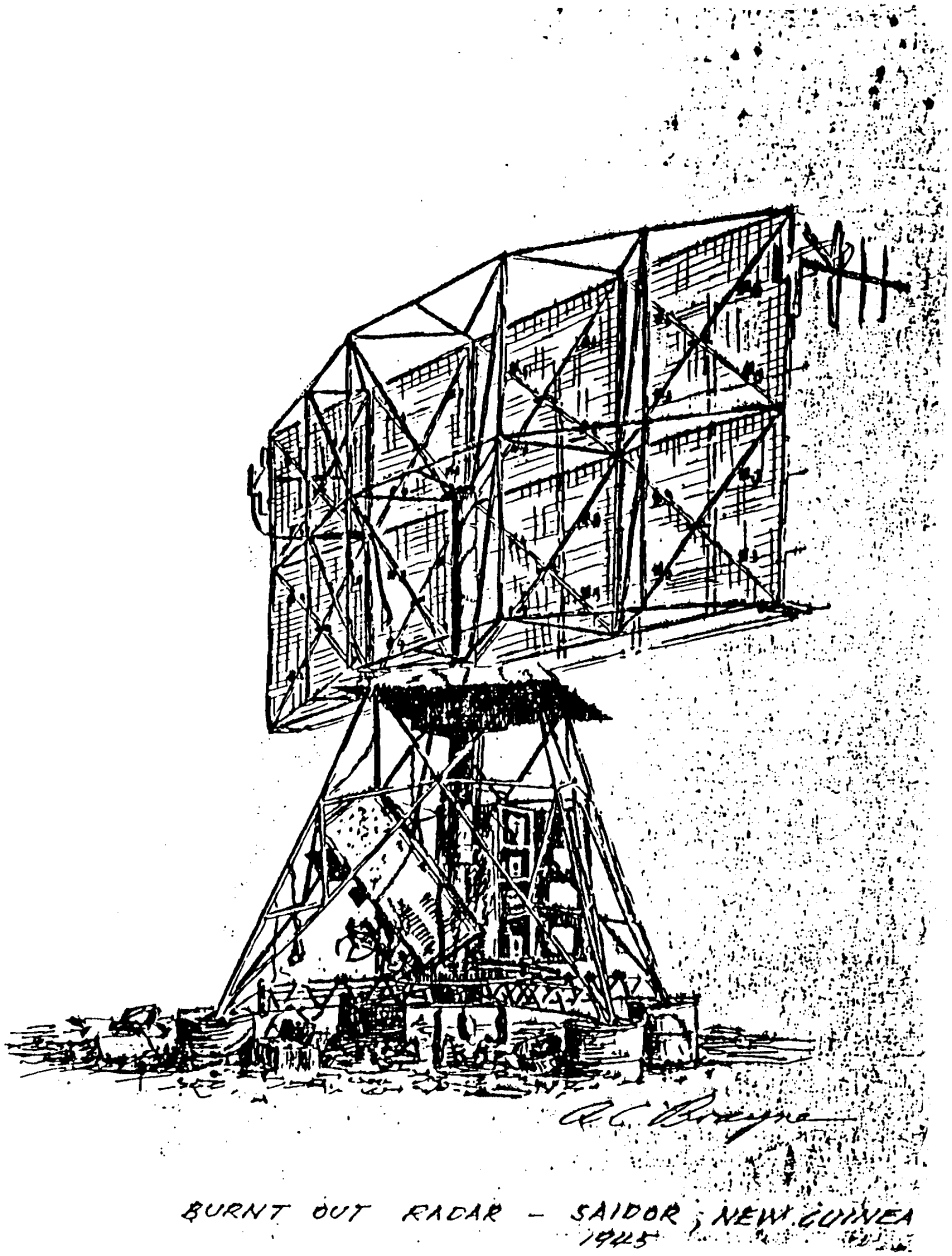
Radar Yarns

Edited by
Ed Simmonds
&
Norm Smith



RADAR YARNS

being memories and stories collected from RAAF personnel who served in ground-based radar during World War II,

or

a potpourri of people, places, problems and pleasantries.

Edited by Ed Simmonds and Norm Smith.

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DEDICATION

This book is dedicated to:-

Those who died during World War II while serving in RAAF radar;
and
Those who have subsequently died because of their service in radar;
and
All those members of both RAAF and WAAAF who served on radar establishments.

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FOREWORD

It is an honour to be invited to write the foreword for Radar Yarns *which, in part, details the history of RAAF Ground Radar in World War II.* Radar Yarns *recounts some of the exploits and experiences of the men and women who manned the RAAF's wartime radar stations. When one considers that the introduction of radar to active service in the RAAF occurred as late as 22 March 1942, during the defence of Darwin, it is noteworthy that by the end of the war the RAAF had over 140 radar stations stretching across the South West Pacific region including the Australian Mainland, New Guinea, Trobriand Islands, Admiralty Islands, Borneo and the Dutch East Indies.*

An important element in the defence of Australia was achieved with the establishment of that early warning network which provided surveillance along the vast continental coastline while maintaining a focus to Australia's north. It was a remarkable achievement - one which places great credit on the training personnel at No 1 Radio (later Radar) School at the RAAF Base, Richmond, NSW, and particularly on the men and women whose combined efforts made the network of radar stations an invaluable part of Australia's fighting forces.

Wars are fought in many different ways. The requirement to maintain the operational effectiveness of this radar network as a vital part of the war effort in the South West Pacific Area demanded the deployment of personnel to areas which caused challenge and hardship. A common challenge for the personnel who manned those units which were outposted in isolated and often inhospitable areas was that of loneliness and the preservation of a rational outlook on life. A significant attribute of any fighting force is the pride in the way in which the force conducts itself. Sharing with families and friends the excitement of operations as well as the hum-drum of the daily routine is an expression of that pride.

The veil of secrecy which enshrouded the very existence of radar and the activities of the radar stations during the war ensured the effective employment of outposted units and their radars. Indeed, the maintenance of strict security precautions contributed significantly towards the survival of many units which were deployed well forward of the Allied Forces. The secrecy which surrounded wartime radar activities and the post-war imposition of the Official Secrets Act denied the radar personnel the opportunity to express pride in their operational achievements and to describe the challenges, rigours and hardships which they faced. This denial, together with the isolation and loneliness endured at remote radar stations, makes the publication of books such as this all the more significant.

However, today that same secrecy has become a major obstacle. I am conscious of the youthfulness of present serving members in the Services and of the increasing tenuous links which exist between today's generation of Australians, including those men and women in the Defence Forces, and the Servicemen and Servicewomen who served during the hostilities. Perhaps it will be easier to bridge the gap between those groups with an increased awareness of the wartime exploits and activities of the personnel at the Radar Stations.

This anthology contains the stories of the men and women who forged the network of RAAF radar stations into effective fighting units - no matter where they were situated. In doing so they contributed significantly towards the defence of Australia at a time when the outcome of the war looked exceedingly bleak. Many lives were saved by the timely warning of air attack, the direction provided in support of aircraft in distress and by the oversight of rescue operations for the recovery of downed aircrew.

The stories are simply told and are unpretentious. They are varied and describe the cruel circumstances of war with the capture and execution of Army personnel who were stationed with 342RS on the Eilanden River in Dutch New Guinea; the tragedy of the occupation of Bat

Island by 340RS; on a lighter note they recount the heartwarming antics of personnel letting off steam at 1RIMU and the "discovery" of a cure for tinea at 31RS.

I am grateful to the authors of these stories for the time taken to recount the tales and I congratulate the editors, Ed Simmonds and Norm Smith, for their initiative, determination, research and drive to complete this collection. This anthology will serve not only to refresh the memories of those personnel who were directly involved with ground radar operations during World War II but will assist in bridging the gap between those veterans and today's generation of Australians.

R B Treloar
Group Captain
Officer Commanding
No 41 Wing
RAAF Base
Williamtown, NSW
9 July 1991

ACKNOWLEDGEMENTS

Researching records, collecting stories and developing this book was well down the track before any financial support was received. Then support and encouragement came from the President, Mr Walter Fielder-Gill, and the Committee of the Radar Air Defence Branch of the Air Force Association. The late Hugh Peaston made 'anonymous' donations, matching the donations from the Branch, to assist with some of the incidental costs such as stationery and postage.

The editors would like to express their thanks to the many individuals who have submitted contributions and generally given encouragement to the project. Mr Dennis Whiley assisted in locating stations and the production of the maps.

Moral support has also been received, over the past three years, from the Officers Commanding 41 Wing at RAAF Base, Williamtown, NSW, and 114 Mobile Control and Reporting Unit at Amberley, QLD, all of whom believed that there is a story to be told.

Special thanks go to Ian McNamara for mentioning it a couple of times on the ABC's *Australia All Over* program. The first responses came through this channel and the project grew from there.

The RAAF Historical Section deserves a special mention as they have always been staunch supporters and made their records available to us not only to confirm some of the material in this volume but also to provide information needed for later volumes.

Our thanks also go to the staff of The Australian War Memorial in Canberra, ACT, for making their records available.

Finally we are deeply indebted to Hal Porter, Bert Israel and Elizabeth Simmonds, who "volunteered" to act as sounding boards by reviewing the text as it came off the word processor. Hal's comments and advice were especially helpful.

PREFACE

The original concept of a History of RAAF Ground Based Radar was to cover the technical aspects of equipment used plus an operational history of each station.

Having made contact with many former radar personnel it was found that the whole thing would have become unwieldy if the stories and anecdotes were combined with the operational history. As a result, the concept has been changed. It is now intended to produce several monographs with *RADAR YARNS* being the first.

Since the events occurred nearly fifty years ago, many stories have unfortunately been lost. Even more disturbing is the that many of the A50 Monthly Unit History Reports for individual stations, which were not commenced until late in 1942, are missing from the records held by both the RAAF Historical Section and the War Memorial. Of course, regrettably, some were never written. In consequence the full history of RAAF ground radar can never be written.

We would like the reader to consider the yarns to be a representative cross section of the 16-20,000 man/woman years of wartime experiences.

Some stations do not get a mention mainly because of either space limitations or the fact that stories about them were not received. The source of each story is attributed to the person who submitted the information. Naturally we cannot guarantee the veracity of all of the stories which are printed in good faith.

All of the collected material will, at the end of the project, be placed in archives somewhere so that it will be available for future researchers.

Stories relating to any particular station are not necessarily grouped together nor does one anecdote always relate to the one before it or after it. There is no table of contents or index[1], but at the end of the stories there are lists of stations and maps showing the operational locations.

To set the scene for the stories about stations and the recollections of the contributors the book starts off with an historic background.

We hope that you will enjoy reading this pot pourri as much as we have done during the compilation.

The need for additional copies has afforded the opportunity to correct, in this revised edition, those typographical errors found so far and two or three station names and locations on the maps.

[1] A Table of Contents was added in the Reprint Edition - 1995

HISTORIC BACKGROUND

Source Material

The two main sources of information for the history of RAAF radar were:-

> *An Account of the Development and Use of Radar in the Royal Australian Air Force* written by WgCdr A G Pither in December 1946.
> [Circulation of this document was restricted at the time and it still has not been published. It provides an excellent insight into the development and growth of the RAAF Air Warning Network in World War II.]
> and
> *The History of Radiophysics Advisory Board 1939-45*
> written by W F Evans and published in 1970 by the Commonwealth Scientific and Industrial Research Organisation, Australia. It specifically covers the development of equipment in this country.

Other sources employed were:-

The Australian Archives in Canberra and Melbourne.
The Australian War Memorial in Canberra, ACT.
RAAF Historical Section, Russell Offices, Canberra, ACT.
Interviews with T B Alexander, E Bullock, B F N Israel and many others too numerous to mention.

All of the above was supplemented by references to the following books:

A Saga of Achievement by G/Cpt(Retd) E R Hall;
The Role of Science and Industry by D P Mellor;
Shaping Science and Industry by C B Schedvin; and
Adventures in Radar by FltLt F H Porter. Limited publication.

There is no doubt that the complete history of RAAF Ground Radar can never be written as:-

- the events occurred nearly 50 years ago
- so many of the A50 Unit History Sheets have been lost or were not completed by the respective Commanding Officers of the early stations.
- many of our participants have passed on to the 'Great Doover in the Sky' and a great deal of valuable information went with them.

However today we are closer to recording this history than we were ten years ago.

1939 - 41

Early Deliberations and Decisions

In 1939 Dr D F Martyn of the Council for Scientific and Industrial Research (CSIR), spent four months in the United Kingdom on a fact finding mission. He returned to Australia in mid-August. Subsequently, some equipment was ordered from the UK for study and research.

The Radiophysics Advisory Board was formed, having its first meeting on 29 November 1939. The term Radiophysics (RP) was adopted as it was considered to be 'an innocuous scientific nomenclature which masked the immediate wartime concentration on radio direction finding (RDF).' The Radiophysics Laboratory (RPL) was established and staff recruited.

At the same meeting, the Board directed the newly formed Radiophysics Laboratory to concentrate on:-

(a) The design and construction of equipment to be located on the coast near Sydney [for Coast Defence (CD) artillery range finding and Shore Defence (SHD)]

(b) The design and construction of sound location replacement equipment [for Gun Laying (GL)]

(c) The design and construction of ASV [Aircraft to Surface Vessel] equipment.

In retrospect this decision is not surprising since the Australian Government's appreciation of the situation, at the time, was that Australia was not open to the threat of invasion and that we need only prepare for sporadic raids.'

To achieve a closer contact and liaison with the UK, Sir John Madsen, Professor of Electrical Engineering at Sydney University and, more importantly, Chairman of the Ionosphere Research Board, was sent to that country to make more detailed arrangements. He made his report to the second meeting of the Board in March 1940. WgCdr Pither's summary of the aspects of research and supply is:-

> "As a result of discussions [by Sir John Madsen in the UK] with Sir Phillip Joubert, Sir Henry Tizard and Mr Watson-Watt, a memorandum was drawn up setting out arrangements for RDF work including Research in Australia and New Zealand. It was agreed that the RPL should act as a sub-centre to the main work in Great Britain and that the British would provide samples of equipment, stocks of components and detailed drawings of equipment. Arrangements were also made for liaison."

Then, at the third meeting of the Board on 16 May 1940, it was resolved that, under the mantle of the Radiophysics Advisory Board:-

- CSIR would be responsible for Research and Training.
- The PMG[2] Department would undertake construction, and
- The Services would be responsible for operations.

At the same meeting it was decided that arrangements should be made to train service officers overseas. However, nothing happened until September 1940 when the British Government requested each Australian Service to send two signals officers to the UK for training 'in order to obviate the necessity of the UK sending experienced RDF personnel overseas at a later date.'

WgCdr Pither, apparently the only RAAF representative, left for the UK in September 1940. In addition to attending a two months course at Radio (Radar) School he was able to see all aspects of radar development in the British Army, Navy and Air Force. He returned to Australia through Canada and the USA where he also had the opportunity to study their respective achievements in the field.

In May 1941 WgCdr Pither took over Section 7 of the Directorate of Signals from FtLt J T Phillips. From that date Section 7 looked after all radar matters in the RAAF, from airborne equipment to air warning and the logistics involved therein. Section 7 was finally formed into a Directorate in April 1942.

Recruitment of Personnel

In England in 1941, it had become obvious that large numbers of personnel would be needed for training as the pool of suitably qualified people was being rapidly exhausted. The problem was handed over to a committee headed by Lord Hankey. UK Universities and Technical Training Centres formulated special short and intensive courses to satisfy the need.

At the same time, requests were made to the member nations of the British Empire, and to the USA, for assistance in view of the depletion of suitable manpower - similar to requests for aircrew under the Empire Air Training Scheme. In fact one aim was to secure 8,000 people from the USA alone.

[2] Post Master General. This department was divided up in later years to become Australia Post and Telstra.

During WgCdr Pither's visit to the UK he had several discussions on this subject and, after an exchange of signals between Pither and Air Board, Australia finally agreed to enlist and train 2,000 personnel for the RAF. A memorandum, relating to Radar School, mentioned that:-

(a) The RAF may need to train many Americans in radiolocation. This could be done in Australia and the men sent to Singapore.

(b) Australia must eventually require large numbers of radiolocation personnel. Once the equipment is obtained, and the school established, it would be a simple matter to divert the output to Australia's needs as they arise.

After the 'Hankey Scheme' had been discussed by the Board of Radiophysics, courses were established at Sydney University and the Melbourne Technical College, the former for officers and the later for mechanics.

WgCdr Pither visited Sydney, Melbourne and Brisbane Universities, addressed the science and engineering students and took the names of those willing to take part in 'radio-location'. The original target was for 100 officers but initially only 50 were enlisted.

The Sydney University course in radiophysics theory, for officers, was under the direction of Professor V A Bailey. It was excellent and his students were known in the service as 'Bailey Boys'. The first course, which started on 15 September 1941, was completed in February 1942. Three other courses followed commencing in March, August and September 1942. It is of interest to note that by the time the first Bailey course started, the Australian War Cabinet had decided that only 200 trained radar personnel could be sent overseas to assist Britain.

The members of second group, who were recruited by advertisements in the press and on radio, consisted of people with appropriate technical qualifications and/or experience. Most of the first batch, who in the service were called 'direct entries', came from either national or commercial radio; were amateur radio operators (hams) or were people engaged in the radio industry. In essence, they provided the quickest means of obtaining personnel, as they only needed the course at Radar School.

The contribution of the 'direct entries', both officers and mechanics, should be recognised. The Radiophysics theory course was, in some cases, not a strong point, but all the personnel had had 'hands on' experience and were generally older and more practical in their approach than those who passed through the crash courses in radio theory prior to Radar School. The first batch of 'direct entries', when added to the very small number of men available from the Permanent Air Force or the Citizen Air Force, provided the nucleus to start the overall effort.

Their influence was felt from the top to the lower echelons of the radar organisation. As an example, when one 'direct entry', SqnLdr John Allan, joined the newly formed Directorate in mid-1942 he reported that:-

> "There were about nine of us in the Directorate, with the WgCdr [Pither] the only permanent type. The rest of us were volunteers, mainly from the radio industry and the majority had amateur call signs."

Furthermore, SqnLdr Allan was the first radar officer to attend the War Staff College, successfully completing No 1 Course in December 1943. Other 'direct entries', such as WOff Arthur Field, had 'roving commissions' which involved installation, matching and phasing, modifications and acting as a 'fix it' man when the need arose. In fact WOff Field, during his period of service, spent time on 37 different radar stations with some of them being visited on more than one occasion.

The third group was recruited at Recruiting Depots throughout the nation. Applicants for ground staff, whose educational qualifications and aptitude tests indicated that they might be suitable for training, were offered the mustering of Trainee Radio Mechanic. Many of these

only opted for radar because they had failed the stringent medical examination for aircrew. So tough was the selection process for aircrew that Sgt J W Hillier, a radar mechanic, passed the aircrew medical with flying colours, only to be rejected because he was left handed.

It also has to be remembered that, by this stage in the war, there were those who had already tried to enlist in the RAAF, but for one reason or another, were not accepted. Typical examples were Harry Duggan, who had wanted to join aircrew as a W/T operator but was rejected on account of age, being in his mid 30s, and A G (Digger) Nottle who had a ruptured spleen as the result of an accident in a saw mill which made him ineligible for aircrew. However, when recruitment for radio location was initiated they were both asked to enlist - Harry as a direct entry and Digger as a trainee radio mechanic.

Only six courses were conducted at No 1 School of Technical Training (No. 1 STT) - alias Melbourne Technical College, with civilian instructors – specifically for Radio Mechanics (RMs). All of these airmen went straight from No. 1 STT to No 1 Radio (Radar) School at Richmond, NSW.

After those six courses, radar personnel were selected from Wireless Mechanic (WMs) Courses. Later on, to meet the increased need, personnel were also drawn from Wireless Mechanics trained by the RAAF at Point Cook, Victoria. It is of interest to note that an examination of a couple of students' note books reveals that the RAAF training was more probably more detailed and of a higher standard than that given at No. 1 STT.

All of the groups, who 'signed up' before Pearl Harbor, were told that they were being recruited for overseas duty, with England and the Far East being specifically mentioned. The entry of Japan into the war dashed the hopes of many that had been looking forward to travel to places foreign. Instead they had to be satisfied with travel in Australia, New Guinea and the South West Pacific Area in general.

A very important point to remember is that the stations in the RAAF Air Warning Network were manned by technical personnel, of all ranks, who had little or no prior knowledge of radiophysics theory before enlistment. Their training was all 'in service' and was commenced either at Sydney University under Professor Bailey, the Melbourne Technical College or the RAAF school at Point Cook, before completing a course at Richmond.

Radar School

The prime reason for establishing No 1 Radio (Radar) School was the introduction of airborne radar equipment known as Aircraft to Surface Vessel (ASV). In July 1941 the first course for RAAF personnel in radar in Australia was held at Radiophysics. This was an ASV course and those attending were FlgOff M A Brown and FSgt A Llewellyn, Sgt Henderson-Wilson and Cpl H Lewis, all of whom were on the pre-war Wireless Reserve of the Citizen's Air Force, and Cpl R Howe of the permanent RAAF.

Under FlgOff M A Brown, No 1 Radio School was then established in No. 5 hangar at the RAAF Base, Richmond. The first course conducted by the RAAF commenced on 4 August 1941. The students were FlgOffs R Wadsley, C Kerr-Grant, and J Weddell and PltOffs B F N Israel, J Weir and A Lewis.

WgCdr Pither, during his visit to the UK, had initiated the idea of the RAAF undertaking training in Australia for the RAF as he stated in his 1946 report:-

> "..in compliance with the British request for Dominion personnel. I felt that this would ensure that a nucleus of ground personnel would be available in Australia if an emergency arose."

Some mechanics from the first course were posted to No 10 Squadron in the UK with the balance being posted to Radiophysics and the PMG laboratories "as assistants to the people engaged in experiments and production of test equipment etc."

In September 1941, SqnLdr A E Mitchell (RAF) with three RAF Sgts 'Spud' Taylor, 'Taffy' Jones and R Richards arrived from the UK, joining the Radar School in October. They brought with them a CD/CHL transmitter and receiver which was assembled at the school by Sgts Jones and Richards. The School then undertook training in both airborne and ground radar. Appendix B provides a breakdown of the number of courses conducted by the school until its closure in 1946. There were 6196 personnel trained on 483 courses.

WgCdr Pither continued by saying:-

> "This training in ground radar which was originally planned for the RAF, eventually became the saving of the RAAF when a ground radar programme was started."

RAAF Given the Responsibility for Air Warning

Possibly the best way to tell the story of this event is another direct quotation from the Pither Report of 1946:-

> "It is of interest to note that at this stage [August 1941] no policy existed as to whether Army or Air Force should man the organisation and as the Army manned the anti-aircraft defences, it looked as if the Army should operate the long range warning system. The only thing against this was the British precedent in which the RAF operated the warning system. It was not until October 1941 that the matter was given serious consideration and at this time War Cabinet, in agendum 421, decided that a long range warning system was necessary and a joint services committee was appointed to consider the matter and make recommendations. This committee, on which the DCAS [Deputy Chief Air Staff] was the Air Force representative, recommended the installation of warning stations at 32 places around the Australian and New Guinea coast (File 201/28/22) and also recommended that the RAAF man all warning stations. These recommendations were accepted in Defence Committee Minute 159/41 on 7 November 1941 and thus, on the eve of the outbreak of war with Japan, the RAAF was presented with a colossal RDF programme."

This was only one month before Pearl Harbor!

Examining agendum 421 in a little more detail reveals a few separate subjects. The first was the disposition of long range sets 'at present available' had the recommendation to install them as follows:-

> "1 MB[3] set at Bombi
> 2 CHL sets at Ourimbah and Sugarloaf Point.
> 1 GL set (modified) at Kiama (Until CHL set available)."

An interesting point was that, in addition to the 26 sites named for air warning, the Navy required six CHL sets at the following places 'for detecting raiders and minelayers in focal areas':-

Neptune Island
Bombi
Cape Otway
Sandy Cape
Wilson's Promontory
Cape Grafton.

[3] Historians seem to have been confused as to what an MB was. The English applied the acronym MB to the second-generation CH (Chain Home) transmitters that operated in the High Frequency Band (HF) for detecting highflying aircraft and were mobile in the UK. In the RAAF, this transmitter was used in the ACO (Advanced Chain Overseas) or TRU (Transportable Radio Unit). Wg Cdr Pither never referred to MB, he used TRU in his list of stations and equipment needs. Radar Researchers now believe that the term MB should have been replaced with TRU (transportable radio unit) for consistency.

The first section of the next item is intriguing and is quoted hereunder:-

> "All early warning sets, i.e. the MB, the CHL sets and the sets located at Kiama and Rabaul should be controlled and operated by the Air Force."

This is the first reference to Rabaul but paragraph (5) page 4 of the agendum contains a fascinating piece of information:-

> "That the provision of an effective set at Rabaul to give long range warning of air attack is a requirement of high priority, and that enquiries should be made to find out the performance of *the R.D.F. set to be supplied by the United States for Rabaul* [author's emphasis] and the set to be provided by the Radiophysics Laboratory, so that if their performance is not satisfactory, then arrangements to ensure long range warning of attack can be made without delay."

The November decision actually went further than just the provision of a radar network. It also covered the whole of the air warning organisation. Unfortunately the operations and filter rooms were put under a separate command and WgCdr Pither was very critical of this arrangement. An extract from his report reads:-

> "At that time the Radar and Filter organisations were separate. The responsibility of the radar organisation ceased when the teller in the radar station passed his information by telephone or radio to the filter room. It was extremely unfortunate that the people in the filter room usually had no conception of the problems or capabilities of the radar organisation, with the result that on many occasions radar warnings were wasted and many bitter misunderstandings occurred.
>
> This unfortunate situation persisted until 1943 when, by determined effort, the Directorate of Radar gained control of the entire filter organisation and instituted a training programme which resulted in radar [operators] and filter personnel becoming more or less interchangeable, producing an understanding which was successful in removing most of the difficulties. This organisation was afterwards handed over to the Directorate of Operations."

First Positive Steps

Whilst this discussion is concentrating on ground radar it should also be acknowledged that the first tangible step taken by the RAAF in radar was the installation of an ASV in a Hudson in October/November 1941. There were other experimental installations of ASV prior to this time but these were carried out by CSIR.

SqnLdr (then PltOff) Israel flew on a test flight in the Hudson piloted by FlgOff Bob Greene who was a Flight Commander from No 6 Squadron. Having completed an exercise for Radiophysics which involved diving several times, straight at an Army SHD set at Dover Heights, they flew south to test the equipment. Near Moruya they located a convoy at about 50 miles out to sea on the port side of the aircraft. They investigated the echoes because they were not advised of any shipping in the area. The convoy consisted of the Queen Mary and the Queen Elizabeth escorted by HMAS Adelaide, all steaming south-east at about 30 knots.

Availability of Equipment in October 1941

A report of a meeting of the Joint Planning Committee on 23 October, attended by WgCdr Pither and Prof White and Dr Piddington of the CSIR, admitted that no long range air warning system existed and that, on that date, there were only three sets available, namely 1 MB (Mobile), 1 CHL and 1 SHD - all held by CSIR. This differs from RPL's statement of November when it said that they had 2 CHLs. Prof White stated that SHD sets were being manufactured in Australia and it would also be possible to manufacture the CHL type.

He continued by saying that the local manufacture of the MB sets would present some difficulty and that it would not be possible to manufacture both MB and CHL at the same time.

The October meeting was also the time when it was decided that the MB should not be installed at Darwin as proposed by the Army but at Bombi where they expected it to give warning of high flying aircraft for the Newcastle, Sydney and Port Kembla areas. This period was before the birth of the Australian AW and reference was made to 'the installation of CHL of local manufacture.' The estimated number of 26 to cover the following regions :-

Cape Blanche to Sandy Cape	12
Perth to Albany	4
Townsville to Cairns	2
Tasmania, including Bass Strait	6
Darwin	1
Port Moresby	1
Total	26

Darwin was given the highest priority, followed by Kiama and Port Moresby. Five of the Tasmanian stations were last on the list.

Using the decision of 7 November as his authority, WgCdr Pither made the first trip to Sydney to select sites for the stations. The sites chosen were Tomaree, near Newcastle, Bombi, near Gosford, and Kiama on the south coast.

A second siting party, led by SqnLdr (then FltLt) Rex Wadsley, was charged with the responsibility for selecting sites on most of the coast of Australia for the different types of fixed stations then being planned.

Since there was no supplier of equipment outside the UK, WgCdr Pither had no choice other than to order English equipment for the 32 locations. The proposal was to have two sets at each location that followed the English practice of the time, one to cover high flying and the other for the low flying aircraft. Then six Ground Control Interception stations were added for fighter control at different locations. Naturally the UK equipment could not be obtained in a hurry and deliveries occurred over an extended period.

The First Australian Air Warning Station

Quoting from T B Alexander's report RP 207/3 on the History of the Development of the Australian LW/AW Equipment, dated 11 January 1945:-

> "On the 17th September, 1941, the Radiophysics Laboratory undertook to investigate the possibility, of local manufacture of an air warning set, having a range of about 100 miles. The initial scheme proposed, was one using a SHD receiver cubicle hut with a simplified time base. The transmitter was to be similar to the British GL or CHL type. Very little effort was directed towards this project in view of the commitments on the SHD and GL sets. On the 8th October, 1941 a further investigation was carried out on the possibility of using two NT99 valves with spark modulation for the transmitter cubicle. This was done in an effort to avoid delay in building the CHL and GL transmitters. However, as no valves were available in Australia, no further work was carried out and development was postponed pending their arrival."

Then, on 7 December 1941, the Japanese attacked Pearl Harbour. Mr Michael Moran interviewed Dr J Piddington when researching his thesis *Radar Defence and the Darwin Disaster, 1942* - this thesis can only be regarded as an academic assignment to get an Honours Degree as it does contain flawed information. However Moran wrote, "Its leader, Piddington, read of the Japanese raid riding a bus to work down in Pitt Street. At ten that morning he

gathered a group in the Laboratory and, within a week, they built a set." Whether it was a mistake by the author, or whether with the passage of time, Dr Piddington had forgotten but there were no buses in Pitt Street in 1941, only trams which buses replaced many years later.

Evans gives a graphic picture of the events at RPL:-

> "After Pearl Harbour, the need became frantic and an experimental set was rushed together at RPL in 5 and one half days using modified components of the CA [Coastal Artillery] No 1 Mk II (Aust) and based on the experience gathered so far with SHD, ASV and GL production."

The time scale is confirmed by Bruce Alexander, in report RP 207/3, that the Army manned the set at 9pm on 12 December 1941 and provided Sydney with air warning for many months.

Examination of archival files reveals that, on 15 December 1941, Radar School requested the authorisation of funds to manufacture masts, aerials, buildings and three warning sets using local components. The same signal included a statement that the experimental set was already in operation in Sydney.

The fact that Australia had no large manufacturers of electronics was probably a big advantage during the war. There is ample evidence that the Americans and Canadians bemoaned the fact that there was a two-year lead-time between design and manufacture. The end result was that their equipment was two years out of date when introduced in the field. RPL fashioned what was to become the AW with whatever valves and materials that were available at the time. Namely those largely used in both the ASV and SHD programs.

Fortuitously the final product was extremely light in weight and therefore eminently suitable for use as a transportable system. Radar Researchers are firmly convinced that the very low combined weight of the transmitter and receiver was achieved by accident rather than by design.

JANUARY TO JUNE 1942

General

Pither reports:-

> "From the beginning of 1942 till the end of 1943 most RAAF effort was concentrated on the ground [air] warning programme. This was due to the fact that in the early part of this period air warning was vital in defence. The programme was divided into two parts:-
>
> (a) The establishment of fixed radar stations to fulfil the requirements of the War Cabinet Agendum, and
>
> (b) The provision of transportable or mobile stations to meet the needs of the moment in forward areas."

The first few months of 1942 gave indications of a situation bordering on panic. It became a hectic period of training, procurement, experience gathering and the establishment of a new section of the RAAF. Everyone involved from the top to the bottom was on a fast learning curve, particularly in 1942 and 1943 - some fell short of the standards required, most succeeded and some were brilliant.

WgCdr Pither examined the installation at Dover Heights and immediately increased the order for the sets to be supplied by RPL from three to six, to be 'manufactured as experimental pre-production models.'

The immediate question raised by the above is why, when things were so desperate, only six such sets were ordered. The answer is twofold and was recently found on archival file 201/28/22.

Firstly, Pither considered that 'these sets will not be as efficient as the sets on order from the UK but they will fill a want.'

The second part of the answer is probably the real reason. Pither said later that 'the quantity of six has been fixed by the spares of valves available and the time taken in getting more produced.' This confirms Bruce Alexander's statement on the shortage of valves in Australia.

The need for the first AWs, as they were later designated, was extremely urgent. FlgOff Frank Bound, then a mechanic, was one of the group of about six RAAF radar mechanics who assisted RPL in the manufacture of these 'pre-production models'. The Radiophysics History only states that the RAAF mechanics were at RPL learning about the AW!

On the question of co-operation in 1942, all three Australian Services had personnel at RPL working with the scientists on prototypes of different pieces of radar equipment. WOff Vern Berrett was one working on the ASV beacons.

Australia should be thankful for the success of the AW transmitter and receiver because, with modifications, it continued to be the backbone of the Air Warning System throughout the remainder of the war.

It could be said that RAAF radar grew as a private empire - possibly there were few if any alternatives. FltLt F. H.(Hal) Porter in his limited edition book Adventures in Radar states "In these early days of radar there was no red tape. WgCdr Pither was given, or took, 'carte blanche'." While each Area of Command was informed about movements of stations and personnel into their areas, the assistance received by radar personnel ranged from co-operation to obstruction. Possibly this was due in some cases to the cloak of secrecy surrounding this new and unknown activity but, in others, it can quite rightly be attributed to an Air Force version of a Colonel Blimp attitude. To quote Walter Bagehot "One of the Greatest Pains to Human Nature is the Pain of a New Idea". The bureaucracy and the accountants had not had time to establish controls or organise paperwork or accountability.

Since there was no real co-ordination by the RAAF early in 1942 for the development and manufacture of radar equipment, supply of bits and pieces, plus the procurement of spares, the position of Radar Liaison Officer was created to 'grease the wheels' of the new arm of the RAAF. SqnLdr (then FltLt) Israel was the first appointee to this very important post which was initially located in Shell House, moving later to Stanton House, both being in Sydney, NSW. Pither reports:-

> "This proved to be a very fortunate move. He was extremely energetic and enthusiastic and his intimate knowledge of Sydney manufacturers proved invaluable in assisting the manufacture and delivery of AW equipments. He maintained close contact with Radiophysics Laboratory, RIMU and the many suppliers of equipment and raw material and established an organisation which was to be of major assistance to the RAAF for the rest of the war."

In addition to carrying out the required duties of the post extremely well, SqnLdr Israel's experience in industry and the brief Malayian and Singapore Campaigns, was beneficial in many respects to the overall air warning system. His involvement in the special sets at Milne Bay and the birth of the LW/AW will be dealt with later.

Recruitment of Radar Operators

At the end of 1941 there was no mustering for radar operators because it seems that all recruitment to this stage had been made for the RAF and not the RAAF. On 1 January 1942 WgCdr Pither took action to create the new mustering, setting out the parameters for selection. In fact, in Australia at that time, the only people who had had any experience in operating ground radar were the three RAF instructors at Radio School and they formulated the first training programmes for operators.

Some of the selection criteria for operators is quite interesting.

- eyesight must be good but colour vision not important.
- normal speech free from the slightest speech impediment, and no dialect or brogue.
- hearing normal.
- under general characteristics Pither listed alertness,
- initiative, integrity. All applicants should be investigated from a security point of view. [This requirement also applied to all those previously recruited]
- other comments included - a 'heavy' type rarely makes a good operator and a 'highly strung' person is likely to be erratic.

The first 24 operators were to be drawn from within the service and it was not necessary for the person to have completed his drill course. Added to this was an addendum by FlgOff O'Neill wherein he recommended that 'the first operators could be drawn from those airmen who had successfully passed the trade test for trainee radio mechanic and who had not yet started their training. These airmen could then be retrained as mechanics once sufficient operators have been trained.'

A number of operators were then remustered for a variety of reasons from air crew, W/T operators' courses, WOM's courses as well as from radio and wireless mechanics' courses at 1STT. Of the first 23 who arrived at Radar School on 5 January six were 'classed as unsuitable and returned to 3STT'. Another seven arrived on 8 January. This is the only entry in the School's history sheets where students were rejected and one can only assume that it was on the basis of something like a speech impediment or brogue.

The First Radar Station installed by the RAAF

The first ground radar station operated by the RAAF was installed by SqnLdr (then a PltOff) R S Choate and party in collaboration with Radiophysics who had the equipment in their

possession. RPL arranged for the set to be installed in an Army establishment at Shepherd's Hill, near Newcastle, NSW, using the aerial and building being erected for an Army SHD installation.

The Radiophysics History is incorrect in stating that the station had a CHL transmitter and an Australian receiver. WOff Arthur Field, and other mechanics, who worked on the installation agree that it had a CD/CHL receiver.

The RAAF installation party, consisting mainly of the students who were on No 1 Ground Course at Richmond, moved to the site on 31 December 1941 and the unit became operative on 10 January 1942. No number was allocated to the unit while it was at Shepherd's Hill.

Introduction of the AW to the RAAF

On 20 January 1942 WgCdr Pither reported that RPL had promised delivery of three of the experimental AWs by the end of the month, another on 7 February with the final three by the end of that month. The RAF had reportedly diverted three COLs, which were on the water destined for Malaya, to Darwin and these were expected at the end of February.

The AW was developed as a replacement for CHL sets and the first AWs were allocated to Port Kembla, Rabaul and Port Moresby. The American set did not materialise for Rabaul so that location was listed for an AW. By the time the set became available Rabaul had fallen to the enemy and it appears that the unit for that outpost was sent to Darwin.

The two first two AW units that were intended for Darwin and Port Moresby were flown to their destinations. These early stations used modified SHD or AW aerials that were heavy steel structures. SqnLdr John Norrie reported a crop of blisters resulting from using a hacksaw to break one aerial down into components small enough to fit through the door of a DC2.

The airlift to Darwin started on 5 February 1942 and the last load did not arrive until after the first Japanese raid on the city. It became operational on 22 March when it immediately detected an enemy raid approaching Darwin. Thereby it became the first RAAF station to detect an enemy raid.

Much has been written about 31RS at Dripstone Caves, NT - some of it incorrect. Over the past four years statements have been collected from personnel who were there at the time.

Those stories somewhat contradict the hitherto accepted statement on page 435 of the book by D P Mellor, The Role of Science and Industry (Volume V of the series Australia in the War of 1939-45). The quotation is:-

> "The set sent to Darwin was accompanied by technicians of the RAAF, who, even though they were without manuals to guide them, felt confident of their ability to operate it. When an attempt was made they failed even to get the set on the air. While they were still trying to get it working the Japanese made their first raid on the town."

The eyewitness reports, all of which agree, clearly state that the array had not been erected at the time of the first raid, so Mellor's statement is incorrect. It was not a case of trying to get the set working, instead it was a case of being unable to even complete the installation due to inadequate lifting tackle, tools etc. Incidentally there is evidence that an elementary instruction manual existed on 5 February but apparently it did not accompany the equipment. The manual was written by scientists and consisted of only a few pages that would have been very difficult for mere mortals to interpret.

There was one aspect which remains unanswered and that is, why the installing officer waited for so long before asking RPL for assistance. There is no doubt that their efforts were required in the end to match and phase the aerial as well as fine-tune the electronics.

The question of the AW station at Port Kembla was, until as late as June 1992, somewhat of an enigma. Similar to Shepherd's Hill it is not listed as an official RAAF unit, there was no written record of its existence, but Evans has said that the first three AWs were installed at Darwin, Port Kembla and Port Moresby. It has now been established that the RAAF, with RPL staff, installed the Port Kembla set at the Army base called Hill 60 - also known as Illoura Battery.

WOff (then Sgt) Harry Duggan was detached from Radio School to No. 3 STT at Ultimo, NSW for the period 19 January to 27 February 1942. At first he worked at RPL assisting in the manufacture of the AW. Then, with some RAAF mechanics including Sgt Kirby, he worked with people from RPL on the installation at Port Kembla. The actual date when the unit became operational is not known but since Sgts Duggan and Kirby stayed on there for sometime after the station became operative, a guess puts the date at around 10-15 February. SqnLdr Don Kennedy and his men operated Port Kembla for a short period while they waited for the equipment being made for Kiama. It is unlikely that the Army operated this station as an air warning as it reverted to the original plan of being an SHD set.

An interesting fact is that Radar School, at the end of 1941 and the beginning of 1942, was the only unit directly under WgCdr Pither's control whereby he could order equipment, establish and operate stations. This arrangement proved to be unsatisfactory and was soon changed. An Anson aircraft was allocated to the School in January 1942 to calibrate both Shepherd's Hill and Port Kembla and was later transferred to No. 1 RIMU when that unit undertook the responsibility of calibration.

RAAF Coast Watching in NWA

Prior to 31RS coming on air at Dripstone Caves, two coast watching units were formed, one on Bathurst Island and the other at Point Blaze. These two units performed the same duties as the Army and Navy coast watchers in other areas and reported direct by radio to No. 5 Fighter Sector that was officially formed on 25 February 1942. No official records of these units have been located but a story about the unit on Bathurst Island has been told on page 169 of Radar Yarns.

RAF Installation Party

Despite Pither's statement that appeals to the UK were 'of no avail', in January 1942 a batch of English equipment was diverted to Australia, as mentioned above. In addition, an RAF installation party, with FltLt G A (George) Day in charge, was sent to assist the RAAF.

Members of this party were FSgt Pete Williamson, Cpl Roy Martin and two Royal Canadian Air Force sergeants by the names of Wiltshire and Cheshire who were serving with the RAF in the UK. Rumour had it that the posting clerk in the UK thought that the surnames of the Canadians were the English counties, in which they were born, resulting in them being sent to Australia.

Whilst the Australian Army had nine Canadian officers and 64 NCOs to assist them in the field of radar, Sgts Wiltshire and Cheshire were the only known Canadians who served for any extended period with RAAF radar.

FltLt Day's posting was dated 19 February 1942, the date of the first Japanese attack on Darwin. With the time difference of 10 hours between England and Australia it would appear that the Air Ministry took immediate action on hearing of that air raid. FltLt Day flew out to Australia whilst the others travelled by sea. Due to a mix up in the ships loading, their personal effects took 2½ years to catch up with them. This group of men was involved in radar installation, maintenance and modifications throughout the war with much of their time being spent on the English type stations such as Cape Cleveland and Milne Bay (the only COL in the New Guinea Campaign).

Later, FltLt Day became the Development Officer at No. 1 RIMU and was heavily involved in such projects as the LW/GCI and the transit boxes used for both LW/AWs and LW/GCIs.

MAWD

The RAAF was fortunate in obtaining some American SCR268 Gun Laying sets in February when the American Forces were diverted to Australia from the Philippines or the Dutch East Indies. They were originally offered to the Australian Army but, as there were no American predictors accompanying the gun laying radar, the SCR268s became potential air warning sets and were handed to the RAAF.

RPL was consulted. They quickly, and successfully, produced the necessary circuit modifications to the time base and pulse recurrence frequency (PRF), changing the working range of the SCR268 from 20 to 100 miles. Thereafter this type was known as MAWD (Modified Air Warning Device). The Americans later modified the SCR268 for air warning purposes and designated it as SCR516.

Two MAWDS sent to cover Cloncurry (107RS and 108RS) were located at Quamby and Dalgonally Station near Julia Creek. To quote Pither:-

> "Unfortunately, the absence of an adequate reporting centre rendered these stations useless."

The above quotation implies that both became operational but Sgt K Backshall, an operator from No. 2 Course, stated recently that while 107RS at Quamby was 'on the air' the other was not put into use. On the other hand some of the MAWD sets performed very satisfactorily in other areas, such as Darwin.

No 1 RIMU

The value of a Radio Installation and Maintenance Unit (RIMU) had been proved in the Singapore Campaign so No1 RIMU was established at the Presbyterian Ladies College at Croydon, NSW. This unit also assumed the responsibility for forming stations, supplying spare parts and such activities as calibration, matching and phasing and airborne equipment.

WAAAF Operators

The decision was made to train WAAAFs as radar operators in the light of the successful performance of women with the RAF in England as it was foreseen that the RAAF operators would be needed for the combat zones. A total of 599 WAAAFs were trained in this mustering and were probably the only RAAF women employed directly in operational activities. The first group of 23 WAAAF radar operators commenced their study in No. 11 Operators Course on 15 June 1942.

Involvement of Civilian Construction Authorities

When the early fixed stations were being established, the RAAF had no construction arm which could handle the concrete structures and the erection of the steel aerials etc. In consequence approaches were made to the Department of the Interior. A special section was created within the Department and standard buildings were designed for radar stations.

Architects and engineers visited most of the sites on the mainland, prepared plans and specifications and supervised contracts from their local offices. In the case of the ACO type stations, the Allied Works Council provided the staff to erect the two large timber towers and all the associated buildings at each site.

All of these activities were quite satisfactory but the establishment of a station became a comparatively lengthy and costly process. The advent of the LW/AW, which was wholly within the sphere of RAAF operations, made the services of outsiders unnecessary. There were some LW/AW stations in the NorthWest area where the RAAF used a separate construction team that preceded the radar station and staff. Their involvement was to erect the camp when it was thought that the station would be of a permanent nature.

Summary of Stations Established

In this half year period no less than 18 stations, manned by the RAAF, became operative. Ten were fixed stations using AW and COL equipment, mainly around the Australian coastline and Port Moresby. The other eight were MAWDs or modified American SCR268 sets.

Additionally, seven Fighter Sectors were formed during this period, located at Preston, Vic; Bankstown, NSW; New Lambton, NSW; Brisbane, Qld; Townsville, Qld; Darwin, NT; and Port Moresby, PNG.

Possibly the outstanding station of this period was the AW which was air lifted to Darwin on 5 February 1942 and located at Dripstone Caves as it was the first station to detect enemy aircraft in a combat zone on 22 March 1942.

While they were not recorded as being RAAF stations, WgCdr Pither states that there were another five stations using American SCR270 equipment and operated by American personnel which reported to the local Fighter Sector in their area. They were located at Paluma, Ayr and Caloundra in Queensland, and Gin Gin and Mundijong in Western Australia.

Once again the number of American stations is a grey area with WgCdr Pither reporting the above locations whereas FSgt John Carlson, who was one of the first to join No. 3 Fighter Sector (FS) at Townsville, recalls that the American units were at Mount Spec, Cape Bowling Green, Cape Cleveland (for a short period), Magnetic Island and Castle Hill.

JULY TO DECEMBER 1942

General

In mid-1942 RAAF Command was formed and sent to Brisbane to maintain close contact with General MacArthur's Headquarters which had moved there to be closer to the war itself. From that point, RAAF Headquarters in Melbourne had no responsibility in the tactical deployment of radar units. They concentrated on the development and supply of equipment and personnel, leaving the disposition of radars to RAAF Command in Brisbane. It has been said that from many points of view this whole arrangement was not a happy one in 1942.

Also in July the responsibility for the co-ordination of radio, radar and signals equipment was given to the Ministry of Munitions. To quote from a report by Mr H J Barnes, a Senior Project Supervisor in the Radar and Signals Supplies Section:-

> "Prior to July 1942, the various Defence Services looked after their own interests in the matter of procurement of electronic equipment with the result that the Services were thrown into competition with each other and the larger organisations in the Radio Industry were thrown into competition with the smaller units with consequent lack of co-ordinated effort."

In the defence of Australia in this period, a very significant event was the establishment of 38RS on Bathurst Island which gave Darwin an extra 70-80 miles of coverage. The increased warning time was beneficial to the Kittyhawks so giving them time to reach sufficient height to attack the enemy bombers.

Other notable events of this half year were the erection of 37RS the 'heavy' COL station at Milne Bay, the birth and introduction of the LW/AW, and the use of ASV sets as early warning at Milne Bay.

Radar School was working at full pressure and the courses were modified as time progressed and experience was gained, to include additional topics such as calibration and new types of power supplies. Instruction for Filter Officers was also undertaken at No. 2 Fighter Sector at New Lambton, NSW.

WgCdr Pither used Bert Israel as a 'fix it' man. He had been sent to Singapore late in 1941, became the first Radar Liaison Officer, was consulted on technical matters and in October/November 1942 was sent on a survey tour of New Guinea. This trip was needed because of reports that personnel on many of the more remote stations were suffering from inadequate medical back up and lack of support such as regular deliveries of essential supplies, food and mail - virtually forgotten outposts. The report supported WgCdr Pither's representations for the need for the formation of Radar Wings in forward areas and resulted in them being established early in 1943.

Birth of the LW/AW

Before proceeding, it is necessary to clearly differentiate between the AW and the LW/AW types of equipment since several authors have shown confusion on this point.

Certainly, both types used the same transmitter and receiver but the AW, in the RAAF, was designated a fixed station using the AW or AW Transportable aerial. The latter bolted together n the field - but it still took some time and effort to erect as it weighed about 12 tons.

The LW/AW was a 'marriage' of the lighter (LW) aerial system designed and constructed by the NSW Government Railways and the AW transmitter and receiver - hence the acronym LW/AW. The equipment and operators were housed in a canvas shelter under the aerial. The aerial was turned manually by the operator and the whole radar set rotated with it. The station was assembled and established by the station personnel.

Now to its birth.

WgCdr Pither had felt the need for an air transportable air warning set as early as December 1941. In addition, on his return from Singapore, SqnLdr Israel told the Director that mobility was an essential element of air warning particularly in a fluid situation.

Action on further development of a lighter aerial was delayed for a few months because it was essential that all efforts be concentrated on the establishment of stations required by the War Cabinet. SqnLdr Choate examined the AMES Type 6 set - the English Light Warning equipment with limited range used at beachhead landings - and reported 'for the purpose required it was a complete failure'.

When the pressure had eased slightly, SqnLdr Israel asked WgCdr Pither whether there was any objection to him having preliminary discussions with Radiophysics on the idea of using an aerial similar to the English CHL system. When Dr J Pawsey, of Radiophysics, was asked for an opinion he indicated that he saw no objection to a four bay aerial with open wire feeders as opposed to the AW three bay array.

In June WgCdr Pither wrote to Mr Worledge at the NSW Government Railways, asking him to investigate the possibility of manufacturing an aerial with the same performance as the CHL array and weighing about 2-3,000 pounds. The task was given to Mr E M Bullock, a very young newly graduated engineer, who worked for Mr Worledge. Three alternative designs were submitted, one was selected but some refinement was needed. Consultations with the RAAF ensued and resulted in a final design that was considerably lighter and much easier to assemble and erect in the field. Matching and phasing of the array was also an easy task. The Railways performed the outstanding feat of delivering the first LW/AW aerial to the RAAF within 30 days from the acceptance of the final configuration.

Clearly the success of this unit hinged on the AW radar set developed by Radiophysics. In 1942 this set, with the Worledge aerial, was so much lighter than any air warning set in use overseas that it could possibly be classified as the first truly air transportable equipment.

The first LW/AW unit was rushed into service. To quote WgCdr Pither once again:-

> "It had been with some misgiving that this move had been made. The array had been constructed without any [official] advice or consultation with Radiophysics who, when they heard of it, condemned it as impracticable, and in fact adequate operational trials had not been made prior to sending the equipment into operation, so great was the urgency."

At this point Radar Researchers disagree with WgCdr Pither's statement as there is circumstantial evidence that Dr J Pawsey, one of the world's experts on aerials, supplied Bert Israel with the relevant calculations for matching impedances et cetera. As far as can be ascertained no one in RPL 'condemned it'.

The Achilles Heel of the LW/AW was the lack of a suitable lightweight power supply. Early sets used a two-cylinder air-cooled engine, normally used in Howard Autocultivator farm machinery, driving a 2.5 KVA alternator. The Army had 'collared' the whole output from the factory but, after much persuasion and conferring, agreed to make some units available for the LW/AW. These small units were never intended to run 24 hours a day, seven days a week, which resulted in a lot of mechanical trouble in addition to having significant voltage and frequency fluctuations during operation.

The virtue of the Howard was its lack of weight. Its usage was only possible because the power consumption of the whole LW/AW was small. One has to remember that the power provided by this unit (2.5 KVA) also supplied the lighting in the tents etc for the whole camp. A modern electric stove consumes much more electricity than an LW/AW station did.

The second generation power supply for the LW/AW was a 5 KVA alternator driven by a Ford 10 petrol engine. While this was a vast improvement it weighed some 1500 pounds.

Since two units were needed for a station, the provision of power made up the major part of the overall weight to be transported and manhandled through the surf and up steep bluffs.

If one were asked for the main reason why the LW/AW was so successful, especially when it initially had such a poor power supply, the answer would have to be the excellent time base unit in the indicator panel of the AW receiver. None of the time base circuits in the English or American sets of the time could have survived operationally with the large voltage swings that occurred with the Howard power supply. Even when relatively stable power was provided to the COL, GCI and ACO stations, the operator generally had a Variac auto-transformer at his/her feet to continually adjust the input voltage to the receiver in order to maintain a constant trace length and range calibration.

301 and 302RSs at Milne Bay

These two stations, using modified ASV equipment, were used as special units and established in 1942 for coverage of possible Japanese shipping movements at Milne Bay. However, the RAAF official list of stations only shows 301RS and 302 RS as being formed on 20 February and 21 April 1944 respectively.

The background to the use of ASV sets for early warning stems from the Singapore Campaign. Late in 1941 SqnLdr (then PltOff) Israel and PltOff Andy Lewis were sent there to assist the RAF in the installation of ASV to aircraft but the situation rapidly got out of hand. Unfortunately they did not have either an Impedance Measuring Set - known colloquially as the Buggery Bar - or the details of the necessary lengths of coaxial cable needed to properly match impedances of the system. Security in those days was such that no one was allowed to carry any circuits or details of equipment with them when they left Radar School. Despite many signals to Australia this vital information was never received. SqnLdr Israel was sent back to Australia to get the information but Singapore surrendered before he got to Melbourne.

The two RAAF officers also held discussions with the CO of the local RIMU and recommended the use of an ASV set with Yagi aerials, mounted in a small truck for mobility, and using the truck engine driving an aircraft alternator for the power supply. There were ASV sets and aerials available because so many aircraft were being shot down. The idea was to use these sets on the mountain ranges in Java for early air warning as the Allies retreated.

SqnLdr Israel told WgCdr Pither of the discussion as outlined above and this is believed to be the genesis of 301 and 302 stations, which were located at the entrances to Milne Bay - East Cape and Kanakopi.

They were assembled with a sense of urgency in RAAF Headquarters, Melbourne. The aerial was made by the PMG Department. Matching and phasing was done by SqnLdr C Resch in Melbourne prior to sending the units up north. It appears that only two of these emergency type of early warning were actually used.

The above somewhat contradicts GpCapt E R Hall, who in his book A Saga of Achievement, stated that they were developed as a ‘gap fillers’ to extend the usefulness of radar coverage. To quote Hall:-

> “The equipment was an early ASV set, later changed to an Australian ASV Mk II equipment, with a small aerial with six dipole elements. The set was tested at Home Hill, near Townsville, Queensland, and moved to Milne Bay to play an important role in the defence of Milne Bay during the heavy attacks early in 1943.”

WgCdr Pither stated that these were the first transportable radars used by the RAAF and indicated that lessons should have been learned. To quote him:-

> "From the beginning the enterprise was unfortunate. They were sent out into the blue and were immediately forgotten, with the result that they became unserviceable, the personnel were neglected, and serious loss of life could have occurred under less favourable conditions."

Similar concepts were used by the RAF to protect the entrance to the harbour at Alexandria, Egypt and, in Canada, a similar unit (Nightwatch) was developed. From these beginnings, the UK developed the AMES Type No 6, as a short-range Light Warning set. The latter was also produced in Canada using the English NT99 transmitting valves with North American components, becoming known as the SCR602.

Summary of Stations Established

In this period, 14 AW or COL fixed stations, one fixed ACO type, three GCI stations and seven LW/AWs became operational - a total of 27 including the two special ASV units at Milne Bay. However, six MAWDs were disbanded, as were the Milne Bay specials.

Two more Fighter Sectors were formed at Brisbane and Cairns in Queensland.

At the end of 1942 there were 37 operational stations, a creditable performance considering that there was not even an organisation at the beginning of the year.

The syllabus for each course at Radar School was revised and expanded in the light of experience gained in the field.

It is interesting to note that the first Americans arrived for training in July. Their lack of radio knowledge was such that they were trained as operators and not mechanics as originally intended. The COs of American units had used the opportunity of getting rid of malcontents regardless of their capabilities.

1943

General

This year saw a more stable situation and it became possible to plan ahead and aim at the production of equipment to meet special purposes. RAAF Headquarters in Melbourne had the responsibility of supplying equipment to meet the requirements set down by RAAF Command in Brisbane and to notify them if there were any shortfall. Research and development, such as the new radar sets, which were being developed by Radiophysics, was under RAAF Headquarters.

Breakdowns occurred in tropical areas due to excessive humidity and arcing between high-tension components were reported from some stations. Early in 1943 it was observed that these incidents usually took place after units had been switched off, sometimes for only a short period. The fitting of a heater in the base of the cubicles of the AW, to be switched on when the unit was not on line, maintained the ambient air temperature at a level sufficient to prevent condensation. Later the high-tension transformers were sealed in airtight containers as an extra precaution.

There were also reports of severe damage to electronic racks and components due to moisture and the growth of fungi when they were in storage or transit. Not only was the cost of such damage high but it also resulted in serious delays in stations becoming operational. Committee L, comprising Allied Services and civilian experts, was the prime mover and coordinating force, arranging tests and recommending standard procedures etc for tropicalisation. Several groups including RPL, Army and No. 1 RIMU were also involved in testing of components.

A nice comment on the end result comes from Guerlac who in his set of books *Radar in World War II*, said:-

> "The Australian built LW/AW was the first light-weight radar available to the US forces in the SWPA. This set, which was rushed into production after Pearl Harbor, was particularly distinguished by its excellent tropicalisation."

Two major decisions were made in late 1943. Firstly the ACO and COL programs were stopped except for Lee Point, Cape Fourcroy and Cape Don where AW equipment was replaced with COLs. The second was the British decision to introduce the Mk III Identification Friend or Foe (IFF) necessitating the use of an Interrogator to 'read' the IFF responses. Another transmitter, receiver and aerial were required at each station to interrogate the Mk III IFF. The American BL4 unit, designed for the US Navy, and operating at 176 Mc/s was used by the RAAF for this purpose. A hectic installation program was begun in August/September.

Establishment of Radar Wings

Three Radar Wings were established early in 1943, No 41 at Port Moresby, No 42 at Townsville and No 44 at Darwin. The purpose behind the formation of these new units was to achieve a better system for control and maintenance of the stations in their areas. A pool of personnel was held at each Wing for replacements of staff. A store of spare parts was also held and RAAF Communication Flights made deliveries of urgently needed items to individual stations. The Wings took better care of the welfare of personnel by providing better services including medical liaison plus, the all important, mail and a watching brief on food deliveries.

Each Wing sited new stations or moved existing ones to suit the needs of operations and this was normally done following consultation with the local Ops Group.

Radar Officers' Conference

All area radar officers, COs of the three Wings plus representatives of Radar School, No. 1 RIMU and the RNZAF attended a conference on 23 August 1943. GpCapt P Chamberlain (RAF) had just arrived in Australia on exchange duties, taking over the post of Director of Radar, from WgCdr Pither who went to the UK. For the first time senior officers came together to discuss common problems. More importantly, the timing was excellent because the drive towards Tokyo was about to commence. The opportunity was taken to advise senior officers of the need to adjust their outlook and thinking as the overall situation was changing from defensive to offensive tactics.

The conference had a big agenda and lasted for a week. Minutes of the meeting were very sketchy but hearsay evidence is that it 'was extremely beneficial to all concerned and the service in particular'.

Stations Established

During the first half-year some 42 stations were formed of which 22 were LW/AWs, 14 were AWs or COLs, four GCIs and two ACOs - the biggest number of RAAF stations formed in a six month period during the war.

The second half-year saw a total of 24 stations established of which 12 were LW/AWs, four fixed, two GCIs and six ACOs.

An additional two Fighter Sectors and three Fighter Control Units were formed in the year.

Furthermore, the number of personnel (1638 on 114 courses for ground radar) trained during 1943 was greater than in any other year of WWII.

On a different front, Section 22, a joint services radar counter measures activity was created with headquarters in Brisbane. Its name was derived from the fact that it started in room 22 and was very secretive - even more than radar itself.

305RS was one of the prominent stations in this period and its history has been well documented in the Secret Action of 305 by Norm Smith and Frank Coghlan.

Possibly the most outstanding station at the end of the year was 335RS which accompanied the American forces when they landed at Pilelo Island - the first RAAF radar unit involved in such a landing. The full story is included in Radar Yarns on page 176.

1944

New situations arose during this year. There was a shortage of manpower in the country, both for industry and the services. Also there was a difference of opinion between Radiophysics and the RAAF as to whether the air warning system should move into the centimetric band. There were also changes in the administration of the radar stations.

With regard to the manpower shortage, it was not as serious as some have indicated as far as ground radar was concerned. RAAF Command had asked for an additional 2,000 radar personnel, including air mechanics, in its program for 1944. The response was that the RAAF allocation for manpower in that year was such that only 1,000 'could be produced and it was their responsibility to use them as they thought best'.

The mobility of the LW/AW had been clearly demonstrated and this feature was fully utilised. As the theatre of war moved away from Australia, units were shifted from one site to another. This made much better use of both material and personnel.

About the same time, it was decided that no more fixed stations would be erected. As a further measure, many of the mainland stations were placed on almost stand by conditions, only operating a few hours through the day. The stations on stand by were those south of the line from Brisbane in the east to Geraldton in the west - this line could almost be described as being the Reversed Brisbane Line.

This action permitted more radar personnel to be made available for stations in combat zones.

Sir Frederick White, the first Chief of Radiophysics Division of CSIR, visited the UK in 1943 and, on his return, recommended to the services that they should 'modernise' and go centimetric. At this point the RAAF had had considerable success with the 200 Mc/s LW/AW Mk IA, local industry was geared to the production of a standard model and all the RAAF personnel knew it inside out. Furthermore the Japanese Air Forces had suffered some major losses and enemy counter measures were virtually non existent.

In hindsight the RAAF probably made the correct decision at the time - to stick with the LW/AW Mk IA.

It is interesting to note that the RAAF's use of 56 LW/AW units was less than half of the total LW/AW units manufactured in Australia. The remainder was used by the US Forces (60 units) and Mountbatten's Forces in Burma (12) such was the quality of the equipment.

The first half of the year saw the unnecessary loss of life on Bat Island, 340RS, from scrub typhus. The opinion of an officer who opposed the selection of the site on the basis of his pre-war knowledge of the region was overruled. However, from that time on, medical approval had to be obtained prior to establishing stations in remote areas.

340RS was one of five radar stations which accompanied the Americans to the Admiralty Islands with the others being based on Manus and nearby islands on the northern side. These stations managed by 114MFCU played a very significant supportive role for the Americans and some 25 bomber crews were rescued as the result of their vigilance.

In mid 1944 it was decided to disband the Radar Wings at Port Moresby, Darwin and Townsville and transfer the control of the individual radar stations to Mobile Fighter Control Units or Air Defence Headquarters. Additional Radar Installation and Maintenance Units were formed and given some of the Wings' former responsibilities. RIMUs handled the technical necessities of stations.

The capture of a Japanese 'spy' boat by the personnel of 326RS was an unusual event in August 1944, with station staff becoming boarding parties. The story of this happening is told in Radar Yarns.

It was not until late in 1944 that an early requirement for special training for newly formed stations could be implemented - the heavy demand for stations in forward areas precluded what WgCdr Pither saw as a need. A special organization was set up at Radar School for jungle training of personnel who were then sent to mountainous country nearby where they carried out several weeks training in camp life, operations and camp life. Pither said, "This produced, long after it was due, a party of men who had some chance of looking after themselves when they arrived in tropical areas."

There was a marked drop in the number of new radar units formed during the year. 11 LW/AWs, five GCIs and four LW/GCIs were established and it will be seen that even this number was halved in 1945. Certainly the re-positioning of stations had an effect but there are some who claim that, by 1944, the Americans had sufficient stations to be able to go it alone in the push to the Philippines. Pither stated that the manpower shortage was one of the reasons tempered with the fact that"

> "The US 5th Air Force preferred to send RAAF radars to these jobs [340RS at Bat Island], if not because the jobs were unsavoury at least because RAAF personnel and equipment were the only ones in the area."

Hal Porter puts forward an additional theory which may explain some of the drop off in the number of new stations:-

> "Gradually equipment was improved, in particular waterproof packing, and bigger operations were planned, but a new bogey arose and beset the tiny radars and to a lesser extent other technical units - top heavy administration.
> Under the [Radar] Wing system the Americans stated that they required a station, ready for assault, in so many hours time. They got it.
> But times changed. Northern Command and 9 Ops Group were formed under RAAF Command, Brisbane. MacArthur's Headquarters were in New Guinea. Further, RAAF Command and RAAF Headquarters were continuously running a trial of strength re who really had the say. By the time a request had passed through these headquarters several days had been lost and the reply usually was 'Not tomorrow but give us three more days'. Such a system did not satisfy our Allies and, from Biak onwards, the Americans went in alone."

1945

As far as the expansion of the RAAF Air Warning Network was concerned, 1945 was just more of the same as 1944.

The major campaign was in Borneo and some 17 LW/AWs and LW/GCIs were involved. But RAAF radar was not used in the campaign for the Philippines and hearsay information from many sources claim that the Americans wanted our field units but not our bureaucracy - a sobering statement bordering on being an indictment.

Only nine new operational stations were formed before the war ended, four were LW/AWs and five were LW/GCIs but the service saw the introduction of the first two centimetric units which were Light Weight Low Flying Cover (LW/LFC). These types were certainly lightweight in themselves but they needed a heavy 25 KVA diesel alternator and a motor generator set to power them. Neither of the latter became operational before the war finished.

Mention should be made of 350RS. It had the singular honour of never becoming operational in its career. No explanation has been found as to why this unit sat at Finschhafen for 15 months doing absolutely nothing. The writer found the following quotation, which comes from the April 1945 Operational Report, showed the CO's concern: -

> "The morale is not high as may be expected on a unit which has been in existence for 15 months without becoming operational. The enthusiasm shown by the original members of the unit is practically non existent. Discipline is satisfactory but harder to maintain than on an operational unit.
> The response to the Third Victory Loan was most disappointing - there were only three subscriptions totalling, £100. The attitude of some personnel towards War Loans is difficult to understand and is certainly no credit to them.
> E T Robinson FltLt. OIC 350RS."

THE OVERALL SCENE 1942-45

Establishment of Stations

The following table, based on information which is still available has been prepared to show the expansion of the network during WWII - it is the most accurate one ever produced.

	1942		1943		1944		1945		
RADAR TYPE	**J-J**	**J-D**	**J-J**	**J-D**	**J-J**	**J-D**	**J-J**	**J-D**	**TOTAL**
AW or COL	10	14	14	4					42
MAWD	8								8
GCI		3	4	2	5				14
ACO		1	2	6					9
LW/AW		7	22	12	8	3	3	1	56
LW/GCI						4	4	1	9
LW/LFC								2	2
Milne Bay Specials		2							2
No Established	18	27	42	24	13	7	7	4	42
No Disbanded		8	1	1		3	1		n/a
No Operational	18	37	78	101	114	118	124	124	n/a

It would appear that the 56 LW/AWs were operational at 122 sites. Some other stations such as the MAWDs and GCIs also operated at more than one location. In total then, RAAF radar stations operated at some 229 sites. Appendix A details the locations of all stations.

Operations and Filter Rooms

There is no doubt that problems existed in this area and the following is quoted from the Pither Report.

> "The Air Defence Organisation in Australia got off to a bad start but it is most surprising that no real attempt was made to rationalise it for three years....In January 1942 with the fall of Singapore a frantic programme was commenced in Australia for the provision of filter and control rooms at focal points. At the same time a training organisation was established at New Lambton, Newcastle, this school being intended to become operational in the event of an attack occurring. No good purpose will be served in outlining the incredible series of mistakes and disorganisation which followed but the trouble can probably be traced to the failure of the Air Staff to realise the requirements of air defence. The Air Staff at that stage was a mixture of American, Australian and RAF, the RAF personnel being aware of the requirements and trying to establish an organisation following the British precedent, while the remainder worked on ideas of their own. The first result was a control organisation which had no connection with or understanding of the reporting organisation of either radar or air observer corps. These misunderstandings were exaggerated by the personnel who were chosen as controllers; in most cases were failed aircrew or other officers who had no conception of the problems of air defence. The situation became worse until in 1943 [when] I was able to gain control of filter rooms and combine them with radar into one organisation, thus remedying part of the difficulties.
>
> Another factor militating against success was the influence of ex-3 Squadron personnel at RAAF Headquarters. These officers had come from fighter squadrons operating in the desert and had established excellent names for themselves. Unfortunately, however, they had had no experience whatever of static air defence and had never been controlled by radar for an interception. They tended therefore to think of fighters in terms of desert warfare, tactics

which were extremely successful at Milne Bay but were quite unsuitable for the defence of Darwin.
Further difficulties arose in the case of GCI controllers which was partly due to the fact that the number of Japanese was very small and there was no real need for GCI control. Nevertheless and rightly, the Air Staff required GCI facilities at all fighter sectors.
It was not until 1944 that this GCI problem was straightened out with the importation from England of two trained officers, one experienced in GCI and the other in filter rooms and fighter interception. Meanwhile the lessons had been learned in operational areas, particularly at Darwin, by bitter experience, and Darwin became a very efficient air defence organisation. Moresby on the other hand was under the control of the Americans who had not by this time developed a really successful system of control of their own.
It was unfortunate that while the RAF control system had been adopted in toto by the American training organisations in America and in fact officers trained in this system in this system were being sent to New Guinea from America, the Americans in New Guinea refused to abandon their local system and the controllers from America had to forget the British-American system and learn the local New Guinea system. And so it went on until by the time of the Philippines were reached and the RAAF was operating from Morotai, experience, combined with a certain amount of advice from overseas had produced an effective control system. In the case of the RAAF this resulted in the establishment of MFCUs and ADHQs, where the fighter defence organisation was an entity, radar, observers, control and fighters all being under the officer responsible for air defence."

Radar Countermeasures

Section 22, a joint services group, was formed for the purpose of combating enemy jamming etc. 'Ferret' aircraft were being equipped at the end of the war. Many people wondered at the time why the Japanese did not make better use of their knowledge of radar and its principles both in their tactics in the air and in defence. A captured document, which was translated after the war, confirms that the Japanese did have considerable understanding of the subject and made recommendations in most areas. To quote from that document:-

"The apparent lack of use of information gained from early warning nets is the inherent difficulties of the Japanese language, which is unsuitable for the transmission of orders/instructions without writing down the characters. This is especially true if the subject matter is technical or complex. This may account for lack of an adequate communication system which is vitally important when using a radar warning net, or fire control equipment."

Conditions on Remote Stations

It is hoped that this brief history has given the reader an overview of the air warning network. However, it would inappropriate not to look at the personal effects on the individuals who manned these units in the SWPA.

To cover the 229 sites, all forms of transport were needed ranging from road, rail and aircraft to merchant ships, landing barges, a converted mud barge, requisitioned pleasure boats, pearling luggers, hired fishing boats even human portage - all involving a lot of effort and determination.

Quite a number of radar units were stationed in extremely isolated locations for long periods - on many stations personnel served for 15 months without relief - sometimes virtually behind the Japanese lines. Many who served on those isolated stations feel, even today, that they

were neglected. Mail and food supplies were both irregular and infrequent - once on location they were largely forgotten except of course when they 'went off the air'.

This question of giving long term serving men relief was addressed in 1944 but it was found that there were not enough technicians, particularly operators, in Australia to replace these men. One explanation put forward was that the selection process had approved people for training who were medically unfit for the tropics, too old or too young, screened personnel and finally those unable to go because of compassionate reasons.

Nevertheless, everyone who served on a radar station, particularly in combat zones, made a significant contribution. Of course the success of a unit depended primarily on the radar personnel. The Officers, Mechanics and Operators were all working in the forefront of technology, an area which may now be called 'raw radar'. There were no computers and everything was done manually.

Non-radar personnel, such as W/T Operators, Guards, Cooks Fitter DMTs and Clerks, also played their part, often as general dogs' bodies and labourers, carting fuel and other items in addition to their allotted duties. Their efforts were largely unrecognised but their contributions emphasised the criteria needed on a small isolated unit - teamwork and efficiency.

The isolation and poor food supplies placed extra stress on the Cooks. These men were an important element in maintaining morale on a station and most of them tried everything in their power to make the food at least palatable.

A radar station without power was literally powerless. Some of the Fitter DMTs slept alongside the noisy cantankerous Howard driven alternators and woke immediately if the motor changed its beat - such was their devotion to duty.

Civilian Input

Due recognition should be given to the civilian input to the overall scene. Radiophysics was responsible for the design of the extremely important AW transmitter and receiver and gave the RAAF continuing technical support and advice throughout the war.

Similar support was received from the NSW Government Railways, the manufacturer of the LW/AW tower and array, and industry generally, even to furniture manufacturers who made the transit boxes for the LW/AW. In fact some 60 odd companies and contractors were used during the war, working on RAAF ground radar equipment.

Conclusion

In writing this brief history, there was no intention of detracting from the efforts of the Army and Navy in the field of radar or the Coastwatchers who fulfilled another need with distinction.

Our appreciation should be expressed primarily to the late Air Commodore (Retd) A G Pither CBE, the father of RAAF radar, who built the network from nothing at the end of 1941.

Regrettably, the author is convinced on two points.

Firstly, that WgCdr Pither cut too much red tape and ran foul of the 'establishment'. This raises the question as to whether he was sent on exchange duty to the UK in 1943 so that the bureaucracy could reorganise the service to meet their demands or whether he was sent to gain further knowledge and experience.

The second point is more pertinent - the Australian manufacturing sector in 1998 could not match the efforts and output of the war years.

It is to be remembered that the RAAF ground based air warning network provided the defensive and supportive roles needed during the war. All of the civilians and service personnel involved should feel justifiably proud of its achievements.

Finally, having briefly covered the Historic Background of RAAF Air Warning there is still another aspect to be explored namely, “Technically speaking, could the RAAF have done better?” The idea is to answer it as well deal with some technical matters in the proposed book, Technicalities and Generalities.

31 RADAR STATION AT DRIPSTONE CAVES, NT
Photo by Courtesy of Charles Hammer

The wording of the Commemorative Plaque in Darwin reads

RAAF No 31 RADAR STATION
FIRST AUSTRALIAN EARLY WARNING RADAR
FLOWN FROM SYDNEY ON 5TH FEBRUARY 1942
IT WAS ERECTED HERE
RAAD RADAR MEN TOGETHER WITH AIRMEN OF UNITED STATES
AIR FORCE AND ROYAL AUSTRALIAN AIR FORCE SQUADRONS
ACHIEVED THE DEFEAT OF JAPANESE RAIDS ON DARWIN
SOME OF THOSE RESPONSIBLE WERE

COMMANDING OFFICER	P/O H W HANNAM
DESIGNER	DR J H PIDDINGTON
DIRECTOR OF WORKS	E W STODDART
DIRECTOR OF RADAR	W/CDR A G PITHER
CMDR US FIGHTER GROUP	COL P B WURTSMITH
1ST COMMANDER RAAD FIGHTER AIRCRAFT	S/LDR R C CRESSWELL
AIR OFFICER COMMANDING	A/CDR D E L WILSON

THIS MONUMENT WAS ERECTED
BY
RAAF RADAR MEN
AND
THE CORPORATION OF THE
CITY OF DARWIN
UNVELIED BY
AIR COMMODORE A G PITHER CBE
19TH FEBRUARY 1967

Air Commodore A G Pither CBE, and Alderman H Chan, Mayor of Darwin,
unveiling the RAAF Radar Memorial Darwin
Photo by courtesy of Norm Smith

*AirCdre Pither, as WgCdr in 1941 became, as far as many people are concerned, the **Father of RAAF Radar**. He graduated in the RAAF as pilot in 1931 and was selected to undergo Signals Officer's Course. Around 1936 he had appendicitis and was operated on at Caulfield Hospital. Unfortunately, the surgical team left a swab in the wound. This became infected and, as a result, further operation was required and one kidney had to be removed which 'grounded' him.*

By the outbreak of the war, WgCdr Pither was the most experienced Signals Officer in the service and it was logical that he should be sent to the UK for indoctrination in the new defensive weapon which later became known as Radar.

RADAR YARNS

31RS AT DRIPSTONE CAVES, DARWIN, NT

Sources. RAAF Historical Section, John Scott, Lew Collier and Errol Suttor.

Editors' Comments: This station was the first RAAF radar station to become operational in a combat zone but it was not the first such RAAF unit to come on line. This honour belongs to the station established at Shepherd's Hill, Newcastle, NSW, a CD/CHL set installed by the RAAF and Radiophysics using an Army SHD aerial. It became operational on 10 January 1942. Later it was moved to Bombi Point, NSW and was then known as 19RS.

The electronic equipment at Dripstone was one of the six sets, "manufactured as pre-production experimental sets" by Radiophysics Laboratory (RPL) with the aerial and tower structure were manufactured by the NSW Government Railways to Radiophysics' design. Mechanics and operators came straight from No 1 Radio School and took different routes to get to Darwin. The former were all "direct entries" being radio buffs and amateur radio operators while the latter were re-mustered from Flying W/T operators.

A commemorative plague, erected in Darwin at the original site, was unveiled by Air Commodore A G Pither CBE on 19 February 1967.

Now to the stories.

Getting to Darwin - a Mechanic's View

John Scott

The technical crew left for Darwin by train from Sydney on 3 February 1942. We arrived in Brisbane on the next day and stayed the night. Then I received a signal indicating that the equipment was still at Richmond and that I was to return to help with the loading of the equipment and accompany it to Darwin. The others in the party, P/O Hannam, Bill Couper, Bill Wellstead and Errol Suttor left for Darwin, flying Qantas.

Having loaded the equipment in a DC3 piloted by P/O Campbell, we headed for Darwin staying overnight at Charleville. The next day we took off for Darwin and after a short time the wireless operator reported the wireless out of order. The pilot indicated that this was not a problem, descended a few hundred feet, picked up the road, followed it through to Darwin and we arrived on 9 February. The last thing P/O Campbell said to me was "keep your tin hat handy".

Then I met up with the other mechanics who were digging trenches. A surprising fact was that the Adjutant of RAAF Station Darwin was unaware of the mustering of RDF Mechanic, which gives an indication of the secrecy of the operation.

Getting to Darwin - an Operator's View

Lew Collier

Our final exam, on either No 1 or 2 Operators Course, I forget which, was a bit of a circus because the CD/CHL was not working so our test was to tune the set for maximum "grass". We did not see how this could have any bearing on what we had to do at an operational station but we managed.

Eight of us, all operators, were posted one afternoon to Darwin. We left Richmond without having been fed. It was a panic situation and we were hurriedly moved to Central Railway Station to catch the Melbourne Express which, incidentally, they held for us so great was the urgency. We still had not been fed when we got to Ascot Vale the next afternoon.

At Ascot Vale - still no meal - we were tropically kitted and had a mass dental treatment. 47 fillings between the eight of us and one extraction which of course was mine.

To confuse any enemy spies in the vicinity we were made to take our blues with us, then rushed to Spencer Street Railway Station guarded by SP's. All very hush hush. There we

complained bitterly to an officer that we had not been fed since lunch on the previous day. Moreover we said that we did not want to go to war on empty stomaches.

Meal warrants were obtained and tables were cleared in the railway dining room. We ate surrounded by SP's, suffering curious stares and glances from the civvies eating nearby. They must have wondered what crimes we had committed to necessitate the guards around us.

We made Darwin in seven or eight days that could have been a record for the overland trip at that time.

At the Personnel Depot, on the civvy drome in Parap, a suburb of Darwin, we were quizzed about our mustering by the CO who was an F/O. He said that there was no such mustering as radio operator as we were then called. He sent a signal after we told him that we could not tell him what we actually did. He told us to "stand by" which meant that we did some spine bashing in the shade watching other airmen dig slit trenches etc.

Some three or four days later we were collected by P/O Harry Hannam and went to Dripstone Caves.

Early Days at Dripstone Caves - an Operator's View

Lew Collier

The Allied Works Council, otherwise known as the Civil Construction Corps (CCC) built the doover hut, and an army hut was given to us for our quarters.

Some difficulty was encountered when they were installing the array which, from memory, weighed about half a ton. No one helped with lifting gear. In fact no one wanted to know us.

The array had been assembled at the time of the first raid and was lying on the ground near the doover. Two of the Japanese planes flew so low that they almost landed alongside the doover. I have often wondered why they did not do something about us then or later. We were heavily camouflaged later.

After the first raid most of the civvies shot through leaving the CCC yard unguarded. Some of the boys went over and liberated a long wooden pole and a pulley or two.

They rigged up the pole and hitched a rope to the truck and lifted the array. When it was almost in place either the rope or the pole snapped and dropped the array that did not do the dipoles and the doover hut much good.

For about seven days after the first raid we were forgotten men. No toilet facilities, no food rations, no cooking facilities and the only water supply being what we collected from a natural rock basin in Dripstone Caves. We "jacked up" and the first thing we did was to take time off to dig a latrine.

For a couple of weeks we did not have a refrigerator. If we got a supply of fresh meat it would be fly blown before we could cook it. The net result was that we liberated a fridge from the Qantas quarters where their flying crew staged overnight. Things improved from then on - we even made a stove from steel posts, used in barbed wire fortifications, and some liberated corrugated iron sheets.

As operators we did not contribute greatly to the installation of 31RS, being mainly relegated to 'navvying'. As we had all spent some time on Flying W/T Operator training we felt that we could have been more helpful but the mechanics were very conscious of their expertise. However we did spend time filling a lot of sandbags which were stacked around the doover.

Even when we were on the air, on six hour shifts, we were still filling and stacking sandbags in our "spare" time. Due to lack of expertise the wall was unstable and it collapsed. The wall then became a revetment consisting of corrugated iron walls with sand in between. Outside help from the Personnel Pool was provided when the boys complained to a visiting senior officer.

One day [it was probably 4 March 1942] we were being visited by a S/Ldr or above, a Yank officer and a sergeant. We were still working on the installation. I was on the sandbag blast wall - or was it the blasted sandbag wall - and Knuckle Findlay was on the top of the array painting it. Six fighters screamed in about 300 feet up and one of the officers said, "Brewster Buffaloes. I wonder where they came from."

Knuckle dropped off the array, briefly touched the roof of the doover in passing, shot past us saying, "Brewster Buffaloes be XXXXXX." - just as they strafed RAAF Darwin.

Once we got our own truck water arrived daily; mail, food and personal parcel deliveries became regular and things improved immensely.

Early Days at Dripstone Caves - a Mechanic's View

John Scott

The first problem was how to get the array into position. It was a prototype and built like a battleship. We tried every trick we knew and it was only after the incident when the rope broke that Harry Hannam, the first CO, decided to get help which came in the form of the US Services sending out a mobile crane and lifting it into position.

The second problem was power - yes power. It would appear the power supply had been completely overlooked. Our CO again contacted the Americans and within a day or so a power unit was delivered. It was a small unit that could be lifted by hand - the type used in home lighting. It was supposed to operate the gear including the variable load of a 3/4 HP drive motor. It was like trying to start a car engine with a torch battery - impossible. Once again Harry Hannam found the solution in the form of an old two cylinder Kelly and Lewis engine driving an alternator, mounted on the back of a truck. We learned that it had been used as a lighting plant on a property in the district. It proved to be suitable and was nursed along by the radar mechanics for a few weeks until a Southern Cross diesel and a fitter arrived.

Equipment racks were fitted with gelignite and associated detonation gear ready to demolish it in the event of a Japanese landing. Kit bags were also packed ready each day and left on our bunks in readiness for a quick exit.

Now for the third problem, the most difficult of all. The array was up, the power supply adequate and all we had to do was to get the equipment operating. It was a matter of positioning the dipoles, cutting the coaxial cable to the correct lengths, and matching up the complete system to give the maximum output with a desirable lobe pattern and a high sensitivity on the receiver side. The instrument used for this purpose was an Impedance Measuring Set, termed by most as a "buggery bar". We tried everything we knew to get satisfactory results without success. The longer we worked on the calculations the more the buggery bar looked like a trombone. It is to be remembered that this was a prototype and only the experts from Radiophysics had previously achieved the delicate procedure of matching the array. P/O Hannam sent for assistance through the RAAF to Radiophysics. Dr J Piddington who led the design team for the AW arrived in Darwin and after a couple of days the gear was working satisfactorily.

A high ranking US officer was heard to say that they would bring in up to 100 Kittyhawks "When this here rig is operational but not before". They kept to their word. The US Signals ran a telephone line from our tin operations hut to their Fighter Sector Control Room.

The first enemy aircraft were located at a distance of 80 miles on 22 March 1942. The crew on watch at the time were Bill Wellstead, mechanic, Fred Findlay and Kevin Wass, operators with Fred Findlay being on the cathode ray tube at the time.

It was not uncommon to see US planes, after a successful engagement, fly over our hut and dip their wings in salute.

We experienced some trouble with the transmitter soon after it became operational. The blower motor overheated due to continuous running. To overcome this we used a vacuum cleaner as a replacement cooling system for the micropup valves. The vacuum cleaner and an electric iron, acquired from the town, came in very handy. The mica insulation from the iron was used to make insulating washers for the transmitter after short circuiting occurred on the valve mounts of the micropups.

Editors' Comments: The above stories somewhat contradict the statement on page 435 of the book by D P Mellor, *The Role of Science and Industry* (Volume V of the series Australia in the War of 1939-45) wherein he states:-

> "The set sent to Darwin was accompanied by technicians of the RAAF, who, even though they were without manuals to guide them, felt confident of their ability to operate it. When an attempt was made they failed even to get the set on the air. While they were still trying to get it working the Japanese made their first raid on the town."

Here we have eyewitness reports that the array had not been erected at the time of the first raid so Mellor's statement is incorrect.

At the time it was not a case of trying to get the set working, instead it was a case of being unable to even complete the installation due to inadequate lifting tackle, tools etc. The coaxial cables feeding the array in the first AW stations were unsatisfactory and the early replacement with open wire feeders not only improved performance but also the need for the buggery bar.

Why 31RS Was Moved

Normally a fixed air warning station stayed in one location if it was giving satisfactory results but not so for the station at Dripstone Caves. This made us wonder why and the answer was found in the A50 report for February 1943.

> "At 2237K hours on 20-2-43 a loud crunching sound was heard outside the Operations Room. On investigating, it was found that a portion of the cliffs and a section of the outer protective wall of sandbags around the Ops Room had fallen into the sea. The galvanized iron sheets and posts of the outer wall now overhang the cliff edge by about two feet. This unit has been informed that it is shifting to a new site soon."

It is to be noted that the actual move did not take place until 30 September 1943.

F/O FRED HULL AND HIS TINEA

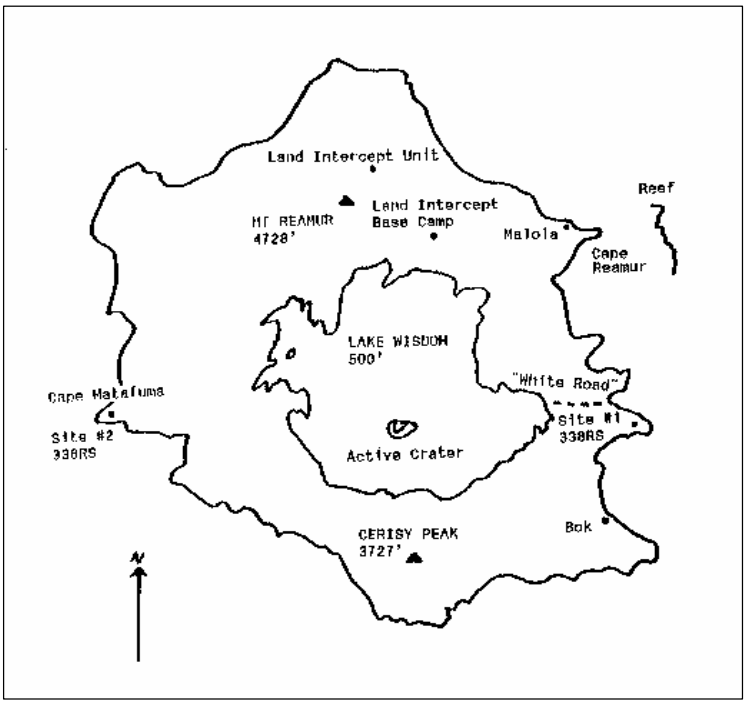
Lew Collier

Housing of the staff at 31RS was originally a very egalitarian arrangement. We all shared the same hut, ate together and even contracted tinea at the same time.

F/O Fred Hull's case was the worst of the lot. He had it in the crotch and around the anus. He was standing starkers in the communal hut we shared and made up a mixture of Mycosol, Triple Dye, and a couple of other spirituous medications. Having saturated some cotton wool with the said mixture, he whacked it on the affected parts. His reaction was instantaneous.

He took off like a rocket - never ever saw a big man move so fast. We could both see and hear him hurtling through the bush. Some minutes later he re-entered the hut and declared to all and sundry. "I think I'll keep the tinea."

LONG ISLAND



Editors' Comments: This is a three part story. There have been more contributors to the overall picture of Long Island than any other story which appears in this volume. Contributors include Brigadier Don Tier and Cpl Errol Coddington of the AIF; Blan Sandlin from the US Air Force; Len Ralph, Les Kinross and Joe Lynam from the RAAF, plus research of official records in the RAAF Historical Section, Canberra. We feel that after reading the story of Long Island that readers will agree with George Bernard Shaw's statement in *Back to Methuselah*: "Life wasn't meant to be easy".

Part 1 - A Series of Misfortunes for 338RS

On 24 December 1943 at 1450 hours a convoy of seven barges, operated by the American 592nd Amphibian Engineers, departed from Finschhafen on a 100 mile open sea voyage for Long Island. Five of the LCM's carried US Marines with orders to clear the island of any Japanese soldiers so that 338RS, carried by the other two, could be established on a rocky east coast prominence on the island.

This unique volcanic island lies on the 147th meridian some 30 miles off the north coast of New Guinea. Roughly 15 miles across, the elevated central area contains a large lake, Lake Wisdom, with a small active crater in the southern half. Several volcanic plugs, or dykes, feature in the jungle-clad landscape . The small bays around the rugged coastline have white coral sand beaches which are the result of the heavy surf and sea pounding the coral reefs surrounding the island.

Past experience had shown that on occasions such as this, a team of experts should accompany the normal station personnel with the idea of foreseeing some, and overcoming other unexpected difficulties as they presented themselves as well as helping the normal radar station staff install the gear and have it operational without delay. The CO of 338RS was P/O A D Lum and the experts from 41 Radar Wing in Port Moresby were F/O J R Hubbard (technical officer in charge), F/O Harkin (Signals), Mr Adams (Camoufleur), Sgt E Arndt (guard & general assistant), Sgt Jack Barnett (guard) and Cpl Len Ralph (specialist radar technician).

Christmas Day was spent at sea undisturbed by the enemy. However, that night the barometer fell sharply to herald the advent of heavy rain squalls. Because of enforced radio silence and zero visibility the LCM's proceeded independently and arrived off the east coast of Long Island at 0400 hours on Boxing Day. They hove to off shore with sea anchors waiting for the Marines to clear the way to the shore. The best way to describe the ensuing events is to quote Len Ralph who still vividly remembers what happened and when.

“The barge I was on, contained all the radar gear, rations and canteen supplies - covered by tarpaulins. Immediately before daylight our barge drifted into the line of breakers, was picked up by a large wave and deposited on the reef some distance from the shore. There it was inundated by successive waves which washed two of us overboard into the lagoon. I scrambled ashore having lost contact with my companion in the rough and tumble of the surf. I perceived someone in the darkness walking along the beach and cowered down in some undergrowth half expecting a Jap but it turned out to be Jim Monara. Concealed among the undergrowth on the fringe of a narrow beach we took stock of our situation which didn't appear to be particularly pleasant. The Marines were due to land at any moment and if the Japs opposed them we would be in No-Man's-Land.

Came the dawn, no Japs and no Marines. Luckily for us we had not landed at the scheduled landing point. Due to the heavy seas crashing on the reef the decision was made to land the Marines about two miles to the south east. We walked this distance through the jungle to the village where we met the others.

The barge was refloated at high tide - about 11 am - when the storm had abated and was taken to the new landing place. In fact they had unloaded the gear before Jim and I arrived on site. But by the time the gear had been manhandled ashore and deposited on a ‘beautiful road-like strip of sand’ running right up into the jungle, it had been submerged in salt water for six hours.

We set up a temporary camp on the south side of this ‘white road’ and the Americans set up theirs on the north side. As our rations had been soaked in salt water we ate our evening meal with the Americans, set a guard on the now camouflaged equipment on the ‘white road’ and retired for a much needed sleep.

That night thunder growled, lightning flashed and the rain came down in torrents across Long Island. Towards daylight I could hear a strange rushing sound. Daylight exposed another disaster.

Through the night Lake Wisdom filled to overflowing and the beautiful ‘white road’ was now covered by a raging torrent. Most of the equipment stacked so carefully in its path now tumbled about in the surf or floated out to sea, some of it, like one of the refrigerators, never to be seen again.

The two sergeant guards, Barnett and Arndt, lost their tent which they had set up near the equipment. Now these two large men clung to the yielding top branches of two small trees in the path of the water rushing seawards. Their kit bags hung precariously on branches below them. They were yelling like hell for help. We watched in helpless fascination as a large floating tree trunk threatened to bulldoze their flimsy support systems. A barge was launched to patrol outside the surf where the torrent vented its fury, hoping to pick them up if they were dislodged.

With unexpected suddenness the spate subsided to a trickle and most of the ‘white road’ gleamed in the sunlight again. We salvaged what we could and relocated the equipment on higher ground.

Ironically the fresh water from the lake washed some of the salt water from the radar equipment. We followed up with more washing under a fall of fresh water and set things out to dry in the sun. The cook’s oven was used to dry out the radar chassis.

Eventually the radar equipment was erected on the selected site and put into operation. Predictably power transformers and alternators kept breaking down and we had to work continually day and night to maintain intermittent operation. To make matters worse two of the station personnel contracted scrub typhus, increasing the work load for the others. Dave Block, who was the only one of the five radar mechanics who had had station experience, was

evacuated and died after being moved out to Finschhafen. I can't recall the name and fate of the other one.

We were elated when a signal was received congratulating us for getting the station on the air despite the misfortunes and keeping it there despite many malfunctions.

On 27 January 1944, Cpl Kemp, Fitter DMT and LAC J Keegan, radar mechanic, arrived on an American PT boat together with a barge containing two replacement power supplies and a replacement transmitter and receiver for the radar unit."

LAC Joe Lynam had been given the task at 41 Wing of checking the performance of various stations in the Northern New Guinea area including 338RS. He travelled to Long Island on a Landing Craft Men (LCM) which was escorted by an American PT boat. When they struck rough weather in the D'Entrecastreaux Strait, Joe was transferred to the more comfortable ride in the PT boat. After an incident of mistaken identity with a couple of American fighters they arrived at Long Island. The PT boat immediately returned with Dave Block to Finschhafen.

In Joe's own words. "I was shocked at the privations the unit had undergone and were still putting up with. It rained continually, the humidity was shocking, blankets had to be covered otherwise they would be crawling with maggots (flyblown) and the menace of scrub typhus was always felt to be lurking in unknown places. The problems Len Ralph, the mechanics, and station personnel encountered and overcame were enormous.

My job was to check the station's azimuth, to plot a 'spotted dog' or performance chart of the station and, if possible, improve its performance. There were numerous trees and shrubs in the way of the beam so, where feasible we eliminated them, much to the disgust of an Army Camoufleur who later visited 338RS.

But we did get better results.

It was an anxious three weeks watching for symptoms of scrub typhus which thankfully did not eventuate. The guard who was evacuated on the PT boat which took me back to Finschhafen was not so lucky."

Part 2 - Relocating 338RS from the Eastern Side of the Island to Matafuma Point on the Western Side

As the Japanese retreated westward along the northern coast of New Guinea in the face of Allied advances it was decided that 338RS should be moved to the western side of the island. The reason behind the move was that the high mountains on the island prevented the station from covering the north western sector and this was now needed.

Another installation party was assigned by 41 Wing in Port Moresby. This time the party was led by LAC Joe Lynam who gets a mention in Part 1 of the Long Island story.

LAC Lynam was given an open order as to the selection of the site as no siting party had made an inspection and also he was authorized to take whatever actions were necessary in the move.

Joe Lynam was interviewed on 26 April 1989 and the following is his story :-

"With a Fitter DMT and a Radio Operator, whose names escape me at the moment, I flew into Saidor which was the nearest American base to Long Island. I was determined that the fellows would have a decent camp at the new site and less worry about scrub typhus. So I went to the Americans and demanded a bull-dozer and a barge to take it over to Long Island with the idea of preparing the camp site before moving the station.

No site had been picked by Wing so between us we had to decide on a spot. Accompanied by an American officer from the local US Headquarters I went over in the barge and did a circumnavigation of the island looking for a good spot on the northern side - this would have

given a bigger coverage towards both east and west. The only suitable spot we found where a landing could be made, and even then with a degree of difficulty, was at Matafuma Point on the south west coast. The bulldozer was taken ashore and the camp area was prepared by making a clearing, about 100 yards square, under a canopy of trees.

It wasn't a bad site out on a little headland.

Then we moved around the coast to the old site on the east coast and prepared to move the station. The first step was to get it down the cliff where it had been set up. Local natives had carried all the gear up the cliff on their shoulders when the station was established. A mechanic with me, Bill Berger I think, and I erected a flying fox and we saw the racks and cabinets going down the rope at a much faster speed than we anticipated. However, they all arrived safely at the bottom, were put back into the transmitter and receiver cabinets and all of the gear went into the barge and around to the other side of the island. Luckily no storm this time.

Having set up the camp we proceeded to get the gear going. It took us a period of three or four days or so [official records show seven days] to dismantle the radar on the eastern side, transport it, unload it and erect it on the western side. We did experience some trouble during the re-erection and we, the mechanics, were working from daylight to beyond dark. But we had the station up and running, becoming operational at 1900 hours on 11 April 1944.

I remember vividly Easter Sunday night 1944, after finishing for the day, sitting on the beach with the other mechanics and watching a very bright full moon over the ocean. It was so peaceful there on the beach and I couldn't help thinking of the conflagration going on in other parts of the world.

After getting it going I went back to Saidor, and being cheeky as I was, approached the United States Air Force asking for a light plane to check the new site for camouflage.

I was assigned a Piper Cub aircraft with pilot. We had to cover some 30 miles over the sea to get to Long Island. It was hard to communicate with the pilot because of engine noise in the cockpit. As we approached the island I tried to talk to the pilot. Without warning he cut off the motor and said, 'Is that Long Island ahead ?'. I nearly died from fright when I heard the motor cutting out, however, he turned it on when I nodded and away we went again.

We had a good look at the camouflage and it wasn't too bad. Then we decided to look at the lake. We flew around the two peaks and down into the crater with walls 500 feet high. The pilot took the plane down pretty low into the crater and there, as I'd been told previously, was this patch of red and yellow mud in the middle of the lake - the actual dormant volcano itself. With the two peaks at each end, it was an amazing sight and something I shall never forget. Then it was back to Saidor and on to Port Moresby.

By the way the volcano did erupt in 1948 and all the natives had to be evacuated.

I was, and still am, proud of the job I had done. Before signing off, I would like to pay tribute to Len Ralph, not because he is a good mate of mine, but because of the difficulties he met and the problems he overcame on Long Island in getting the station operational in the first instance. Having been to the first site twice I know what trouble he encountered. He showed tremendous ingenuity and pluck in carrying out his work. He really deserved a 'gong' or at least some form of official recognition."

Editors' Comment: When one looks back to the composition of the first installation party, the decision to place the responsibility of the move on a Leading Aircraftman is absolutely incredible. Bert Israel was asked about the composition of the second installation party. He could not offer an explanation because he had, by then, been posted south and was the CO of 1RIMU.

Part 3 - Radar Counter Measures, Land Intercept

With only one RAAF member of the "multi-national" Land Intercept Unit some might say that this incident should not be recorded in this history. But the RAAF was there and it was probably the first ground based radar counter measure activity in the SWPA. Another reason for inclusion is that the efforts of the group do not appear to have been published elsewhere.

Furthermore, the overall story of radar on Long Island would not be complete without a short report of their activities.

The unit was the brain child of Captain (now Brigadier retired) Don Tier when he was the Australian Army Radar Liaison Officer, and a member of Section 22, the Radio and Radar Counter-measures Division of GHQ SWPA in Brisbane. The name Section 22 was adopted for security reasons, being based on the fact that it originally occupied Room 22 in the building. The members or representatives came from various elements of the Allied Services.

Captain Tier started in radar during 1940 with the Coastal Artillery at North Head, Sydney, NSW - many months before RAAF ground radar came into existence. He had attended an early Army course at CSIR and spent 14 months at the Army School of Radiophysics as well as some nine months in the UK and the USA studying radar counter measures.

The practice up until this time was to use "ferret" aircraft, surface vessels and submarines to listen for enemy trans-missions when they were on missions so Cpt Tier's concept of a small land intercept unit to be put into forward areas to search on a 24 hour basis was innovative but untried.

The concept was accepted and approval given for an experimental unit on Long Island. Don Tier recalls that he was named as OIC in a secret memo which sought every assistance from everyone "short of actual help". He visited several Army units to select personnel and since the Army did not have any radar technicians near Brisbane, technical assistance was sought from other branches of the services. The Australian Army provided the bulk of the numbers mainly to protect the group from any enemy they might meet but also to help with such things as portage and running of the unit.

The technical personnel involved were Cpt D Tier AIF, Tech/Sgt Blan Sandlin US Air Force, Sgt L Kinross RAAF radar mechanic (at Sec 22) and Pete Money an operator from the Royal New Zealand Navy. The AIF escort group was lead by Lt K A Acreman with Cpl McDonald, Cpl E Coddington, and eight privates.

Special aerials were designed, with a mesh reflector, covering a range of frequencies from 100 to 300 Mc/s with the aim of searching for Japanese radar transmissions from aircraft or ships or ground based stations. This aerial was turned manually with both the aerial and mast being "broken down" to manageable elements for transportation and portage.

Tech/Sgt Blan Sandlin kept a diary which indicates that he was asked by telephone on 28 December 1943 by Cpt Tier to attend a conference for briefing. There he learned details of the mission and also the fact that all members of the group would be wearing Australian Army uniforms and carrying Australian weapons. In addition, the search equipment had to be assembled and tested before 10 January 1944. The electronic equipment was basically American receivers currently in use with a modification, probably done by Radiophysics Laboratory, to sweep the bands by means of a motorized tuning condenser.

Blan Sandlin and a US Marine by the name of Holmes worked hard with the American equipment and were ready in time, travelling to Brisbane on 13 January 1944. The whole group met for the first time on the following day and for the next eight days they went through a brief training session including a trip to the firing range to get experience with the Lee Enfield 303 rifle and the Owen submachine gun. The American Marine Holmes failed

the medical having an acute case of Athlete's Foot - there was going to be a lot of walking involved in the mission.

The unit was airlifted in DC3's in stages to Finschhafen where they were equipped with jungle greens, American hammocks, two months rations, grenades and explosives aplenty. Then the unit boarded a barge for the trip to Saidor experiencing enormous seas and heavy winds in Vitiaz Strait. Fortunately the seas were travelling in the same general direction, so the barge chugged up 30 foot waves, sliding down the other side ending with a sickening thud at the bottom of the ride. Everyone was saturated with salt spray and most were seasick. The exceptions were a small group including Cpl Errol Coddington and Sgt Les Kinross who sang a favourite services' ditty which started off with -

"We don't care if it rains or freezes,
We are safe in the arms of Jesus."

Saidor had only recently been captured and things were grim but the next day they were off to Long Island not knowing whether it was in the hands of the Japanese and certainly not knowing that 338RS had already moved there. They landed on the beach about 4.30 pm on 29 January 1944, the Army escort under Lt Acreman was ready with its Owen guns, and there was some surprise when an ANGAU (Australia New Guinea Administrative Unit) man and two natives walked out of the bush to tell them that there were no Japanese there. Errol Coddington still maintains to this day that the chap was a Salvation Army Officer, not ANGAU, because he gave them coffee and biscuits just like the "Sallies" did everywhere else.

Like the original setting up of 338RS misfortunes were encountered but many served as lessons for future operations.

The unit landed at the wrong location north of 338RS. It was not possible to reach the top of Mt Reamur as intended. There was continual rain - hammocks filled with water and Blan Sandlin poked a hole in the bottom of his with a screwdriver to get a reasonably dry night's sleep. Some three weeks were spent drying out the gear and setting it up at about the 3,000 foot level where the ground was so steep that a ten foot square platform had to be built from timber split from local trees. Naturally all the gear including the Briggs and Stratton battery charger, petrol and supplies had to be carried to the site - a back breaking job to say the least.

This delay also applied to wireless communications. In fact when they tried to establish contact with their base, the delay had been such that Base had given up listening on the assumption that they had been captured. When they started to broadcast in code it was assumed that the enemy was using their call sign. Finally they got a message back saying "all in the whippy's taken." But the lines of communication opened thereafter.

Cpl Coddington went on five day patrols carrying tinned food which "blew" after three days so the party starved for the remainder of the excursion. To get water they scraped moss from the trees and put it into their water bottles with tablets.

The corporal also visited 338RS and he tells a nice story that the boys at 338 had acquired a rubber dinghy and used it to go fishing. One day they were off shore when an aircraft buzzed them wagging its wings, so they waved back. Some time later a Catalina landed alongside them and dragged them aboard cutting the dinghy adrift. Then they were asked how long they had been there. Six weeks was the answer. Consternation ! What were they doing ? On being told "fishing", they were bundled into the water with some rude words being uttered. The dinghy had drifted a couple of hundred yards and a bit further from the shore than when the Catalina picked them up. So the boys had to swim back to the dinghy and then paddle ashore - presumably with no fish.

At the beginning the LIU found interference, at a frequency of about 110 Mc/s with a pulse recurrence frequency of about 50 c/s, whose bearing and strength remained constant but when the battery charger was moved and dug in the interference changed its bearing - very high-tech. Sacre Bleu!

A watch was maintained for 24 hours a day by a crew of six with two being on shift at a time, the other four playing bridge and drinking coffee - 36 pounds of coffee and 60 of sugar being consumed in four weeks according to Blan Sandlin. Since there were only three technicians in the original party some of the Army escort were trained on site to act as operators so proving the versatility of the average servicemen. [Norm Smith reports that two of the most conscientious operators on one of his stations were in fact RAAF guards.]

The unit operated on Long Island until 20 March 1944 and some enemy radar signals were intercepted and identified. The unit left the island by barge on 24 March.

They had been over-supplied with offensive equipment and the intercept gear, though satisfactory in a technical sense, was barely portable. Valuable lessons were learned, the aerial system was redesigned, gear improved and the unit was re-equipped with specially designed packs to carry it. They went on to other successful operations in the Philippines and, finally, Borneo at which time it was made up solely of Australian and US Army personnel. Les Kinross, the only RAAF member to serve with the Land Intercept Unit went back to Section 22.

7 FIGHTER SECTOR AT PRESTON, VICTORIA

Jean Renew nee Grant-Stevenson

When sent to 7 Fighter Sector for extra experience in September 1943 my theory and worst fears were confirmed. It was my opinion that the weak link in the radar network was not radar but the ignorance of the support group.

The Fighter Sector at Preston was manned by people on rest from their real jobs. They had no understanding of radar and most simply didn't believe it. Of course radar then was so secret and had to be kept secret. But some of the people were radar operators recovering from nervous breakdowns after being “stranded” on isolated stations for long periods.

It did not help their morale to discover that when a suspected submarine was reported, the Naval Officer was “not to be disturbed”. Or when a plane veered off course to Tasmania and was heading for the South Pole, to find that the RAAF could not be contacted.

However, the big gripe was the fact that we had to clear “all unidentified plots” off the board before a CO's inspection -(not identify them), just clear them off until he had left the room. It “looked bad” to have unidentified aircraft and ships on the board.

Now Preston was in Melbourne and it was 1943, but we lived in an unlined Church Hall and only had cold showers. The meals... bully beef and biscuits three times a day with boiled spuds added once a day. And tea with powdered milk !!

Working 12 hour shifts, 12 on and 12 off, the only bright spot was when the Salvation Army brought us coffee at 1 am.

28RS - FITZROY ISLAND - A THUNDER STORM

Jack Hillier

At 28RS on Fitzroy Island we were on shift late one afternoon, a time when you get some pretty hefty tropical storms up there. This storm sat right over the island, banging and crashing and carrying on. We were about 600 feet above sea level so you can imagine what a lovely conductor the array was. We were sitting there in a little tent talking on the phone to Andy Thomas, the CO, down yonder at the campsite, when suddenly an enormous bolt of lightning struck the tower.

A young radio operator, I have forgotten his name, was sitting there with his sandshoes on, with one foot on the battery and tapping away on the Morse key, "talking" to Cairns. The next thing a great blue arc went through his sandshoe to the battery -BANG. He jumped nine feet in the air - there was a colossal crash in the phone. The phone flew out of my hand and we just sat there shivering with about a foot of water running through the tent.

Andy, down below, told us afterwards that he said to those present "Well they're gone. That's the end of those two". It blew up the generator at the foot of the hill. Burnt out all of the power lines and everything electrical was out of action.

The others came up the hill not long afterwards looking for us as we were walking down - staggering down I should say - to them.

She was a ripper that one.

Editors' Comments: This was typical of many stations in tropical areas. Lightning induced great fear particularly when the station had a bomb, with electric detonators, placed under the doover to blow it up in case of an enemy landing.

316RS KOMBIES DNG - STREWTH

Jack Ellis

Jack was a RAAF guard at 316RS at Kombies, DNG. Well one day at dusk, Jack had just finished a long patrol with Army guards who were stationed nearby.

One of the few luxuries at this remote station was electric lights in the tents. A flick of the switch flooded the dark interior of the tent with light and Jack froze in his tracks.

STREWTH - smack in the middle of the tent was a huge crocodile with baleful gleaming eyes and a fetid breath. A moment of incredulity - then dynamic action.

The reptile's frantic race for the entrance to the tent was sidestepped by Jack who has said that the lingering pungent odour was not all crocodile.

23RS LYTTON - OOPS

Jean Renew nee Grant-Stevenson

I was the first WAAAF operator to arrive at 23RS, Lytton, and an RAF sergeant came up to show me "how to use the set". Arrangements were made for an aircraft to take off from Archerfield at a specified time so that the sergeant could teach me tracking.

Well, a few minutes after the scheduled take off time, he said, "There it is."

But I could not see it. Again, "There !"

But I still could not see it. Again and again the same ....my CO was prodding me and going red, but I couldn't see it.

The phone rang. It was the drome ringing to say that the plane was U/S and did not take off.

Sorry !!!

No one apologized to me. They just slunk away.

OOPS

Women DID make the best radar operators, because they WATCHED the screen. I once worked with a male operator who had been in Darwin....no wonder Darwin was bombed, if his attitude was typical of the operators there.

Editors' Comments: When Jean was asked why women were better, she advanced the idea that women, from childhood, had been conditioned to routine but exacting work. This gave them the ability to concentrate, during dull moments, so ensuring that they could overcome boredom because of the importance of the task.

Certainly G/Cpt(Rtd) E R Hall agrees with Jean for, in his book *Saga of Achievement,* he says on page 213 “Further, there is no doubt that a woman is much better suited for the duties of radar operator than is a man”.

Undoubtedly there were brilliant operators, both male and female and there were those who were not so good - just like a cross section of any community, trade or profession.

The ability of operators to detect weak signals (echoes) was very important but not fully understood. This ability is believed to be due to an unconscious form of pattern recognition analogous to the “cocktail party” effect where some people can enjoy a conversation amid the background noise whilst others are “socially deaf” in the same environment.

341RS MULGRAVE ISLAND - BLACK VELVET

Arch Trail

A new guard arrived on 341RS on Mulgrave Island - known locally as Badu Island. Apparently he had heard that “black velvet” was something even better than Betty Grable.

Having eyed the belles at the local village and given what he saw a high approval rating, he was most persistent in getting his share of what, he thought, was available.

A scheme was worked out by the other guards. There was a deserted native village where they had tried to grow vegetables before the war. One guard wearing a grass skirt and smeared with brown vinegar and boot polish set off early so that he could arrange the reception at the “harem”. Two of the guards were to take the new bloke to the deserted village which was some two miles to the north of our camp.

It was evening. On arrival, the eager beaver was handed a jar by the “dusky maiden” in the grass hut who, in a husky sexy voice, said “Rubbem this on the silly fellow to stoppem babies”.

Having followed the instructions and prepared himself mentally for the anticipated pleasure of the flesh, he dived into the hut.

There was no one there. No dusky maiden at all.

His two escorts had returned to camp. The victim did not return until daylight. The assumption, at the time, was that he either got lost or had spent a lot of time trying to remove the contraceptive jelly which was made of grease and duplicator ink.

Arch thinks that it was the only time, when showering, that one looked at another’s genitals.

“I saw it” Arch reports - “duplicator ink on tender skin takes a lot of removing.”

DEMARCATION ISSUES

Arch Trail

At Badu we found talents in doing jobs for which we were not classified by the RAAF.

The sergeant radar operator became the radar mechanic and general camp builder. The radar mechanic, who was an ethnic Chinese, worked in the kitchen most of the time.

The clerk was a radio hobbyist and tinkered with and repaired the W/T and set up a telephone line to the top of the hill.

I was a radar operator and worked in the orderly room.

One of the guards, who had had some nursing training, preferred to be the medical orderly and worked in the sick bay. Another guard, an undertaker by trade, was also an official of the Miscellaneous Workers Union in Sydney. He was absolutely horrified at the way these chaps were working outside their mustering. Some 20 years later he was seen on TV giving the Union side of a strike in Sydney.

HOW I BECAME A RADAR OPERATOR

Kaye Hutchison nee Rae

I joined the WAAAF in July 1941 on turning 18. Although I could drive a car, a truck, ride a horse and work in a shearing shed, I had only left school the year before and had no qualifications other than my Leaving Certificate, so I joined as a clerk general. In January 1942, I still had not been called up and, while holidaying in Sydney, I heard the ABC advertising for women to join the WAAAF as RDF operators. So I hot footed it to 2 RD at Woolloomooloo and was granted an interview with a flight sergeant.

Me "I want to remuster to an RDF operator."

F/Sgt "What's that ?"

Me "I don't know but the ABC is calling for them."

F/Sgt "Hang on and I'll find out."

Ten minutes later.

F/Sgt "You will have to pass the pilot's intelligence test and then we will interview you."

Did the test, reasonably simple and then the interview.

F/Sgt "What experience do you have?"

Me "None. I have been helping on the property and teaching 12 children from Kindergarten to 6th Class, as a subsidised teacher at a small village near home, for six months."

F/Sgt "Where do you come from?"

Me "Nymagee."

He didn't say "Who's looking after the dog?" Though many did later.

F/Sgt "Oh, do you know so & so?" Naming a well-known stock and station agent.

Me "Yes and my father knows him well."

F/Sgt "He's my brother. Congratulations. You are now remustered as a trainee RDF operator."

MEMORIES OF 313RS

Dr Eric L Unthank

Mornington Island Mission School

The Presbyterian missionaries were evacuated from Mornington Island in the Gulf of Carpentaria sometime in 1942 leaving Mr Braunholtz behind. Being on his own he was forced to close the mission school.

Late in March 1943, 313RS arrived on the island and was set up about half a mile to the west of the mission. When F/O Howard Jasper took over as CO, he found that there were three other teachers, besides himself, among the airmen. This led him to make an offer to Mr Braunholtz to re-open the school.

By June two classes of children had been re-assembled. One class consisted of children from about five to ten years and the other from ten to about 14 years. Lessons were arranged for approximately three hours each morning with a RAAF teacher to each class.

And so it was that, two-by-two, Don Sutherland from Tasmania, Tony Ryan, Howard Jasper and myself all from Victoria, re-opened the mission school.

This work was considered to be an extra-curricular activity and no allowance was made to these four participants when it came to routine shift work on the station.

Teaching continued until early November 1943 when Reverend and Mrs McCarthy returned to the mission. On 18 November Mrs McCarthy assisted by four native women named Lily, Mary, Pearl and Julia resumed the responsibility for teaching the children.

I taught the senior class for these few months and my notes of the period refer to the following children who, by now I guess, are approaching 60 years of age.

Kirke	Jacko	Maurice - White Cliffs
Flora	Clara	Phillip - Charlie Bush Bay
Connie	Sally - Denham Is	Peggy - Sydney Is
Roberta	Mona - Gubarnyerr	Edna - Mainland
Annie - Mainland	and Jerry - adopted son of Gully and Cora	

Suffice it to say that I enjoyed the experience, as did the other airmen/teachers. It helped build my belief that kids are much the same the world over - a range of abilities, a range of desires to learn and a range of pranks when the teacher's back is turned.

A Crate Marked 'RADAR - TOP SECRET'

Three radar stations, No's 311, 312 and 313 travelled from Sydney on the SS Wanaka in February 1943 to Thursday Island. The radar equipment, under the charge of the mechanics, was placed in shops on the waterfront opposite the Metropole Hotel. The rest of the gear and personnel were transported to Horn Island where they remained until they were transhipped to their final destinations - 311 to Archer River on Cape York, 312 to Wessel Island, Arnhem Land and 313 to Mornington Island in the Gulf of Carpentaria.

Most of the civilians had been evacuated from Thursday Island many months previously so it was not long before some of the "scroungers" had some bright ideas about the efficient use of under-utilized furniture in the houses in the township.

By now it had been established that, among the forty or so airmen on 313RS, there were some musicians.

During the dark hours of one night, a piano was spirited from one of the houses and one additional crate marked RADAR -TOP SECRET appeared in the shop where 313's set was stored. On other nights the equipment in the shops storing 311's and 312's equipment also increased in direct proportion to the decrease in some of the other houses.

The results of the scrounging were varied. Some months later, a missionary visiting Arukun Mission was invited to look over nearby 311RS. When entertained in the airmen's mess he recognised much of the cane furniture as that which he had left in his house on Thursday Island !!!! Even worse, the piano in the mess tent on Mornington Island had come from the home of the Town Clerk of Thursday Island who had not been evacuated !!!!

He was not amused at the disappearance of the piano and had the Military Police searching for hundreds of miles around for it. Eventually the bush telegraph yielded its whereabouts and I am told that, when 313RS was pulled out of Mornington Island on its way to the Solomons in 1944, the MP's were waiting on the jetty at Thursday Island to repossess the piano.

If it justifies the "illegal loan" in any way, the piano was well used by people who appreciated it. Don Sutherland was a classical pianist of considerable talent who entertained us on many occasions. Bill Oakley played the trumpet, Paul Morriset was a female impersonator and Bob Mashford, a magician-cum-entertainer on the NSW Hoyts circuit before the war. They could, and did, rattle out many a popular tune while Ronald Earle Grainer was doubtless the most talented of them all.

He was a brilliant pianist, always the highlight of our concert party known as the Aristocrats, playing such favourites as Bolero and Rhapsody in Blue or composing special items such as Havana Moon. After the war he became a resident of London composing music for the stage play 'Robert and Elizabeth' as well as the theme music for many TV shows including 'Steptoe and Son' and 'Maigret'.

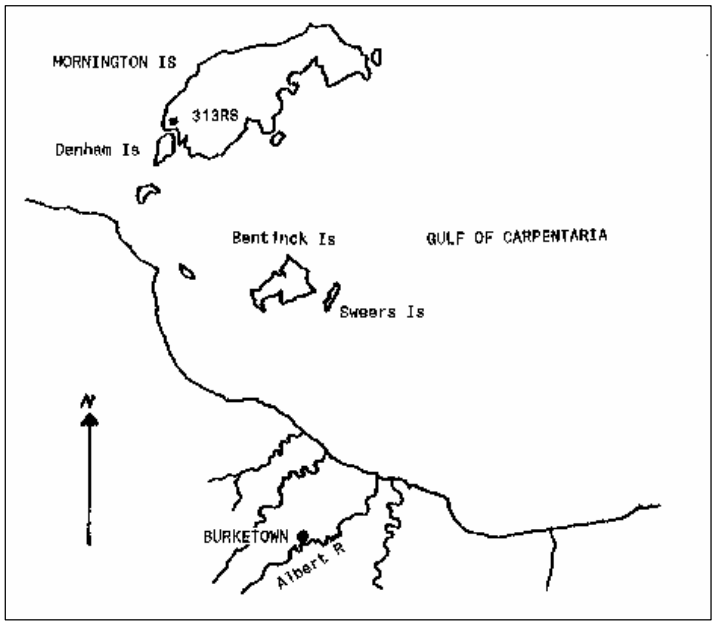
Although there were only forty two airmen on the unit, the Aristocrats devised and performed two complete concerts in 1943 on Mornington Island. They had stage, footlights and all erected in the mess tent for the entertainment of the airmen. Later these concerts were repeated for the aborigines in the mission hall.

Not to be outdone, the aborigines responded by putting on play corroborees for us. Nor were their talents limited to traditional dances. The Chinamen dance, performed by one of their number who had worked on the mainland, was great entertainment and accurate even to the sound effects.

And all of this relief from utter boredom was fashioned around a piano from a crate marked RADAR - TOP SECRET.

The Sweers Island Incident

The only means of communication between 313RS and civilisation were the radio link with Fighter Sector in Cairns, the occasional Burns Philp boat still plying some sort of trade in the Gulf, an even less occasional aircraft landing in the channel or on the emergency strip on Denham Island or asking the mission to send their boat to Burketown on the Albert River.



As our mail was being sent to Burketown, our only chance of getting it with any degree of regularity was to make the 80 to 90 mile trip by boat across the open waters of the lower Gulf of Carpentaria and up the Albert River to the township.

The "Bonnie", the mission boat of about 25 to 30 feet, was usually sailed by Gully Peters and one or two other aborigines as crew, with three or four airmen to collect the mail and carry out such purchases as Burketown could provide and which the CO had condoned.

On the way the boat had to pass Bentinck Island, home of several hundred aborigines, and nearby Sweers Island which was normally uninhabited. On Sweers there was a well of fresh water at the site of an earlier, but short-lived settlement.

In the course of one or two trips earlier in the year, Gully had steered the "Bonnie" close inshore to Bentinck Island and had some shouted conversation with some of the inhabitants. Only the men were seen but they gave no signs of any hostility.

During the return trip from Burketown, it was usual to land on Sweers Island and replenish the water supply. I think it was about August, when following this custom, a couple of airmen and one of the aborigines went ashore and up the beach towards the well. As they climbed up from the shoreline and could see behind the dunes they became aware of a group

of aborigines watching both them and the boat. Their intentions seemed anything but friendly.

The aborigines and the shore party headed for the boat at about the same time. Gully stood up in the boat trying to shout at the Bentinck men. They started throwing spears and tight balls of grass, the shore party was sprinting and finally swimming -literally for their lives and the airmen in the boat were firing their 303's.

Gully had to dive overboard to avoid taking a spear in the chest but finally they got everyone back on board, the motor going and the boat at a safe distance offshore.

An aborigine lay dead on the beach of Sweers Island, killed by a bullet from a 303.

The men on the boat collected a number of spears, which had been thrown at them, as well as several balls of grass then headed for Mornington Island.

An investigation by mainland police followed the reporting of the incident. It was established that the Bentinck Islanders had been roused by the actions of some of the crew of an army survey vessel that had landed on their island and interfered with their women.

Having seen the "Bonnie" on its way to Burketown and knowing the probable actions of the men on the boat as they returned, they seized the opportunity to take revenge on some white men. Hence their presence on Sweers and their attack shouting "Kill the men and burn the boat".

It could not be established who fired the fatal shot, as the airmen on board the boat at the time all felt that they had been firing over the heads of the attackers for effect rather than to kill or maim.

A most unfortunate incident with the Bentinck Islanders seeking to protect their own and Gully seeking to protect us.

Another aspect of this story was told by Phil Jarratt in the issue of 28 October 1989 of *The Manly Daily* following a visit to the region. He was sharing a billy of tea at a camp on Bentinck Island with three aboriginal women named Alison Dundaman, Valami Yarrak and Paula Paul. They had accompanied their fathers and a party of Bentinck men to Sweers Island on a fishing trip. To quote from the article :-

> "They had just begun to set their nets when an RAAF party came ashore. Frightened, the Bentinck men threw spears at the airmen, wounding one. The RAAF responded with rifle fire and King Alfred's younger brother was killed instantly. Alison's mother Roonga was shot in the knee.
> 'Did they hate the white man for what he had done ?' I asked Alison.
> She shook her head. 'We shouldn't have thrown spears, but our fellers, they were frightened.'"

Emergency Rescue

A few months after we arrived on Mornington Island the creek alongside our camp dried up so we dug a well. It was lined with adzed logs and we went to a depth of 12-15 feet but no water was found. We had to drive out in a Fargo utility several miles to a waterhole used by mission cattle and the aborigines and fill drums to be carted to camp.

One day on the way out LAC L Barrett, who was sitting in the back of the truck, failed to watch the track and was struck on the back of the head by an overhanging branch. He was knocked unconscious. We radioed Cairns and asked for him to be airlifted out of the place.

Some 24 hours later he was still unconscious and we took him by dinghy across the channel, about half a mile wide, to Denham Island where there was an emergency airstrip. This was a relatively flat piece of ground covered with tufty grass but its length was barely adequate resulting in a "touch and go" take off.

The “emergency” plane was an Avro Anson piloted by a Sgt pilot who had either an F/O or F/Lt as navigator. When the injured airman and stretcher were loaded aboard, the Aggie was manhandled around until the tail was actually in the bush and the plane facing the rough emergency strip. At the end there was a row of scrub gum trees with the channel beyond. Then a fairly heated argument between pilot and navigator ensued. The latter didn't like their chances and as he outranked the skipper was not too keen to board the plane. Finally he was ordered aboard by the sergeant skipper, the motors gunned up with the brakes full on until the tail lifted, then away they went. There may have been some gum leaves in the landing gear when they got to Cairns.

As a result of this emergency evacuation, late in 1943 a new airstrip was constructed on Mornington Island by the airmen on 313RS and the aborigines. It was quite substantial and I believe that loaded DC3's took off from it when 313RS was shifted elsewhere.

Editors' Comments: We have been lucky in making contact with a pilot, F/Lt Theo Watts, who was probably the pilot of the emergency flight. At that time Theo was a Sergeant Pilot with Communications Flight in Cairns. He recalls his many flights to Mornington Island and other radar stations and the fact that, when using the old strip on Denham Island, they had to have natives hang onto the wings and tail until engine revs were over the red line. He also recalls arguing with his commissioned navigator about overloading on Denham Island but cannot recall the purpose of the flight - possibly the argument overshadowed the circumstances.

33RS - CAPE NATURALISTE

Phil Williams and John Sheard

The equipment was a Mk V COL which was intended for Malaya but diverted to Australia after Singapore fell. It suffered from the trip as deck cargo and needed quite a lot of attention. W/O “Taffy” Jones, RAF, was there for a time and Ralph Baker, the senior mechanic, asked Taffy why the Poms made things so heavy. Taffy's reply was succinct and to the point. Firstly he was Welsh and therefore not a POM and secondly that if they didn't, “you heavy-handed Australians would only bugger it up !!”

Once a week when the set was off the air for maintenance, the pad in the air filter, in the air cooling system, was washed in petrol, dried out in the sun and then replaced. On one occasion Fighter Sector ordered the station back on the air. The mechanic, thinking the filter to be almost dry, fitted it back in the transmitter.

He initiated the starting sequence but the fitter on duty decided to change over generators. The transmitter in that brief interval was now full of an explosive petrol-air mixture. With supply restored they restarted the transmitter and apparently there was a spark at one of the contactors which ignited the said mixture. All the brass panels were blown off the transmitter shearing off the heads of the hundreds of size O BA screws.

John Sheard was “clobbered” by the door from the modulator unit as he stood at the workbench and was knocked out for a while. He was fairly groggy for a time and claims not to have been much help to his mates. The doors and panels were hammered as flat as possible. Luckily enough screws were found, about eight per panel, to get the panels back on to the transmitter and all the gaps were stuffed with rags to seal them for the blower cooling the transmitting valves. Amazingly no valve was broken and they were back on the air within two and a half hours. But for weeks during every maintenance period, and in between as well, mechanics were drilling out brass screws, retapping holes, bashing panels flat and generally repainting.

A week after completion there was an unexpected visit by the AOC who remarked on the nicely painted transmitter.

Little did he know !!! Or did he ???

There was another incident during the AOC's visit which occurred on his arrival. He was certainly unannounced beforehand - he was on leave nearby and probably came for a snap inspection. Anyway, Bert Brown, the guard on duty at the gate noticed the Scrambled Egg on his cap and did the right thing - a full Present Arms. The AOC was pleased until he noticed that the guard was wearing pink woollen slippers.

Our Medical Orderly explained that he was treating Bert for ingrown toenails and had recommended that boots should not be worn.

The story was accepted by the AOC, the guard forgiven but I heard that the AOC had "dined out" with the yarn on several occasions. There is a sequel.

Some months later when I visited HQ in Perth, I called to see the Staff Officer, Personnel, who looked up at me and said, "Ah yes. 33RS - that's where the guards wear pink slippers !"

"Famous at last." I replied - but he granted my request for a replacement cook.

It pays to be different sometimes !

MEMORIES OF 315RS AT CAPE WARD HUNT
Charlie Watkinson

Off to a Bad Start
I was in charge of some of the station personnel and equipment, enough to fill a C47. We flew out of Cairns early in 1943 with orders to report to 41 Radar Wing at Port Moresby. On landing in Papua New Guinea the aircraft taxied to the side of the strip and the American crew insisted that the equipment be unloaded there and then as they had to return without delay.

This done, I set off to the control tower farther down the strip and reported to the Duty Pilots. On telling them my orders, the officers looked at one another in a funny way and said, "Who brought you here ?"

I said that we had come on an American flight, to which they said, "Ah, Bloody Yanks !"

"Where's all your gear ?" And I told them.

They burst out laughing and said, "This is not Moresby. It's Milne Bay."

We were stuck for several weeks unable to get a plane to Moresby. I scrounged a marquee to shelter the gear and the men. I didn't want to become attached to any unit at Milne Bay as clearance papers would be required for departure. So we lived under the marquee and I split the men into small groups to join meal queues of various nearby units.

Augmenting the Menu
Grenades were used at Cape Ward Hunt to add variety to the menu. We had a Japanese boat and some five-second grenades. But when we released a grenade and it hit the water with a one-two splash, three-four-BOOMB, the bloody fish were gone.

So I would release the lever, count one-two-three, throw for four in the air. Then splash-BOOMB and we got fish.

I will always remember my mate, Max Oakley, saying, "Don't you stutter ! You bugger."

Target for Today
Mitre Rock was very small, it had a few trees and stood in the sea about half a mile from our camp. Fighter pilots often used it for target practice as they flew by.

This day we were sitting on some logs near the camp when some Yank fighters came through and opened up right through our kitchen area. We scattered like rabbits. The CO soon got a signal off to Fighter Sector. It didn't happen again.

Per Ardua ad Radar

We had to make steps to the doover, up this hill that I think was really a mountain. My guards and I cut and drove stakes in the ground to hold the dirt for more than 350 steps; I remember for there was almost a step for every day of the year.

Up that track we carried all the doover parts, the dismantled Howards and all the fuel and oil to keep them running.

It was back breaking work and I recall one chap saying, "I'll give anyone a quid that can carry a drum (four gallons) of petrol up the hill without putting it down. He can stop and have a rest, but he's not to put it down."

Nobody ever collected the quid.

Replacing the Howard Alternators

Two Ford Ten power units were received to replace the clapped out Howards. When the technician arrived from Moresby and saw the mountain he said that he could fix them at the bottom. No more carting petrol, no more carting oil, no more carting water - just lovely. So he sent blokes into the nearby jungle where they collected miles of discarded American signal wire. He made two multiple cables to reach from the doover at the top of the hill to the motors at the bottom. The whole thing worked beautifully and the technician went off to report at Moresby.

And those blokes back at Moresby who may never have seen the place and possibly didn't know the place said no, the motors have to go up to the top of the hill. Back came the sergeant saying, "I can't do anything about it."

So we switched onto the old motors again, threw away all the wire collected in the jungle and began the back breaking job of carting the Ford's [they each weighed about 1400 lbs] up the mountain where the big heads in Moresby wanted them to be.

The hard working sergeant ended up in hospital with a busted back.

Sick Parade

We had a very good medical orderly - a chap named Scobie who was training to be a veterinary surgeon before the war. If you went to his tent he'd be lying on his bed and would call out,

"What's your problem ?"

"I've got tinea."

"Second shelf on the left, third bottle in the row and don't forget to put the bloody top on."

But if anything serious came up he was off his arse and he'd look after you properly. He did a very good job with the natives. They had scaly skins and they had yaws - that's a terrible disease. He cleared them all up. Natives were coming from miles away and the young ones that wouldn't have their needles got a thump over the head from their parents.

41 RADAR WING - A RADAR MECHANIC'S LAY DAY

Norm Smith

Sometime in November 1943 a top priority signal was received from 50RS at Tsili Tsili, requisitioning a doover part from 41 Wing where I was enjoying a break between assignments. The Orderly Room sergeant suggested - with an enigmatic smile I failed to interpret - that an aircraft was flying to Nadzab next day and I could enjoy a scenic trip and deliver the parcel by "safe hand".

After a specially arranged pre-dawn breakfast in the Sergeants' Mess a driver arrived from the transport pool to deliver me to the 17 Mile Strip where I sat in on the briefing of the American crew of the B25 in which I was to be human cargo. The briefing officer had plenty of, "Avoid

our ack-ack positions here - don't overfly our naval ships there, keep below these hills to avoid enemy detection on this leg as you will be on your own etc."

So much for an anticipated pleasant day's outing. The aircraft dropped out of cold clouds blanketing the Owen Stanleys into hot sunshine over Lae and landed on the fighter strip recently captured from the Japs. The turret gunner and I were alone in the rear section. As there were two unmanned waist guns, he spent the short time while we were on the ground giving me a crash course on firing them in the event of an enemy fighter attack on the next leg of the journey. Great idea for a day's outing ! The strip was short and B25's have stubby wings and need considerable knots to be airborne. So back to the end of the strip and then some. With the brakes on the engines were raised to a crescendo and the war machine literally jumped up and down before hurtling seawards where the strip ended close to sea level. The aircraft literally ran off the end of the strip and dropped perceptively before rising and turning 180 degrees to head up the Markham Valley.

The skipper assured us that the best way to avoid the Zeros was to fly at zero feet - almost. This he did and I stared in fascination and disbelief at the ruffled surface of the Markham River following our slipstream. Then it was kunai grass waving frantically to us as the plane pelted along cushioning it towards mother earth. Abruptly, without any indication of a landing approach the wheels were down and the aircraft trundled to a stop at the end of the air strip to stand all alone in searing tropical heat. The absence of other aircraft and/or a reception committee was soon explained when we were informed that a red alert was current. General agitation was the order of the day as a jeep sped out of the hills and skidded to a stop near the aircraft and a member of 50RS, in an unashamed hurry, took delivery of the important parcel and disappeared in a cloud of dust. The B25 immediately took to the air and skimmed the tree tops across to Finschhafen there to waggle its way onto another fighter strip cut into the rain forest for Aircobras and eminently unsuitable for light bombers with high landing and take off speeds. A top ranking American serviceman came aboard and the bomber adopted its pre-take off antics before tearing down that tropical tunnel sliding and banking steeply to avoid the clawing branches looming up ahead and eventually reaching open skies. Then up and away - across The Gap to settle in at 17 Mile at dusk.

Thus ended a pleasant day's outing - bloody hell !

FEELING UNWANTED

Arthur Field

Late in 1942, on my way north from Croydon I had carried with me the usual field intensity receiver, a massive tool box, battery test oscillator and impedance measuring bridge plus rifle, gas mask and kit bag. Prior to leaving Townsville for Port Moresby I left the majority of my official issue ie rifle, webbing, gas mask and a lot of my clothing with an SP Office in Townsville city for safe keeping.

I recall also that on this occasion nobody wanted me. This was usual in my trips around Australia and New Guinea and I spent the night in the SP Office sleeping on an ambulance stretcher.

Anyhow on my return to Townsville, I went to the spot where the SP office was to pick up my gear and found that it had moved. I eventually traced it to Garbutt and I had great difficulty in finding it but eventually I did.

Arrangements were made for us to proceed to Hammond Island and we were to catch an aircraft at Garbutt on 7-2-43. We were woken up and taken by a bus to a C47 which was operated by US Air Force Transport Command. There were quite a few passengers plus a lot of freight. We called in at Cairns, Cooktown, Cowen, Iron Range and Jacky Jacky.

There was quite a commotion when we landed at Horn Island - a single engine fighter plane had pranged on landing and there was quite a crowd gathered. A W/O was shouting and

carrying on, insisting that we get away from the front of the aircraft as it was probably armed and there was the possibility that the guns could start spraying the area with bullets. Needless to say I joined the group and "took off" as requested.

I would like to point out at this stage that we had had nothing to eat or drink at Townsville prior to departure. The crew, at nearly every stop on the way to Horn Island, had disappeared in a jeep no doubt for morning tea, lunch and afternoon tea. I was starting to get a bit hungry and thirsty at this stage. I wandered off to the airmen's mess and found that tea was all over, washed up and closed.

I was not too happy about this so I walked over to the officers' mess and requested to see the Orderly Officer. I told him of my plight and requested that he may see his way clear to arrange for something for me to eat. I could sense that he was not happy and that I was a damned nuisance. However, he contacted a duty sergeant cook, who with very bad grace, gave me a scratch tea which was my first meal for the day.

Such was the lot of people like myself operating in isolation as we wandered around Australia - we sometimes felt unwanted.

BOAT TRIPS TO HAMMOND ISLAND (36RS) AND MUTEE HEAD (52RS)

Arthur Field

On 8-2-43 I joined 36RS's launch which took me to Hammond Island. It was an open boat and looked as if it had been manufactured about the turn of the century - a very old engine making loud clanking noises. I was intrigued to find that the ignition consisted of a 6-Volt battery and an induction coil and a cam-operated lever initiated the spark.

Anyhow we took off for Hammond Island and roughly half way across the engine conked out, in fact the head blew off. I was not too happy because I had heard that 10-15 knot currents were quite prevalent in the seas around this area. We were drifting east rather swiftly and common sense told me that the first land was probably the Americas. It appears breakdowns often happened. The guys packed material down the cylinders, cleaned everything up and carefully replaced the head and we were on our way again. I was very pleased when I arrived at 36RS.

We left Hammond Island via Horn Island on 7-3-43 on our way to a new radar station at Mutee Head, 52RS. We left Horn Island on an RAAF crash launch fitted with three Chrysler engines. As we departed the boat went too close to the shore, there was a thump and an immediate severe vibration. We had grounded with the port propeller. The port engine was shut down and we completed our trip on the centre and starboard engines.

We were a four man team including two guards to relieve the existing two at Mutee Head who were guarding the place after the other installation team had put the equipment in place and departed.

The guards were very pleased to see us and of course went back to Horn Island. The four of us were on our own. We had no communication with the mainland or Horn Island. Pete Williamson and I were kept very busy completing the antenna and transmission line installation and getting the radar equipment operative.

We used to take turns to cook. The weather was nice and with plenty of work to do, life was not boring. It did not worry me at the time and I have often looked back on life at Mutee Head where with two technicians and two guards we would have been easy prey for a Japanese submarine or any other ship interested in obtaining the secrets of a radar station. We had no means of communicating with the RAAF if such an event had taken place.

BOAT TRIP TO WILSON'S PROMONTORY - 14RS

Arthur Field

To get to 14RS at Wilson's Promontory I first caught a train to Yarrum and then travelled on a hired fishing ketch. Being the only passenger I had a very interesting trip assisting the owner to catch barracuda with long lines which had multiple hooks. I remember he caught eight boxes on the trip over. This of course was fruit on the sideboard because he already had the RAAF charter as his "bread and butter" line.

Editors' Note: Arthur was luckier than the station personnel who had to walk 14 miles to get to the station - officers were provided with a horse by the Army for such a trip.

SOME REMINISCENCES OF UNSEEMLY BEHAVIOUR AT 1RIMU

Arthur Field

The telephone switch was always manned 24 hours a day and the deputy switch operator had an iron bed adjacent to the switch board for the early hours of the morning. Late one evening the Orderly Officer and Sergeant were doing their rounds and crashed into the switch area where they found that in addition to the RAAF member in the bed there was also a WAAAF member who at the time was not manning the switch board. The WAAAF did a hasty retreat and there was quite a lot of 'how do you do' the next day in an attempt to try to discipline the unfortunate couple.

On another occasion a sergeant had a female in his room and someone complained. The Orderly Officer and Sergeant had no recourse but to carry out a room check. Word was quickly passed through the quarters. It was a close shave with the unfortunate girl being shoved out through the window on to the roof of an open verandah until the search was over. It happened in mid-winter and she nearly died of the cold.

Some members of the sergeant's mess got on the grog one night and decided to go into the roof area with sugar bags to collect pigeons. Quite a lot of these were obtained and were then distributed into the officers' rooms, one under the sheets, one to a drawer and one to a wardrobe. All the birds were safely "stowed away" whilst the officers were having a dining-in night. There was quite an outcry as you can imagine. The CO put the whole sergeants' mess on the "dry" for one month as a "reward" for their outrageous behaviour.

A certain RAF sergeant purchased a cake of Lifebuoy soap once upon a time. Three months later you could still read "Lifebuoy" on the soap so it was decided to give him a well earned shower. His howls and screams and language were delightful to the ears of the members of the sergeants' mess who carried out this very important task.

ASSEMBLY OF RADAR AERIALS IN THE NSW RAILWAY WORKSHOPS

J R Mitton

The easiest job I ever had was in the Central Substation in the basement of Central Railway Station - normally there was nothing to do except read about John Carter, the War Lord of Mars. This station closed down when the Prince Alfred Substation, containing large rotary converters, was commissioned just before the war.

The loading bay had a large travelling crane and when WWII started we were all eased out of our cushy jobs to work on the war effort. The first radar aerial was assembled in this loading bay by substation operators of the Sydney electric train system because all the electrical mechanics and fitters were transferred to other jobs. Construction was originally in a temporary galvanized iron shed near Everleigh Railway Workshops before the Wilson Street Annexe came into being.

Many of the men who worked on manufacturing radar aerials were returned soldiers and sailors from WWI and their ages ranged from 40 to 77. The man who used to climb the ladder and walk about the steel roof rafters to adjust the rigging for the aerials was a retired doctor aged 77 and he had a pet tom cat who used to walk around the rafters with him. He

brought milk to work with him for the cat which he claimed would prevent the cat from suffering from industrial fatigue. The cat was called 'Pissy Old Percy the Persian from Parramatta'. We worked from 7 am to 9 pm seven days a week so we had to have a few jokes to break the monotony.

A THEORY ON HOW WE WERE POSTED

A W "Fang" Hurrey

It is somewhat surprising how some chaps were posted here, there and everywhere whilst others sat put either at Radar School, RIMU or an isolated "outpost of the British Empire".

In every organisation there has to be a procedure covering movement of personnel. I have given this subject a lot of deep thought and in my opinion there is one only possible explanation why some of us were posted frequently and not others. The sole controlling factor was the height of the WAAAF shuffling our vital records.

The theory is like this. All our names etc were put into a massive set of pigeon holes which covered a couple of walls and ran from floor to ceiling. When you were posted the WAAAF on duty put your card in an appropriate hole. If she was tall it went into one of the top ones or one in the middle. If she was short, the card went into either one of the bottom ones or once again into a middle one.

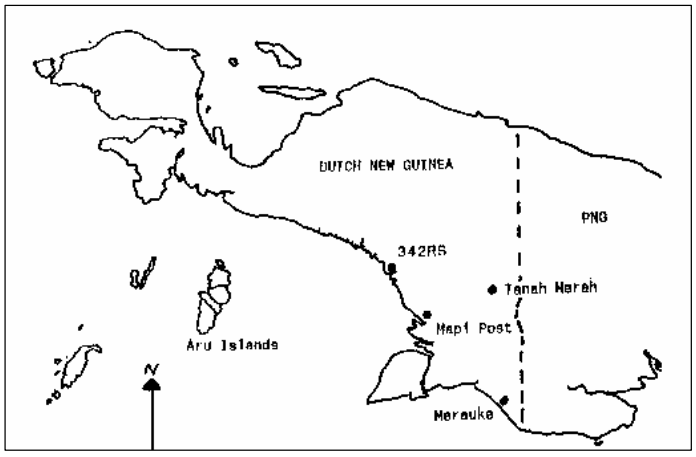
It was the luck of the draw. If your card was dropped into a middle slot then you could expect to be posted every couple of months regardless of whether she was short or tall, or right or left handed, because your vital card was within easy reach - no straining or discomfort involved. If on the other hand the tall WAAAF was on duty when you got popped into a hole and it went into a top one, more or less out of sight - then you were in trouble.

You got deeper in the clag if that tall girl was moved onto a more important job, like making the tea, and she was replaced by a short WAAAF - you were really sunk then because "shortie" could not reach up to the top holes. Of course the same thing applied if the changeover of WAAAF's was from short to tall.

A SAGA OF SURVIVAL - POST NO 6 EILANDEN RIVER

Sources of Information: RAAF Historical Section, Canberra; radar mechanic Bob Mainon; radar operator Mark Bussanich; Gunner Edgar Langford C Troop 154th Light Anti-Aircraft Battery AIF; and *Age* Publications May 1945 and April 1946.

Background



During 1943 intelligence reports indicated a strong Japanese build up of forces in the Timika district of Dutch New Guinea some 190 miles east of their strong air base in the Aru Islands. This posed a threat to the Allied base at Merauke, the abandonment of which was briefly considered in the light of heavy Allied commitments elsewhere. However a decision was made to oppose further infiltration.

To test the strength and distribution of the enemy in the Eilanden River area an RAAF patrol was despatched overland. After leaving Mapi Post, the site of 323RS on the rough fringe of civilisation, the patrol traversed almost impenetrable swamps and almost insurmountable hazards to reach the Eilanden River. Details of this epic journey are not given here. Suffice it to say that an OBE and two MID's were awarded.

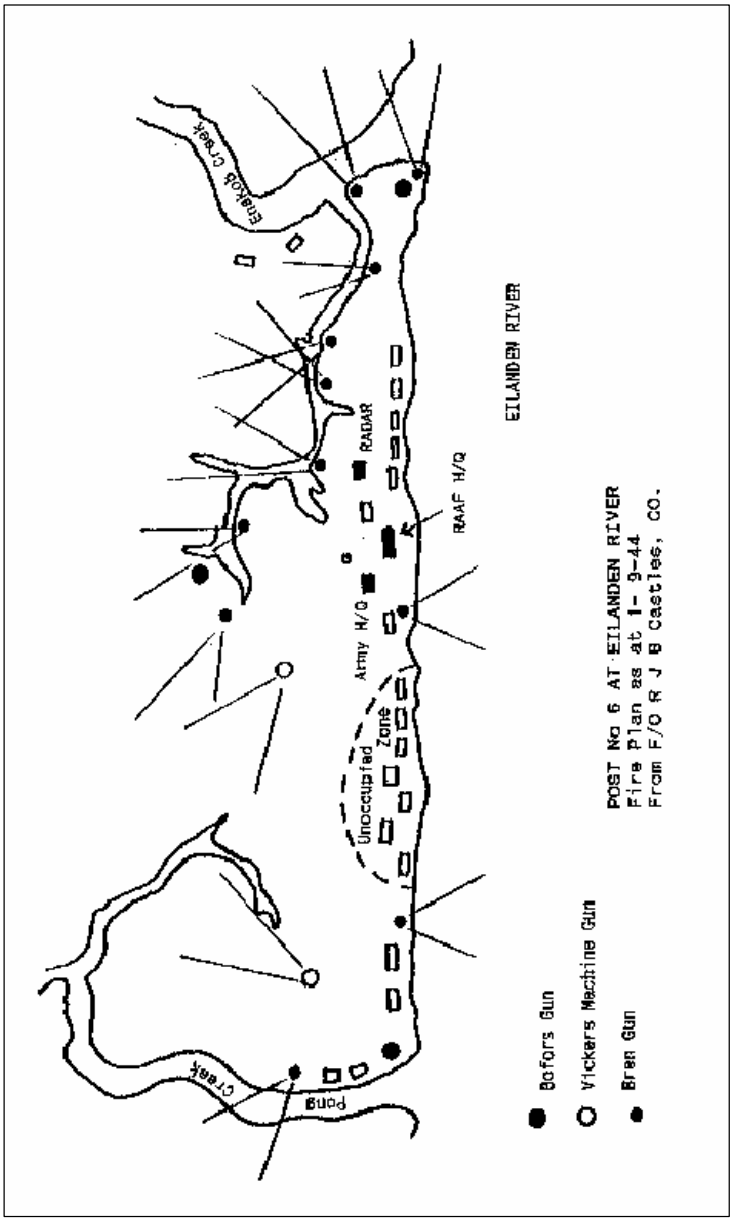
The patrol had entered a hornet nest to gather valuable information, doing so at great personal risk. The Japanese had been in control there for nearly two years; the pro-Japanese indigenous people were now armed with steel knives and machetes to back up their lethal bows and arrows. They became increasingly arrogant and threatening, finally attacking and wounding most of the patrol before being driven off by Tommy gun fire. Radio silence was broken to contact base and a Catalina flying boat was sent with a fighter escort. A perilous but successful pick-up was made from the mile wide Eilanden which was strewn with floating debris.

Having assessed the patrol report, the aerial reconnaissance photographs and other intelligence, it was decided to risk an early warning radar station at a spot chosen on the north bank of the Eilanden River, about five miles upriver from the Arafura Sea.

342RS Formed and Moved in.

The unit was formed at Mascot, NSW, on 10 November 1943 and proceeded to Mt Spec in Queensland where equipment was erected and tested. Douglas aircraft transported it to Merauke where it staged with 42 Radar Wing detachment at 44 Operations Base Unit (OBU).

On 13 May 1944 the personnel and equipment were aboard the 150 ton barge "Daphne" bound for the Eilanden River. Also on board were about 40 officers and men of the 154th Light Ack Ack Battery with their three Bofors guns. Most of the equipment was stored in the hold while the men shared the deck space with the remainder for the 300 mile journey.



A leak forced the "Daphne" to anchor in the Mariana Straits and to wait for welders to come from Merauke to effect repairs. Several days late they reached Post No 6 where elements of the 31st/51st Infantry Brigade had proceeded to secure it from the enemy - but not without incident. On being warned by friendly natives of a Japanese move against them, the Australians set up an ambush, sank the enemy barge and despatched the attackers.

Bob Mainon continues the account.

Situated on the north bank of the river, the post was bounded to the east and west by small creeks with jungle to the rear. It was flat swamp land subject to inundation, especially during neap tides. A small native village was situated to the east

beyond the creek. The advance Army party had arranged the erection or acquisition of a few native style thatched huts (attap) and these became crowded temporary living quarters for the airmen and soldiers.

The Eilanden River here was about a mile wide, very deep with steeply sloping banks. This enabled the boat to berth very close in and with the aid of her derricks and planks to unload supplies and equipment. Thereafter it was heavy work for the troops to move it all to storage areas. A major concern was to keep it all dry. A great deal of timber was cut to build storage platforms for heavy items such as power generators.

After disembarkation the first priority was to erect the LW/AW and become operational. The chosen site, about 100 feet from the riverbank, was cleared. More trees were felled to provide four corner posts and these were dug into the mud leaving about four feet protruding above the surface. The framework of the doover rested on these posts. The power supply was situated about 50 feet away, raised on a log base calculated to be just above high water level. At the same time the radio aerial was being erected and communications were established with Merauke Fighter Sector.

The radar was soon assembled and the power turned on; 342RS became operational at 1100 hours on 15 June 1944. An immediate plot of 100 miles was obtained on a Vultee Vengeance aircraft.

Attention was now turned to extending the facilities for the radar and personnel. An attap hut was attached to the doover as an operations room and sleeping quarters. Boardwalks, constructed of small logs, were laid between the doover and the huts. The program of expansion and consolidation was initially very vigorous as a permanent base for the 80 Army and Air Force personnel had to be established on a difficult site. Natives were employed to build extra huts and to help clear the surrounding jungle. Gradually the airmen's quarters became less congested. Fortunately tents could not be used due to the mud. The alternative accommodation was far more suitable being spacious, cool and comparatively comfortable with each attap hut accommodating eight to ten men. CO’s quarters, orderly room, W/T hut, kitchen and mess room etc soon followed to complete the station.

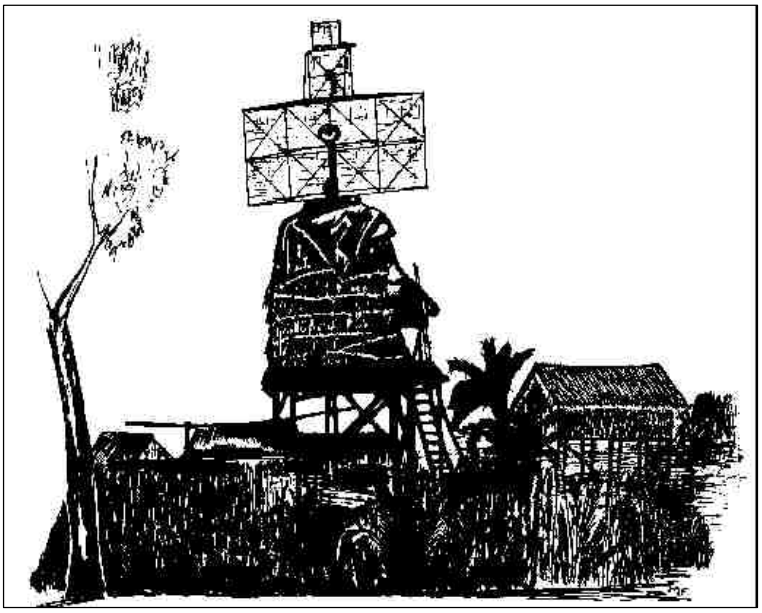
Concurrently the Army was tending to its requirements along similar lines. Their first objective was to mount their three Bofors guns, two on the bank at opposite ends of the Post and the other about 100 yards inland, thus forming a triangle. Gun crews were quartered in huts close to their guns. An advance party of 154th Battery had already prepared the three emplacements. After installation the guns were camouflaged to resemble thatched huts. A framework was constructed over the ramparts which, upon release, slid quickly to the ground exposing the gun.

RAAF armoury comprised one Vickers machine gun, Bren guns, Thompson sub-machine guns, 303 rifles and hand grenades. An emplacement on the riverbank was constructed and the Vickers fitted to an Ack Ack mount. This was manned by our guards.

After a few weeks of operation it was decided efforts should be made to increase the average radar range which, at about 30 miles, was not satisfactory. Work began on the erection of a tower some 20 feet high on which to sit the LW/AW. Work parties had to travel a mile or so down river to find a suitable stand of timber.

After much searching the first log party found what was thought to be a suitable stand of timber some distance from the bank. They landed and the boat returned to base as the workers were to return with the making tide on the floating logs. Trees were felled and after much loss of sweat and wallowing in mud, the logs were snigged to the water's edge and pushed in. They promptly sank to the bottom of the river. The party was picked up later - much later - by boat. The second party selected a different species of trees and successfully floated the logs back to base on the return tide.

The tower main frame consisted of four posts 10 to 12 inches in diameter set into the mud and cross-braced. The feet of the LW/AW sat on the top of the posts. A platform built underneath provided the operations room. Access was by steps attached to the outside of the frame. Finally the top section was covered with thatch. Once the tower was completed 113 MFCU at Merauke gave permission to close down for a couple of days while the changeover was effected. The transition was fully vindicated as it improved the average range to 60+ miles.



Editors' Comments: The final installation was probably the only one of its type in the world. It had a small searchlight in the centre of the aerial - the purpose was allegedly to illuminate the perimeter in the case of a night attack. One would imagine that if this had happened then the enemy, in shooting out the light, could have put the aerial, and even the doover, out of commission at the same time. More of Mainon's memories follow.

Zara - Cannibal Queen

Zara was the only female permitted to enter the Post. Self-elected as 'Queen' she was intellectually far superior to her 'subjects' and had obviously been in contact with some level of civilisation. Zara was initially the only native to wear clothes - possibly as a status symbol. She acted as interpreter to the Army Intelligence Officer, native supervisor, intelligence collector and general factotum, performing valuable service to the Post.

Earth Tremor

It was just on dusk, the time when any attack was expected and the defences were bolstered by reinforcements. The author was lying prone in a pill-box with the firing port in the direction of the radar some distance away. "Suddenly I was bouncing up and down some two or three inches as an earth tremor struck. The jolting was very severe and the noise level quite high. My eyes were drawn to the LW/AW swaying wildly on its base. First thought was that it was going to topple but fortunately the tremor ceased and no damage was sustained. During the tremor the natives hastened to the river and proceeded to placate the river 'devil' flailing the water with sticks."

Getting the Message Across

While contact with the natives was quite frigid to begin with, they became friendly when employed for reward. Later they became boisterously arrogant. Thefts started to occur and as a result the Army Intelligence Officer ordered reprisals. The natives were banned from the Post and their village situated over the eastern creek put to the torch.

Justifying Our Existence

The station provided surveillance of air activity within its area and air raid warning for Post 6. Most Allied air activity was directed towards the Aru Islands. A lost American Liberator was detected far to the west at extreme range. It was nighttime and the aircraft was at very high altitude, possibly trying to come into the beam of some allied radar. Picked up more than 100

miles west, the Liberator was guided through our sector, handed on to 323RS at Mapi Post and thence to 40RS at Merauke.

The event was subject to acknowledgment from 113 MFCU, mention also appearing in the newspapers at the time.

Fortunes of War

An Army patrol was despatched in a collapsible boat equipped with an outboard motor to search the area. Travelling a short distance down the river the patrol entered a creek where it came under fire from Japanese troops. After a brief engagement in which one or two soldiers were killed the patrol withdrew and returned to the Post.

The Magic of Penicillin

During an argument between tribes a native was badly injured having been speared through the upper chest. He was taken to our Army doctor who attended to the wound and gave him a shot of the new wonder drug - penicillin. The next day the native was up and about chopping wood.

Mental Trauma

Source. Official records at RAAF Historical Section, Canberra.

At 1400 hours on 17 September 1944 the guard sergeant reported that 76484 LAC F R O'Sullivan, dressed only in bathing trunks and carrying no arms had left the camp confines and had not returned.

At 1900 hours RAAF and Army personnel made an initial search in the dense swamp jungle surrounding the Post, both overland on foot and along the creeks off the Eilanden River by motor launch. All parties had returned without success by 2100 hours. However the airman's tracks had been found on the far side of Enacob Creek. As a guiding signal one Bofors gun-crew fired three shots at hourly intervals throughout the night.

Next morning 30 RAAF, 20 Army and 20 natives formed into small groups and conducted an extensive eight hour search penetrating four miles into the swamplands. All personnel returned exhausted. Mark Bussanich was one of the searchers and felt that their guide lead them round in a big arc to avoid entering another tribe's land.

However, during the day a tribe called Warse at a village seven miles away was contacted by a boat expedition. These natives, after some demurring, were persuaded by the Army Field Security sergeant to proceed through the jungle towards the Post. Later a Warse runner reported to the Post that these villagers had found LAC O'Sullivan in a fatigued state six miles from the Post. The rescuers carried him back to the Post where he arrived with no clothing or equipment and suffering from abrasions and exposure.

In a statement O'Sullivan said that he had gone to the village to purchase a prau (native boat) and did not remember anything until found by the Warse people 30 hours later.

All were amazed that he had survived.

Readers are reminded that the personnel at No 6 Post, members of Western Civilisation, were existing in a foreign hostile environment and affected by diseases for which they had developed no immunity. It should also be noted that the life expectancy of the indigenous natives was little more than 30 years excluding of course death by violence.

Many unfortunate Allied servicemen contracted unfamiliar diseases which undermined their health. The combined debilitating effects of heat, humidity, isolation, inadequate food and disease in a war environment caused gradual deterioration both mentally and physically. It is fair to say that any serviceman who lived under these kinds of pressures for more than six months would be at risk and nearing the condition unkindly referred to by the uninformed as "going troppo".

Crocodiles

Mark Bussanich has mentioned that big crocodiles inhabit the region and that some rules were necessary for coexistence with them. Close observation revealed that they remained submerged for precisely 17 minutes and when a snout appeared one had to judge how safe it was to swim in the fast flowing river. Logs and scrub floated down the river, sometimes like small islands but if one saw a big log travelling at a different speed to the rest then it was usually a big crocodile.

A couple of specific incidents were recalled. One evening two of the Army chaps were on a small jetty and it was high tide. A croc put his snout on the jetty between the pair of them so virtually marooning one on the end of the jetty. The other chap ran shouting back to his hut and one of the boys charged out of the hut with rifle and fixed bayonet wounding the chap raising the alarm in the shoulder. The end result was threefold. The croc swam away, the chap with the bayonet wound survived as did the bloke at the end of the jetty who had large doses of fright.

Towards the end of radar operations at Post 6, when the Japanese had been pushed back and there was no night watch, Les Northam, one of the guards, awakened Mark and his hut mates to tell them that a large crocodile had come ashore and was lying under the hut next door. All the shouting and noise did not disturb it and it stayed most of the night. Finally he/she slid back into the river startled by the vibration and noise of the Ford Ten, started by Lou Williams in the early hours of the morning.

Head Hunters

It was estimated that there were some 20,000 head hunters in the region of about 30 square miles, centred around the mouth of the river. The post was adjacent to, and friendly with, a tribe called the “Kyimos” whose chief was “Anacob”, a strongly built man with a bit of arrogance. The Army security men, with a fairly good command of the Kaya Kaya language, were able to extract information about the Japanese and hostile tribes. Of course some of the tribes took tobacco and other goods from both sides for passing on information and this was of some concern to us as to whether or not we got the right information.

Periodically through the night we would hear blood curdling screams as one tribe made forays into another's territory. The “Kyimos” were very hostile towards the “Amboreps” who gave a lot of cheek to the Kyimos because of the presence of the Aussie soldiers and their weapons. One wonders what happened after the Army left the district.

Vigilance was required at all times.

Death Stalked the Jungles and Waterways near Post 6

Gunner Langford of C Troop, 154th Light AA Battery, AIF, who served at Post 6 for six months has given the following report:-

“Whilst stationed at Eilanden River we lost some of our personnel in a patrol action some miles up the river. Other members from the 20th Motorized Section were machine gunned in an ambush. Only one native interpreter returned, wounded, to report what had taken place. He stole a native canoe taking several days to return, travelling only at night, to avoid detection.”

Radar mechanic Bob Mainon gave his version of the events:-

“A party left in a Dutch patrol boat and sailed to the mouth of a tributary of the Eilanden River into which the Dutch captain would not venture. The Australians continued up the river in a collapsible boat with an outboard motor, there they ran into an ambush. Those, who were not killed immediately, were taken prisoner and later beheaded by the Japanese commander.

This incident was later the subject of a War Crimes Trial, the Japanese commander being found guilty.”

Research Fellow David Sissons of the Department of International Relations, ANU, extracted the following information from Australian Archives :-

"In Australian War Crimes Trial No 23, Captain Kihachiro KATO was, on 14 January 1946, sentenced to death at Morotai for the murder of N164087 Signaller Williams of 82 Light Wireless Unit, a member of a recce party last seen on 12 November 1944 at map reference K404409 on map 'Eilanden River Area'. The place where Williams was captured appears to have been Otawa (137°15'E, 4° 42'S)."

There seems to have been five in the patrol, two from 'K' Field Security Section, one from 20th Motor Regiment, one from 154th Light AA Battery and Williams from 82nd Light Wireless Unit. Perhaps the other four were killed in action.

Captain Kato was shot at Morotai on 6 March 1946.

From RAAF Records it has been ascertained that on 15 November 1944 HMAML 1322 and Minesweeper HMAS Smeroe after a patrol into enemy territory requested that the radar, which had reduced operations to daylight hours, operate from 0600 to 2359 hours on 18 November 1944. It had been thought that the vessels may have been observed by the enemy and there may be the possibility of an enemy air attack. Following reports of hostile activity in the vicinity of the Post on 20 November the alarm was fired and Post defences sprang into action, the 'stand to' lasting about 30 minutes. It was subsequently learned that the Kepala of a native village known to be friendly towards the Japanese had been killed and a Kaya Kaya wounded. There were other incidents. On page 116 of *Air War Against Japan 1943-45*, George Odgers states :-

"This Squadron (No 86 Fighter Squadron led by S/Ldr R J C Whittle DFM) also destroyed four enemy barges at the mouth of the Lorentz River on 31 January [1945]. These had been used the day before for an attack on the Army Post on the Eilanden River: the Kittyhawks attacked the next morning and sank all the barges by strafing."

Bob Whittle stated in 1990 that he detected the barges by observing an oil slick emerging from the mangroves in which they were hiding.

Editor's Comments: The dangers and difficulties experienced by the personnel of 342RS were at the top end of the scale; extreme efforts were also demanded at places like Pilelo Island, Milne Bay, Long Island and many others including those across the north of Australia and isolated islands off the mainland.

At the other end of the scale were the paradise of Dunk Island, the comforts of Coolangatta and the pleasant life at Radar School.

Yet all of the stations were necessary in the overall RAAF radar network to monitor aircraft movements, both enemy and Allied, also shipping and to give a supportive role to lost aircraft so saving many lives of aircrew in both Australia and the combat areas.

JOE, OUR GREEK COOK AT 154RS, TRUSCOTT NWA

Morrie Fenton

Joe our cook was Greek by birth, though no more "Pro-Australia" airman ever came north. A typical Mediterranean in appearance, short, fat and dark, he was a happy worker, popular with the men, and more importantly, a good cook and spotlessly clean, though truth be known, no one had ever seen Joe under the showers. Joe was known to be touchy about his figure and preferred sponge baths after dark rather than sharing a bucket shower with the men.

The story was that Joe joined the Air Force to stop the Japs getting his hamburger shop back in Newcastle. True or not, he made a good cook and his kitchen and store became his world, his very reason for existence and often he was to be seen working there at night, and again first thing when we got up for early shift at six. The only variation to his routine was a night out once a week at the Operational Base pictures when he wore his overalls and gaiters to

keep as many mossies as possible away from his portly figure. His “on duty” dress was always the same singlet and shorts, or rather Blamey bloomers in Joe’s case, black socks and boots - his badge of office was a clean white apron, fresh on every day.

From behind the servery window, Joe always presided at the serving out with a few words to everyone, his rather staccato English garnished with an accent straight from the Greek Islands.

The Yanks were soon to close their nearby signals station. Our CO, always on the alert for an opportunity, drove over in his Blitz Buggy and came back with a load of kitchen treasures. Tinned pork, frankfurts, pork sausages, puddings, cordials, spices, corn flakes, sauces - every luxury we dreamed of was there. The boss called for ‘Mac’ and me to unload. Joe was on duty and we were to pack the stuff away as directed.

Now Mac and I were a bit “browned off” and we regarded this as the opportunity of a lifetime. We dutifully carried a few armfuls of the treasures and left Joe happily arranging them on his shelves. Mac then raced to the woodpile, grabbed the old wheelbarrow, and quickly loaded it with stuff I handed down from the truck. Quick as a flash, then, off to the Op’s tent and out of sight with the treasures. Back to the kitchen to find Joe nearly beside himself with worry.

“What Mr Waldron do ?” was all he could say. We calmed him down a bit by carrying in a few more armfuls, then off with another load for ourselves. Poor Joe was nearly in tears when we returned. There was one obvious way to make sure he kept the peace, so eventually we made him take a tin of tea for himself. This he eventually hid under his bed, but he would take nothing else.

That night some spirits were taken from the sergeants’ mess. First thing next morning the Service Police from the airstrip were out to investigate. Naturally, our tent panicked. There we were, with all this rich contraband in our tent and the SP’s already on the station.

A plan was quickly decided on. Each of us quietly made a trip out into the bush. A natural enough thing to do, surely, so early in the morning - but each man had enough contraband hidden about his person to give him six month's hard labour at Brock’s Creek. When the SP’s finally searched our tent, nothing remained.

Joe though, was caught. Perhaps his conscience pricked so hard that he fatalistically just resigned himself to the worst. His tent was searched, the tea found where he had put it, and Joe was on a charge.

Of course, we all agreed it was a shame, a poor show for sure. But though Joe had our sympathy, he only had himself to blame. Poor Joe cried he was so worked up. Mac said all Mediterraneans were a bit that way, emotional and so on. Probably it was the first bit of trouble he had ever been in. Even the CO said it was a paltry thing, but there was no way to avoid the issue as the SP’s insisted that Joe be charged.

Next morning we were up at 5 am to gather some oysters. Joe was up too, getting us some tea and tack. He was quieter than usual, probably hadn’t slept but he made no comment. When we returned he was about to be escorted into the Orderly Room tent, an armed guard on each side, in case he resisted.

The charge was heard - the SP’s gave their evidence. Joe said the tea was for his own use. The tea was confiscated. The charge dismissed. Joe walked out into the sunlight and wiped his eyes a bit, a free man with an unblemished record and immediately got on with what he did best - preparing lunch for the men.

Our boss reckoned it was a big enough sentence for any man to have to cook for a band of pirates like those on 154RS.

Joe and I were good mates, though he regarded me with much suspicion for many weeks - he was easy to tease and kid on, especially about the little Greek maiden who we reckoned was waiting for him to come home. Gradually he learned to give as good as he received. When we finally parted, Joe wanted me to visit him at his hamburger shop in Newcastle.

"I make you a good hamburger, Fenton !"

I am sorry I haven't been able to use up the invitation.

SOME MEMORIES OF 345RS

Walter Fielder-Gill

Editors' Comments: Walter served as the CO on 345RS for some twenty one months which is probably a record as many units changed CO's on an almost regular basis.

The Flight to the Islands

On 28 February 1944 the unit departed from Brisbane by plane. My memory is that it took some 12 to 14 DC3s to shift both 345 and 346RS's and we worked all night loading all our equipment.

Having left the Queensland coast, on our way to Port Moresby, the weather was very bad indeed. The planes rocked around the heavens and the DC3 could barely climb above the cumulo-nimbus clouds with the result that a lot of the men were getting very, very sick and in the vernacular of the day "hitting the bucket". I was in the lead aircraft, with some of the men of 345 when the copilot came back - he was sick too - and said,

"Where's that Australian Flying Officer ?"

"I'm here, Lieutenant." I said.

"Skipper wants you up front." he replied.

With that he also "hit the bucket". So I went up to the front of the aircraft and the skipper waved me into the seat that had been vacated by the navigator/copilot. The skipper then said,

"We can't go to Port Moresby. Moresby strip's bogged in with this bad weather. We've gotta go down to a place called Mill-nee Bay. I want yer to navigate me down there."

I said, "I can't fly. I haven't been trained as a flier"

"But yer a Flying Officer aren't ya ?"

Some time was spent explaining to the American Lieutenant the idiosyncrasies of the RAAF's ranks where you could in fact be a Flying Officer and still be on the ground. He said,

"We got a problem, boy. The other aircraft are tailing us - we're the navigation kite here. If that guy doesn't recover from that bucket right soon we've got a real problem coming up unless you can help us."

So I said, "Give me a map. Have you a map ?"

He brought out his Australian military map - a beautiful map - one inch to the mile. More importantly I had been trained in the Army to read them. I said,

"Where do you think we are at the moment ?"

"I think we're about here." pointing to a spot in the ocean somewhere between the Queensland coast and New Guinea.

"In which direction are we flying ?" and he gave a compass bearing. I remember saying, "You just keep flying in that direction and when we hit land we're going to turn right."

"OK." he said and when we saw land he added, "We turn right now boy ?"

"No you don't. Keep going so I can be sure this is New Guinea."

So we went in and saw the huge mountains approaching so I told him to turn right and get back to the coast line and get lower so that I could see where I was. We struck the coastline and I looked at the inlets and bays and finally decided where we were.

“How far is Mill-nee Bay ?” he asked.

“I reckon that we are there,” pointing at the map.

“We can't make it,” he said, “We haven’t enough gas.”

Fortunately all aircraft made Milne Bay. I had suddenly turned from a boy of twenty into a man of twenty in an hour or two.

Food Shortage

Once again, because of our remote location, food was not only poor but sometimes short in supply. Lines of communication were stretched. I don't know whether the authorities knew where our radar stations were located. Certainly our operations were secret but the end result, for whatever reason, was that we did not see any rations for a long time. Of course we were signalling furiously to get some food and supplies to the island, without avail. It got so desperate at one stage that we managed to hook and bring in a sea cow [dugong] and carve it up for supper. In this day and age one wonders what the present day conservationists will think about our action.

With native help we found a cow near a plantation on Sisi Island which was over a way from Bipi where we were at the time. Luckily we had a butcher among the security guards so we managed to get some fresh meat on that occasion.

Strangely enough the natives preferred to eat our bully beef in exchange for fish of which they caught a lot for us.

Supportive Role in the Admiralties

Our radars were wanted in the Admiralties for two reasons -the protection of the American floating docks and our supportive role.

When our bombers went out on a raid, they would generally fly at about ten mile intervals, we would track them out and back. We would watch them individually if they switched on their emergency IFF signal that was code 6 of the six codes available. These emergency signals were carefully watched and plotted with the actual range and bearing being given to the MFCU when the echo was lost from our screen.

It was only later that I learned that RAAF radar in the Admiralties had saved about 25 Allied aircrews who were rescued by American Air Sea Rescue.

Experiences with the American Navy

The first incident was nice. An unidentified ship had been picked up on the screen. It approached the island without lights and anchored. We sent all the signals in the “Q” code by Aldis lamp but there was no response.

I said to the sergeant, “I am going to have to board her Sarge. If I am not back in half an hour you can do what you like.”

Accompanied by a small boarding party, I went aboard to find that the ship was American and the crew were asleep.

They were delighted to find that we were Australians because they did not know where they were - they were lost ! Suddenly I recalled the half hour time limit given to my sergeant so, needless to say, we got to hell out of their ship and returned to the island.

Another incident involved an American Navy unit on our island. Generally relations were pretty good until ANGAU tried to stop the natives making grass skirts etc for trading purposes

with the Americans. ANGAU banned trading but the Americans continued trading and bartering so ANGAU reported them to the American authorities in Los Negros.

The navy boys thought that we had done the dirty deed, so they banned us from their fortnightly picture show and also threw out our fresh food from their refrigeration unit. We ate the fresh food as quickly as possible and got the natives to help us smoke what we couldn't eat with the hope of preserving the rest.

We withstood the battle of wits for a while by not going to their camp. However, my troops decided that they were going to take the American movie projector and bring it down to the Australian camp. When I reported this to the Chief Petty Officer, their OIC, he said, "You've got to stop them."

My comment was, "I can't stop them. In any case I will be up the hill with the radar tonight, Chief. Our fellows outnumber your blokes by about two to one. I think they'll succeed. Incidentally, they have decided to invite your fellows to come down to watch the pictures in our camp."

"OK, boy. You win." was his reply.

A Night Intruder

Haregan Island was a tropical paradise. It was night, lights were out and there was only the rustle of palm leaves. The only creatures moving about were the guards and the local pigs.

It had been my habit for some time to sleep with my Smith and Wesson under my pillow fully loaded and with the safety catch on. I was asleep, a very deep sleep in fact because in those days I was a sound sleeper.

A large pig entered my tent - for how long it had been snorting and rooting around there I do not know - but suddenly I woke with a start quickly realising that there was a "big thing" in with me.

Reaching for my trusty 38, in sheer fright, I took defensive action and fired indiscriminately at the "thing".

Now how does a wounded pig react ? I can tell you. It screamed and jumped about and got worse with each shot. A bloody disaster in more ways than one. I kept firing, it kept squealing and jumping around until I ran out of bullets, the pig died and the tent collapsed - I cannot remember in which order.

The camp awoke to this hullabaloo and investigated by torchlight. They found a collapsed tent with a dead pig half in and half out of it and a harassed and confused CO trying to get out of the same tent.

Their reaction was laughter - no sympathy - just bloody laughter which sometimes still rings in my ears. But how did I, the CO, react to their reaction to my dilemma ?

Easily, the two who laughed the loudest fixed the mess up. The natives built a fence around the camp and guards were given orders to shoot any pig found inside the fence.

Incidentally I've never been partial to pork since then.

Walter and the US Military Police

This is a three part story which starts with the constant harassment of Australian drivers by the US Military Police with a high incidence of speeding tickets being issued by the latter. It seemed that every time one of 345's men drove down Lorengau Road, Los Negros they were booked for speeding even though they had claimed that they had not exceeded the 30 MPH limit.

What should a young CO do ? Obviously "test the game". So I took off accompanied by the "grand old man" of the unit, he was in his 30's, Sgt Vic Thomas, our medical orderly.

In the rear mirror I soon spotted the "bad guy" complete with US MP arm bands and a suitably marked jeep. I said to Vic, "Check my speed, Vic, I am going to maintain 28 MPH."

Sure enough, only a short time later I heard the "Voice of America" say "Pull over guy".

The US MP corporal sauntered over to my jeep and said, "Say guy, you were doin' 31 MPH". Loudly chewing his gum as he spoke.

Drawing myself up to my full height while remaining seated in the jeep, savouring the moment when I was going to pull rank for the only time in my service career with the RAAF, I said in a slow, loud, dignified way which only a lad of twenty could really hope to do, "Corporal. When you address an officer of the Royal Australian Air Force, you will remove the gum from your mouth in an inoffensive manner. You will stand to attention. You will salute and address me as Sir. Do I make myself clear !!"

The reaction was instantaneous. His foot was removed from my jeep's side, the gum was removed from his mouth, he stood to attention and said, "Sir, I'm sorry to advise that you were proceedin' at 31 MPH."

"That's better," I said, "but my speedo, witnessed by my sergeant, only read 28 MPH."

All to no avail. Of course I was booked but the good news was that the paper work was sent to the CO of 345RS.

Editors' Comments: Wal, what about cleaning up the bloody pig ! Wasn't that pulling rank ? It is a pity that the US MP was not a major because then we would have called this story Wally and the Major !!

I did have a second offence. Only a warning this time for carrying six people in the unit jeep. This was accepted gracefully on this occasion.

The third incident happened a few days later. We had not received any mail since leaving Brisbane on February 28 and the lack thereof was a serious morale matter, particularly as I knew that our outgoing mail was not getting out either.

My driver and I decided to drive down to Momote airstrip. En route we saw a bunch of Yanks, seemingly intoxicated or partly so, fighting their own MP's. Closer examination revealed that the MP's were trying to protect two miserable looking skinny Japs who had obviously surrendered and who were wanted for interrogation.

There was a rope in evidence and it appeared that the Yank mob had different ideas. The MP's stopped us, no - to phrase that more appropriately - my driver Reg Maskell (fitter DMT) brought the jeep to a sudden halt in response to an unholy yell from the US MP's. They bundled the Japs over the back seat, jumped on themselves and said, "Aussie. Get to Hell outa here before we all get lynched."

Reg really did not need such an order to plant the foot. We started with a lurch which nearly put the rear seat passengers back with the mob.

As we drove away under the MP's direction I could not help reflecting that once again I had six passengers on the jeep - but of course it was different this time because two of them were US MP's !!

A Driverless Jeep

The road between the doover and the camp became so grooved that we used to put the jeep's wheels in the said grooves that acted like tram tracks. Then we would start it, put it in gear, pull out the hand throttle and let it go on its merry way -driverless. Of course we would ring up someone at the other end beforehand so that they could catch it at its destination.

The Hand of Fate

At Finschhafen five radar stations were staging; 337, 340, 345, 346 and 347. We were told that we were all bound for the Admiralties.

Decisions had to be made as to which station went where. Straws were drawn and the hand of fate selected 340 to go to Bat Island. It could have been any one of the five but poor old 340 drew the short straw.

"There but for the Grace of God, go I."

TRAGEDY FOR 340RS ON BAT ISLAND

Sources: RAAF Historical Section, Les Bell, Ken Stansfield, Bill Skillman et al.

Less than 100 miles south of the Admiralty Islands lies the Purdy Group of low profile coral islands comprised of Rat, Bat, Mouse and Mole Islands. Bat Island is covered by lush tropical greenery, the root systems nourished by the droppings of countless sea birds fishing the lagoon and surrounding shallows. It was impossible to walk across the island as the centre was a swamp. Magnificent butterflies and other insects shared the canopy with birds and bats while at ground level wild fowl and wild pigs rummaged, accompanied by rats, rats and more rats. All are provided for in a complete food chain.

On 27 February 1944, a conference of five American and two RAAF officers, F/Lt Glassop and F/O Walther (the CO of 340RS), decided on a site for 340RS well suited to give early warning of Japanese aircraft from NW New Guinea attacking the Admiralty Islands. The majority decision was Bat Island.

Next day P/O Les Bell arrived at Finschhafen to assist with the installation of 340RS at its new site.

On being informed of the proposed site, P/O Bell strongly opposed it for the following reasons. A Lutheran missionary who occupied Bat Island before the turn of the century had succumbed to a mysterious disease. Further deaths from an unrecognised illness had caused the owner of the copra plantation on the island to make his headquarters on a neighbouring island. He ferried his native labourers to Bat Island every six weeks or so to harvest the coconuts, arriving and leaving during daylight. By so doing the mortality rate was reduced, proving the island was an unhealthy place to dwell and therefore an undesirable place to locate a radar station.

P/O Bell's pre-war background in the region made him eminently qualified to pass a judgement on locating any station on remote islands in the region. Furthermore P/O Bell suggested an alternative island with the advantage of greater altitude which would increase the radar's maximum range.

His objection to the use of Bat Island was summarily dismissed. When he persisted, he was threatened with disciplinary action if the matter was not dropped.

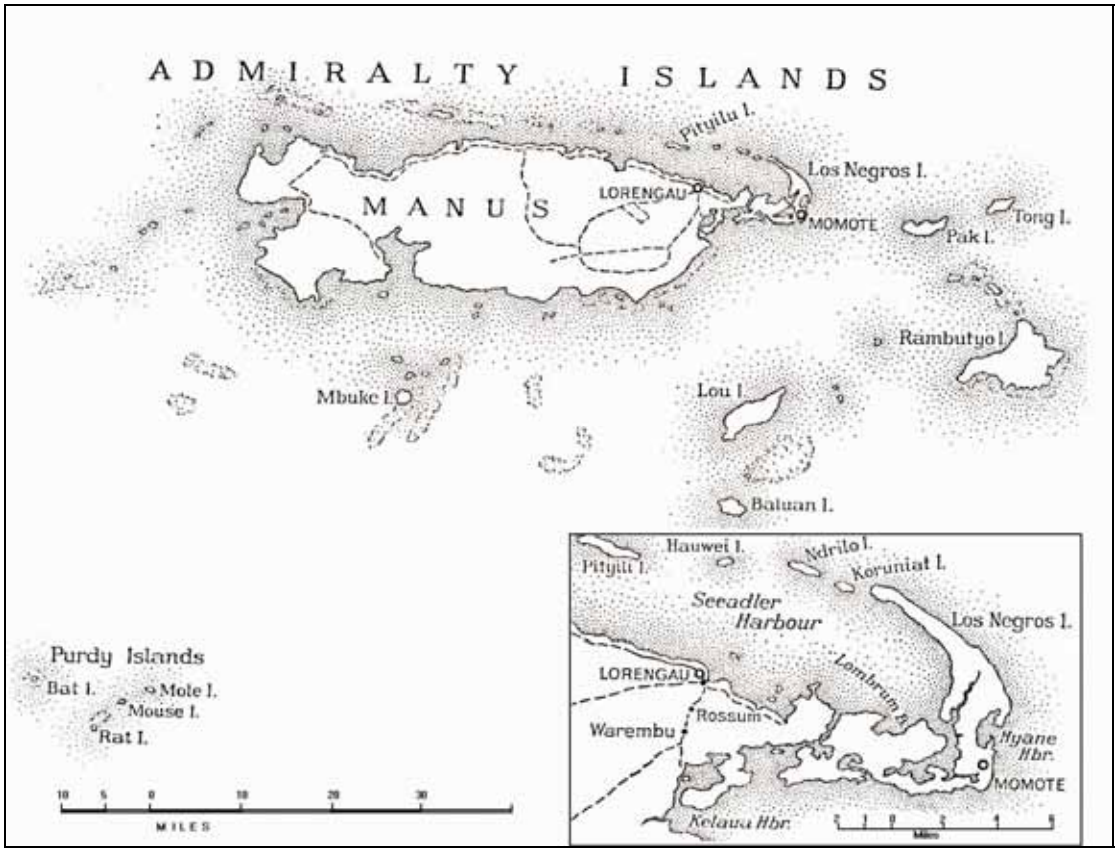
Six American spotters, members of the 383rd Signal Air Warning Battalion, arrived on Bat Island by Catalina on 3 March. Visual reports on enemy air activity were radioed back to Momote Airfield in Los Negros. They were told that 340RS was also coming to the island.

The unit had been drawing rations from the US Quartermaster and at about 10pm when orders to move arrived the Americans sent trucks, cranes and lighting units. Everything was packed and loaded into a small coastal vessel with only one hold. It was so small that the gear filled the vessel and the men slept on the deck. The vessel was piloted by P/O Bell at the request of the American skipper who was aware of Bell's knowledge of these poorly chartered waters.

Before first light on the morning of their arrival a few of the station personnel went ashore with two of the native ANGAU boys to check the island out, as a shed with Japanese fuel had been reported - but no occupants were found. The landing party had a scare that resulted in most of

them firing and killing a pig. There was also a report that the spotters had not expected them at such an early hour and that a confrontation was narrowly averted.

340RS nearly did not make it to Bat Island. As mentioned the vessel was very small and it had to be balanced when unloading heavy items. One Ford unit was moved to the opposite side while the other was being swung on the boom over the pontoon but the timber outrigger broke and the unit hanging on the hook decided to swing to the other side - the boat listed, water rushed in through any open portholes and nearly lapped into the hold. The pontoon was quickly moved to the other side and unloading completed.



Within a couple of days of landing 340RS became operational. The first problem was a lack of permanent echoes to fine tune the set. This was overcome by taking some of the galvanised iron sheeting from the Jap fuel shed and transporting it by RAAF supply boat to Rat Island. There, the sheets were nailed to the top of a coconut palm. The mechanics were delighted with the result.

But illness soon began to plague the members. The first casualty among the Australians was F/O Walther who was evacuated to Momote by seaplane suffering from dengue fever. The next day the senior radar mechanic went down with the same disease and within the next two days 75% of the men were ill. All were greatly fatigued and developing the various skin ailments common in the tropics.

To quote from the station report written at the time, "- island appears very unhealthy - all precautions taken."

On 23 March an ANGAU officer with dengue fever and an American spotter with scrub typhus were evacuated. Two days later two more RAAF personnel were off duty with dengue fever. Two US PT boats arrived and departed on 27 March with four airmen, an ANGAU officer and the remaining five American spotters, four of whom had become scrub typhus victims.

A further two dengue fever patients departed on a RAAF supply launch on the last day of the month. That day P/O Bell and four airmen were off duty with suspected dengue fever.

About this time, Bill Skillman recalls, they were doing extra shifts and in consequence not getting much sleep because so many were sick, About midday [date unknown] a boat was sighted approaching the island. No signal had been received for the unit to expect the arrival of a boat, therefore it was suspect. The guards and all technical staff not on watch gathered together, rifles and ammunition readied and the one and only Bren gun brought out from the store. The boat was travelling slowly, there was no wind so it was not possible to recognize the flag at the mast head.

A corporal, using the station binoculars reported that there was a gun at the bow of the boat but no one was manning it. Then when the boat was about 30 or so feet from the shore a puff of wind disturbed the flag and the RAAF flag was recognized - it was a RAAF boat sent to evacuate the sick.

All guns etc were quickly put away and a very friendly bunch went to the water's edge to welcome the visitors. Lunch was enjoyed by all. While the sick were being loaded on board a signal from the Mobile Fighter Control Unit was received advising that the crash boat was coming to Bat Island.

On board the boat there was an officer from MFCU who had gone along for the ride and also to see a radar station in operation but instead he had to take temporary command of the unit. The poor bloke had not even brought a tooth brush with him. The next day he had settled in and only then was he told about the Red Alert when the crash boat had approached the unit.

Sgt Bickford, a Medical Orderly from 26MCS (Medical Clearing Station), Los Negros, arrived on 2 April and P/O Bell was diagnosed as suffering from scrub typhus. The following day S/Ldr Harrison, the CO of 26MCS, arrived in a flying boat to evacuate P/O Bell who was now dangerously ill.

More airmen reported sick on 4 April and P/O H G Cairns, temporarily in charge, received a signal to be ready to move the station out in ten days time.

On 5 April the RAAF supply launch transported 10 more patients to 26MCS. Two cases of dysentery followed, P/O Cairns and the Medical Orderly, and they were admitted to sick quarters.

F/O C C Siegele arrived on 9 April and took over command and the station ceased operations on 12 April with the island being abandoned soon after. Ken Stansfield, suffering from scrub typhus, was evacuated on the Walrus which brought F/O Siegele and he has given some pertinent information about conditions on Bat Island.

"Until tents were supplied American jungle hammocks were used. At night you had to make sure that the mosquito net overhung the hammock otherwise the rats had a lovely time running around you on the hammock - anytime you hit the waterproof cover you could be sure that some rats would fall to the ground. When tents were erected and stretchers used, again the mosquito nets had to overhang the sides of the stretchers to keep the rats off you while you were sleeping. The rats enjoyed toothpaste, soap and in fact everything left lying around. They chewed through wooden packing cases and boxes and most of our gear had to be hung on ropes.

The unit cook saved a lot of the boys from getting a really serious case of scrub typhus by keeping palatable food up to them. It is not easy to eat when one gets the same food with no variety and of course then your resistance goes down.

The cook had been a pastry cook in Sydney and cooking was what he enjoyed doing and feeding the boys made his day. When we landed on the island he carried a kerosene tin and within hours we had a "cuppa" and hard tack to keep us going. He could disguise bully beef in so many ways that you did not know it was bully beef. While in Finschhafen he scrounged

some yeast from the Americans and within days we had fresh bread. Whenever one came off shift, or anytime of the night or day, there was always a "cuppa" and something to eat in the kitchen."

According to Ken scrub typhus affected different people in different ways. He was one of the last ones to succumb to the disease. He spent some 18 weeks in hospital and even today has to be careful about what he eats and drinks.

Bill Skillman summarizes the unit's stay on Bat Island by saying, "We were on the island for six weeks altogether and 18 of us packed all the technical equipment and personal gear when we left. Four of that number were replacements of the original members. We had two CO's and two acting CO's during that six weeks. According to the history books we frightened everyone in the area as they did not know if we would infect any other area."

Some of the dangerously ill airmen, when sufficiently recovered, were flown from Los Negros to Port Moresby where they were sent to recuperate at the convalescent establishment in the foothills of the Owen Stanleys - Ken Stansfield went direct from 26MCS to 3 RAAF Hospital at Concord, NSW.

Two airmen from 340RS died from scrub typhus at 26MCS and were buried within only a few hours after their demise in the Allied War Cemetery, Hyane Beach, Los Negros. They were:- 140910 LAC Nobby E A, guard, who died at 1345 hours on 20 April and 77676 Cpl Whitman J D, radar operator, who died at 0855 hours on 22 April 1944.

It would appear that four of the American spotters also died from scrub typhus at Bat Island so bringing the total to six.

Following this tragic episode, a medical opinion was obtained before radar stations were established in isolated locations.

Even more tragic than the illnesses and deaths on Bat Island is the fact that the whole incident would not have happened if "they" had listened to P/O Bell who was indeed fortunate to have survived. In addition, cases of scrub typhus had occurred at Long Island before the station was sent to Bat Island.

CONSTRUCTION OF THE ACO TOWERS

Bill Brown

Bill Brown was a civilian carpenter working for the timber merchants Codey and Willis of Glebe, NSW. This firm had the initial contract for the prefabrication and erection of the 132 foot timber towers for the ACO stations. The timbers were cut to specification and marked in the company yard at Lidcombe, NSW then shipped to various locations on the eastern coast. In some cases the timber had shrunk when the crew started to erect them and it was necessary to either burn out bolt holes or re-drill them on site.

Bill was involved on the towers, with 12 or 13 others, at Lilli Pilli, Swansea, Benowa, Toorbul Point, Home Hill and Tolga. After erecting the first two sets of towers, the men were made to join the Allied Works Council and continue the work with this quasi-government organization.

The same crew were supposed to erect similar stations at Mount Spec and Kingaroy in Queensland but these stations were cancelled.

The crew would all work on one tower from foundations upwards until the tower reached 60 feet. Then Bill, another carpenter, Keith Burge, and a rigger would complete it while the others dug and poured the concrete bases and got up to at least the 20 foot level on the other one of the pair. Why ? Well the others would not work above 60 feet.

In some cases the RAAF crew arrived on site while the erection crew were still there and Bill commented that some of the airmen would not climb the towers but quite a few of the WAAAF operators showed no fear and went to the top.

At Home Hill there were two factors which are worthy of comment. Firstly the place was the absolute home of snakes. Everything on the ground had to be handled with extreme caution - bags left on the ground, beds and in fact anything that had a gap underneath. One man was bitten by a taipan but it is believed that he survived.

Another interesting feature at this site was that every morning they had to chase koalas off the tower - some were reluctant to leave and clawed at the workers.

The bases had to be blasted out of rock at Home Hill and during the process a petrified tree stump was found and this, Bill believes, is still in the Museum at Brisbane.

The supervisor was a man named George Hamilton and he stayed on the ground and prepared bits and pieces for the three up above. Rather than keep looking up and so develop a permanent crick in his neck, he made a bed where he could lie back and look upward without strain. The boys could not bear the fact that their supervisor was stretched out while they laboured up above so Bill called down for him to cut 72 pieces of nicely prepared timber, with bevelled edges, to specified sizes. When George had completed the task he put them in sugar bags and was about to haul them up to the top only to be told to put them in the back of the utility - the pieces were cut to length so that they would fit nicely into the fuel stove back at their quarters.

It is said that George was not amused.

Editors' Comments: Originally W/Cdr Pither ordered 32 ACO stations but only nine were actually built because the war had moved away from Australia and the need was for air transportable stations.

Mellor, on page 431 of *The Role of Science and Industry*, quotes that each ACO tower cost £50,000. Since the figure was so large efforts have been made to trace the source and the only reference to the figure of £50,000 was found in Marjorie Barnard's unpublished manuscript *One Single Weapon.*

Bill Brown has said that it took a team of 12 or 13 men about 12 weeks to erect two towers which equates to about £1,000 for labour for two towers. Des Coveney of the Department of Interior, Adelaide, has located an order for the erection of towers in South Australia for £2,400 for one tower and allowing a similar amount for supply of timber and profit, our estimate is £5,000 for one tower. Therefore we suspect a typographical error in Barnard's work which Mellor repeated without checking.

PAY PARADE - 154RS

Morrie Fenton

"Bullet", the LAC guard, was a "bull" of a man shaped like a barrel and hairy all over, like a gorilla almost. He understood guns and tended his with daily doses of TLC - but his care did not extend to looking after himself, for he always appeared to be a mixture of a wild bushman and an uncaring hulk. True it was that our station was a lonely bush camp, but even by our easy standards, "Bullet" Smith was a bit rough around the edges. His daily dress seldom included more than a pair of "issue" cotton underpants, gaping and hanging beneath his hairy barrel front. Several days' growth always adorned the chin. Sometimes he wore a pair of home-made thongs - more often he didn't.

Anyway, it was pay day, and "Bullet" fronted up to Pay Parade outside the Orderly Tent, dressed or undressed as usual, his appearance unkempt and untidy, a cigarette hanging on his lip. His only garment was a pair of baggy underpants.

Usually our Orderly Clerk did the honours, and "Bullet" struck no trouble, taking a couple of pounds to buy his smokes and beer for a few weeks. This time the CO decided to pay the men and he took the chair - clean shirt with wings and rank up, cap neatly placed on the table, the clerk next to him looking just as neat - everything just right according to the good book.

The parade was not long, and quickly progressed until the CO looked up and just could not contain his indignation.

“I'm not paying you, LAC - not like that.”

“Bullet” stood in front of the table - no hat, underpants gaping - no boots - and smoking.

“Why not sir ?”

“You're not properly dressed, man. This is a proper Pay Parade. You know the King’s shilling deserves more respect than that.”

“Of course, sir.”

“Bullet’s” mental processes seldom allowed more than three words at a time. He turned, grabbed the hat from the man’s head behind, donned it himself and saluted.

The CO gave up the impossible task and paid him. “God save the King”, he muttered as the next man fronted up.

SOME RECOLLECTIONS OF 317RS - SIR GRAHAME MOORE ISLAND
Len Ralph

The Drysdale Mission
Father Cubero came over, in the mission lugger, to visit us on the island. These visits were usually coincidental with the fact that their supplies were overdue and stocks were running low. I always felt their conditions had become difficult and whilst he was seeking some assistance in this regard, he never actually said so.

We were not able to help from our normal supplies because they were rationed by the Air Force. However, our CO, John Weir, was a kindly man who always found a way to assist.

Our emergency rations, enough to last about a week, were stored in a locked box out in the bush. An inspection would be arranged of such supplies and amazingly this revealed that some of the tins were showing signs of rust. Therefore we could not be sure that the contents would be usable in an emergency. Naturally the whole lot had to be condemned and replaced with a fresh supply.

Now Father Cubero was also a kindly man and he would remove the “condemned cans” to save us the trouble of getting rid of them. Also surprising was that the good Father always came with three or four bags of freshly dug peanuts - not roasted or salted but still most welcome.

Peanuts in exchange for bully beef and dog biscuits seemed like a good trade to me.

The mission lugger had an old diesel, or was it oil, engine which had a novel starting procedure. One had to use a kerosene blow lamp to heat a bulb on each cylinder. After the prescribed heating time, the starting handle was wound furiously to achieve the desired result.

Father Cubero would say Mass for those of us who were Catholic. He spoke little English which did not matter for the Catholics because the Mass was said in Latin, but it was a bit hard for the non-Catholics. I feel that we all had some need for spirituality when living under such difficult conditions and that we all benefited.

Station Telephones
When using the telephones it almost became mandatory that one identified oneself as a well known world personality. One day when the phone at the beachhead rang in the CO’s office he heard:

“Group Captain X here from North West Area. I have come to do an inspection. Please send a jeep down to bring me up to the camp.”

John Weir replied, “It’s General Eisenhower here. I don’t give a damn who you bloody well are. You bloody well get yourself back up here the same bloody way you got yourself down there.”

It was all sorted out eventually and even the Grouper enjoyed the joke. After all, he had heard that there were strange people on radar stations.

A Parade

The CO decided that we needed a bit of straightening up - we were told to prepare for a formal parade. Now this did not go down very well with the blokes as most of us had not drilled for years. However, most agreed to go along with it if only to humour the “old man”.

It turned out to be an incredible shambles but the fun was enjoyed by all.

Maybe the “old man” knew more than we gave him credit for, because that parade did wonders for our morale.

The Flag Pole

Having scrounged or made parts I built a short wave radio and a real problem arose as to how to hang the antenna high enough above the ground when long poles of any type were just not available.

The hut in which we sergeants lived was on the edge of what was called the parade ground, on the other side of which was the station flag pole. A lovely straight pole about 9 metres, set in the ground.

I had never seen a flag up there. In fact we did not even have a flag. Also there was no way to get one hoisted.

The more I looked at it, the more it became the perfect antenna mast. So I shinned up to the top and attached my aerial wire which then went over the parade ground to the corner of our hut.

The result was perfection until about a week later when the CO realized what the wire was. He told me to get it down as it was not “the done thing” to tie aerials to flag poles.

I said that I would be unable to climb the pole again, quoting loss of nerve etc, etc. The CO of course did not believe me and I had to try.

After several unsuccessful attempts, I had to admit defeat.

The CO then said that he would get it down himself. So, to the cheers and applause of the onlookers, our gallant CO started climbing. No matter how hard he tried, he could not get past halfway. He was a little more than furious so he tried a different approach.

He got our jeep and a long rope. A stone was tied to one end of the rope which he then threw over the antenna - both ends of the rope were then tied to the back of the jeep.

The result was inevitable. It had to be the wire or the pole. The pole broke about half way up to the peals of laughter from the camp.

After a couple of days it was agreed that half a pole did not make a flag pole and also that we missed the radio.

So without any fuss, the wire went up to the top of the remainder of the pole.

Everyone, the CO included, agreed that the whole episode had been a great diversion from the usual humdrum existence.

Food

Like many other stations, food was usually canned and sufficient even though deadly boring to think about. Depending on the weather fresh food, ie bread and meat, would be delivered once a fortnight.

Refrigeration was inadequate and we could only store about half of the delivery. So we had to eat as much as possible when fresh stuff arrived. The quality of food fluctuated wildly as a consequence.

We supplemented our diet from a fish trap located in the 100 metre wide channel between our island and another small island of the Geranium Group. Steel mesh normally used for airfield construction was the basis of the trap. The catch was normally salmon or shark with the occasional groper but it was unreliable. So we occasionally used explosives which stunned the fish and they floated to the surface. This occupation was a little hazardous as sharks were prevalent and they were attracted by the flapping fish. Naturally guards were posted with rifles while the rest were up to their waists in the water. Thankfully no one was bitten or taken by a shark.

Drinking water was carried over from Truscott in 44 gallon drums which were difficult to handle from the beachhead. There was a well close to the beach on the northern shore, about one kilometre from the camp, but the water was very hard and only suitable for washing.

Most tents and huts had some form of water collection which was only of use in the wet season.

Pests etc

Snakes were prevalent, like many other radar stations in the area, the two main types were death adders and tiger snakes. Tiger snakes seemed to like to get into the rocks which were stacked underneath small stones and dirt which formed the base of our tents.

Sandflies and mosquitoes were a great problem and the older mosquito net was no barrier to the sandfly. If you were not careful excessive scratching could break the skin and form the basis for an ulcer.

VISIT TO AN AMERICAN HOSPITAL

Bray Bagust

The time was August 1944 when I had a broken leg - only the lower half of the right one. It was decided that I would have to leave 336RS at Tufi and go to Oro Bay.

The easiest way to achieve this, was to send me on the supply lugger. All went well until we got to Oro Bay where the sea was running too high for the lugger to come alongside the jetty. So they off loaded me into a dinghy to complete the journey.

Needless to say the dinghy capsized and I was thrown into the water. All I could do was turn my haversack upside down and hang onto it because my leg was in splints right up to my shoulder in accordance with the St John's Ambulance book. Some locals pulled me out of the surf and a couple of chaps came down with a stretcher.

“Okay buddy. We gotcha now.”

I was then carried up the beach to a casualty tent. Inside the tent was an American doctor who was huge, with a cigar to match, a fellow with a field telephone, two Yanks on stretchers and the two medics who carried me up from the water.

The doctor, in a deep southern accent, said. “Get tha guy a glass of water. Watcha rank son ?”

Whereupon I replied, “LAC”.

“Get a shot of brandy fur tha officer.”

Then turning to the fellow with the telephone, “Gedda nuther Ambulance for tha officer here”.

In a short space of time I became Lootenant A Class. My promotion was short lived because when I was flown to Port Moresby a couple of weeks later I stopped being an officer and a gentleman, reverting to an LAC.

ACQUIRING NEW CLOTHES

Bray Bagust

The time was August 1943 and the personnel of 336RS were at Kiriwina in the Trobriand Islands. We were waiting - no we were still waiting to be fully equipped, as most of our clothes were in a very poor state, almost in tatters, because clothes did not last long in the tropics. Some of the fellows decided to have a look around as there "just might be something loose lying around".

Down a side track, standing all on its own was a large American tent which was literally stacked with kit bags. This certainly warranted further investigation at a later date, which we did using our command car. By the way some time afterwards, we swopped the command car for a sea tank [a largish square tank which appeared on several stations] because we knew that there were only walking tracks where we were going.

Having thrown about ten kit bags into the command car, a Yank started yelling at us from the other side of the compound so we left.

The spoils, consisting of good Yank shirts, pants, boots etc, were divided amongst the boys - CO excepted. I scored a pair of rubber soled, calf length canvas jungle boots as well as a couple of shirts. After a while I gave the boots to a mate who had tropical ulcers on the top of his feet and on the lower legs.

Eventually word went around the camp that the American tent was out of bounds to all ranks.

It appeared that when an American serviceman died, all of his personal possessions were removed from his kit and the remainder was cleaned and packed to be sent to a repository and then destroyed.

It felt a bit strange walking round in a dead fellow's boots and clothes.

We had no regrets for our actions but we did feel sorrow for the unknown departed.

AN ALERT AT 23RS AT LYTTON

J G (Peter during the war) Croker

It was about 11 am on a morning in July or August 1942, the day PM Curtin was due to leave Brisbane on the Sydney train, when we picked up a series of blips some 60 or so miles north east of Brisbane. They were spaced some miles apart in a straight line and heading directly for Brisbane.

The plots were sent to Fighter Sector but there was no feed back at all - the aircraft still kept coming in and we still kept reporting them. When they came within visual range we dashed out to identify them only to find that the air raid sirens were blaring forth.

Fighter Sector did not notify us that they were "X" plots which turned out to be group of B25's from Noumea (we knew that from our sighting). There is a two part explanation for the "X" plots.

Firstly the pilot who put in their flight plan had forgotten about the International Date Line when planning the flight back in the United States. Secondly they were not sure where they were nor apparently how big Australia was. Therefore they split up, five to ten miles apart but in line, still travelling on the same heading. The first plane to sight Australia had to the report to the others !!!

None were lost - they all found Australia.

BOSTOCK'S AGENT

Don Kennedy

Editors' Comments: Don was one of the early direct entries as a radar officer and the following is an extract from an interview relating to some of his non-radar activities.

I don't know whether you know the Merauke area but it is as flat as a pancake. There are

only just a few strips of dry land around the place and being in the tropics these are subject to monsoonal rains. The station was having difficulty getting the truck into Merauke to get supplies.

They built a corduroy road by cutting down a few hundred coconut palms. The palms were owned by a Dutch company who apparently found out how many were cut down and presented a bill to the Commonwealth Government. I had to go up and investigate why 140 or 150 coconut palms were cut down. I think the Dutch were claiming some fantastic sum like £2 a tree. I do recollect that in the end we did have to settle with them and it is funny how some figures stick in your mind, but I think that we gave them 6s/8d per tree. These were some of the many jobs that Bostock had asked me to do.

I often refer to myself as Bostock's agent or outside traveller.

Well I had an easy means of getting around - a Beaufighter that was part of our communication flight and at times I even got to use Bostock's own private Hudson which was very nicely equipped. These were odd times, particularly with the Oboe operations coming up. You might recollect the Oboe 1, 2, 3, 4, 5, and 6 involved Borneo and part of the Malayan Archipelago and places like that. Quite frequently there were some very top secret dispatches which had to be taken from RAAF Command Headquarters to RAAF Headquarters in Melbourne particularly where it involved the administrative aspect of units being moved here and there. It was often my job to take these dispatches down to Melbourne and, being au fait with the forward planning, explain any queries that may arise.

So it was rather a common thing for me to travel quite a bit. I had a permanent tent in Morotai, operating out of there mostly for the latter part of the war, an office and a bed in Brisbane and my wife was at that stage living in Sydney.

Funny thing, on my trips to RAAF Headquarters, either on the way down or back, I would find a need to stay in Sydney for a few days with some form of engine trouble.

But I enjoyed my time in radar and in the latter part of the war being Bostock's agent.

TESTING THE TRANSIT CASES

Cyril Vahtrick

One luxury the radar personnel enjoyed at 1RIMU in the summer months was the college swimming pool - RIMU had taken over the Presbyterian Ladies College at Croydon, NSW. This was a 25 metre pool, deep enough at one end to have a diving board. This inevitably led to the organization of a unit swimming competition during the summer of 1943-44 in which I won a few races. (The point of this will emerge soon.)

Naturally, during the winter months, the pool was deserted and so it was a matter of curiosity in the winter of 1944 to find a number of wooden boxes floating around in the pool. These varied in size from about (from recollection) 18 inches cube to 2ft X 2ft X 3ft. An interesting feature of these boxes was that each had two rope handles fore and aft, which would obviously allow the box to be carried by two men in the manner of a palanquin - an eastern covered litter.

There were naturally lots of rumours about the purpose of these boxes and why they were in the swimming pool, but, in true RAAF tradition (particularly radar), no information was officially forthcoming. The plot thickened one day when I was summoned to the presence of one of the officers who had been seen looking at the boxes. I was a corporal at the time and had innocently planned to spend the day repairing and calibrating some test instruments in our small workshop.

His opening remark was "I believe you are something of a swimmer". All my instincts were immediately on the alert, searching for a suitable negative response. I realized, however, that I was trapped and that any denial would be hardly plausible because RIMU was a small unit and

during the previous summer I had beaten one of his fellow officers who had swum in one of the races I had won.

Without waiting for a response, he told me to get hold of a particular airman (who, fortunately for me he had named as a good swimmer, so I didn't have to dob anyone in). We were to get into our swimming togs and report to the swimming pool soonest. The big catch in all this was, of course, that it was a cold and windy mid-winter's morning.

As expected, we were instructed to get into the pool and retrieve all the boxes, which we accomplished as quickly as possible and, having dried ourselves, made to hurry off. "We're not finished yet - get dressed and load those boxes on that truck."

We elicited on the way that we were off to Sydney Harbour to test the boxes under more realistic operational conditions. We duly arrived at Garden Island where our peace of mind was not particularly improved when we found ourselves loading the boxes onto a landing barge.

We proceeded to Nielsen Park where we "invaded" a small strip of beach next to the swimming enclosure. My colleague and I were grateful for the barge skipper's skill in bringing the barge up so that the landing flap was resting in shallow water only a couple of feet from the shore.

Once again in our swimming togs, we were instructed to take the biggest box which we understood had bricks in it to make the right weight and we thankfully scrambled ashore only getting our legs wet. Naturally, that was too easy, so the barge skipper was told to back off into deeper water.

We were standing on the barge flap at the time and suddenly the flap gave way under us and we found ourselves unceremoniously dunked into the deep icy water - box and all. This livened up our reflexes, and we quickly manoeuvred the box ashore. It was, thankfully, weighted so that it just floated.

We swam back to the barge and our officer nodded approval saying "That seemed to go OK". (Good we thought, as we dried ourselves and tried to restore our circulation - thinking that's finished). Not so. "I think we're ready now to try the surf", he remarked enthusiastically.

So we headed off, with much signalling to South Head, through the anti-submarine defence boom in the harbour and out to sea. We took a northerly course and duly arrived at Manly Beach, which was heavily festooned with barbed wire except for a small section where the normal surfing beach was.

There was a moderate surf running and the barge skipper told our officer that he could not risk running up to the beach as he might not be able to get off again. Undeterred our man said that, in that case, we would have to get off beyond the line of the breakers and take the box in on the surf.

Having been trapped at Nielsen Park with the falling landing flap, my colleague and I stood well back until the flap was completely lowered and then we heaved the box overboard and jumped in after it.

As soon as we had done this, the stern of the barge plunged into a deep trough causing the bow, with its flap, to rise about ten feet in the air, threatening to come down like a gigantic fly swat on top of us. Getting our priorities right, we abandoned the box and scrambled clear, seeing the flap come down with an almighty whack, fortunately just missing the box.

Before this could happen again, we rescued the box and addressed the task of getting it ashore through the surf. The box had a mind of its own in this situation and all we could do was hang on to it and let it ride through the breakers. So far so good.

By this time a small crowd of onlookers had gathered on the beach, watching these antics with some curiosity. "What are you doing mister ?" a small boy asked. My colleague and I looked at each other, then I said solemnly "It's a secret".

By now, we had shouts and hand wavings from the barge that we were to bring the box back. Hanging on to a box full of bricks coming in on the waves was one thing - taking it back was something else. Time and again the box was wrenched out of our grasp and headed back to shore.

Finally, with a small lull in the surf, we managed to struggle out past the line of breakers and approach the barge, but what now ?

We dared not get too close to the landing flap, which still kept menacingly rearing up ready to flatten us, box and all. Also, the box was far too heavy to lift over the side. Finally we got as close as we dared with the box and, as soon as the flap slapped down we shoved the box onto it for the crew to take. We each then did the same thing, scrambling on one at a time during subsequent suitable "slaps".

On the way back, we were told that the boxes had been designed to take the equipment for a complete LW radar station ashore during proposed landing operations up north.

This was to be their final testing prior to applying them to the real thing.

EMERGENCY SURGERY AT PORT KEATS 39RS

Dr Jim Flaherty

To set the scene: the Port Keats tribe was, during the war, still classified as wild. And wild they were, fighting neighbouring tribes using spears and waddies. They even used these weapons when fighting among themselves.

One night at the Mission when I was talking to Father Docherty a woman was brought in with a barbed fishing spear in her neck.

It had passed from one side of the neck to a point in the back alongside the 5th vertebra. Father Docherty broke off the spear but could not move it.

As the Mission had some ethyl chloride and ether we decided to anaesthetise her before opening up the wound. I made up a mask and gave my first anaesthetic !!!

I don't know whether she went under or was hypnotised but we opened the wound but still could not shift the spear. Now I was running out of anaesthetic but Waggin, the local medicine man, was looking on so we called for his assistance.

The woman was lying on a blanket on the ground and Waggin planted one of his feet on the woman's head, gave the spear a few experienced twists and out it came.

She did not bat an eyelid.

The wound healed beautifully.

And the day following the "operation" she was walking around with her husband and he was the blighter who put the spear in her neck in the first place !

Editors' Comments: At the time of this incident Jim Flaherty was a radar operator but fortunately his eldest brother was a country GP and Jim had helped the latter out from time to time during his holidays - proving that a little knowledge worked wonders in the bush.

POSTED SOUTH FROM 44 WING

Ed Simmonds

Around April 1943 Jimmy Holt, Norm Vieusseux and I were sitting quietly in the personnel pool at 44 Wing waiting for something to happen. It did. We were summoned to the Adjutant's office to be informed that we were posted back to 1RIMU at Croydon on a DATAR posting. This meant as soon as possible.

No time to say goodbye to mates, told to travel light and the rest of our gear would be sent on to us - that took nearly two years to eventuate. We were bundled out to Batchelor and put on a

chartered Guinea Airways DC2 heading for Adelaide. The pilots were middle aged civilians and the plane was not in the best of condition. Some Army blokes were loaded on board with us and we took off on the first leg to Alice Springs.

One of the Army chaps had never flown before and was scared. He spent nearly all of his time kneeling on the floor - it was a cargo plane and did not have seats - watching the starboard engine spew oil over the wing that was not a pleasant sight. He kept this up all the way to Adelaide.

Norm rolled up in a blanket and went to sleep and as we came into The Alice we hit a down draft and the aircraft dropped quite a bit. Jimmy and I laughed as there was daylight between Norm and the floor. He landed on the floor when the aircraft stopped falling, awoke with a jerk and said something about dreaming that he had just fallen off a cliff. We said that, in effect, he had just done that, explaining what had happened

As we approached Parafield the port motor stopped and the starboard one was still spewing oil under the watchful gaze of the Army chap. We only just cleared the fence before touching down. He turned a shade of green and nearly fainted when we told him that the other motor had died on the approach. This did not stop the three of us continuing on to Melbourne the next morning in the same aircraft.

On this leg a serious discussion took place. I lived in Sydney and wanted to get there as soon as possible. The other two came from Melbourne and wanted to spend a couple of days there. Now Norm was a very resourceful sort of a bloke and he duly examined our combined movement order in minute detail.

On arrival in Melbourne, Norm rang his fiancee and within a couple of hours I was given a bogus movement order and leave pass. Norm kept the original movement order for himself and Jimmy which gave them extra space on the troop train since I was not with them.

It was cold and the only clothes I had were shorts and shirt plus slouch hat. So Norm loaned me a civvy overcoat and off I went to Spencer Street railway station to get a train. No problems with the RTO office and I was given a seat on the troop train for Sydney but had some time to fill in.

Standing quietly behind a column, trying not to look conspicuous, I was suddenly confronted by two fierce looking SP's - they all looked fierce when you were feeling guilty.

After scrutinizing my pay book and "papers" there came a barrage of questions. Something like: "Where are you going ? Why are you dressed like that ? You are a bloody disgrace to the King's Uniform". etc etc.

Thinking of my situation, false papers and all, I gulped hard. As soon as my Adam's Apple had stabilized I pitched a good story about being posted south without warning, having to borrow a civvy overcoat from a mate who lived in Melbourne to keep warm, and not having any money to buy even a cup of coffee.

Now these SP's were kind hearted chaps and one gave me a couple of shillings to go over to the refreshment counter to get a cup of coffee and something to eat. Being such nice fellows they stood guard over my kitbag while I went to partake of some refreshments.

The girl behind the counter said "Strewth. What sort of a rig out is that ?" I told her what was going on - she laughed and gave me the coffee and biscuits for free. So I had made a two bob profit on the deal.

I had a lovely three days "on leave" in Sydney and met the other two at Strathfield railway station at the appointed time.

The three of us turned up at RIMU, all in blues having just arrived from Darwin on a DATAR posting. We did not think at the time but it must have looked a bit fishy particularly as I did not have any kitbag or gear with me at all.

Well F/Lt A Gray, an Australian serving in the RAF, eyeballing the three of us, seriously questioned the time it took us to get south on a DATAR posting. He had just got back from Darwin and it had taken him four days less than it had taken us.

Our answer was logical in our opinion. We put forward the point that he, being an officer, had probably got preferential treatment as far as transport was concerned whilst we had to take what we could get.

TOORBUL POINT LOO AND THE WAAAF

Ed Simmonds

For more than forty years I have occasionally recounted this story only to find that according to the Monthly Operational Reports for this station I had left the station before the WAAAF arrived. Maybe I have been subject to fits of fantasy but it makes a good story anyway.

The ACO equipment was being installed. It rained and rained and rained until everything and everywhere was awash. The septic tank was overflowing which necessitated the digging of a temporary pit up the side of a slope on the Parry-Okden farm.

It was a nice structure in an architectural way, with a galvanized iron roof and hessian side walls - see through in fact.

Well the WAAAF arrived and early on the first morning a WAAAF went down to the structure and almost immediately all hell broke loose - screams and yells galore.

Subsequent investigation revealed that one of the boys had put a loud speaker down in the pit and rigged it up with a battery and microphone. The culprits waited until the poor lass had settled down comfortably and then a deep voice came from the pit below saying:-

> "Would you mind moving up to the next seat please Miss. We have not finished digging down here yet".

A MAINTENANCE TRIP TO TANAH MERAH (322RS)

Ray Graf

One of the hazards of the Tanah Merah region was head hunters. I was told that the males had to sever and provide two heads as a bride price. Furthermore they weren't particular whose head was collected in the process. I well remember a local native coming in, covered in blood, with his head seemingly half off, having made a lucky escape.

There were lots of crocodiles too, which wandered away from the actual streams. What with head hunters and crocodiles mixed with mud, humidity, moisture and mosquitoes - it was nothing but a hell hole. On top of everything else, if it did not rain every day the locals thought it was a drought.

Bruce and I were billeted about half a mile from the main station where it was their practice to play cards, 500 in particular, each night. Being somewhat interested and invited, I went up to play one night despite the aforesaid hindrances. About halfway there was a narrow footbridge, no handrails, across a deep gully at the bottom of which was a creek about 20 feet deep harbouring crocodiles.

Anyway the card game became very enthusiastic and time ran away from me. Some time after midnight I decided that I'd better get off to bed and walked out into a wall of blackness. Heavy clouds covered the moon - there was no vestige of light and I had no torch. Pride forced me to plunge on bravely in the general direction of our camp. Slapping aggressively at the hordes of mosquitoes, I can distinctly remember wishing that they craved perspiration instead of blood.

Progress was slow. Could head hunters see in the dark ? Certainly they had acute hearing and here I was floundering along feeling for other hazards in front of me with a long stick. Weird noises from the jungle didn't help my peace of mind. The macabre idea of my own head taking pride of place in a jungle village was quickly dismissed from my thoughts.

Arriving in the vicinity of the footbridge raised the fear curve together with the hair on the back of my neck. The first task was to find the bridge. This involved edging forward and probing with my long stick. If it went down it indicated space below and that I was on the edge of the gully. Choosing to move left proved to be right, if you know what I mean, and I discovered the bridge. Now to get across.

No messing around, no suicidal tight rope act across that narrow footbridge without hand rails and hungry "Harrys" wallowing below ! Then a thought, "What if someone's coming to other way ? Use the stick. That was it".

So it was down on hands and knees, paddle a bit further, wave the stick in front and then on again. Thus was the progress of this radar pilgrim to the far side.

By now I was getting cocky and experienced at blind navigation. But it was with great relief that I was finally able to creep into the friendly confines of my mosquito net.

Early Days At Port Kembla And Kiama
Don Kennedy

Upsetting the Navy
This incident at Alloura Battery or Hill 60, which the RAAF called Port Kembla, happened before I got to the unit but the operators were still talking about it.

One evening, around dusk, they were plotting several ships, all of them being known plots, when gradually additional ships started to appear on the screen. There was a flurry at Fighter Sector because according to their records there were far more than they were aware of.

The Naval Officer was also concerned and a mild degree of panic resulted and continued until some of the ships started to sail up onto land with a group somewhere near Liverpool. The panic subsided but the Navy lost faith in both the RAAF and radar for a while.

By way of explanation it was very early days of radar and we were all still on a learning curve. The aerial was the early AW model which was based on the Army SHD type. Furthermore the array had not been phased and there were several side lobes. In retrospect temperature inversion was present.

Editors' Comment: A similar incident occurred at Cape Otway with similar results. 13RS at Cape Otway was an interesting installation as it was a hybrid. A CD/CHL transmitter with an AW receiver and AW aerial. The higher power of the transmitter would have exacerbated the situation if the array had not been phased.

Submarine Echo
Many people claim that they were on duty when the first echo was seen of a submarine. Well I think that I can claim to have been on the first RAAF station to do so - it would have been late February or early March 1942, just after Bill Weston was posted.

The operators were doing the usual four hour shifts, but with limited staff it was four hours on and four hours off. I had just settled down for the night when one of the ops woke me and said, "We have a very strange signal on the CRT. Would you come up and have a look at it, please Sir".

So I went to the Ops Room and asked, "Where is it ?" Their reply was, "....it was so many miles out". I could not at first see any echo. Then suddenly out of the trace came a very strange

signal right up to saturation point and just as quickly back into the trace again. I moved a little closer, sat a bit tighter in the chair and asked, "How long has this been going on?"

They said, "For about ten minutes".

"Has it been behaving like that all the time ?"

"Yes it has."

Then it came up to another saturation signal and back into the trace. Well it was obvious that it was something that was floating. We had had an experience at Alloura Battery plotting an "unidentified ship" which eventually turned out to be a packing case. So it was obvious to me that whatever we were looking at was floating and from memory I would say that it was 40 to 45 miles from the coast. It could have been less. The only conclusion I came to was that it was not a packing case by its size because it must have a lot of metal to give this form of signal. A ship has a multiple top and moves up and down but does not completely disappear from the trace. There was a heavy sea running at the time and we were only seeing it when it was on the crest of a wave. By its shape it was obviously made of metal and thus was a shipping menace and it was giving a signal which I thought would be that given by a submarine. So I personally reported it on the land line to Sydney Fighter Sector as a possible submarine. That started a bit of a panic with the Naval Officer on duty. You may recall that at that time the Navy did not seem to be very much interested in RDF. The Naval Officer asked, "How do you know it is a submarine ?"

I said, "It is behaving as I would expect a submarine to behave".

"Well there are no submarines in the area so it cannot be a submarine."

I pointed out that that was up to him but I still felt it could have been a submarine. Then he said that I was only causing a panic by reporting it as a submarine and asked for my rank. He was a Lieutenant so he pulled rank on me and ticked me off for creating a mischief.

The situation at that time had reached a stage of serious concern by virtue of the Japanese advances everywhere. I felt that I was doing the right thing.

Be that as it may, I was told not to pass any further plots on the target. The plot had not changed position at all from the time it was picked it up so obviously if it was any form of surface vessel it was not under way. Having been ticked off by Fighter Sector I went back to bed and explained to the operator that as long as it remained in its present position it could not do any damage. We had reported it to Fighter Sector and if they wished to instruct shipping that there was a hazard in the area then it was their business - not ours. I did say to the op that if it does start to change its bearing and appears to be under way he had better come and wake me up.

Somewhere around 2am I was woken by the op who said, "That X plot we had is now moving and from the rough readings we have taken, it is moving at a speed of" - he gave me a figure which I have forgotten - but it again confirmed to me that it was a submarine. My conclusion was that it had just been floating around charging its batteries and was now heading north.

We again reported it as a plot on a different bearing and range and again I added that it was a possible submarine. This produced a second panic for the Navy who said we were only creating additional trouble by continuing to report that it was a submarine and that I was to discontinue passing further plots. This we did. Reluctantly.

Sometime around daylight we lost the plot somewhere towards Sydney. Later that day we heard on the grapevine that a ship had been shelled by a submarine near the Sydney Heads. So that report confirmed the fact that what we were plotting was a submarine. If you want to get the exact date, I am certain it would have been reported in somebody's log sheets that a ship was shelled off the Heads around dawn.

The Navy suddenly took a great interest in submarines from that point onwards and I was called to a conference at Fighter Sector and questioned at great length as to what it looked like, why did I think it was a submarine etc. I was asked to prepare a report which was circulated among all stations which were in operation at that time, advising them how to differentiate a submarine plot from a normal surface vessel.

Gear Box Failure

During my period as CO, I never prepared any history sheets so this particular incident, like the others, will not have been recorded.

One night we had a very heavy wind and as you know we had an early type of aerial and drive system. On this particular night the wind was so strong that it stripped the gearbox.

This basically left us unable to operate. So I decided that we must keep the station in operation in case there was a repetition of Pearl Harbour. I, for one, did not know where the Japanese fleet was but I was not going to take any chances.

I dragged a couple of personnel out of bed, tied a lump of rope to each edge of the array and had them walk around like a couple of donkeys. The wind was blowing like crazy, so strong in fact that you could hardly stand up in it and it was also pouring with rain. No one was very happy about this exercise so I limited the time to, I think it was a quarter of an hour or 20 minutes, then a break. Everyone had to have a go at it and I even co-opted the Army [VDC] chaps who were guarding the station to help out until we could get the NSW Railway workshop engineers to come down with a new gearbox.

You can imagine the feeling of the operators; all AC1's at that stage, who had joined the Air Force to fight not to walk around in high winds and pouring rain like donkeys.

103RS AT POINT LOOKOUT, NORTH STRADBROKE ISLAND

Frank Coghlan

We left No 1 Radio School at the end of March 1942 for Amberley where 103RS was formed on 5 April and the unit moved to Stradbroke on 8 April with a MAWD (Modified Air Warning Device). We were told that the Americans had delivered the SCR268 in February and it had been modified by CSIR to work as an air warning set by increasing the range from 20 miles as a gun laying set to around 100 miles on aircraft and 30 miles for shipping. Our innovative mechanics Bill Humphries and John Fraser later improved MAWD's performance by putting chicken wire at the back of the reflectors on the arrays to cut down on what they called back radiation. We hauled the two trailers totalling about 20 tons to the top of the hill near the lighthouse and started operations.

Oh what a wonderful war. We were accommodated in fibro cabins which were part of a guesthouse, good food, a beautiful location and far from the actual shooting war. I often thought that it was too good to last and I was right. My stay there was rather brief.

But there was still a need for radar coverage in the area because at that time there was the distinct possibility of a Japanese sneak attack by either sea or air. On more than one occasion a whale was responsible for a submarine report.

The operator on a MAWD set sat out in the open and manually turned the whole thing through the search sector. This was all right when there was no wind but a brute of a thing when there was wind because the aerial was asymmetrical - bigger on one side than the other. In one direction it screamed along on its own but the return was sheer hard work. What's more, there was no cover -you were literally out in the elements.

However there were some memorable incidents like the time I nearly shot myself in the foot. a 38 Smith and Wesson revolver was always on a tray alongside the operator - in case of an enemy attack. Instructions were that, as a safety precaution, to have an empty chamber under the hammer. One very dark night there was a rustling noise in the bushes close by the set - I

picked up the pistol, pointed it downwards and pulled the trigger to arm it and bang ! I blew a neat chunk from the side of my right boot and nearly blew off my little toe. Some one, during their lonely vigil, had absent-mindedly rotated the chamber of the revolver.

The Battle of Cylinder Beach

An American Signals unit moved to the island and was to take over from us if we were posted up north. They had a "gungho" sergeant, a real John Wayne type who never moved without a butt of a cigar clenched between his teeth or a 45 automatic holstered on his waist. One night someone saw lights bobbing on the water just off the beach. The assumption was that it was the long expected Japanese landing and the alarm was raised.

All personnel not on radar duty were mobilised - tin hats battle gear, loaded rifles and hand guns - and headed off through the bush towards Cylinder Beach, ably led by our CO Bill Nash. The Americans, led by Sgt "Wayne" were there. We looked down from the high ground above the beach. Clearly there was movement and activity 200 yards below. The intervening slope was fairly heavily wooded with many large trees.

Before we could sensibly plan our tactics and exploit the element of surprise, Sgt "Wayne" shouted "CHARGE !" and with automatic in hand and cigar at the ready, raced down the steep slope. There was an almighty thump. We came upon "Wayne" flat on his back, the remnants of his cigar splattered across his face and his helmet askew. In his wild charge in the dark he had run into a tree and knocked himself out.

Proceeding at a gentler pace, we arrived at the beach to find two rather startled fishermen who could not understand what all the commotion was about. How lucky they were because rampaging "Wayne" was all fired up and would have shot at anything that moved on the beach regardless of who or what it was.

An embarrassed group of Allied servicemen shouldered arms and the "wounded" warrior and headed back to camp in the wee hours of the morning.

One of the same fishermen later came to my assistance when I inadvertently got a fishhook embedded in my bottom lip. He sized up the situation, got a pair of pliers, cut the shank off the hook pulled the hook part out of my lip. He gave me a glass of brandy to drink. Not having tasted hard liquor before, I spat it out whereupon the fisherman said, "Don't waste the bloody stuff", grabbed the glass and drank the rest.

Wreck of the "Rufus King"

One stormy night in May 1942 we had been tracking a ship for about an hour when it came into visual range. It was a Liberty ship and rounded Point Lookout light instead of the Moreton Island one and was headed straight for the sandbar that joined the two islands. The ship was too big to pass over it so I ran and grabbed our Aldis lamp, raced to the edge of the cliff and signalled "DANGER STOP". I had passed Morse at 25 words per minute on a key but had never used a lamp before. Someone on the bridge flashed back but I could not understand his message.

I kept sending my message and the ship kept on coming which ended in a dull thud - they had run aground. Next morning as the result of heavy seas the "Rufus King" had broken in half and wreckage was scattered along the beach.

One rumour later had it that the skipper was drunk - another that he was a German and that it was a deliberate act of sabotage - but I never heard the real story.

Editors' Comments: 103RS equipment was handed back to the Americans on 29 July 1942. The wreck of the "Rufus King" was not a complete loss as we used it as a permanent echo at 23RS, Lytton, to fine tune the set.

SETTING UP 37RS AT MILNE BAY

A Mechanic's Story

E (Eric) a Renowden

We left Townsville in a filthy Dutch ship called the "Swarten Hont" with its hold full of rotten food following its escape from Singapore. To me there was no excuse for the filth because the fall of Singapore had been months before.

Our arrival at Port Moresby was greeted by heavy bombing at night when the RAAF lost six Catalinas and Burns Philp the "McDewy". The next night was just as bad but we left on the third in the "Bontico" which was just as dirty as the first tramp steamer we travelled in.

Milne Bay Harbour looked beautiful until we found that there were no unloading facilities for our heavy English equipment. So we moored near a village called Gilli Gilli and floated the gear ashore on rafts made using 44 gallon drums.

F/Lt George Day showed us how to use pinch bars and brute strength to shift heavy articles. Someone up above must have been on our side because one of the lads found an old rusty four wheeled truck in the undergrowth. This helped move the crates etc a distance of about two and a half miles to the designated site.

The stores equipment officer, whoever he was, must have disliked us for when we opened a crate expecting it to be some essential equipment we found that it was full of "Pucka Sahib" pith helmets from Singapore. Guess what, the helmets were immediately thrown into the Bay.

One of our first serious set backs was when we found that we were short of three phase cable. Approval, by radio, was given for a party to go to Samarai Island to collect anything worthwhile such as electrical cable, hospital equipment, bedding etc. There were some nice pieces of timber there but I got a bit of a shock when I picked up one piece to find a body underneath it. It was a coffin lid !

Work proceeded smoothly with the RAF Installation Party and we had a very sophisticated camouflage system. So we were somewhat surprised when we were strafed by Japanese Zeros. Neither personnel nor equipment was hit but the attack did spur us on to complete the installation.

Len Sommerfeld's comment on the attack was succinct. "I was sitting under a coconut palm and the next thing I saw was a bloody big red dot fifteen feet above the trees and I had a rear action."

Four days later at noon on 8 August 1942, a very bright Sunday morning, we picked up some enemy aircraft at about 150 miles and they were intercepted, which pleased us immensely. Our pleasure was short lived as not long afterwards lightning struck one of the diesel alternators putting it completely out of action. Its partner then had to run full time with the night shift changing oil while the motor was still running. This Lister diesel ran for many months before a replacement came.

We clamped the three-phase cable on to coconut palms with a couple of the crew on the ground maintaining tension while another up the palm fixed the clamp. I was on the ground applying the tension when I stepped back on a snake that bit me. It was venomous so I was whipped off to an Army hospital for an immediate operation resulting in a scar on my right leg and this was duly recorded on my discharge certificate.

Living almost exclusively on tinned food our health started to deteriorate but fortunately the Americans arrived about this time to build an airstrip. Seeing our condition they supplied us with edible food and we improved.

Their assistance spread to other areas as they had welders and workshops and these were readily made available for our use.

An Operator's Story

Cyril R Short

I had the dubious honour of being the unit's first cook - well at least for the first two weeks until the permanent cooks arrived. It happened quite unexpectedly as the result of "volunteering".

On Day 2 at Gilli Gilli the CO called a parade and asked the question, "Have any of you chaps been in the Boy Scouts ?"

Thinking that the task he had in mind obviously required a young man with intelligence and initiative, being 23 at the time and probably the oldest of the operators, most of whom were only 19 and 20 years old, I, like a bloody fool, stepped forward and said, "Yes Sir".

He replied: "That's good. You are the unit cook until further notice."

The rations on hand were Army hard rations consisting of bully beef, hard Army biscuits, tinned yellow grease called margarine and tinned marmalade jam. The menu worked out roughly as follows:-

Day 1	Cold Bully Beef.
Day 2	Bully Beef slices fried in margarine, using a four gallon Kero tin cut open to make a frying pan.
Day 3	Cold Bully Beef with mustard.
Day 4	Bully Beef slices fried with mustard.

At this stage I decided to give the boys a treat - hot pasties. So I asked the lads, if they were down at the waterfront, to contact the cook on the "Bontoke" and scrounge from him some self-raising flour. They arrived back with the cook's apologies and the message that he only had plain flour and no baking soda. My immediate thought was what would a pastie be like made from plain flour and water - no good.

So I used my Boy Scout's initiative. Word was sent out to see if anyone had a tin of Sal Vital in their pack ! Blue Blunt obliged and an unmeasured quantity of Sal Vital was added to the flour before water was mixed in. Using a tin of marmalade as a rolling pin the pastry was rolled out and shaped for pasties. The filling was shredded bully beef as there was nothing else available. The pasties were cooked on a sheet of flat iron, over an open fire, with another four gallon Kero tin, with one side cut out, sitting on top to form some sort of oven.

Need I say, the pasties were only 10% successful, no commendation was received from the troops, nor did HQ give me the AFC or AFM for service beyond the call of duty. a few days later two trained cooks arrived and I was relieved from that duty.

Approximately Day 14 we shifted out of the mission buildings to our permanent campsite. The mechanics, with some of the operators, were erecting the doover while I was given the task of supervising the natives allocated to us, to erect the sleeping hut and other buildings. My initial trouble was with two natives both named Tom. One was 18 years old and five feet ten inches tall, the other was about 30 and a full foot shorter. To my way of thinking the tall one should be called "Big Tom" and the little one "Little Tom" - so I lined them up and explained it to them.

Back to work we went with the situation well in hand or so I thought. I was both amused and bemused when each time I would call for Big Tom, Little Tom would arrive and vice versa. Sgt Les Bell put me right by explaining that, in Pidgin English, Big meant important.

To the natives, the CO was Big Boss and I was Little Boss - Little Tom was Big Tom to them because of his age and experience.

Everything went well from then on.

314RS AT ONSLOW

Peter Croker

In February 1943 a posting came through for me to join 314RS and we proceeded as far as Carnarvon on a DC3 which had a landing gear malfunction and could not go any further. a couple of days later we hitched a ride on the MV Koolinda doing a milk run down the west coast. We then discovered that there was a war on because we had a US naval escort for the rest of the trip.

310RS and 314RS were there to provide air warning for the US Submarine Base at Potshot. 76 Squadron, with Bluey Truscott, was also there - he was killed one day when making a practice pass at a Catalina. The sea was dead calm and he was a bit too low and looking into the sun - a very sad day for us and Australia.

Onslow was pretty rough, a bit of a port town serving a handful of inland sheep stations - a pub, Post Office, a couple of stores and a hospital was about it. Half the population had shot through because of the possibility of an invasion so we had no trouble in getting some houses to both live in and serve as our base. The station was about half a mile away on a sandhill.

By and large we had a nice winter there with some things going wrong so providing some distraction for us.

Then the doover burned down.

It was over in minutes as there was a lot of spinifex grass around and the fire started at the back of the doover tent. We certainly got the message on the importance of our location to the authorities as a DC3 turned up at 5pm the next day (about 32-34 hours after the fire) with new gear which the mechanics installed very quickly indeed.

Then we had two real live air raids at the full moon in either July or August. Both occurred about 11pm to midnight. No one believed us at first when we reported something 80-90 miles out, coming from the north ie the direction of Timor or Java until a bomb dropped on the strip at Onslow. In fact the warning was given when the aircraft were some 140-150 miles from Potshot since we were about 60 miles north of there.

I can say that they believed us the following night when the bombers came again. The planes flew right over the top of us and they dropped a couple of “reminders”. I understand that they had a couple of aircraft in the air to meet them. By then the new Australian Boomerangs had replaced the Kittyhawks but I don’t think that they did anything useful. [According to the *Guinness Book of Air Facts and Feats*, page 92, “it is perhaps surprising to record that, though frequently in action against Japanese aircraft, it (the Boomerang) failed to destroy an enemy aeroplane in the air.”]

PARKES GCI

S J Keighley

The unit was installed near the Parkes Air Base with the personnel being billeted and fed by the School. Whilst Syd was responsible for getting the unit to Parkes he left before it became operational.

There are two interesting aspects to this unit. Firstly no record of a station number has been found so far in official records but we are still searching.

The second is the means of transport to Parkes. Most of the equipment was sent from 1RIMU by train. The exception was the trailer-mounted 25 KVA Lister diesel driven alternator. This was towed to Parkes by a 30cwt W/T van that had no air brakes.

The descent down the western side of Mt Victoria was accomplished by dragging a fair sized tree behind the trailer !!

THE BURNING OF 301RS AT SAIDOR

Harry Radbone

An attempt was made one night to burn the doover, but this was smartly brought under control by a conscientious guard who was on duty. Some weeks later at 0400 hours the whole camp was alerted with the cry - "The Doover's on fire !"

Everyone, ready for action, responded and instructions were quickly given. I remember grabbing my rifle and webbing in full preparation for finding the enemy. Some men were sent to guard the powerhouse and generators; a couple were allocated the job of guarding the stores and about four were strategically placed around the perimeter of the camp. The rest of the team headed up the hill not only ready for action but also with the aim of putting the fire out with as little damage to the set itself as possible.

However as day dawned we realised that the doover could not be saved because the camouflaging had caught fire and was burning fiercely. The fire spread with clumps of the kunai grass burning in the immediate vicinity. The battle then was one of trying to stop the blaze covering a bigger area.

The hunt for the enemy was in vain.

We successfully contained the fire but not without having lost the fight to save the doover which was virtually burnt to the ground - only the steel frame left standing.

Well ! What next ? Everyone was on edge not knowing where or when another attack might be made. All personnel were required to take part in a full 24 hour guard duty. Radar and W/T operators, radar mechanics - everybody took his turn to guard the camp.

Our CO, as I recall, was on special duty in Madang and the Acting CO was finding it pretty hectic keeping things under control, the boys being so edgy.

We got back to a routine after some weeks but with no set work to get on with, guard duty was the Order of the Day for everyone. The rumour passed round, "No radar set to work with, we would soon be heading south !!"

Bunkum. Not to be!

Some weeks after the fire the camp was alerted by a New Guinea Fuzzy Wuzzy soldier bringing in two unkempt and unarmed Japanese soldiers for detention. He was a capable and very proud soldier - strapped up in all his gear - but amazingly, minus a pair of boots. His feet must have been as hard as iron.

Within six to eight weeks we had another set brought in, so replacing the burnt out one. The new one was placed on a knoll about 300 yards to the right of the old site. Away we went putting it together and setting it up. It was less than two months, I think, when we were back in operation again.

There were stations placed at roughly 50 miles apart along the coast - Madang, Saidor, Finschhafen, Lae etc, monitoring all traffic along the New Guinea coast and we were alerted to enemy working in the area on odd occasions.

I well remember another sad time when an American plane sent out a distress call when trying to make Saidor strip. Our station lost the echo in the ground return and it hit a mountain a couple of miles away. a sad loss.

Editors' Comments: Harry Radbone's story is very important because the A50 reports for 301RS are missing for the period June to October inclusive including the time of the fire which was after the atomic bombs were dropped.

The only reference to the fire was in the entry for 18 November 1945 which reads, "Radar equipment not being withdrawn destroyed as far as possible with explosive. Equipment left

including arrays and mast, was left in a mutilated condition. **Similar action was taken on the original equipment burned by the Japanese in August.**"

SINGAPORE AND BACK

B F N (Bert) Israel MID, US Medal of Freedom (with Bronze Palm)

When Japan attacked Pearl Harbour and advanced on Malaya, a request was received from the RAF for assistance in installing ASV sets in aircraft in the region. The first to be sent was young P/O Bert Israel by air. He was followed a couple of weeks later by P/O Andy Lewis and eight airmen in the "Aquitania".

The first step was being kitted out for the tropics at No 2 Embarkation Depot at Bradfield Park in Sydney. The process smacked of procedures followed in either WWI or even the Boer War because an important piece of gear was a collapsible washstand - a canvas basin and folding legs - plus a camp stretcher about six feet by three - all weighing about a ton and a half.

There were no jet aircraft in those days. The flight to Singapore was in a Qantas flying boat. The first day took them as far as Townsville with refuelling at Brisbane; the next to Darwin, Koepang, Bema and finally to Sourabaya in the Dutch East Indies; the following day ended at Djakarta (then Batavia). The bombing in Singapore caused a two or three day delay in the trip.

After reporting to General Headquarters the interview with W/Cdr Cave, Chief Signals Officer, RAF Far East Command, was somewhat of a surprise being something like:-

"You don't look as though you are six fully trained officers, 12 fully trained RDF mechanics supported by 48 airmen".

"No, I'm not Sir. What do you mean ?"

"Do you realise, that there was an agreement between the UK and your Government, at Cabinet level, that in the event of Japan coming into these hostilities, your Air Force would supply that number of personnel. And all I get is you".

"Well I'm sorry I'm not all these people. I'll do the best I can".

"Well get busy, do what you can, go to the squadron, see what can be done there".

Sembawang was a baptism of fire. Continual air raids, jumping in and out of slit trenches half full of water and road gravel was an experience in itself. The next day revealed that the situation was more than serious - it was critical. With up to seven raids a day there was only time for aircraft to be re-armed and re-fuelled, no time to fit such luxuries as ASV and IFF.

P/O Andy Lewis had just arrived and together they tried to install radar equipment but basic information as to cable lengths etc was not available. Top priority "immediate" signals were sent to Australia requesting information but nothing was forthcoming.

Israel and Lewis wrote a joint letter and gave it to W/Cdr Cave at the RAF RIMU at Ponggol Point and learned that the unit was pulling out that night. a discussion ensued about using ASV sets as early warning ground sets if and when the retreat to Java happened.

W/Cdr Cave's reaction was decisive:-

"I think you'd better get off your backside, get out of here, get to Melbourne, get the bloody information, come back and meet us in Java and get on with the job".

Whilst nothing could be done in Java because of the rapidity of the Japanese advance, this discussion was the genesis for the special early warning sets, using ASV equipment and Yagi aerials, at Milne Bay later in the year.

Cave's decision saved Bert Israel's life - P/O Lewis died in Java. The following copy of a signal plus the copy of a letter on the following page became, in effect, a directive that Bert had to follow:

TO AIR BOARD MELBOURNE
FROM RAF HQ F/E S/836/RAD

ATTENTION W/C PITHER. STRONGLY ADVISE P/O ISRAEL RETURN AUSTRALIA BY AIR WITH FULL STORY ASV POSITION. THIS WILL SAVE MONTHS OF CORRESPONDENCE AND HELP ALL PARTIES.

SIGNED W/C N CAVE
T.O.O. 0830
RAF F/E HQ SEMBAWANG. S'PORE

There was standing room only on the 3 am Qantas flight out of Singapore - 51 people jammed on board, overloaded of course -it took six miles to get off the water and it only achieved a maximum height of 600 feet all the way to Djakarta. Being a gentleman Bert gave up his room at the Hotel Des Indes in Djakarta to English ladies on the flight and went to the KLM people to see about a flight to Australia. They were quite rude saying, “Since your Qantas people will not go to Borneo to pick up our people there is no way you are getting a seat with us”. After being pushed from one place to another, eventually a letter to General De Poorten, the Commander in Chief of the Dutch Army in Java, was obtained, but he was in the hills at Bandung. The trip to Bandung involved a taxi to the railway station and a a train trip. Luckily the General granted an interview and another letter of introduction to the CO of a nearby military airport was handed over. But there was a condition attached - three other people wanted to get to Australia and Bert had to take them with him.

The first was Tom Playford, the Premier of South Australia, who had been trapped in Honolulu when Pearl Harbour was attacked. Not being able to travel further south from Honolulu he had gone back through the USA, England, Singapore and was once again trapped, this time in Java.

The second was Lt Jacobs RN, a King’s Messenger, complete with despatches from General Wavell to Washington in a nice brief case chained to his wrist. And the third was an American Army Colonel who later rose to a high rank - it may have been Colonel Arnold.

The CO at the Army airstrip pointed to an unarmed LB50, the Light Bomber version of the Liberator, which was trying to get to Darwin. It was peppered with holes having just got out of Manila. When the crew was told that this small band also wanted to get to Darwin they said, “Yeah, that’s OK, get aboard, we're going to leave now”.

The bomb bay was the only space left; acceptable even though most uncomfortable. If the plane got to 10,000 feet the temperature dropped below freezing and there was no oxygen, on the other hand it was heading in the right direction.

Soon after take-off one of the port engines gave trouble and the plane landed at Malang, a military airport south of Sourabaya. While the crew were trying to fix the malfunctioning engine the four passengers went into town and had lunch at the Harmony Club. The airfield was raided again while they ate and when they got back to the airstrip, after the raid, they found that their plane had received a direct hit. Fortunately there was another LB50 on the ground, also a refugee from Manila, and the second crew were equally helpful. It was once again bomb bay accommodation and being unarmed the pilot was not going to leave until about midnight.

A few hours rest in army cots in one of the hangars was all they got before boarding the plane at around 2300 hours. After take-off it was freezing cold and no oxygen - quite stressful really. Daylight came eventually and through a gap in the bomb bay doors they could see land and grass. The plane landed in Darwin but was not flying any further south, perhaps awaiting orders.

Bert went to see the Air Officer Commanding (AOC) and explained his problem but went a little further than he should by commenting that the white RAAF buildings stood out like the

Air Headquarters, Far East,
Royal Air Force,
Singapore.

Reference:-
S/311/P.D. 3rd February, 1942

Sir,

I have the honour to inform you that the undermentioned officer of the Royal Australian Air Force is required to proceed on duty to SYDNEY in Qantas Empire Airways aircraft leaving SINGAPORE on 3rd February, 1942.

Pilot Officer B.F. ISRAEL.

It is requested therefore, that you will issue a Travel Document in respect of the journey through the Netherlands East Indies.

I have the honour to be,
Sir,
Your obedient Servant,

Air Vice-Marshal, Commanding
Royal Air Force, Far East

Consul General for the Netherlands East Indies,
11, Dalvey Road,
Singapore.

proverbial dogs' what nots. After a ticking off he was told to go down to the strip and hitch a ride on any of the aircraft heading south.

Luck prevailed and they got a lift on the first one which was a Trans-West Airlines DC3, commandeered by the USAAF. Other passengers were US fighter pilots who had ferried aircraft to the Philippines and places north and were now headed for Amberley. Port engines seemed to fail when Bert Israel was on board and this flight was no exception. The port engine started to cough after 20 minutes out. The plane circled and lost altitude and the crew were becoming disoriented. a D/F bearing was requested from Darwin and finally they arrived back there, landing down wind because the engine was on fire. The plane came to rest about 30 feet from the main hangar.

Nothing ventured nothing gained, this happy band waited at the strip and got an RAAF DC2 piloted by Lionel Van Pragg the famous dirt track motor bike rider. The plane had seen better days and had to land every 200 or so miles to top up oil levels in the engines. The first day

included stops at Katherine, Newcastle Waters, Tennant Creek and Alice Springs. The next stage required stops at Oodnadatta, either Port Pirie or Port Augusta, Mount Gambier and finally Laverton around 2100 hours.

Darwin was bombed on the day after they left in the DC2. Laverton was the parting of the ways for the merry band -Bert went on to Melbourne and the others to Amberley. At 0900 hours next morning, spruced up as best he could, Bert reported to Victoria Barracks, Melbourne with all of his paperwork in hand. W/Cdr Pither was leaning back in his chair talking on the telephone when P/O Israel knocked on the door. On glancing up he looked as if he had seen a ghost. Little wonder really. Nothing had been heard from P/O Israel for quite some time and Singapore had fallen on 15 February. Then Pither said :-

"Good God, Israel, we thought that you were eating rice".

P/O Israel rose to the rank of Squadron Leader and his achievements, both administrative and technical, are covered in later volumes.

WHY DID THE PADRE JUMP ? (340RS Aitape)

W J (Bill) Skillman

At the end of May 1944, after coming back from Bat Island, 340RS was sent west of Aitape on the north coast of New Guinea where it was decided to set up the unit near the remains of the pre-war administration buildings.

The site was on top of a ridge about 150-200 feet above sea level. Everything was fine except that there was no access road. So all hands were soon on the job of building a road suitable for our jeep and trailer. The terrain was steep and the road finished up with a hairpin bend in the middle, its outer edge being supported by a four foot high rock wall. Below was a very nice slope many yards in length with plenty of trees on it.

The jeep and trailer could negotiate the hairpin in one manoeuvre going up the hill but had to take two 'bites' to get round the bend when going down.

About a month after we set up, an Anglican Padre arrived at the unit. He was not long out of Theological College and had enlisted on his graduation. He had tried to visit us at Bat Island as soon as he heard about our troubles there, to help us spiritually. However the authorities would not give him permission because of the health risk.

The Padre was not to be deterred and he came to us at the first possible opportunity. You could say in current terms that he came to counsel us - he offered prayers for the two who died from scrub typhus, which made us feel better, and encouraged us to talk about our experiences.

Now that I have set the stage I can get on with my story.

One day he cadged a lift with the jeep going in to Tadji for supplies. Not long after they left, we got a call for help to put the jeep back on the road - the front wheels had gone over the edge during the "double take" at the hairpin bend. We got the jeep back on the road and driver and Padre continued on their journey.

The W/T tent was directly above this point and one of the W/T's saw the accident. Just seconds before, the jeep reached the edge of the road and the Padre jumped out. The driver stayed put until the jeep came to rest. When they arrived back in camp we gave the Padre a bad time. As we passed him between tents, or wherever, we would shake our heads and murmur, "I didn't think it would be possible", or other similar remarks or just click our tongues.

After about 36 hours the Padre was a very worried man, not knowing what he had done or why he was being treated this way. The CO had not been told what had happened, other than that the jeep had run off the road, so he was not able to put the Padre's mind at rest.

Eventually the Padre confronted one of the operators. After about a quarter of an hour of comments like, "Never thought I'd see the day !" He finally had to tell the Padre what he had seen.

"We were sure that you had enough faith in God to have stayed in the jeep", said the operator.

"Well, yes, normally I have complete faith in God but at that moment I had more faith in my ability of jumping out of the jeep", was his reply.

The Padre stayed with us for about three weeks and we all became good mates. Many's the laugh we had together about why the Padre jumped. We were left with the feeling of being glad that he visited us.

This was the stuff the Padres were made of and why everyone thought so highly of them.

FIXING TAMI'S BL4 AND ASV BEACON (331RS)

Len Ralph

The BL4 - the interrogator sets for IFF - and the ASV Beacon at Tami, 331RS, were unserviceable so I was sent to fix them. The solution seemed quite simple to me as both the BL4 and the beacon had been set to exactly the same frequency that meant that the interrogator was triggering the beacon all the time.

So I changed the frequency of the BL4. Everything was then OK and I sent a signal to Wing at Moresby advising that both beacon and BL4 were now serviceable as I had changed the frequency.

Back came a signal. "This is not permitted. Please restore frequency".

This I did and signalled, "Frequency restored. ASV beacon and BL4 no longer serviceable".

Back came another signal, "Alter frequency of BL4 to XXXX".

After following instructions I went back to Wing.

UNWANTED VISITORS AND HOW TO DEAL WITH SAME (312RS)

A D Banks

My first posting was as Technical Officer at 312RS at Cape Wessel. Here we were provisioned once a week by 6 Communication Flight and occasionally by the MV Amarylis. Com Flight pilots would usually stay overnight. But sometimes "Shiny Bums" would get themselves a ride in the "Dragon" and often stay over until the next flight.

The pilots didn't like it and we didn't want them.

So the pilot, Jack Slade, and I hatched a plan. Over the meal one night, when our "guest" was the Senior Administrative Officer from 44 Wing in Darwin, we discussed the "horrific" dangers of an early morning take off from our strip when there was no wind. We talked about near prangs and the added risk in the case of an overloaded Dragon.

I don't know how well the SAO slept that night but I can say that he looked somewhat pale when he boarded the aircraft next morning. The strip was 500-600 yards long finishing at the top of a cliff several hundred feet high above the sea.

On take off, Jack held the plane on the ground to the cliff's edge and then let it stagger down towards the waves.

The SAO may have dined out on his "lucky escape" but we had fewer worries with visitors thereafter.

THE ILL-FATED 161RS IN NWA

W (Wal) G Cornish and W (Bill) G Hoiberg

Editor's Comments: We are indeed grateful to Wal Cornish for initiating the story of 161RS in NWA because the A50 History Sheets tell us virtually nothing. On 7 May the entry is simply "moved for special operation", followed by "in operation" on the 8th, "moved" on the 10th, "in operation" on the 11th, "destroyed by fire" on the 16th and a "Court of Enquiry convened" on the 18th. Without Wal and Bill, who submitted additional information, very few people would be aware of the details of the "special operation". After the fire the unit was re-equipped and moved to Sattler and later on, with Mk II LW/GCI equipment was sent to Morotai. The first "operational life" of 161RS in NWA, a Mk I LW/GCI, was only short, included many moves and a fire which destroyed the equipment.

Wal Cornish feels that this story is neither heroic nor something about which the members of the unit talked at the time - they were rather crest-fallen afterwards. But now he feels like telling what happened to the unit. As for the cause of the fire, he was not sure what occurred but of one thing is certain - it was purely accidental. They, at the time, were all of the opinion that the high-ranking officers were looking for either a saboteur or a scapegoat.

Another thing which puzzled them then was why 161RS was there ? Surely the American aircraft carriers had better radar sets than the LW/GCI could have provided.

To start at the beginning. 161RS was formed at Richmond, NSW as a light weight "portable" GCI unit. It was soon learned what the term portable meant when the station moved to Adelaide River in the Northern Territory. The journey was by train to Mt Isa via Brisbane and Townsville then by semi-trailers to Larrimah, NT, and train to Adelaide River. At each change of railway gauge or means of transport all the equipment, stores, generators and tents etc, was man-handled - that's what portable meant.

Bill Hoiberg recalls some amusing incidents which occurred on the train trip to Mt Isa. At Cloncurry, at 1 am, some of the boys were escorted by the Station Master to buy some cold bottles from the nearest hotel. When asked what would happen if the train left without them, the Station Master replied, "It can't, I control the green light".

At Julia Creek the hotel opened for an hour but was dry in five minutes.

A two up game was under way at Hughenden with the train crew joining in. After the train crew won all the money, it was a case of, "OK boys. We are on our way".

The first operational site was several miles east of the north-south road near Adelaide River. Everything was complete, showers, kitchens etc. By now it was late January 1944 and the monsoon rains came with a vengeance. The nearby river rose rapidly and it became imperative to decide whether the unit should be moved or lost in a flood. The decision to move came at dusk on the first day of operations, being completed some time after midnight with the help of the Army. The water was over the axles of the last truck load.

Unfortunately this was not the only flood the personnel had been through. They suffered two other minor floods on the way, both at night when everyone was a sleep, with the first one being at Townsville and the second at Mt Isa.

A parade was called after the flood and the CO read out a "citation", from a roll of toilet paper, for bravery for the whole unit during the flood. An hilarious incident enjoyed by all. This did not stop some kit inspections to ascertain whether anyone had taken clothing or towels from the store. Nothing was found but there are recollections of some people trying on boots, shirts and trousers in the back of a truck - possibly a simple bartering operation !

The unit moved back to the site when the waters had subsided but it was not long before another order to move was received. This time it was to Truscott strip on Anjo Peninsula. Fortunately they were moved by DC3's, eight of them with American crews, picking them up

at Batchelor. One thing that still sticks in Bill's mind is that as their DC3 was preparing to land using a smoke fire as a guide to wind direction, a few puffs of white smoke were observed on the plane's. It appeared that a "trigger happy" Ack-Ack gunner who had apparently been told to shoot on sight had done just that before he recognised the aircraft.

The station was located near a mobile works unit just north of the strip they were building. The area was near the coast and fairly densely wooded with everyone thinking the site unsuitable.

Just as the unit had settled down again, another order to move arrived. As usual the destination was kept secret with the DC3's sent for an early morning departure from Truscott.

The destination, Potshot (Learmonth), was reached after flying nearly all day with only a refuelling stop at Nunkanbah. The personnel were expecting an evening meal but got a late lunch instead. The unit was erected very quickly and was working by about midnight - no time to put up the tents so all personnel slept in the open alongside the doover.

The night sky was clear and dark. The stars were magnificently bright. Heavy dew came down during the night that made everyone take cover under tarpaulins on the ground. When morning came they were told that the station should not have been where it was. Guess what, another pack up and move.

Meanwhile a squadron of Spitfires had arrived at the strip and was carrying out exercises. There was great excitement in the operations tent as radar personnel were having a first hand view of proceedings at close quarters.

By mid morning the convoy of trucks moved out with the crew being perched on top of the equipment. The trucks passed through the American submarine base and in so doing some dipoles were ripped off the array when they caught an overhead cable between two huts.

While travelling along a bush track they met a sheep farmer and his wife. What a surprise to meet such a couple in that locality ! They told them where they were - on a track leading to North West Cape on the western side of Exmouth Gulf.

There was still a mystery. 310RS was already there beside the lighthouse overlooking the beach. What, therefore, was the purpose of our move ?

Tents were erected on the beach near the station's amenities. It was good to have a wash and a meal after such a rough trip. The ocean at night was exceptionally calm and serene without so much as a ripple on its surface. The sea and sky merged into one. Stars were reflected in the depths of the sea or was it a duplicate sky ?

Within a couple of days an operational site for the GCI was found east of the Cape out in the centre of a desolate clay pan - hard and dry. One day an old fabric-covered De Haviland Dragon landed with mail. It was "laced" underneath and the pilot was eager to answer all our questions including, "What was the glass funnel with the rubber tubing attached, hanging through the hole in the timber frame of the door ?"

Work went on getting the radar operational and very early one morning the unit discovered the reason for its presence there. Back at the beach on North West Cape was a sight across the wide Indian Ocean - never-to-be-forgotten.

On a glassy sea a large fleet of warships came into view. There were aircraft carriers, battleships, cruisers and numerous smaller ships from both the American and Allied Navies. They stretched as far as the eye could see and were heading into Exmouth Gulf. It was mid-May 1944.

Spitfires from Potshot were there to give air cover and 161RS was to assist with directing the fighters in case of an enemy attack by air on the fleet.

The radar was just beginning to operate properly when disaster struck. Suddenly the side of the tent covering the doover was ablaze. In a few minutes the ashes of 161 lay there in front of them. It was a heap of twisted pipe frames, burned out transmitter and receiver with broken glass from exploded cathode ray tubes and valves. The steel ring with its blackened cogs lay under the ashes of the wooden turntable on which, only moments before, everything had been fixed and smoothly revolving with the aerial.

There were no fire fighting facilities !

Wal does not know how the fire occurred but Bill says that it was the result of a soldering iron either heating the frame or touching the material which was waterproofed and painted - obviously treated with flammable materials. Both agree that the fire was accidental and not the work of saboteurs.

The "remains" were taken back to Potshot where a Court of Enquiry was held to ascertain the cause of the fire. Statements were taken from witnesses and many questions asked. No one was allowed to talk about the fire, or its cause, outside the court. They did not ever hear whether a report was published or not. It was, from their point of view due to the circumstances of war.

After several weeks the entire unit was transported by air back to 44 Wing where there were many separate postings to various other radar stations were made. The operational life of the ill-fated 161RS in NWA was only about four months.

SOME MEMORIES OF 324RS
J (John) a Sheard

Paradise, Nookanbah
There is not much to be remembered about this location except that temperatures were around 125oF during the day and a blanket was needed at night. We were not far from Marble Bar being about 200 miles inland from Port Hedland.

Food was very good as we had steak on most days. One of our guards was a butcher in civvy life and he and one or two others would go out in the station truck and shoot wild cattle, butcher the beast in the bush and bring back the best cuts of meat for the crew.

A popular pastime, when off duty, was to thin out the local kangaroo population and we were encouraged to do this by the local station overseer.

Cockatoo Island
The whole unit moved from Paradise about the end of August 1944 by truck and plane to Derby and then by lugger and landing barge to Cockatoo Island. We used some buildings left by BHP with the station being located on the highest part of the island about a mile away from the wharf and the camp.

The AT5/AR8 communication equipment was located back at the camp and there was some difficulty with low voltage. Every scrap of wire, including telephone cable, was joined together to reach from the alternators to the camp but we could only get about 150 volts at the camp end. For a week or two until we got a mile of heavy-duty cable we had to keep trundling the batteries back and forth to the generators. But in the end all was well. After fitting the new cable we had enough power for both radio and camp lighting.

Catalinas used the area for re-fuelling for their mine laying activities in the Java region. One of our main jobs was to monitor the arrivals and departures of the squadron. Even though the LW/AW was only calibrated to 130 miles quite often we would track them to 200 miles with temperature inversion.

Panic stations one night, when they came back undetected and there was no flare path light for them. Officially there was an equipment failure but actually the operator, who shall remain nameless, dozed off to sleep.

The mess hut was quite good as we had scrounged materials from the adjoining Koolan Island using the landing barge which we had kept after our move. There was no landing strip so mail was delivered by Tiger Moth once a week and food was brought fortnightly by lugger from Broome. Wild goats on the island provided occasional fresh meat.

There was one fiasco when we used our barge to help a chicken farmer. We unloaded the farmer's goods and chattels up an estuary, anchored the barge in the centre of the river because of the 27 feet tidal range, and rowed ashore. The farmer thanked us for our trouble with amber fluid and this took time - time enough for the tide to have gone out leaving 150 yards of mud between the barge and us. The rowing boat was also at the barge because I think someone took it back to the barge, got stuck and waded through the mud possibly to get more of the amber fluid.

There was nothing to do except wait for high tide at 2 am and even then there were few volunteers. George Peters and I decided to give it a go and stripped off. George got stuck halfway in the mangroves whilst I managed to get out there and row back.

I was decidedly not amused to find that the tide had risen and that my clothes, including my watch, had gone under. We were fortunate in having a watch expert on the unit so all was not lost.

Papen Island

The unit left Cockatoo Island to join the Borneo invasion. First we went to Archerfield where we re-equipped with the latest LW/AW MkII complete in its waterproof boxes. We went by ship and LST(Landing Ship Tanks) to Labuan and then barge to Papen Island which was half a mile long and 200 yards wide with the highest point being 30 feet above sea level. We set up in about six hours I think, and generally got good results but by the time we became operational the Japanese Air Force had been virtually annihilated.

Messing and recreation arrangements were pretty good because somewhere along the line we had acquired a very large marquee. Food was fair and mail deliveries, by barge, were reasonably regular. In between normal deliveries the Sgt Radar Mechanic paddled a dugout canoe to Labuan.

One of our guards built a sailing boat from drift wood etc. Four of us set out one fine afternoon to sail to another island that looked to be about half a mile away. We did not ask for the CO’s permission, as he probably would have refused. This, we felt, was not important since we would be back in a few hours - famous last words.

We had a pleasant trip to the island but it was more like five miles rather than our estimate of half a mile and naturally we took a long time to make the voyage. An hour or so was spent exploring the fairly thick jungle on the island and we did not notice the gathering clouds. By the time we got back to the boat it had started to blow and rain.

It was too dangerous to try to attempt a return, so we decided to stay the night. We had one groundsheet between the four of us and tried unsuccessfully to add branches to it to make a shelter. This proved to be absolutely useless in the torrential rain we got that night - over six inches. Two of us were rostered for duty that night so we knew that we would be in trouble.

It was the most miserable night I have ever spent in my life.

Next morning there was no sign of the boat. So we went searching for it and found a tin of sausages washed up on the beach. At least we had something to eat. Further searching located the wreck of our boat. The only tool we had was a Tommy Gun that we managed to

use as a hammer, nail puller and lever. Eventually the boat was patched and holes caulked with torn shirts and we set sail.

The wind and tide were well and truly against us and there was only one chance left - to make for an American Patrol Boat at anchor off the end of Labuan. With a frantic effort from all, we made the side of the boat and they took us aboard. We were treated to a hearty meal and they radioed their base who sent a landing barge to return us to our own island. We were really lucky it was the Americans. Had it been our own Navy we would have been in all sorts of trouble.

As it turned out, I think our unit was pleased to see us back. Of course we did get a severe dressing down from our CO.

A W/T AT SEVERAL RADAR ESTABLISHMENTS

S (Syd) J Cuffe

Having completed W/T Course No 64 at Point Cook, I was posted to 24RDF Station at Caloundra. I think that Alan Connelly and I were the first W/T's on the unit and our job was to run an hourly "sked" as a back up to the phone for passing plots to Brisbane Fighter Sector.

The unit was housed in Kings Guest House with the WAAAF quartered upstairs and RAAF downstairs. During the many off duty hours it was our task to tend the unit "vegie" garden.

I can only recall working two "skeds" when the phone was unserviceable and one of those was quite memorable. It was during a storm. I had finished the "sked" and had just placed the earphones on the table when lightning struck the aerial. Bang it went right through the set and to the earphones - a lucky escape for me.

After about six months I was posted to NWA in Darwin and worked the administrative watches on hourly "skeds" to the outlying radar stations in the area, Cape Don, Wessel, Peron and the rest. I enjoyed the association with those units even if it was only by W/T key.

After my tour in the Territory my next posting was to 43RS at Portland Roads which by then was only used for tests as the war had passed it by. There were only six on the unit, I did not pass a single message and became the unit cook.

Food was very scarce. Nine tins of M & V a week was our ration! However we did quite well because we caught fish, sometimes shot a wild pig, gathered paw paw and wild lemon. We had two meals a day and really were very fit.

Then I was posted to ADHQ at Higgins Field (Jacky Jacky) until the end of the war. I was proud that I actually took the message to ADHQ advising them of the end of the war.

With a bunch of rookies, I was then off to 36RS on Horn Island to dismantle the radar set. One of our main duties there was to kill and dress the poultry left by the station personnel.

Another job was back to 43RS to retrieve the gear. When the DC3 took off from Iron Range it skimmed the trees and proved to me what a wonderful kite it was.

MEMORIES OF 322RS AT TANAH MERAH

Doug Boag

Within two weeks of turning 19, I was posted to 322RS at Tanah Merah being flown from the Embarkation Depot at Townsville to Merauke. Tanah Merah was some 200 miles north of Merauke with only continuous swamps in between.

From the point of view of a visiting radar operator, nothing bad enough can be said about Merauke. For good reason it was aptly named "the arsehole of the universe" and its fame was immortalized in a well known parody. It was a stinking, swamp bound mess and we sometimes thought that it would have served the Japanese right if they had captured it. In fact according to newspaper maps of the time, Merauke and its surrounds was the only part of Dutch New Guinea not shown as being Japanese occupied.

Now to Tanah Merah.

The Region

Located on the Digoel River, one of the wettest parts of the world, it was inhabited by semi-nomadic “Kiakuku(?)” and the centre for the “Kalimyu(?)” natives who were semi-pygmies.

The settlement was basically a Dutch Penal Colony including a high security compound and gaol. It has been said that President Sukarno had been a political prisoner there. There was a Dutch Contraleur and a detachment of Indonesian guards. Non-aggressive prisoners and their families lived in small cottages. Some were Christians from Ambon and there was a small Methodist church which some of us visited, by invitation.

The region was dominated by crocodiles in the river, incredible mosquitoes and a fierce tribe of headhunters who lived on the river banks between the settlement and the sea. They were extremely savage besides being tall, aggressive and arrogant and armed with bows and arrows plus knives made from sharply honed cassowary leg bones. Heads were part of the bride buying culture.

Crocodiles and headhunters were credited with preventing the escape of political prisoners. After the war it was reported that they were responsible for destroying a complete battalion of Japanese which disappeared while occupying our area. Some people also blamed them for the fact that no trace was ever found of the missing American anthropologist Michael Rockefeller.

The natives were very proficient with bows and arrows. On one occasion I saw a native intentionally shoot two birds, perched a foot apart on a branch, with one arrow. On another occasion a native shot three arrows into a target, quicker and with as much accuracy as three shots by one of our guards using his 303 rifle.

Other natives were relatively quiet and friendly. We adopted a houseboy nicknamed “Pudden”. I still recall his gentle wake up whisper of “jum unnum tuan Doug” and wonder if he resisted the post war Indonesian colonizers of his homeland.

Next to “roco” - tobacco - salt was the item most sought after by the natives. Under the wet conditions, salt must have been leached from all food. The resulting ankle and leg ulcers were quickly transformed into healthy shining skin on those natives we befriended. We gave them salt and compelled them to bathe.

There was a Chinese owned store or “toko” and this was the centre of an incident. We were paid in Dutch guilders and cents. The only places we could spend our money was either in our own meagre canteen or the toko.

Takings from the toko were recirculated through the Contraleur. a crisis arose when the Contraleur ran out of guilders to pay the guards. The cause was an Australian who shall remain nameless. Apparently a guard from 322RS short-circuited the system by buying everything in the canteen and shipping it by dugout canoe to the toko. The toko owner bought everything at inflated prices and the Australian then held most of the colony's guilders. Now this man only gave the name of “Tuan Arsehole” during his negotiations with the locals. So, when the Australian Provosts flew in from Townsville to investigate, the natives could only repeat the name of “Tuan Larsehole”.

No arrests were made.

Our Way of Life

Our barracks were the Wilhelmina Ziekenhouse, the former hospital. Entertainment and recreational facilities were very minimal. All we had was a battered piano and a gramophone. There were only a few records but one was undoubtedly badly and inappropriately chosen - “I Wonder Who's Kissing Her Now !!”

Mail deliveries were very irregular and along with an occasional fruitcake from home, only came in batches. The latter were inclined to be a bit mouldy by the time of arrival - I cannot recall any of us receiving any Comforts Fund parcels at all.

Like all other stations we did have a cook and an assistant. With the supplies and ingredients at their disposal and the remarks they had to bear, it is little wonder that they, on one occasion, decided to lift their flagging "spirits" by making some "home brew". To give it a bit of kick, they reinforced the brew with Aqua Velva that was an alcohol based after shave-lotion.

The doover was mounted on a timber platform slightly raised above jungle level and was gauze enclosed in a vain attempt to keep out the millions of flying insects and mosquitoes which were literally everywhere at all times.

SOME NOTES ON 17RS AT BURREWARRA POINT

Jack Fraser

Most of our technical difficulties were caused by rats eating the waterproof coating of components, particularly power transformers, so causing short circuits and dead rats.

There was also an ASV beacon located right at the end of the point. Through it we had what should have been an operational success but failure of Fighter Sector or Headquarters at Point Piper to take any notice of us led to the sinking of a Liberty ship off Moruya. The ASV beacon, when challenged, transmitted a signal in Morse of TS plus a long dash. Headquarters reported several times that the beacon was only transmitting the TS omitting the dash.

I kept monitoring the beacon signal, found it to be correct and advised them accordingly. Then we saw an odd boat off Burrewarra Point and reported this as well. It was later learned that a Japanese submarine was transmitting TS in Morse and that it was credited with sinking the freighter. Survivors from the vessel were picked up from a life raft and brought into Moruya.

Certainly my time at Burrewarra late in 1944 and the beginning of 1945 was a little easier, than had been earlier. The station only operated four hours a day being on stand by for the rest of the day. The cooking was done by the Fitter DMT and the cook looked after the vehicles but no one minded.

My wife, who was a cypher clerk in the WAAAF, got leave and we set up camp in a tent on the beach. If I was needed outside normal working hours the boys summoned me by rifle shots.

FORMING 44 RADAR WING AT DARWIN NT

The following is the lead article in the unit's first wall "newspaper". The title was "Forming of This Wing" and was written by F/Lt Clem Morath, the Senior Administrative Officer.

"The publication of this, our first "literary" effort, does not represent an attempt to build up the esprit de corps or morale. It is, we believe, conclusive proof that such already exists.

Our little show - that "little" is to deceive the enemy and visiting officers who expect four course meals from three cooks on picture nights. Our little show was formed on Dec 14, 1942; that is, it formed in the mind of the then Area Radio Officer F/Lt Harold W Hannam, who was soon to become the Wing's first CO, since followed by F/Lt Wadsley.

Air Board took F/Lt Hannam's advice - tendered through the "correct" channels - and an establishment was soon compiled and issued. On Dec. 17th the writer became personally interested in its formation as a signal from Air Board posted him as the Wing's first administrative officer.

Soon followed signals posting various members already in the area and several of them are still with us. Under real difficulties they all lent their weight to the tough job of getting the Wing functioning.

Airmen who had passed successfully through hard technical courses were soon covering themselves with mud and glory building a camp which has since become our home. There were growls aplenty but no moans, and it can now be disclosed without fear of disciplinary action, that the rudest remarks about the Works Authorities were made by the CO and the Adjutant. They were also made in the right places but not, perhaps, through the "correct" channels.

As we go to press that stage is almost over - we have a camp with messes, our own showers, etc, to which all of us have contributed something in thought, sweat, and even blood (vide sick reports and check with the singing messmen for gory details).

Most of us are now settling down into the particular jobs for which we were trained (more or less) and others are soon to taste life in the raw in this tropic paradise.

It is hoped that this, our own brain child, will thrive in spite of the likely vicissitudes of climate, circumstances, and changing parents. The first producers are to be congratulated on their enthusiasm and energy in undertaking the care and feeding of the infant. May it thrive and prosper and find blips in the right papers."

A FASCINATING INCIDENT AT 326RS - CAPE LEVEQUE, WA

Sources: RAAF Historical Section; Wings magazine, Summer Edition 1988; T(Tom) C Windsor and G(Gerry) J Cranage

It is difficult to tell the story of any incident that occurred some 47 years ago and claim to be 100% correct. Certainly no such claim can be made for the happenings at Cape Leveque in August 1944. Bob Piper, of the RAAF Historical Section, has examined all the official documents, including the Army Intelligence Reports of interviews etc., and written the article in Wings entitled "The Mystery of the Bandoeng Maru".

The two eyewitness reports that we have received only add to the mystery.

"Tokyo Rose" had sent several personal messages to the men on 326RS, including the unit's exact location, made reference to their isolation and told them about the "interesting" times the Yanks were having in Perth. So the Japanese knew what was at Cape Leveque before the incident occurred.

Who knows where the true story lies - we can only leave it to the reader to draw his own conclusions.

Detection and Apprehension of the "Bandoeng Maru"

A 30 knot gale sprang up on 13 and 14 August 1944 and Gerry Cranage was on the CRT during the 0400 to 0800 watch of 15 August. An echo was picked up which, at first, did not appear to be moving but it was not one of the station's permanent echoes. a closer watch revealed that it was in fact moving very slowly. The CO, F/Lt R W Fletcher, was called and Broome Filter Room was notified. Their reply in morse, and presumably code, was for the unit to keep a close watch as it was not on their list of friendly craft in the area.

Tracking continued and there was an air of tension when the object came closer towards the shore. Before dawn the RAAF guards and the two AIF men, Sgt Eric Martin and Bombadier Bob McPhee, were alerted. 326RS was unique in that it had two 18 pounder guns with two AIF men in charge - RAAF personnel made up the rest of the gun crews. One gun guarded the western approach while the other covered the north and northeastern sectors. Gerry Cranage said that regular gunnery practice was essential and provided a very welcome change from radar duties.

LAC Tom Windsor was the guard on duty and he was the first to identify the object as a large prau, obviously in distress as its sails were in tatters. It was drifting with the tide that resulted in the almost stationary echo on the CRT screen.

A shot was fired across the bows of the vessel by Sgt Martin as soon as he was able to fire with any effect. The vessel turned out to be the "Bandoeng" - ex Batavia. This information was passed on to Broome and the CO was instructed to board the vessel.

The unit did not possess any boats, not even a rowing boat, but fortunately the "Donna Francis", owned and operated as a trader by Mr R Shipway, was sheltering from the gale in an inlet called Cape Leveque Cove. The "Donna Francis" was requisitioned by F/Lt Fletcher and the first boarding party was formed.

Mr Shipway was not enamoured with the idea of risking his vessel.

Boarding Parties

F/Lt Fletcher's listing of the personnel involved in the first boarding party is :-

"Donna Francis" (Captain/Owner R Shipway)

C Ruhrick (mate) and 2 aboriginal crew

RAAF:	F/Lt Fletcher	296057	
	Sgt Patton H R	29065	Guard Commander
	Sgt Vincent J	81868	Radar Mechanic
	Cpl Olsen a G	45764	Guard
	Cpl Francis T R	17600	Cook
	Cpl Pearce W C	46831	Guard
	LAC Garvis G G	123416	Radar Operator

The composition of the boarding parties as listed in the A50's is questioned by Tom and Gerry ie Tom Windsor and Gerry Cranage.

Tom Windsor made a submission to the Department of Defence for a "Returned from Active Service Badge" based on the incident wherein he stated that he could not remember all the names of the first boarding party but those he did recall were:-

F/Lt Fletcher

Mr Davidson, Light House Keeper and Customs Officer

LAC Beresford Fitter DMT

LAC Poole M

LAC Windsor T

Mr Ron Shipway (Lugger Master)

Mr Shipway's native seaman

Mr Robin Hunter (aboriginal mariner of pearling fleet)

It is hard to explain why so many names on Tom Windsor's list do not appear in the official one. Particularly since F/Lt Fletcher's A50's were so well written and contain much more information than most relating to other stations.

The first boarding exercise has been described by Tom Windsor as being low key in nature, mainly intended to establish the identities of the vessel and crew. Only the captain spoke English at the time but it was later established that most spoke reasonably good English. All the sails and rigging had blown away in the gale and the prau was rolling from side to side, almost to water level.

The party returned to shore whereupon the CO was instructed by the Filter Room at Broome to put a permanent party on board until such time as an RAN ship arrived to take it in tow.

The captain and master were brought ashore, given a tent apart from the main camp and the Medical Orderly placed them under quarantine pending further advice.

On the following day, 16 August 1944, the second party went out to the vessel on the "Donna Francis" which then returned to the shore. The A50 lists the following RAAF personnel as being on board the "Bandoeng Maru":-

51414	Sgt Jeffers F O	Radar Operator
121441	LAC Beresford a H	Fitter DMT
116524	LAC Poole M J	Telegraphist
147787	LAC Windsor T C	Guard

Once again Tom Windsor does not agree. He, in his list, has omitted Sgt Jeffers and has included LAC Cranage G J. a statement has been obtained from Gerry Cranage and he is adamant that he was a member of the boarding party. Gerry went on to say, "I know I was, because I thought I might have to change my underpants at one stage... For my part it was probably one of the most exciting, yet most tense, situations I am ever likely to be involved in."

The second party tried, without success, to set sails which belonged to Mr Robin Hunter. The weather abated, the seas became calmer and the prau began to drift farther out to sea and down the coast. Robin Hunter estimated that at one stage they were 30-35 miles out to sea.

Two Beaufighters took it turn keeping watch over them and patrolling for enemy submarines. They were a great comfort to the Australians, at least until nightfall, when they left.

The king tide eventually carried the prau closer to the shore and LAC Poole, the W/T operator, managed to flash a signal ashore using an Aldis lamp.

By this time the "enemy aliens" were becoming very unco-operative and milling around the boarding party. Tom has said that he drove them below deck with a Thompson sub-machine gun and held them there by stationing himself at the top of the gangway.

It was hot and everyone was thirsty. However there were several barrels of sake on board and with almost everyone [hopefully only the Asians] sipping it - the situation did not improve.

Mr Shipway returned in the "Donna Francis", secured a towline and towed the 'Bandoeng Maru" to Cape Leveque where they arrived in the "black" of an early morning.

RAAF responsibility for the vessel and the "prisoners" ended when Lt Benbow, the "Town Major" of Broome, arrived with 12 Army personnel and took them to Broome, leaving at 0730 hours on 18 August 1944. Interrogation of the Asians commenced at Cape Leveque and no doubt continued long after they left the area.

Lt/Cdr Rycroft, of the RAN, said after the interviews, "I am quite satisfied that neither of these men [the sailing master and the owner Lin Liong Ki] were telling the truth and that the vessel did not arrive off Cape Leveque by accident but by design."

People on Board the "Bandoeng Maru"

As if the differences between the official lists of participants in the boarding parties and those of Tom Windsor is not enough to cause concern, the reports of numbers of people on board the vessel further complicates the issue. Fletcher in the A50 says that there were 17 men on board. Tom Windsor says 44 !!

Gerry cannot recall the exact number as he did not count them but was very positive when he said that the number was 40 or so and certainly not merely the official 17.

The official reports refer to the 17 men as being ethnic Chinese from Indonesia, who were held in the Fremantle gaol, having been flown south from Broome. According to Bob Piper, "the 17 Chinese were sent by troop train to Brisbane and expected to pass through Melbourne

about 1 September. No further record of them could be found. They disappeared, perhaps back to Indonesia, after the war, as mysteriously as they had arrived."

Earlier in the same article Bob mentions that the vessel owner Lin Liong Ki was, post war, "a partner in a bicycle spare parts and rickshaw hire business that had run down with the Japanese Occupation." Was he one of the 17 who disappeared between Fremantle and Melbourne ?

On the question of nationality Gerry Cranage's story raises doubts as to them being Chinese. To quote him, "The following day or so, some half dozen of us, went to Lombadina Mission for Mass and of course the hearty meal provided by the missionaries. In the course of conversation I asked Father Benedict whether he thought the Asians were Malays or Timorese, knowing that the Army Intelligence Officers had pulled up at Lombadina Mission to take advantage of his (Fr Benedict's) many years of experience and great knowledge of the North West, its inhabitants and visitors. Fr Benedict's words still remain firmly implanted in my mind. In his German accent he said, 'They are not Malays, Timorese or Chinese. They are Japanese.'"

The saga of numbers and nationality continues. After Bob Piper's article appeared Gerry Cranage was asked to talk again to Tom Windsor. In answer to a question as to what happened to the Asians, Tom replied,

"Those Japanese were shot, according to an Army man who was at Cape Leveque. I met him in a cafe in Townsville in 1945 and he said, 'I know you' and I said, 'I know you.' He then asked me where we had met and I told him at Cape Leveque.

Then I asked him what might have been an impertinent question.

His answer to me was that they sorted out the sheep from the goats and having done that he said that they shot them. I asked whether they shot them all. He said that there were 44 on board and that they were not all Japanese. About 17 were possibly Chinese or Indonesians. He said the others were shot - executed was the actual word he used.

I then asked him why he told me and he said, 'Well it's history then, isn't it ?'"

This raises the question of how the men disappeared on the train trip from the west. Surely they would have been guarded ! Or were some of them shot as conveyed in the hearsay evidence of the Army man met by Tom Windsor in 1945.

Did any Japanese Land in Australia from the Bandeong Maru ?

Bob Piper's Epilogue states, "Earlier this year [1988] the writer was advised by Professor Mizuno in Japan that the BANDEONG MARU was probably a spy vessel. Five Chinese junks had been assembled in Singapore during 1944 to operate as spies against the British/Australians. Those on board were all loyal to the Japanese and the code name for the Project was KAIZOKU, which means 'Pirate'. Their cover was to be smuggling and trading with Australia."

Tom Windsor is quite convinced that the Army found a cache of weapons, explosives etc north of Cape Leveque but this has not been substantiated. He claims that, "After the interrogation by Army Intelligence some of the blokes [Asians] cracked or broke and divulged the situation."

Bars of Gold

In Tom's first submission, prior to Bob Piper's article, Tom had made mention of the presence of 20 bars of gold being on the vessel when it was boarded. Yet this information was not included in the official reports or the article in Wings.

The question was then re-opened with Tom and it would only be fair to say that he was very emphatic that the gold was there on board the boat. He went on to say, "I would personally

like to know officially what happened to that gold and who got it and there was a pair of gold binoculars which was estimated by the lighthouse keeper to be worth a lot of money indeed. The answer is that I did see the gold and held one [bar] in my hands, it was very heavy.

My family, or some of them, were gold miners. Therefore I had a fair association with gold and it appeared to me that it was of very high quality. Probably 24 carat or something very close to it. It was gold without any doubt whatsoever.

What happened to it I don't know but to re-iterate it was definitely aboard along with a lot of Australian currency."

Australian Currency

Tom and Gerry confirm the existence of Australian currency that is also mentioned in the official reports. The latter seems to refer to at least one note as being held by the Asians as a souvenir. Gerry has said, "Amongst the Australian money was a £5 note with a written note on it. This £5 was eventually traced back, by Army Intelligence, to an Australian POW in Singapore. The AIF chap in question having reputedly come from Gippsland in Victoria."

Jettisoning of Cargo

When apprehended it was noticed that the vessel was riding high in the water with weed showing above its water line. This indicated that some heavy objects had been thrown over board prior to capture. Certainly no arms or radio equipment was found but Tom Windsor reported that there were fresh scratches on the deck indicating that something heavy had been dragged across the deck and apparently jettisoned.

Newspaper Report

Just to add further flavour to the whole story the following is the text of an article that appeared in The Herald (Melbourne) on Thursday 30 August 1945. A copy of the newsclip was supplied by Bob Menner who also served on 326RS. Certainly radar was still under the cloak of secrecy when the article was written but the events, as reported, are completely untrue - was it a case of 1945 vintage journalistic hype or did the authorities supply the details?

COURAGEOUS SKIPPER OF LUGGER
Captures Cargo of Jap Spies

PERTH - The courageous action of the skipper of a northwest lugger resulted in the capture last September of a mysterious Chinese junk, with a cargo of Jap spies.

The mystery junk was the Bandeong, and the man responsible for its capture was Ron Shipway, owner-skipper of a lugger that was transporting from Broome to Wyndham.

Broome at that time was the terminal for most northwest shipping.

It is now revealed that Shipway, with a crew of only two native boys was going to Wyndham when he noticed an unusual vessel close to the beach at Cape Leveque.

He approached the junk, which was about 130 tons, and was flying a white flag.

He hailed the vessel in semi-darkness and was answered with "Yes, Sir". He then asked for the skipper and was told that they were in doubt on their position.

Boarded Junk

Shipway concluded that the ship was safe for the night and he reported the incident to a nearby listening post. The report caused surprise.

The following day some servicemen sailed with Shipway and they boarded the craft to find only five seamen.

The rest were Orientals and were not seamen.

The crew and passengers were taken off and handed to the authorities.

Following the bombing and subsequent sinking of the Koolama at Wyndham Jetty, Shipway "ran the rabbit" between Broome and Wyndham in his unarmed lugger getting food through to the few people then left at the northern tip of the Kimberley district.

THE MOUNTAIN THAT MOVED OR DID IT

Jean Renew nee Grant-Stevenson

Editors' Comment: This story is about 343RS at Mt Spec in Queens-land, written in a delightful manner, it portrays a picture of almost utter frustration. Jean's story follows.

It was 1944 and we were the initial operating staff for a new radar station that had been recently built on the range of mountains north of Townsville. I was one of 12 operators, with the cooks, guards, orderly room staff and mechanics. We were on hard seats, jammed under the canopy of an RAAF transport truck. This was our normal form of transport between stations. The terrain was wild and inaccessibly precipitous, covered in rain forest.

The road up the mountain was narrow and steep, mist shrouded the edges of the curves and billowed around the overhanging cliffs above, moved this way and that by unseen draughts and eddies. Hidden waterfalls splashed and foliage dripped. The top of the range above us would appear then disappear, seeming to move and sway with the motion of the swaying vehicle. Our transport wove its bumpy way around and up the mountain, through the light misty rain towards what we supposed was the summit of the range.

Eventually, in semi-darkness, we stopped and some pale lights among the dark rippling trees indicated our future home and work place. Rain wet everything that came out of the truck which by now was bogged in the mud on the edge of the unmade road.

The surplus trucks managed to back and turn without incident and returned to base. We were left with our bogged vehicle on the site of what appeared to be an abandoned timber or road workers' camp. In the rain and pitch darkness we found our Spartan "home": a collection of "warped" huts on one side of the dirt path and bleak half open and half roofed toilets and showers on the other. Cooks made our meals, and we ate, in an old house forever shadowed by huge dripping trees. In the other direction, in the scrub, crouched the starkly new doover, housing our secret radar equipment.

"Funny" mused Peter, one of the mechanics, "I thought it was to be about a couple of miles farther up the range along the dirt track".

It was the twilight kind of morning we became used to. Now we uneasily surveyed the dank half dark jungle around us, and settled in to an almost normal routine, or rather we tried to.

The radar was newly installed but apparently not quite working yet. We were female radar operators and male radar mechanics, veterans of many efficient radar stations, but this one proved to be different. The forces of radar are strong and accurate, but they would not work for us here. From the first day we felt an unseen pressure, from somewhere, hampering our every move.

Above and around us, the towering cliffs merged into dense fog and rain fell heavily all night on the iron roofs. Dawn was late and wet, we walked in the muddy slush to the cold showers and splashed back to our huts that by now had a film of mud on every floor. We ran through the rain to breakfast, then marched in squashy order to the doover where we sat on the damp concrete floor, yawning while the mechanics fiddled with the radar set. Far below us, beneath the cloud, planes would murmur softly to or from the airport, but never an indication of them did we see on our radar screen. Unseen ships plied the coastal run, but did not sail for us. Boredom reigned and the devil found work for idle hands.

The guards gave up the pretence of guarding the doover with its secret equipment, and drifted into the fringe of the surrounding jungle, using their rifles to take pot shots at the harmless and

inedible fauna. Soon they returned, wet, and grey faced, claiming the place was haunted. They had found a cave full of bones and stated that it was a burial place. Peter and I climbed through wet scrub and razor sharp vines to examine the bones. We thought they were kangaroo bones. But were they ?

Raining days became raining weeks. Our clothes did not dry before they mildewed. Our shoes were never dry. Narrow duckboards were laid along each pathway and now floated on a sea of thin mud.

Somewhere nearby was a Convalescent Depot for sick airmen. Idly we speculated on the illnesses that could be overcome by a stay in this environment, perhaps they were terminal patients, but this theory was dispelled when we received a message asking us to join with them in putting on a concert and dance. But now the mountain began actively working against us.

Part of the slope above the access road slipped and our supply truck was hidden in the rain forest behind a heap of soil and rocks. The road down to the coastal plain was blocked by a timber jinker which had slewed and skidded across a sharp bend. Our cook went into a state of depression and our meals were unashamedly still in the moulded shape of the tins from which they sprang. We received no mail, no letters from home. More and more we felt ourselves to be trapped by an unseen force that held us under this tropical deluge. We were numbed into inertia.

The soles peeled off our shoes and we tied them on with flex wire discarded by the mechanics as they dismantled, resorted and reassembled the radar. Then the spirit of the mountain struck in real earnest. Two of the men brewed jungle juice from unknown ingredients, ran amok, and used the guards' rifles to shoot the insulators off the telegraph poles. They took the camp jeep, raced down the mountain road, crashed into the bogged timber jinker, and had to be lifted, painfully, over the jinker and into the ambulance and taken away into oblivion. So for them the imagined curse became a reality.

Morale was low. Uneasily we watched each other and wondered, who next ? All sense of time and direction was confused in the close swirling mist. The towering mountain seemed closer.

The rain poured down incessantly, running in a brown torrent where the path had been. The duckboards were washed away and lost. We removed our shoes and waded knee deep through mud, then had leech counting contests. Green frogs clung like creeper buds to the inside walls of our huts, centipedes lurked in our dreadful shoes.

We were desperate. We helped the airmen from the Convalescent Depot arrange their concert and dance. That night, instead of just raining, the heavens opened and poured a crashing deluge on to the roofs. Not a word of dialogue or song was heard. Silently the pianist played while vocalists yammered open mouthed and noiselessly. Not a note was heard above the awful din of the rain.

Romance flourished and liaisons entered into that night lasted for the next 45 years.

But we defied the mountain, we fought back. We danced, the sodden flapping leather soles of our broken shoes clinging to the wet floor. At midnight, in the rain, we gathered outside the doover and with raised fists shouted "Work ! You bastard ! Work !"

The rain eased to a steady drizzle when the news spread that the radar station was to be closed. The timber jinker was towed away, the road was open. Our supply truck emerged from behind the landslip and we received our mail and rations. But still the radar did not work. We were all given postings to other places.

With my kitbag packed I stood waiting for the transport truck. Something made me look skywards. The clouds were parting, the mountain top seemed to move as it emerged, silhouetted against the blue sky, for the first time. I gasped ! We were in a natural rock amphitheatre, radar could never pick up anything here ! Between us and what should have been

a view of the sea was the sheer, massive wall of the mountain. Its contours were roughly in the shape of an old seamed black face that stared at us angrily from twin caves like black eyes. Suddenly a curtain of mist moved across the face... or did the mountain move behind the mist ?

Editors' Comments: One explanation put forward, at the time, for the station never working was that the trucks, delivering the materials got bogged (where the station crew also bogged) at the edge of the timber road and dumped all the materials there instead of taking them another four miles or so along the mountain ridge to the selected site. Civvies constructed the buildings - not the RAAF - where the materials were dropped. They would not have known whether the place was right or wrong because radar was behind a "cloak of secrecy" in those days.

MY FIRST FLIGHT WITH DOC FENTON

A.G. (Digger) Nottle

My first flight with the famous Doc Fenton was when I was transferred to 38RS on Bathurst Island. We left Batchelor with the station mail and a "hot box" and had to land at Darwin because there was an air raid in progress.

Kittyhawks were taking off as we landed. Doc, with a newspaper on his lap which he had been reading, taxied into a camouflaged bay. As he cut the engines he said, "There's a slit trench over to the right, son. Hop in and keep your head down."

We saw the raid out together and when it was over continued the flight to Bathurst Island where we landed on the beach.

A GRASS FIRE ON NORTH GOULBURN ISLAND (309RS)

A G (Digger) Nottle

When the CO of 309RS, Jack Ryan, developed an ulcer on the leg, the Medical Orderly advised him that he should leave the island and seek treatment. Our CO was a very conscientious man and refused for quite a time. But it deteriorated to such an extent that when the famous Doc Fenton airlifted him out we had to carry him in a stretcher to the plane, an Avro Anson - the ubiquitous old Aggie.

The emergency strip was covered in dry grass about seven feet tall. Doc's landing was frightening enough and we wondered how he would be able to take off.

Doc had landed into the breeze. He turned the aircraft around and calmly lit the grass with a match. He gave the flames a head start and followed in the ashes to take off.

We spent the next two days securing the camp site, doover and the guards' outpost which no doubt stood out like "dog's balls" on the fire blackened North Goulburn Island.

Editors' Comments: Official records show that the station personnel fought the fire between

1100 to 2300 on 9-3-44

0800 to 1700 on 10-3-44 and

1800 to 2200 on 11-3-44 before it was under complete control.

AN ALERT FOR PERTH

Les Kinross

It was on 25 February 1945, I am pretty sure of the date, when we were flying down towards Perth in the Section 22 Hudson. We were carrying contraband - American cigarettes. Someone warned me and my friend Kennerly A Smith that the authorities were examining all aircraft coming south and that there could be trouble.

We immediately thought - what the heck were we going to do about the cigarettes. Suddenly a brain wave.

We were carrying window, strips of aluminium foil, which was dropped to jam enemy radar. It was in packets labelled TOP SECRET, not to be opened "under pain of death" etc. Since we

used to drop the stuff, the instruction did not apply to us. So we opened one of the said packets and removed enough of the window material to accommodate our cigarettes, put some of the foil over the top of them and neatly resealed the packet. The question then arose as to what to do with the loose window strips - the top secret stuff which others were not allowed to see - we simply had to get rid of it and the easiest solution was to toss it out of the plane. Which we did. It was stupid really, a non-thinking action, giving little or no thought as to whether or not its echo would be picked up near Perth.

Murphy's Law prevailed and when we got to Guildford, WA, there was a full scale alert for Perth based on a radar report of 100+ planes coming down the coast.

We were somewhat dismayed when we learned of the alert but we kept our mouths closed about our involvement. Looking back, I think that we had a wry smile or two at the time.

A FLIGHT TO AUSTRALIA

George Day

My trip to Australia was an interesting experience. I left Prestwick, Scotland, one Friday night with the RAF Ferry Command and proceeded to Nova Scotia, then San Francisco, Honolulu, Fiji and eventually Archerfield near Ipswich, QLD. After that it was by train to Melbourne.

After about five days in a Liberator aircraft, which was not fitted out for passengers, and two nights on the train I was probably not at my best on reaching the railway station in Melbourne. I could not make out why people kept coming up to me and asking questions about the railway service and places with horrible sounding Aboriginal names which, incidentally, I still cannot pronounce.

It was not until later that some one pointed out to me that my light blue-grey RAF uniform and particularly my brass VR's (Volunteer Reserve) in my lapels made me identical to the information man of the Victorian Railways [The Man in Grey at Spencer Street]. I avoided that railway station in Melbourne after that.

George Day was never seen wearing the brass VR's again.

Editors' Comments: George Day was RAF and was sent out to Australia in charge of an RAF radar installation party in early 1942. There is an interesting story about George. Apparently there were two George Arthur Days in the RAF and they were given the same regimental number for some unknown reason. The wrong George Day is quoted in the footnote on page 564 of Douglas Gillison's *Royal Australian Air Force 1939-42*. For quite a few months our George was not being paid but was receiving the other chap's mail. We asked our George whether the other George had been married. His reply was, "I don't really know, but from the letters he should have been".

A CAMP POWER SUPPLY

Len Ralph

Small 2.5 KVA alternators were provided to run the radar and there was always a need for power to light tents etc - very important for morale of the personnel.

At 306RS, Bulolo, NG, this need was present and in the true tradition of Aussie scrounging Cpl Jack "Smokey" Smith, radar mechanic, and LAC "Butch' Clark, Fitter DMT, went walkabout only to find the chassis and engine of an old Chevrolet truck behind a building in the town. The carburettor was missing so a replacement was requisitioned from 41 Radar Wing in Port Moresby. With a large measure of reluctance and grumbling, the Wing provided a replacement and the engine was brought back to life.

A 240 Volt AC motor was "liberated" from a gold dredge, connected to the tail shaft of the revitalised engine and rewired to operate as an alternator. This piece of improvisation provided lighting to all nearby units extending to some American Army spotters well up the valley where the hydroelectric power supply had been blown up.

The power lines were still intact, as was the distribution system. So the boys connected the makeshift alternator to the lines and Cpl Len Ralph wired up the Army tents much to the delight of the inhabitants.

There was only one snag. The Army was already using the said power lines for their telephone system.

It is said that the initial turning on of the power caused some consternation at the Army telephone switchboard.

The army was not the only ones to get a surprise or two from this marvellous distribution system. Len Ralph and Joe Lynam worked together quite often on the power lines and one day Len was up a makeshift ladder working on a pole with Joe steadying the bottom of the ladder. Len called out :-

"Joe, stop shaking the bloody ladder."

Joe said, "I'm not shaking the bloody ladder."

"Yes you are. Cut it out."

Len looked about and found that they were having an earthquake !!

Same two blokes, same ladder, but different pole. Len was up the pole with the power isolated and he called out, "Don't turn it on."

Joe at the bottom thought that Len said "turn it on' and he did just that.

Len reports that he does not recall what he called Joe at the time but does remember that he got a helluva shock.

A JAP VISITOR

Len Ralph

At 306RS we were luckier than most stations in that we were close to the airstrip and so there was no supply problem. Our mail was delivered by Wirraway and, needless to say, it was always welcome.

One morning as a late comer arrived at the mess for breakfast a lone single engined aircraft approached at tree height and circled the doover. Jack Bryce, a guard just coming off duty, called out, "You beauty ! Here's the old Wirraway. Mail today !!"

Len Ralph spotted the red rondels beneath the wings and promptly dashed behind a tree yelling, "Take cover ! Jap !"

Meanwhile the Jap flew up the valley, wheeled and commenced a diving attack on the doover. Jack Bryce left the mess like a rocket, realised that he could not make the slit trenches, smartly altered course and launched himself into the grease trap near the mess where he landed with an oozy squelch. Fortunately the Ack Ack boys were alert and opened fire causing the Zero to disappear in the direction of Lae.

As Jack emerged, a dripping greasy mess, to be hosed down by the cook, some wag remarked, "Funny place to have a swim".

Next day everyone, including the Ack Ack boys across the valley, was on the alert waiting for a return visit by the Zero. Down the valley came the Wirraway with our mail. The very anxious Americans on the Bofors in their gun pit opened fire. One of the RAAF guards ran towards the Americans yelling, "Stop firing you bastards ! It's one of ours !"

Now the gunner in question was unable to hear as the tracers were homing in onto the Wirraway - action had to be taken. The RAAF guard swooped onto a nearby piece of timber and clobbered the gunner over the head. Fortunately the American's steel helmet reduced the blow

to a rude shock. The chatter of the machine gun was changed to a verbal exchange indicating some rather strained international relations.

WEST MONTALIVET (344RS)

Stanley W Morgan

344RS was formed at Mascot, NSW and we went by rail to Mt Isa and road to Darwin. There we were loaded on the HMAS Bomba with West Montalivet as our destination.

This trip took four days and we were told that the waters between Darwin and Timor and near the coast had not been charted since William Dampier in the 17th century. Therefore we anchored each night because of unknown reefs.

There were two submarine scares and the RAAF personnel refused to go below decks, for reasons obvious to us at least. After this incident RAAF personnel were treated as being members of the ship's crew and we had to perform the same duties. As a RAAF Medical Orderly I finished up shovelling coal in the boiler room.

Fortunately we reached our destination on the fourth day and so we escaped from the Navy. But we then faced the task of unloading our gear. Firstly into barges and then by manual labour onto the beach and up a cliff. Then we carried the gear to the site selected for the doover and the camp area. No trucks or jeeps were supplied.

Most of the food landed on the island was hard tack on which we lived for some months until an oven was built to bake fresh bread. 19 meals a week were bully beef with the rest being either tinned "gold fish" (pilchards in civvy street) or fish we could catch ourselves.

In the early days they did try an airdrop of fresh food but this was unsuccessful so we went back onto hard tack.

Fresh water was the greatest problem - no fresh water available - however the Navy left us some 44 gallon drums to tide us over until we could dig a well. This we did but the water turned salty after a very short time. Since further supplies were uncertain, we were rationed to half a pint of water per man per day. Clothes had to be washed in seawater which caused skin problems among the men as well as quickly rotting our clothes.

After six months a small fishing craft manned by an RAAF crew arrived with food, water, mail and Comfort Fund parcels and this was then repeated every few weeks. Once, not only did they bring the usual food, water and comforts but also a Salvation Army Officer.

We really had few problems except that we had a few bombs dropped by enemy aircraft returning to their bases plus a few shells from surface craft but no landings - just as well because we only had half a dozen guards with one NCO and they were only armed with the standard 303 Lee Enfields and some Mills bombs.

BORNEO BOUND ON BUNDLES OF BOMBS (316RS)

Norm Smith - from his diary

We loaded the gear for 316RS as deck cargo on LST590 [Landing Ship Tank] which was carrying all the back-up ammunition and bombs for the invasion of Borneo by the Australian 9th Division. The men were "poised" above this combination of explosives of cataclysmic capability - it only needed to be triggered by either something from the sky or beneath the sea which the enemy was still capable of doing.

Japanese Kamikaze attacks were the norm so the LST was heavily equipped with firepower to meet any potential direct sortie against it. There was a four inch gun at the stern, three 40mm Bofors at the bow with another two athwartships near the bridge. 20mm Oerlikon cannons were spaced every several yards around the perimeter.

We left Morotai at 1600 hours on Tuesday 5 June 1945 with a protective cover of four Liberators circling overhead. Black Widow night fighters replaced them as darkness gathered.

During the night a strict blackout was observed. We had some red alerts when contact with enemy submarines was established.

The next morning Liberators once again took over the cover patrol while fleet destroyers criss-crossed the convoy at speed to keep the enemy submarines at bay. On Wednesday a practice shoot was held and to us it looked as if the massive collection of guns on board would be capable of protecting this deeply laden ship - and us too, which was even more important.

During Thursday night a Japanese submarine surfaced in the middle of the convoy and crash-dived immediately. A destroyer dropped depth charges without any evidence of a kill.

At dawn on Friday we saw the watery lights of Zamboanga as the convoy passed the Basilan Strait. Local sailing craft dotted the sea and their "skippers" cleverly manoeuvred their frail vessels away from the paths of the ships. An incongruous sight was seen. A gaunt grey-headed Malay fisherman, standing at the salute, deftly maintaining his balance as his outrigger danced in the wash of our modern fighting ships.

Lightning fighters, accompanied by a Martin Mariner for submarine spotting, took over the role of aerial cover. At 1915 hours as the Black Widows were about to take over again, there was a general stand-to but no attack eventuated.

Saturday was both very hot and uneventful with the convoy entering Balabac Strait by nightfall. A wireless station and lighthouse were visible on the shore and lights blazed everywhere but the Japanese in occupation appeared to be unconcerned at the passing armada.

It was known that the waters we now entered had been mined and this caused some concern to those of us aboard LST590. Contact with one of them could precipitate an enormous explosion.

At 0400 hours on Sunday, destroyers hounded away another enemy submarine. Some of the 316RS personnel had been detailed as duty crew for the day which included the fire picket. Being on duty had some compensations - they saw the 13,000 foot mountain on North West Borneo, about 30 miles away. At 1607 hours, sirens warned of an impending air attack and all ships came to full readiness. A lone Japanese fighter dived down across the convoy at a great speed having dived from a high altitude and been pursued by a dazzling pyrotechnic display of tracers but the speed and angle of descent upset the gunners' aim and the pilot eluded the Lightning fighters in the gathering darkness.

The landing was scheduled for 0800 hours on Monday morning and all stood-to well before daylight. Our LST passed under the parabolas of observable gunfire from the cruisers offshore and "barged" its way into Victoria Harbour and dropped anchor amid a scene of urgent activity. The sounds of war were intense and a haze of dust, smoke and cordite fumes hung in the air. The hospital ship "Manunda", in its white and red livery, stood out starkly in the bay, receiving casualties of war emerging from the devastation on shore.

The invasion had been successful to a point but 316's appointed site was still in Japanese hands. In consequence an order was received instructing the personnel of 316RS to stay on board and become the unloading party for the ammunition ship.

At 1030 hours at high tide on the following morning our LST ran for the shore. But its laden draught was such that she ran aground some 100 feet from the beach. The front gates were opened and Caterpillar tractors pushed trucks through the water from the beach and up the ramp to be loaded.

We operated in two relays of 12 men to manhandle the mountain of bombs, shells, mortars, grenades and rifle ammunition. Perspiration streamed down bare backs as we toiled in sauna-like conditions. The unloading parties retired to the rear of the vessel when several air raids interrupted the operation. At the same time some of the crew ran ashore placing smoke canisters up wind hoping to obscure the "sitting duck" from enemy aircraft.

During one of the alerts, the American skipper looked in on our men to see if they were OK only to find them engrossed in a game of poker. His only comment was, "Now I have seen every-thing."

We toiled throughout Wednesday and were becoming greatly fatigued and sleepy as we worked into the night. The two crews were now able to work simultaneously as space was cleared in the hold. Unwittingly the stack was made unstable and we all stood in horror as the lot came tumbling down, clattering around in all directions. Following several seconds of stunned silence, the workers bent their backs again, finishing the job at 2320 hours.

Facilities aboard the LST were first class and the Americans overly generous. Fresh water showers, plentiful good food and cooling fans to ensure a good night's sleep prepared us for going ashore the next day.

316RS was finally installed and became operational but the need for an early warning capability at Coal Point evaporated after the atomic bombs had been dropped on Japan.

So, after all of our specialist technical training and experience, the personnel of 316RS served the war effort in Borneo by unloading ammunition for the Australian 9th Division ensuring the defeat of the Japanese there in June 1945.

A WAAAF OPERATOR AT ASH ISLAND

Beryl Mainon, nee Walker

Morale was always very high on the unit with the operators taking great pride in their results. Probably the extra interest of obtaining height readings with the GCI at 131RS was a contributing factor to the high morale when our readings were confirmed by Fighter Sector. In addition we always did "visuals" of air-craft flying over our unit and compared them with the tracks which we had picked up. These, plus the types of aircraft, were reported to Fighter Sector and this activity added interest to shift work.

To occupy off duty personnel the CO directed that we start vegetable gardens with each crew having its own plot appropriately marked by a peg. The trick was, at inspection time, to move your own marker to the best plot and so the best gardeners, if they were unlucky enough to be on shift at the time, were often reprimanded for their lack of effort.

Off the roadside, on the way to Raymond Terrace, there was an old sand quarry, filled with beautiful clear water of unknown depth. Using sundry assorted camp bikes as well as the camp tender making an "unofficial" detour when hitch hiking failed, this pool became the off duty crews escape hideaway.

To reach Ash Island required taking a train to Newcastle station, a tram to Mayfield Terminus, then a five mile walk to Hexham over a wooden bridge and then a half mile walk to the camp. There was no public transport over the five mile stretch and with petrol rationing in force, very few vehicles. In brown out conditions, no street lighting, it was a lonely walk alone at night when returning from leave. The fact that the road ran along the boundary of the very large Sandgate cemetery did not enhance the walk.

However, in those days, girls were safe in accepting lifts from anyone kind enough to offer - in most cases not a single vehicle would pass us. The variety of vehicles was wide and ranged from the night cart to an undertaker in his hearse. One night, the writer arrived back at camp proudly sitting on the handlebars of a bike being ridden by a friendly father figure who was coming off night shift at BHP.

Farm animals were permitted to wander freely amongst the camp buildings as part of the camouflage. One pay parade was completely broken up when a wily old draught horse lifted the lid from a fresh water copper, at the rear of the parade, and started to drink very noisily. The parade of about 15 personnel dissolved into peals of laughter and the poor CO lost control.

Our punishment was a five mile route march.

We had two cooks. One with imagination and the other without any at all. The latter relied on bully beef for cottage pie with rice and dried apricots for desert.

I personally brought home a lost Catalina one night and received a "thank you" from the crew a few days later.

On another occasion I had perfect plots of some low flying Sunderlands. Fighter Sector advised us that the plots were a storm. Anyway the said storm landed perfectly at Rose Bay and the next day the press announced the safe arrival of the wave hopping Sunderlands from the UK.

THE BULOLO GOLD RUSH

Bob Williams

When the boys got to Bulolo they collected gold from the abandoned sluice boxes. From this "bullion" some made rings, some traded with the Americans but the one who took the cake from my point of view was an operator I met in the workshop at 29RS in Port Moresby.

In early hours, one morning at 29RS, I went into the workshop to find this operator carefully filing down some "spanners" which had been cast in gold from Bulolo. One would assume that they were then painted black and brought home - but who knows.

I met the same rooster some years later on my way to catch a train at Wahroonga and found that he was studying medicine at Sydney University and was billeted nearby. Unfortunately time was short so it was a brief meeting. I often wonder what happened to those spanners - in today's money they would have added up to a nice tidy sum.

SCROUNGING

Bob Williams

I suspect that every station was guilty of scrounging and to some it almost became a way of life. As an example of how prevalent it was, at 315RS, Cape Ward Hunt, we had one member permanently stationed 80 miles south at Oro Bay. He provided us with a boat with a wartime Johnston outboard motor plus other equipment purloined from our friends, the Americans, and others of course, where and when the opportunity arose.

At Port Moresby we found an American base which looked as if it was deserted. So we took the CDEV flat top and loaded it up with all kinds of building materials and other goodies which were lying around.

There was a bit of a flap later when the theft was reported particularly as someone had taken the registration number of the truck. The CO swore that the truck had not left the unit, so the matter rested and died.

The upshot of it was that we set to and built an elaborate doover building which was probably the best outside mainland Australia and no doubt superior to many down there.

LIVING DANGEROUSLY (348RS)

Stan Williams - W/T Op with 348RS

In December 1944, an American refrigerated ship arrived at Aitape loaded with Christmas fare. Word was received at 348RS on nearby Tumleo Island to send a party to collect poultry, eggs, steak etc.

A barge visiting Tumleo gave our party a lift to Aitape. Having collected the generous Christmas supplies we had to cadge a ride back. The skipper of an amphibious Alligator agreed to ferry both us and our precious supplies back to Tumleo, for which we were thankful.

By way of explanation the Alligator was a sluggish craft in water, had no rudder and relied on reversing one set of tracks for steerage. In retrospect we could not have selected a more unsuitable vessel for the journey at that time of year.

December is the month when the northern sea-board of New Guinea experiences high tides coupled with heavy swells. Needless to say we met just that combination. Just like on the east

coast of Australia, the waves were coming in a series with a lull in between. The skipper picked what he thought was a lull and headed seaward. Almost immediately an enormous rogue wave loomed up ahead. The skipper yelled, "Put her straight into the wave".

Sitting in a corner at the back of the craft, the advancing green wall of water prompted me to grab the end of a piece of rope and loop it around my arm. No time to check where the other end was or whether it was attached to the boat at all. The wave plucked me out of the Alligator and when I surfaced astern, our craft was still heading out to sea.

Fully dressed, my saturated clothes caused me to submerge. Desperately clinging to the line, I trailed the barge like a king sized shark bait. I gasped for air between submersions by successive waves until the inevitable intake of sea water was followed by oblivion - I had drowned.

Later I was told that the Alligator hove to after having cleared the waves; our CO, A H Philp, leapt overboard and supported my inert body while others hauled us aboard using the rope still attached to my arm. They pumped the water out of me and by the time the island was reached my heart beat and respiration were OK but there was no other response.

As the sergeant medical orderly sat by my bunk, the CO apparently brought in a bottle of brandy saying, "Give him a good drink of this when he comes to".

Two days later when I "came to", the bottle was empty. The medical orderly explained, "I thought that I'd lost you last night and I considered that my need was greater than yours".

SOUTH GOULBURN ISLAND MISSION

Cyril Vahtrick

Having completed the installation of the interrogator equipment at 309RS on North Goulburn Island, we had to get back to Darwin. The first step was to get to South Goulburn Island.

The radar unit employed a small number of aborigines doing odd jobs - women were strictly forbidden on the north island. The men alternated from time to time, with two men walking in during the morning and two others who were going back. They offered to take me along.

The first stage was to walk across the island, only a few miles, then they would pick up the dug-out canoe left by the new arrivals and paddle across the narrowest part of the channel between the two islands. It was January, the wet season had not yet started and it was very hot.

The aborigines obligingly carried my kit bag by suspending it from a spear which was carried by two of them resting on their bare shoulders. I noted the huge callouses, bigger than beer bottle tops, on their shoulders.

My first concern was the availability of drinking water on the trip and they assured me that there was water to be found on the way. After about an hour's walk, we arrived at a small depression in which there was some slimy water the colour of black tea. I was invited to have first drink. I recall that it did the job but tasted pretty bad.

After about a five mile walk we reached the coast on the other side where the typical heavy duty seagoing dugout canoe had been left. I found it all a magnificent experience.

I handed the young aborigine my pouch of tobacco - my Christmas free issue by courtesy of Doc Fenton. A non smoker I had kept it for such an occasion. This man was obviously a chief of sorts because the others did all the paddling. But he did share his bamboo pipe with the others. Incidentally the bowl of the pipe was an Army issue thimble which you recall was open at both ends. Whilst it was very small it made the tobacco go further.

A group of natives met us and they cheerfully carried my gear to the mission which was some miles away and on the other side of South Goulburn Island. Now I was faced with the tough task of luxuriating as a guest of the missionary while waiting for the next transport back to Darwin. Tich Kelly joined me after a couple of days and we both sat back enjoying ourselves.

Over dinner one night the missionary casually mentioned that, before the war, his superiors had sent out all the gear for a 32 volt power supply. Not knowing about such things, the crates were still sitting in his shed because the war had intervened. Tich and I volunteered to have a look at it for him. It was all there, wires, switches, lights and generator - so in very short order, we were busily engaged in installing the system. The missionary was delighted because we had the system complete and running in a couple of days.

When the plane arrived a few days later, it had some important equipment on board for Darwin and therefore it could only take one passenger. Tich being the senior in rank had to take the seat and I had to wait for another plane. Tough !! Not really since it gave me the opportunity to luxuriate a little longer and learn about the mission as well as doing some exploring.

MEMORIES OF 311RS
Hubert Theodore Tolhurst

Setting up on Green Island
Shortly after Xmas 1944 we were advised that we were going to the Solomons with Torokina as the first stop. At that time Torokina was a muddy, primitive, unpleasant area with a small Australian and US perimeter. Since small Japanese raiding parties often penetrated the perimeter we were not unhappy to learn that we were to be moved to Green (Nissan) Island to the north of Bougainville and east of Rabaul.

Travelling by LST we duly arrived at the island which was in fact an atoll, enclosing a lagoon, measuring about 400 yards across and 5-6 miles from tip to tip. A landing strip had been carved from the pre-war coconut plantations to accommodate US Air Force Squadrons of B25 and A30 bombers plus a squadron of Vultee Vengeances, the latter being either USAF or RNZAF - I cannot remember which.

On landing our equipment was loaded onto US trucks and taken to the site selected by our CO. It was virgin bush, on the edge of a “cliff” about 30 feet above sea level being the highest spot on the island. The CO went to report to the US Commanding Officer leaving Sgt Robinson and myself to oversee the work of establishing the camp and gear. We started almost immediately using what we had been given to work with - axes, machetes and mattocks.

Not long after we had started work a truck stopped nearby. It contained an American sergeant and driver. The sergeant got out and when he asked who was in charge, he was directed to me. He approached me and asked who we were and “What the ... do you think you are doing ?”

When advised that we were an RAAF radar station preparing a camp and erecting our gear his answer was quite interesting, “Where the .... are your dozer and trucks ?”

When told that we did not have any dozer, trucks or even a Jeep his reaction was one of almost stupefied incredulity followed by, “Come with me sergeant and we'll get this matter straightened out right now”.

Then I learned that he was with the US Seabees detachment maintaining the airstrip and that they had all the necessary earthmoving equipment for such work. We went to see his CO to whom I was introduced with:-

“Sir, this is Sgt Tolhurst of the RAAF radar station. I discovered him and his men trying to set up camp and equipment with axes for Christ's sake. They’ve got no dozers, no trucks, no gaddamned equipment at all. Jesus, sir, how in .... sake can the stupid bastards expect their troops to fight a war if they do not give them equipment ?”

Within a very short time I headed back to the site leading a convoy of trucks, a dozer, a scraper and a courtesy jeep. By the following day a camp area had been prepared and American Army style tents erected, complete with mosquito side walls and floorboards.

Using timbers felled on the site the erection of a 15 foot wooden tower (to raise the height of the doover), was commenced immediately under the direction of F/Lt Davies and Sgt Robinson. In approximately 72 hours the tower and antenna were erected which, I believe, was a tribute to the efforts of the personnel working in blazing hot, humid, tropical monsoonal conditions.

The US Command advised that our air warning capability was not really needed as the possibility of Japanese air attacks from Rabaul was remote. However, our help was required to plot the positions of the US bombers and other aircraft who maintained a series of harassment raids over Rabaul - virtually 24 hours a day. More importantly, it would indeed be a very great help in the event of "friendly" aircraft ditching.

With this in mind, we redoubled our efforts and it is to the eternal credit of Sgt Robinson and his mechanics that we were almost ready to go on the air five days after landing on the island. But this was not to be.

Pilfering Causes Tragedy

On unpacking the case clearly marked "Radio Valves - Handle with Care", it was discovered that somewhere between Townsville and Green Island the crates had been opened and all the valves removed. It is impossible to name, with any certainty, the culprits but it was our opinion then - and nothing has subsequently happened to change that opinion - that the valves had found their way on to the Australian black market by courtesy of the wharf labourers at Townsville.

The loss of the valves was not in itself a tragedy. The tragedy occurred on the night of the day when we would have been on air. The major part of the Vultee Vengeance Squadron was caught in a violent tropical storm on their way back from Rabaul.

The electrical storm upset their compasses and even though they were in radio contact with Green Island they became hopelessly lost. From memory 16 aircraft were forced to ditch when they ran out of fuel. Two pilots managed to ditch in the lagoon but no trace was found of the others.

We believed that had we been on the air it was possible that we would have been able to guide those doomed aircraft back to base and saved the lives of the crews. All of the personnel keenly felt the loss of lives - a grief compounded by the fact that had it not been for the mindless cupidity and corruption endemic on the Australian waterfront in those wartime years, young lives would not have been needlessly lost. Our feelings were not helped by the scorn from the US Air Force personnel who became aware of the reason for our delay in getting on air and who tainted us with the contempt they held for civilians at home.

Replacement valves were scrounged from the USAF and from memory some were flown over from the RAAF at Lae and then we were on the air.

The next several months passed without incident. Operations were maintained on a 24 hour basis in spite of various tropical skin complaints, fevers which may have been malarial and some degree of dehydration suffered by the operators who were forced to spend hours in the close confines of the LW/AW tent sitting in front of the heat generating transmitter and receiver - just four degrees below the equator.

There was a certain amount of tension on Green Island largely due to the presence of 30-40,000 Japanese troops on nearby Buka Island, visible across the water. So it was necessary to maintain night guards as there was a possibility that they might make a raid.

It is certain that on two occasions traces of small Jap landing parties were found and some US stores went missing. The fact that the aforesaid landing parties must have landed within a few hundred yards of 311RS did nothing to allay our concern as we were relatively isolated from the main US camps which were strongly defended.

Editors' Comments: The pilfering by waterside workers described above was not an isolated incident as many other cases have been reported by other stations and MFCU's - but it was one

which had a sad ending involving the loss of lives rather than just a delay in becoming operational.

Hoisted On My Own Petard

One evening, whilst drinking with some American pilots, I remarked that our radar plotting indicated that they never actually flew over Rabaul. Around it at a distance yes - but over it - no. According to our plots they would disappear a few miles distant from the target and reappear a few miles on the other side.

A couple of nights later one of the same pilots, to whom I had made my assertion, asked me would I care to go along on one of the so called joy flights.

Naturally I jumped at the chance - the penny still had not dropped - I knew from the plots.

The following morning at dawn I crawled into the tail turret of a B25 and was given some instruction on how to use the gun.

"Not that you will have to use it, of course."

A little while later, flying west, almost dozing with the sun warming me in the turret, I noticed that we were flying very low. The penny dropped - here was the reason why we lost them on the screen.

As I was rationalizing, suddenly land flashed past on one side with a mountain high above pouring smoke. Almost simultaneously land and a similar mountain appeared on the other side. Within moments boats flashed past on either side. We were almost at deck level and people on the boats were shooting at us - tracers with the appearance of fireflies criss-crossed past us.

It all happened so fast that I did not have time to get scared, nor was I then aware that we had run the length of Rabaul Harbour until we reached the end where there was a relatively low hill over which the pilot hopped, thereby causing my stomach to drop onto the ground.

Several miles later, out to sea, the pilot enquired whether the "tail gunner' was OK and had he enjoyed the flight ?

Incautiously, with more bravado than sense, my reply was, "Yes, it was great".

"Good," said the pilot, "then you'll enjoy it better the second time" - a statement which was palpably false. I had been under fire several times in the Middle East, where I served with the AIF. I hadn't enjoyed it then, so I saw no reason why I should enjoy it better on this occasion.

However, true to his word the pilot took us through it again, which did absolutely nothing for my peace of mind, though on this occasion I did manage to get a few shots off with the gun but it's extremely doubtful whether I hit anything other than sea and air.

In due course we returned to Nissan, unscathed apart from several bullet holes in the fuselage with a very chastened sergeant radar operator who apologized to the pilot and crew, vowing to never again make disparaging remarks without absolute verification of the facts.

311RS Moves to Jacquinot Bay

Our CO was often absent for a day or so when he visited the US Command and we did not think anything was amiss when he once again was away. This time it ran into a few days. We made enquiries on the island without success. Finally a message came through that he was in hospital in Lae and that "a new CO would be appointed in due course".

Sgt Robinson and I, as the two senior NCO's, operated the station as normal while waiting for the new CO. After about four weeks - still no CO - we got an instruction to pack up the station and move to Jacquinot Bay and thence on to Wide Bay, both on the island of New Britain.

We loaded the gear and personnel on to an LST and cruised toward New Britain. I use the word cruised advisedly since being a shallow draughted craft with an almost flat bottom it would not

have been a comfortable craft even on Sydney Harbour. As it happened we ran into the edge of a cyclone and those who were prone to sea sickness succumbed immediately followed closely by those who claimed otherwise.

On arrival at Jacquinot Bay no one knew anything about us nor were we expected. We were told to "park yourselves at the end of the strip and wait for further orders".

This we did. For the following few weeks (six I think) we lazed around the camp, explored the area, played cricket and waited. So over a period of about 2-3 months the station had operated, been dismantled, then moved and waited - all without a CO, fortunately without any mishap of any kind.

Then a crisis developed. The new CO arrived and wanted an inventory of the station equipment. The transmitter and receiver had been packed in crates, stored under tarpaulins, in the open for a couple of months. We opened the crates to find that fungus had grown through all of the electronic equipment. Cables normally as thick as a lead pencil were as thick as a child's wrist.

It was patently obvious that the transmitter and receiver were inoperable and it seemed that everything would necessarily have to be scrapped with a consequent loss of thousands of pounds.

Since Sgt Robinson and I had been in charge for this period we thought that we would be held responsible. We were more than a little apprehensive about the matter and it seemed to us that we would face Court Martial charges of "grave dereliction of duty and malicious damage to Air Force property."

However, P/O Cook performed magnificently. Refusing to take the easy way out and report the matter, he faced the daunting task of rebuilding the equipment. With the help of Sgt Robinson and the other mechanics, he set to, stripped down and completely restored the electronics. This was no mean task considering that there was no easy access to a supply of spare parts and they worked out in the open dodging showers as best they could.

That they succeeded is a tribute to their doggedness, ingenuity, skills and perhaps some slightly illicit acquisition of some needed bits and pieces.

The gear was re-crated, the war finished about this time and to my knowledge the gear was never used again.

SOME NOTES ON 151RS AT MERAUKE

Neil Trainor

Most of the time we worked through Fighter Sector but someone got the bright idea of us having a direct contact with the Dutch pilots. New VHF equipment was installed and we were off on a trial run. None of us spoke Dutch and their English was so heavily accented as to be almost unusable. The idea was shelved soon afterwards.

Early in 1945 when I became the NCO in charge, the unit was on a care and maintenance basis and instructions were issued to run the gear for an hour a day. Within a week the humidity played its part and it took over an hour to get a trace on the PPI (Plan Position Indicator) tube. Soon after we got instructions to move the gear.

This unit was a Mk V GCI, truck and trailer mounted, with three 8 ton Crossley trucks. These were four wheel drive vehicles with double reduction worm differentials so making them immensely powerful. Came the day for the move to the camp and station area.

The trucks had been standing, without running, for perhaps 18 months but they gave remarkably little trouble. The nickel-iron batteries were filled with water and recharged. The engines were turned over by hand and then started readily. The worst part was pumping up the large tyres which had to be done with a hand pump because we had no compressor.

The unit was located on a short road which was separated from the main road by a large ditch bridged by two heavy timber planks, one of them had sagged lower than the other. Now the first truck to be backed out was not quite lined up with the planks. The tyres were a bit slack, not having been fully inflated. The net result was that the tyres rolled leaving the rear end of the truck resting on its large differential. Despite all our efforts and ingenuity it refused to budge.

A large American 6X6 truck just happened to be passing by so we enlisted its aid. With 20 men in the back of the truck to act as ballast we hitched its winch on to the Crossley. All that occurred was that the 6X6 gracefully pulled itself towards our truck. Then, as a final fling, our driver very precariously drove the second Crossley through the ditch and hitched onto the first one. We were surprised that, with the worm differential in low ratio, it pulled the first truck out so easily.

This gave rise to the theory that a Crossley could pull itself up a cliff if it could get a grip on the surface.

The rest of the move went smoothly with only a minor hiccough. Driving the lead truck I had forgotten how high these trucks were and so successfully brought down our power lines. However they were quickly repaired.

We used those Crossleys for many tasks including removing a six inch tree. In low low gear it was not possible to feel whether the tree was moving or not but I drove to the end of the camp and found that the tree had dutifully followed the truck all the way.

As always there were occasional flashes of humour such as the amazement on the faces of the AWAS (Australian Women's Army Service) when they noticed that the natives looked at them in an odd way and that they kept out of their way. “Awas” in Low Malay meant BEWARE.

Then another day two Americans arrived in a jeep and asked, in a very broad accent, if we could give them a “farve zee three”. Most of us had had little contact with real Americans and it took some time for the penny to drop that what they wanted was a valve known to us as a 5 Zed 3 (5Z3). After that was straightened out we got along very well indeed.

One day our telephone went dead - really dead, and it was my lot to fix it. So, with another chap, I went out to walk the line to find the fault. The overhead line was literally covered in millions of the infamous New Guinea tree ants which have to be seen to be believed. Three quarters of an inch long and if you were erecting a wire or clothesline somewhere by the time you were tying the other end of the line they were travelling in both directions along it. They were voracious and would think nothing of trying to polish off a human being if he was silly enough to stay too long in one spot.

The line went through about half a mile of swamp, complete with leeches, and we inspected the ant covered wires as we went along because no one knew the actual location of the telephone line. After traversing the swamp, avoiding the leeches, and a short section of rain forest we came to a main road. The line crossed the road and proceeded through an Army camp where some of the boys had twisted the two wires together to make a clothes-line. They thought it was funny but I am afraid that our sense of humour was not up to the occasion.

Towards the end of our stint a truck drove into our camp and the occupants asked, “What’s this unit ?”

We told them 151 Radar and they were surprised because we were not on their maps and became somewhat worried when told that we had been there for about 18 months - they were the local anti-malaria group which seeded ponds with special fish to eat the mosquito larvae. This generally lowered the incidence of the disease. We seem to have survived even though they had no record of us.

ESTABLISHING 23RS AT LYTTON

John Allan

On 8 May 1942 I was sent as Area Radar Officer to Brisbane to set up the air warning stations for that city. Having reported at Amberley on 9 May I went back to Brisbane to locate a set of COL equipment which was originally intended for Singapore. Eventually the equipment was located in the railway marshalling yards in South Brisbane - complete with RAF guards who had accompanied the equipment all the way from England. Can I say that they were very pleased at being relieved of their responsibility ?

A dummy aerial was erected at the same time as the real radar station but it did not fool the locals who knew it was a dummy because it did not turn like the other one.

Editors' Comments: One wonders what happened to the RAF guards and how long they spent on their escort and guard duty. 23RS operated very successfully and was used as a training station for officers, mechanics and operators. The AW aerial was the same as was used at 31RS at Darwin and several other locations. Even with coaxial feeders there was no real problem with side lobes and reporting incorrect positions of ships etc. The aerial gave no trouble until it was rotated at fast speed and using the PPI tube to locate an American aircraft over land during a thunderstorm. The plane was found but with dire results. There was no rotatable coupling for the feed to the aerial with the net result that the coaxial cable, with constant rotation instead of sector scanning, twisted and short circuited just above the concrete at the base of the tower.

Tom Buckland spent quite some time digging the coaxial cable out of the concrete in which it was embedded.

344RS AT WEST MONTALIVET

Walter Wood

Isolation and Loneliness

My main recollection of this station was the isolation and loneliness - about 30 men, no changes of personnel for approximately seven months. The same faces, the same limited view, the same food, no fresh water, no "flicks" and no mail for several months initially.

344RS was a very tough posting. Six months was almost more than enough for any man to bear and the initial crew spent about nine months there. [It was reported by Ken Nice that the boys had tears in their eyes when the relieving crew arrived.]

Probably what helped preserve our sanity was the hard work in establishing the place. [The trip by ship was covered in Stan Morgan's tale earlier in this book.] The unloading of the "Bomba" was the worst with the boys standing waist deep in shark infested waters with lookouts, armed with 303's, standing on nearby rocks to frighten off any of the hungry monsters.

Supplies, including water, came initially by boat every two or three months until we were able to construct an "airfield." Thousands of stones and rocks were removed by hand between radar shifts. These were dispersed in the surrounding area so as not to make the runway noticeable to the Ungodly. What a celebration when the first plane, piloted by "Doc" Fenton, arrived with fresh tucker and mail.

The shortage of fresh water caused problems with the Ford 10 generating plants - running 24 hours a day, they inevitably used water that we really needed for living. Now the CO was an ingenious man (a former builder and radio ham) and he got the boys to build a substantial evaporative cooling tower over a large holding tank which was then filled with sea water. The radiators were then disconnected from the engines and the water pumps connected to pipes leading to the top with cool water being drawn from the bottom of the holding tank. A periodic chore was the removal of salt which formed on the tower during the evaporative process but the unit was still working well when I left the unit after being there for nine months.

A Visit by a Jap Submarine

Late one afternoon a Jap submarine surfaced off the island. Frantic signals were sent to Fighter Sector and a rapid overhaul of our defences took place. These ranged from was one Vickers machine gun (ex-WWI), two Brens, two Thompsons, a number of 303's, one box of hand grenades to the CO's revolver. All that plus deadly silence.

Midday on the following day a Beaufighter appeared ready to do battle. But where was the enemy ? Somewhere in the Indian Ocean feeling fully refreshed no doubt.

THE LADDIE WITH THE LAMP AT 344RS

Gordon Shearwin

Gordon recalls a visit by the Dental Officer from Truscott who came out to make a routine inspection of the men. On coming ashore he was somewhat concerned to see a figure wandering around the camp area carrying a lighted hurricane lantern in broad daylight - full bright sunshine.

But all was well. The island was completely out of matches and the "laddie with the lamp" was the camp cigarette lighter.

324RS THE ONLY LW/AW MKV IN SERVICE

Jack Fraser

Having spent some time at Radiophysics on the development of the MkV LW/AW I was involved, with F/O Jock Stark and Sgt Alf Curtis, in taking two sets to Labuan where it was thought that it was needed most. There we were supposed to introduce the new type to other crews.

I suddenly became an AFHQ person with no movement order. At the last moment I found an officer who would make out the necessary papers for me. I can't recall what happened about papers for the other two of the party.

Eventually we were loaded aboard a C47 for Brisbane where we were to be transferred to a flying boat. Over Coff's Harbour on the way to Brisbane the plane hit an air pocket and almost crashed. The radar gear, which was packed in transit cases, was thrown about breaking valves, meters etc. We also were thrown to the cabin roof and two of us had to seek medical treatment. The pilot was taken off to hospital.

The movement by flying boat was called off and we eventually boarded another C47 for Merauke. From there we went to Biak and picked up yet another C47 for Morotai where we became stuck.

The gear was put "under safe hand" at the Morotai strip and we checked it each day until one morning when we found that it had disappeared. Enquiries revealed that it had not been sent to anywhere else in Borneo so we began to fear dire consequences.

The station transport officer finally found that the equipment had been sent to Zamboanga in the Philippines. Urgent pleadings on our behalf brought a promise that it would be picked up and delivered to Labuan. At the same time we were given passage to Tarakan in Borneo.

There we arrived immediately after a Japanese air raid. Oil wells were ablaze, the air strip was pitted with bomb craters and we had to fly around until the holes had been filled in. Landing was a noisy affair as the strip was covered in steel mesh.

At Labuan we found our boxes stacked in the open alongside the air strip. Arrangements were made to shift the stuff to 4 RIMU and we checked into the First Tactical Air Force Headquarters. We later moved to 4 RIMU to be among the other radar types.

The gear was set up between the orderly room and the maintenance hut. Damaged parts were replaced and we started transmitting. Now this new transmitter had an output of 250 KW and not the low power of the LW/AW Mk IA. This caused some fun for us and consternation for

others, when we turned the array towards either the office or the workshop, long sparks leapt from metal objects. The CO was not amused.

The next move was to establish 324RS on Papen Island just out from Victoria Harbour. It worked well except for the main transmitter transformer blowing up and we had to take the one from the second set we had with us.

Soon afterwards we were told that we were to set up the gear on a landing barge and go in with the first wave of an invasion of some place but we were saved by the dropping of the atomic bombs.

Snippets on Papen Island

The most exciting thing that happened on Papen involved the American Navy. They built a baseball diamond on our island, taught us the rules of the game and were mortified when we beat them.

We were saddened when an American was bitten by a sea snake near the pontoon we used for diving. He died within about 15 minutes.

Three RAAF officers, who built a small sailing boat on Labuan, went sailing on Victoria harbour and were blown onto Papen Island. They had no means of identification on them, were only dressed in shorts, so our guards arrested them, and put them under guard for the night until they could be identified.

Back at RIMU it was rumoured that I was listed to go to Japan with the occupation forces. This did not please me very much so I conveniently remembered that I was an AFHQ body and that I had never been posted to RIMU through the correct channels - I did not go to Japan.

Our evening entertainment was to listen to Tokyo Rose on a short wave radio which I had built from parts scrounged from here and there. Ultimately this set was the means of the three of us getting back to Australia. The gift of the radio in the right quarters got us seats on a plane to Morotai on our way home.

328RS AT WALLAL DOWNS

Allan J Ferguson

I flew up to Port Hedland on a RAAF Dakota and well recall, between Onslow and Port Hedland, an aircraft mechanic pulling up part of the floor of the aircraft and fiddling around. The aircraft had apparently lost its brakes and it was going to be a “hairy” landing at Port Hedland. However, there was a strong head wind and we pulled up just in time. We noticed a string of bomb craters down the side of the strip as we landed - the result of a Jap raid earlier in the war.

Then we sat in the back of a truck while travelling along the shocking dirt, sand, rocky coastal track to Wallal Downs. The radar camp site was four miles down the coast “road” towards Port Hedland from Wallal Downs homestead while the radar set was located on a 50 feet high red sand hill, called Red Hill, about half a mile closer to the homestead. Along the 80 mile beach there was the usual line of sand hills near the beach, with another line, having more reddish sand, running parallel to the first line and about half a mile further inland. The coast “road” ran on the inland side of the second line of sand hills and our camp was on the eastern side of the “road”.

Most of the bores sunk in the area yielded brackish water but we were lucky because the bore near the camp produced a never ending supply of good fresh water. This was probably why they established the camp where it was.

Snakes and Other Beasties

The area around Red Hill was infested with death adders, scorpions and centipedes. Movement around the camp drove the adders away within about six months but the other creepy crawly beasties remained a menace.

The “dug-out” toilet, really only a seat over a hole, was on the side of the hill near the doover. One had to brush the scorpions off the seat and quickly sit down before they returned.

The centipedes were the worst - there were literally millions upon millions of the things, from freshly born bright green ones, to darker green, to red, to red/dark green with the bite of the latter being equivalent to the proverbial kick of a mule.

Our home-made beds consisted of a wooden frame with wire mesh stretched across the top. The ‘pedes would crawl up the legs and into bed with you and find a warm spot, usually under the upper arm. Even putting the legs of the bed in jam tins filled with kerosene did not deter them.

When you turned over during the night they would sink their fangs in as a defence mechanism. Nearly everyone kept a torch and a bayonet alongside the bed. On being bitten you would leap out of bed, automatically grab for both torch and bayonet, kill the beasty, then race up to the medical orderly’s tent.

Treatment was to scratch the wound and rub in aquaflavine to ease the pain. The arm would swell and become very itchy for a few days. It was such a common occurrence that eventually no one woke the medical orderly. Most of us were bitten nearly every night so we became more or less immune.

Only three of us, as I recall, were bitten on the “vital parts”. Normally it was so hot that we dropped our shorts while working on the CRT - it was so flaming hot in that tent. Max Hunter was operating when he was bitten. It was the funniest sight with Max belting out of the doover, racing through the Op's Room alongside and down the track to the medical orderly’s tent, yelling blue murder all the way, while hanging on to “you know what” with one hand and trying to pull up his shorts with the other.

In my case, I was bitten while in bed. Naturally I could not scratch it and rub aquaflavine into the wound, so I just had to put up with the pain. I won’t go into any more detail except to say that the boys wanted to send me down to the Perth Museum -unfortunately it didn't last.

Fishing

We installed a semi-circular fish trap on the beach to take advantage of the tides, which rise and fall 30 feet or more, trapping all types of fish on the ebb tide - quite an acceptable addition to the normal diet of bully beef and baked beans.

Shearers used to come once a year and they knew exactly where to go for the best catch. We accompanied them once, up the tidal creek between the two homesteads north of Wallal. When the tide had reached its peak they waded in up to their chests, staking the net across the mouth of the creek. The water literally raced at a great rate of knots after the tide turned leaving piles of fish stranded in the net, jewfish, salmon, kingfish, whiting, all manner of fish - the best fish one could hope to taste. We heaped the back of the truck with our catch having enough to fill the two fridges at the homesteads, the aborigines camp, the shearers' quarters and our own camp, and, without telling a lie, left fish stacked on the beach to rot.

Diversions

When I was posted north, whilst passing through Perth, knowing there were no pianos on radar stations, I decided that the only way to have music was to learn another instrument. The only clarinet available was of ancient vintage, but I bought it together with a tutor book, and taught myself whilst at Wallal. My practising caused my mates much chagrin. One evening when I was hard at it in the ASV Beacon shack up the hill away from the camp, the fellers got their own back on me. They surrounded the shack, rifles loaded, and on a signal they all fired together. I, thoroughly engrossed in practice, thought the equipment was blowing up and came tearing out of the shack in full flight, much to the amusements of the boys.

Swimming, or rather dipping, was limited to a tightly bunched group in waist deep shallows. Too risky to go any further out as one could see the fins of sharks cruising up and down just beyond the line of the surf. Occasionally a small shark or large fish might brush past one of the guys on the rim of the group. A yell of "SHARK" would result in the whole bunch almost walking on water to reach the beach.

Father Bryan, who came to the camp every month or so to say Mass for the RC's, was a great guy who joined in any fun and went swimming with us. He was stationed in Hedland for years and flew his own Tiger Moth or Auster to the surrounding mission stations. I believe that he had pranged more than once and walked away unscathed on each occasion - Divine Protection !

We used to play Aussie Rules football once or twice a week on a patch of blackish sand below the camp in 140^{o}F temperatures. The teams were called the "The Red Hill Rovers" and "The Wallal Wanderers". About half time our sweat had turned into black mud and often one of the boys would come up, wipe his index finger down your back, lick it and exclaim "Pure EB" (Emu Bitter).

ESTABLISHING 38RS ON BATHURST ISLAND

Editors' Comments: In 1946 Hal Porter wrote *Adventures in Radar* which regrettably was never published although a few copies have been distributed as part of this overall project. With the author's permission we have extracted the following stories and information to which has been has been added some contributions from Cec Blumenthal.

In June 1942 38RS was formed in Darwin and personnel immediately started a scrounging exercise to make up for the deficiencies of wire cable and other necessities. In late August an advance party of seven airmen took the 12 ton AW Transportable aerial etc, by a boat called the "Yampi Lass" to Cape Fourcroy on Bathurst Island.

F/Lt(then a P/O) F H Porter arrived three weeks after the advance party. Incidentally he never filled in any A50's because he was not told about them.

The station was ill equipped, men were untrained in self defence and the initial party had been so convinced of an imminent Japanese invasion that they had hidden equipment under camouflage, under bushes and piles of grass over an extensive area. It took a long while to recover it all. Essential medical supplies and tools were either in short supply or non existent, in fact the only thing in plentiful supply was bully beef - 20 tons of the stuff.

Cec Blumenthal wrote recently that he was acting as a supernumerary to Hal Porter, in Darwin, by collecting bits and pieces on behalf of 38RS. He said that he was not surprised that the original food supply was inadequate because he was told to order iron rations for a period of six months. Presumably someone else was supposed to take steps for normal supplies which did not eventuate for quite some time.

Guards and some other personnel arrived from down south while the crew were installing the gear at Cape Fourcroy and Cec Blumenthal looked after this aspect from 31RS. Some of the guards had been in the Air Force for just a few more days than it took them to travel overland to Darwin and some had not been issued with clothing or rifles.

Rifles were not so hard to acquire but ammunition was controlled by the Army and difficult to obtain. After having the first requisition knocked back it was a case of reverting to the barter system. 31RS, according to Cec, had some of the most inventive scroungers in the RAAF. They had discovered a refugee cargo of cement, in steel drums, in an open store at Vestey's meatworks. Having used all that was needed for the floor of the mess at 31RS, the information was discreetly traded with the Army for ammunition - strictly on the basis of no ammunition no cement. Two days later the store was checked and found to be empty.

On Bathurst Island large brown snakes - possibly King Browns - were prevalent as were scorpions, both of which invaded beds, boots and clothing. Rats also regarded leather items as delicacies so really nothing was sacrosanct.

After establishing a rudimentary camp, the staff worked frantically to get the "doover" on the air. It was no mean feat to erect the 12 tons of steel tower and aerial with few tools, makeshift sheer legs and block and tackle. Local natives, with names like Flowerpot and Packsaddle, were very helpful - as were many of the piccaninnies - in unloading the ship, carrying items and taking part in the heavy lifts. Without them the unit would have taken much longer to become operational.

Probably the only factor which was in their favour was the fact that it was the dry season. When the radar equipment itself was dragged up the hill it was found to have been affected by salt water and full of sand but no humidity. Miraculously, after cleaning it up a bit, it worked when it was switched on.

The sole power supply was an historic piece of machinery to say the least. The engine was a 1926 straight eight Auburn engine complete with a bent crankshaft. Designed to run on unleaded petrol but they were supplied with high octane leaded petrol which caused the motor to overheat - it also burnt out valves. A 500 gallon cooling system was devised by the fitters and an ingenious galvanized air duct was made to take air from the radiator fan to cool the carburettor to stop it being blown off the engine when it backfired. The duct also helped with the problem of pre-ignition.

The provision of such an odd piece of machinery as the Auburn driven alternator has to be seen in the context of the availability of equipment in early 1942. The Australian manufacturing sector was very small and it was a case of improvising where possible to meet the needs. Eventually a Ford V8 driven 15 KVA power supply was shipped out to the island. But it weighed about 1400 pounds and had to be unloaded and lifted once again with makeshift sheer legs.

The AW Transportable Aerial was cumbersome and time consuming in the erection stage so highlighting the need for the Light Weight Air Warning set (LW/AW) which came into being in the second half of 1942. The LW/AW could be erected in a matter of a few hours on a reasonable site whereas 38RS took about a month.

The unit had an old Chevrolet 30 cwt truck which gave a lot of trouble and the springs kept breaking until it got to the stage when the two front wheels were riding on a pair of gum saplings instead of springs. The truck was a necessity because all material and fuel had to be moved from the beach, where it was landed to, the camp or the power house located at the foot of the hill where the doover was located.

One clear and beautiful night late in 1942 they picked up a strong force of Japanese at a range of 140 miles. Plots were passed to Fighter Sector and the raiders were intercepted. On the return flight of the Japanese, the operator on watch dejectedly reported that "the bloody doover's on the _____ ice, the echo's falling off the blasted screen." At the same time one of the guards reported a fire ball in the sky, so the unit had, on the screen, seen an aircraft shot down, probably one of the first to have had such an experience.

38RS was in many respects similar to a number of other radar stations in other areas. It was isolated, devoid of close contact with other units and almost forgotten from time to time by Area Headquarters. For instance the unit once went for a period of ten weeks without a mail delivery and they were only 65 miles from Darwin.

Deficiencies in the food department were such that many on the station developed what was locally called Barcoo Rot. The slightest bump grew into a blister and subsequently became

infected or ulcerated. Affected personnel became lethargic and listless resulting in low morale.

Many signals were sent to NWA reporting the parlous state of affairs without result. In view of the lack of action, P/O Porter took the unprecedented step of sending a signal direct to the Director General of Medical Services at RAAF Headquarters, Melbourne. It could be said that the "substance hit the Westinghouse" at NWA because very soon after Hal's signal was sent, Doc Fenton flew out with a generous supply of cordials, lime juice, ascorbic acid and tomato juice. Within three weeks the Barcoo Rot was gone, ulcers were healing, general health and morale improved.

The AW equipment was replaced in 1944 by a Mk V COL becoming operational on 22- 4-44. More of this later.

MEMOIRS OF THE COOK AT 323RS - BOEPOEL

Percy Blood

An Accidental Wound

This incident involved Jack Sargeant who accidentally shot himself in the thigh with a tommy-gun. Of course there was doctor on the unit as we were only an isolated radar unit. Our medical orderly Jack, who was a very good man at his job, was rushing around saying, "What am I going to do ?"

Frank Morris, a big solid man, practically carried the wounded man up to the medical tent only to find the orderly in a bit of a dither as he had no such thing as an anaesthetic to give Jack so that he could probe for the bullets.

"What's wrong," said Frank.

"Well I have to do something," said Jack. "I just can't probe in there to see where the bullets are or anything - it'd drive him up the wall. He needs an anaesthetic."

"Get everything ready Jack. He'll get his anaesthetic."

So Jack got everything ready on the little table and said to Frank, "Are you right now Jack ? What are you going to do Frank ?"

"Give him an anaesthetic."

With that he just put his hand under the back of his head, lifted it off the table and went bang with the other and knocked him out, saying, "That should hold him until you're done."

So Jack, the orderly, probed and found no bullet, then cleaned out the wound and strapped him up. They'd sent a message to Merauke to get ready for him. Anyhow it took two or three days for the old boat to come up and get him and it took another two days to get him down on the big current in the river to hospital. The surgeon down there opened up the wound, had a look and said, "Who the hell did this ?"

"Oh the medical orderly," they said.

"Well, by God, what did they want to bring him down here for ? I couldn't do any better than that myself."

So he just washed it off, disinfected it, tied it up and said, "Right. He can go back home again ! " That's all there was to that. Jack, the medical orderly, was good.

A Busted Nose and a Trip to Hospital

One day we tried to have a game of cricket down on the foreshore. There was this bloke who fancied himself as a bit of a cricketer. Well he bowled a bit of a fast one and it hit a stone, bounced up, and hit me fair square between the eyes. I ended up in hospital for eight weeks with a busted face. [Contact has been made with Peter Rolle who was the cricketer in question.

He said that Percy thanked him for busting his face because he had wanted to get it fixed for years.]

I took that young bloke, Mick Dugan, with me as he had ulcers under his arm. They had to operate on him but he got home pretty quick.

While we were down there who should come in but Horrie Staples. Do you know he had busted teeth - false teeth of course - he smashed them trying to eat dog biscuits 'cause I used to give them bread. No one knew anything about making bread so they went back to dog biscuits.

Anyway Horrie teed up a load of wire netting to go round the kitchen 'cos there were dogs everywhere in the village. Yes he teed up a lot of other stores when he was there.

Bread Making and Flour Deliveries

I had a box stove with four large trays and used to get up at six o'clock and make 15 two pound loaves each day whether I was on duty or not. I'd put in a dish of water and then I'd room for three trays of bread. After they had been in for about half an hour I'd open the door and switch them around so that they'd all be evenly baked.

A lot of flour used to come in tins. Some of it, if I was lucky to get it, was Manitoba flour from Canada, that's the best flour in the world. It's good hard flour and made beautiful bread.

At one stage we were near out of flour and I mentioned it to Robson who told me to see Mr Collings, the Defence Officer. So I did and said to him, "Hey, can you get us some flour ?"

"Yeah, I'll get on to 'em." Sure enough with the next lot of rations, there were four or five bags, mind you not tins, of flour on an open barge. It rained all the way up and when it got there the bargemen came up - from an Army unit -and one bloke said, "We've got a load of flour down there. Have you got any native boys that can come and give us a hand with it ?"

So we went down and here were these bags of flour - they hadn't even a tarp thrown over them and they'd been there for four days coming up river.

Well, I took one look at them and who should come along but Robson and I said to him, "Hey, come and have a look at this". And he said, "What are you going to do with it ?"

"Do you really want to know ?"

"Lor, it won't be any good now will it, being wet and all."

It was sopping wet, so I said to one of the barge boys, "Give me a hand." He got one end of the bag and I got the other and he asked what I was going to do with it and I said, "This !!" as we threw it overboard. I threw the whole lot into the river and that was the end of that.

So after that, they were very smart with another barge coming up with some more food as I got more tins of flour.

Minced Cassowary

One afternoon a couple of the boys were out and brought back a cassowary. They'd shot it, right through the head - a good clean shot it was. It wasn't a fluke, both bullets through the head.

You had to more or less skin it like a beast - a big animal it was - and I tried to cook it. God !! To start with, I never had a knife sharp enough to cut into it but in the end I got a few pieces off and we tried to cook it on the top of the stove - like grilling. You couldn't even chew it. But there was a mincer in the gear and we tried putting it through.

We bolted the mincer down onto the bench. It was so tough and so full of sinews that every few minutes you had to undo everything and clean the mincer out. We threw a lot into a big pot, threw in a tin of vegetables and boiled it. It came out good. The meat had plenty of flavour but you had no chance of eating it.

THE SUPPORTIVE ROLE OF RADAR

A D Banks

Editors' Comment: Possibly the most poignant comment made about the supportive role of our radar came from A D Banks who was the CO of 59RS at Lee Point at the end of the war.

Here [59RS] we probably did our most useful radar work providing surveillance for the many worn-out aircraft ferrying back our released POW's. Sometimes shepherding planes were vectored to escort loaded aircraft that were having trouble. As far as I know none of these aircraft was lost.

WESSEL ISLAND - 312RS

D H(Doug) Beard

When our posting came through to Wessel Island, it was difficult to find out just where it was and how we would get there. Eventually a small dot in the Arafura Sea on a map was found and this was to be our home for the next six months.

The first stage of the trip was by Catalina to Melville Bay. The trip was memorable for me because I went to sleep in a gun blister and received the worst case of sunburn I have ever had. By the time we arrived at Wessel my whole face was peeling, giving the appearance of some horrible tropical disease.

We left the next morning on an Army supply boat having been billeted in an Army camp over night. The trip was only 80 miles, so we expected a pleasant one day trip. Instead we had four days of crawling along through uncharted waters with a man on the starboard bow "swinging the lead". We'd heard of the expression before but it was quite interesting to watch. He stood on a specially constructed platform out from the hull with a safety rail around him.

He constantly swung the weighted rope marked in fathoms and called the depth to the bridge. When he was down to "And a half three, Sir", the ship would stop. If it was "By the mark, three, Sir", we would go astern and try to find deeper water. This is why it took four days to cover 80 miles. Finally on a dull squally afternoon, the ship stopped and we heard the anchor chain being let out. There was no land in sight, but we were told we had arrived and a long boat was lowered to take us ashore. All our gear and supplies were loaded in and we set off on a two mile trip. We landed on a deserted beach with a group of curious natives our only reception committee.

After standing in the rain for about half an hour, we heard a rumbling in the jungle and an old Fordson tractor with trailer appeared down a dirt track. Everything was loaded on the trailer and we charged off to find the camp. It was about a mile from the beach by a very narrow completely overgrown track. Once we hit a deep gutter while crossing a creek and several kit bags finished up in the water.

On arrival at the camp we were taken to a tent in the middle of a large pond, so the first job was to drain the pond and settle in. A few days later the rain stopped and we got everything dried out and began to enjoy our Island Hideaway.

We really enjoyed a very pleasant war on Wessel with a large group of friendly natives to look after us doing all the routine chores around the camp in addition to providing us with beautiful seafoods which they speared from their dug-out canoes. Lobsters were enormous and we actually got tired of them when they were our only food when the plane could not land with fresh supplies.

A DH86 Dragon normally brought mail, fresh meat, butter etc, once a week, but after prolonged rain the airstrip was out of commission. On one occasion after we had been subjected to week after week of lobsters, oysters and fish, the pilot decided to come down low over the strip and just toss everything out. This was fine until one of the lads received a broken leg after being hit

by a side of beef. The boxes of butter also suffered somewhat by being dropped from about 100 feet. We managed to salvage some of it.

There are many pleasant memories of Wessel where we had complete peace in wartime. One unusual episode involved a 16 ft python. We met it in middle of the track at 2 am on our way between the Ops Room and the doover. It was curled up and it was impossible to get around it because of the thick jungle. I went back and phoned through to the Duty Crew asking that they meet us at the scene with a 303 which they had with them. The monster was duly dispatched and it was decided that we should take it back to camp to show the others.

Then we had a better idea and draped it outside the CO's tent with the front six feet across the floorboards and the head propped up facing towards the sleeping CO who happened to a young ethnic Chinese, just off course and not too sure about this mad bunch he had to command. After we made a little noise the CO woke up, saw the snake, took his trusty 38 and emptied the chamber into an already very dead snake. We didn't wait around to witness his embarrassment, but he took it all in good spirits.

Another unusual experience was when I went "native" for two days during a break. My tent boy was Prince Baranuyu, son of the Chief and next in line to the leadership of the tribe. He was very skilled at living off the land, so two of us went with him to live as they lived. We slept in a cave, started a fire with fire sticks, speared and cooked a wallaby, speared fish and lobsters, dug for yams and generally experienced life as it had been lived for thousands of years. We were quite happy to return to the comparative comfort of the camp.

A never-to-be forgotten experience was to witness a circumcision corroboree when a number of young boys were admitted as men to the tribe. A harrowing spectacle for us, but I guess much more so for the young boys undergoing an "operation" by the witch doctor with a rusty cut-throat razor without the benefit of an anaesthetic. The worst part was the group of wailing women who were injuring themselves to alleviate the boys' pain.

Not recommended for the faint hearted !

Wessel was an interesting interlude on a very pleasant island, but after six months, it was good to return to civilization and not to have to eat all those lobsters.

WAAAF's AT HOME HILL - 211RS

Lorna Brodie (nee Olsen)

After spending six months in 1944 at Alligator Creek some of us were posted to Home Hill or rather a station midst cane fields about two miles from a railway siding at Tyah, some miles from Home Hill. Here we were greeted with hostility by some of the male operators who had formed attachments in the town and did not look forward to moving north.

Conditions were rather primitive, beds made of hessian tacked to uprights of 4X2 timber, red back spiders making their homes in the hem of the hessian. Ablutions consisted of a roofless shed with a cold shower rigged up in one corner so, to have a warm wash we purchased a baby's tin bath and some basins which we filled with water heated outside in a boiler over a wood fire where we also washed clothing. The latrine was a four hole affair, no doors but a wall in front for privacy !

We were eventually issued with standard iron beds and palliasses. Then an ablution block was built near the sleeping quarters, here the cane toads came to cool off.

Life was really very comfortable. We had a bore installed so were able to cultivate a lawn and some flower beds only to have them entirely devoured by a plague of locusts.

We became a very happy "family" on the station, surrounding farmers and townsfolk were good to us. We had outings to the so called beach out from Ayr and were able to spend our time off, after the allotted shifts, on Magnetic Island.

The Christmas spent there was an all out effort, townsfolk gave us boughs of poinciana flowers and even the top of a pine tree for our own Christmas tree. Our recreation hut was decorated and a gift for all personnel was supplied by the Salvation Army Captain who had been so good to us WAAAF during our time there.

He had supplied us with a sewing machine and tea making facilities for our quarters, apparently thinking that we were being neglected at this isolated station.

When the main group of WAAAF operators were posted south, we were piped on board the troop train at Home Hill by one of our Scottish neighbours dressed in his kilt. This was definitely not appreciated by troops already on board who were just settling down after leaving the station at Ayr on the other side of the Burdekin River, not knowing that there was to be a short stop on the south side of the river.

GABO ISLAND - 16RS

D H(Doug) Beard

When we finished our Ops course at Richmond, probably like every other course which passed through that August establishment, we were invited to apply for group postings so that friends could stay together. Four of us did that and were subsequently spaced out between Darwin and Melbourne, maybe in the interests of national security. Keep this lot apart, someone said, they represent trouble !

I drew Gabo and was perhaps one of the luckiest. It was a very pleasant start to the war and I have very happy memories of Gabo. We had a daily parade of Fairy Penguins, now a popular tourist attraction in other places. A beautiful beach where we spent many off duty hours, trips up the coast by fishing boats to attend dances at Eden and plenty of diversions on the island with a variety of sports.

Our CO at the time was F/Lt C J Matheson, a Master from Barker College, who was not only a skilled radar technician but also a very keen sculler. I expressed a similar interest and in no time we decided to build a single scull. This was done in the sergeants' mess using scrap material. The main problem was the skin for the hull, but we solved this by using layers of newspaper bonded together with waterproof paint. We purchased a pair of oars, installed a sliding seat and launched the vessel, with due ceremony, from the beach. It was 28 feet long, 14 inches wide and about eight inches deep. It was impossible to sit in it without the oars out as it was so unstable.

Gabo is about two miles off the coast and we used to row this thing between the island and the mainland. An old dinghy was our tender and the two of us would set out in the two craft and take turns to row the scull. We changed over every half hour in "mid ocean". I haven't heard of CJ, but having survived those hours at sea, he must still be around somewhere.

Very early during my career at Gabo, I was on duty in the wee hours of the morning and detected an echo on the screen which looked similar to what we were told was a submarine. I called the chief operator and reported a possible "tin fish", in no time flat the whole station was put on alert, the Vickers gun being mounted and armed, all hands at battle stations etc.

Melbourne Fighter Sector was advised and they had a squadron of Spitfires ready to take off at first light. The "target" was still moving up and down the coast about two miles out and we were ready for an invasion. The Spitfires duly arrived just after dawn and after several runs over the target reported a very large school of tuna just below the surface!

We were, however, commended for our vigilance, as this was the time that the Japanese submarines were active off the coast.

Gabo was a very enjoyable place to fight the war, and we felt somewhat guilty at being so far from the action.

THE PARABLE OF THE THUNDERBOX (336RS)

Bray Bagust

Editors' Comments: Enough material has been submitted to fill a book on the subject of latrines and their vicissitudes. Design and construction ranged from somewhat sophisticated "choofer" with a galvanized iron roof to the primitive thatched variety. Every day, for hygienic reasons, latrines were "burned off" using flammable liquids ranging from malariol to petrol and distillate - at Eilanden River the thatched roof had to be replaced after almost every burn off. Some chaps suffered the indignity of having minor burns or loss of body hair. This tale is about 336RS in early 1944 on Trobriand Island, being told somewhat differently to the other stories it has been included.

Prelude to the Thunderbox

Coral jutted out of the shallow soil and it was virtually impossible to dig holes, so the structure was built over a coral rift with the ends being blocked with sandbags. Construction was in bush timber with plaited palm leaves for the roof, sides and back.

All personnel took turns to have the normal "burn out" each day with a mixture of petrol and diesel.

On the day in question, W/T Op "Darby" Fisher and radar mech Manning were given the job.

Now "Darby" had a definitive view on most subjects and would impress by explaining at great length the right and the wrong way of doing things. Sometimes the discourse would be over-long and in this case, it took place after the mixture was poured in and before the piece of paper was set alight. The time was sufficient for fumes to form and expand within the confined space available. So when the lighted paper was tossed down the hole an explosion and fire resulted.

The explosion was heard all over the camp and attracted all who could attend. They really appreciated the diversion and gave encouragement with less than helpful suggestions.

A full report was requested by the CO and the following was submitted.

The Parable of the Thunderbox

And he spake to them in a parable saying :-

In a distant country, there dwelt a great host of men of battle.

And some fifty paces from the tents of this people was a great structure, yea a noble edifice in the sight of God and man.

And these men did love this structure dearly for Behold, there was not a single day passed that each of the multitude did not pay homage. For it was verily a great structure, for could not two men sit thereon with comfort and ponder on the great deeds to be done on the Morrow ?

And verily I say unto you, that this building was named with a name in the manner of the day and was called 'Ye Olde Thunder Box.'

Now there sojourned in this country, one Fisher, known among men as The Great, and Manning the son of Manning.

And it came to pass that the Great Fisher and Manning the son of Manning didst proceed to this place, as was their wont. And they did pour liquid into the bowels of this noble work of Man that they might consume by fire the forces of Evil which lurked therein, yea and in the depths thereof.

And Satan didst wax exceedingly wrathful and he called his legions unto him.

And it came to pass, that he didst cause the consuming flames to burn fiercer and yea, seven times fiercer than their wont.

And it came to pass that the Great Fisher and Manning the son of Manning did stagger back from the forces of evil. Yea, verily they did fall back from the heat thereof.

And I say unto you that the great edifice didst burn even unto the structure thereof.

And it came to pass that the Devil didst place a stone under the feet of the Great Fisher as he made haste with Manning the son of Manning to return to the well which was nigh unto the spot. And he didst stumble, Yea verily did he fall even unto the ground and the waters did close over him and he grew exceedingly wet.

And it came to pass that he did cry in a loud voice and he spake saying, "_____ that _____ with _____ to _____ !"

And here endeth the words he spake.

Now Manning the son of Manning didst listen, Yea even with his ears he did heed him and it did perceive there was much wisdom in these words.

Whereupon he did go nigh unto the Great Fisher, where he sat upon a Rock which the Lord had placed for him, and didst sit with him.

And the multitude came from afar off as they saw the fire in all its fury.

Now "Ye Olde Thunder Box" did burn, both it and the supports thereof. Yea even unto the framework, and the Multitude did sit and marvelled.

And it came to pass that the rulers of the land came with haste to the spot and were filled with anger and verily they were exceedingly wrathful, that so great an edifice should crumble.

But Fisher, known as the Great, and Manning the son of Manning rejoiced with exceeding great joy, saying,

"You little beauty !"

Here endeth the parable.

321RS AT MELVILLE BAY - GOVE

W M (Bill or Max) Counsell

The doover was at the very tip of Cape Arnhem with a sweep of 360^{o}, and the climate was very pleasant being milder than the rest of the Territory. Our tents were on the side of a hill and in the evenings we used to get fresh breezes blowing in from the sea. The ocean was about a quarter of a mile from the camp and the surf was terrific at times.

The Yirkalla Methodist Mission was about 200 yards away from our camp with Reverend Kolinio, a Fijian, being in charge. He was a huge man and very strong - he could lift a 44 gallon drum of petrol onto the back of a truck without any trouble. The mission had about 20 acres of land fenced and under cultivation while we had about a dozen paw-paw trees growing, so fruit was regularly on our menu.

56OBU was some four miles away and 13 Squadron, Ventura medium bombers, was based at Gove strip. They carried out convoy escort work and ran a courier service to Morotai. 42 Squadron, Catalinas, was based at Melville Bay which was some 15 miles away.

The unit worked in well with the Control Tower at Gove strip giving them early warning of our planes returning from the north. They received some credit for locating off-course planes including one particular Ventura when all other radio aids failed.

Quite an efficient unit really, the only difficulties were snakes, spiders, centipedes, sand flies and mosquitoes. We outran the snakes !

The Japs had been pushed back by this time and we engaged in recreational activities to avoid boredom. We had a good swimming beach, made our own badminton court where we played at night, played bridge and poker through the day, plus cricket.

At first we played on a matting pitch pegged down on the airstrip. We always had to have a long stop behind the wicket keeper because if the keeper missed the ball it went for six byes ! Sometimes when the match might be at an interesting stage a siren would sound indicating that a plane wanted to land. The pegs would be pulled out, matting removed, the plane land and then we would relay the matting. We regularly took drinks when this happened - lemon squash supplied by the good old Salvos.

Another diversion, invitations to which were keenly sought, was when the Missioner used to invite three men from the unit to play bridge with him. His wife always turned on a good supper which was an excellent attraction and change from the normal fare at camp.

It was towards the end of the war with Japan and we were lucky in that we saw movies almost every night. In May I even received ten shillings from the General Motors Cobbers Fund. We played “housie housie”, listened to the BBC broadcast of the cricket match between the English and Australian Services teams - Australia won the first test by six wickets.

At the beginning of June 1945 "Black Jack" Walker, the CO of the Darwin based ADHQ, came over to inspect RAAF units in the area. A full dress parade was called at our unit - rifles had not been cleaned for months. Things were going rather well during the event until somebody yelled out “Gas”.

After much hesitation and blank looks, we realized that we should take our gas masks from their pack and place them over our “features”. Well you have never seen anything like the outcome. In the packs there were packs of cards, tooth brushes, cakes of soap, spiders' webs etc. We were all chastised for our laxity !

Three or four days later the CO dropped down in the popularity poll, he introduced a weekly parade. Maybe he got a shaft from HQ following the gas mask episode.

I can honestly say that I enjoyed my work as a radar operator and there were many advantages in being on radar stations in the tropics. [Bill served on several units in NWA -some in isolated spots and others not quite so bad.]

1. Situations were mainly on islands, capes or near the coast with the pleasures of swimming beaches, fishing and the more pleasant tropical breezes and sunsets.
2. Very little regimentation, eg, no parades or strict discipline.
3. Being “in the know” of shipping and aircraft movements within the range of your station.
4. The constant challenge to plot an accurate course after picking up “ours and theirs” at maximum range.
5. Small units (between 24 and 50 men) with very young personnel.
6. The feeling that our work was worthwhile.

RESOURCEFUL ACQUISITIONING AT 37RS

Tim Jones

The unit had inadequate refrigeration. One day when two of the lads were driving around Milne Bay they noticed a couple of refrigerators standing in isolation outside the OBU. They stopped the truck and inspected the refrigerators, taking note of the serial numbers.

Bold as brass, they went up to a sergeant and told him that they had to collect refrigerators having serial numbers X and Y for repair. The sergeant said, “OK” and even got some men to help load them on to their vehicle.

Consequently 37's "frig" capacity was greatly enhanced. Eventually there was a day of reckoning but somehow they escaped any disciplinary action.

EARLY RADAR DAYS AT RADIOPHYSICS

Vern Berrett MID

Editors' Comments: Vern Berrett was one of the early direct entries whose work was mainly oriented towards airborne radar and ASV beacons but his comments about the early days at Radiophysics are seen to be pertinent. Frank Bound, Andy Thompson, Fred Eyre and Vern Berrett were some of the RAAF radar mechanics who were posted from Radar School at Richmond to assist in the construct-ion of the first AW's used in the air warning network and work on other prototypes.

Prototypes for the services were produced by Radiophysics in their laboratory within the grounds of Sydney University. They had all the necessary facilities viz - scientists, equipment and a staff consisting of Navy, Army and Air Force trained radar mechanics plus radio technicians from the PMG Department.

This development was "top secret", and for security reasons the various elements were separately allocated to the radio manufacturing industry. In the case of ASV, the transmitter went to Radio Corporation, the receiver to Healings and the indicator unit to HMV. Of course there was test equipment which had to be developed to ensure that the sets in the field functioned properly.

We were stationed at 3STT, Ultimo, which was reasonably close to the Sydney University. We were issued with special passes as there were guards at the entrance.

Workshops were on the lower ground floor and the research lab was on the top floor. The prototypes we made, were sent up to the research lab for testing. Modifications were sometimes needed and we did these as well. The process continued until the desired result was achieved.

The research lab was normally "out of bounds" to us in the workshop but on one occasion I was asked to take one piece of equipment up to the lab. The atmosphere looked to be very relaxed indeed, some of the scientists were practising golf "chip shots" into a waste paper basket. As they "chipped" they were probably thinking about some obscure aspect of their work because when the "brain wave" occurred they would work continuously day and night until they achieved their break-through or particular goal. Their lab had "live in" facilities and a tuck shop was located just across the road.

Then when the break-through had occurred, they would go home and rest for a few days. Everyone felt the sense of urgency and worked accordingly.

Much is owed to our scientists, another example is The School of Tropical Medicine where atabrine was invented or developed. Those of us who served in New Guinea know how it helped win the war.

One funny incident which happened was during the testing of the SLC (Search Light Control) radar. They had a Wirraway, based at Richmond allocated to Radiophysics for the tests, with the SLC unit being on the University Oval. Apparently the plane was flying too high for the tests because it was a restricted area. Contact was made with the control tower at Richmond and permission given for the aircraft to "fly low". The pilot took this to be an invitation to shoot the place up and he did. There was a loud roar as the Wirraway made a very low pass over the Oval and many were the faces at the windows of the University.

HOW I NEARLY OWNED THE COLLAROY PLATEAU

Harold Ogilvie

My first posting from Radio School was to 101RS at Collaroy and the unit, a MAWD, was situated on a small farm on the Plateau. The farmer, named Barsley, must have been about 65-70 years old and his wife was about the same age.

They lived in a very small and very old weatherboard cottage on the farm. The RAAF had obviously requisitioned their farm and utilized some of the sheds. These were converted into offices, a mess and of course showers and toilets were also built. Tents were pitched for the "lads" for their sleeping quarters.

Now I was not keen on sleeping in a tent so Owen Jeffers and I approached Mr and Mrs Barsley seeking alternate accommodation. They really didn't use their sunroom so they agreed to let it to us for 10/- a week. F/O David Swan, our CO, did not object so Owen and I had, for a few months, the luxury of our own room. We often spent the evening talking to the owners around their large open fire and during one of these discussions they told us that they thought they would sell the farm as they would be too old to farm it again after the war and they could use the money to buy a small modern cottage and retire.

I recall asking them how much they expected to get for the property and remember the answer well - £800 !! At the time that was an enormous amount of money for a young AC1 on 6/- a day. Nevertheless I believed that it would really be a good investment and started to think seriously about it.

A letter was written home to my father with details of the proposition but unfortunately he was extremely ill at the time and only slowly recovering from a very nasty operation. He was just not capable of giving the matter serious consideration. So I had to look elsewhere for a partner.

The proposition was also discussed with Cliff White and I informally indicated my interest to the Barsleys. Then, of all things, I received my posting to 37RS and was soon bound for the islands. So I simply forgot about the whole thing - "let's get rid of the b_____ Japs first" was my attitude.

Of course opportunity only knocks once and after returning from an 18 month stint in New Guinea I found that the sale had been made, the old couple had moved out and I guess that the new owners became millionaires just a few years after the war !!!

There were other changes too. When I was at Collaroy the first time there was a small mixed business, with an attached residence, operated by the Veitch family down in the village. Mr and Mrs Veitch were marvellous people and they gave us the "run of their home" so their place became our home too. Bill Vawdrey and I were both piano players and many a great time we had there singing around the piano in the Veitch's lounge room.

There was another attraction - their daughter Delphine - a quite lovely 19 year old with a charming smile and bubbling personality. It was quite sad when I revisited the Veitch family after New Guinea because things were not the same. The piano was out of tune and Delphine had become engaged to some Army bloke named Maher !!

THE CASE OF THE BORROWED TRUCK

Editors' Comments: The scene was somewhere up north and we are sure that the basic facts are true. There have been a few versions of this story reported to us and it is felt that the anonymity of the location and personnel should be maintained in the interests of the CO who was manipulated by some scheming men. Possibly the CO was a little naive in believing the stories the men told him but it was unfair for the troops to leave him "carrying the can" on his own.

An Army unit was stationed right next door to a radar station and when the Army moved they could not take all their equipment with them. The equipment remaining on site was to have been collected by others for safe keeping and probably for accounting purposes.

One of the vehicles left behind was a small lightweight truck or heavy ute which was regarded as being an ideal means of transporting the radar personnel to various picture shows and for touring the region. A discussion took place among the chaps and they decided to "borrow" the

vehicle and 'safely' store it out of sight. Of course some explanation as to the means of acquisition would have to be given to the CO who was a very young man.

They advised the CO that the Army had "inadvertently" left a vehicle behind and that they strongly recommended to him that they should "take care of" the machine for their good friends in the Army. The CO agreed.

A short time later, the CO was advised an inspection of the vehicle had revealed that it was showing signs of paint fade and rust. A strong recommendation was made to repaint the said vehicle to protect it from further deterioration - all in the good interests of their good friends in the Army. Once again the CO agreed.

The vehicle was duly repainted, in off duty hours of course, in a colour completely different to the normal Army camouflage green. Then the CO was advised that the ute should be regularly maintained and to achieve this, periodical trips should be made. Yet once again the CO acquiesced.

Now it just so happened that these "maintenance" runs coincided with picture nights and attendance at several far away functions. Everything went swimmingly for a few months. They even chauffeured the CO around the region. The boys all came to regard the truck as theirs !

Then all hell broke loose. Army MP's swarmed over the radar station compound asking all sorts of awkward questions. The boys kept shaking their heads, looking dumb and at the same time saying, "No, we don't know anything about any lost truck etc".

A particularly energetic MP started snooping. He wandered off towards the doover which was some 250 yards from the camp and orderly room finally stumbling onto the well hidden garage and of course "our" truck.

The boys readily owned up but qualified their statements by saying that everything had been done with the CO's approval. About this time the CO arrived back at camp and had to undergo some intensive questioning.

The MP's and RAAF SP's concluded the interviews with heads shaking in disbelief. Within days the boys had lost "their" truck and the CO was posted.

319RS AT FENTON

J H (John) Reen

Having formed the station at Mascot about April 1943 we moved to the NWA and set up the unit at Fenton which was well inland and amazingly located about 4 miles from the 319th Heavy Bombardment Squadron of the USAAF.

The camp was sited on a flat terrain amongst light to medium timber and the doover was raised on 44 gallon drums, surrounded by a "blast wall" of earth-filled drums for protection. Bushfires were a worry and we had to fight one by "burning back" from the camp perimeter.

The close proximity of the Americans caused us some concern before we got on the air. If they got a fuse cross-threaded when bombing up their aircraft or reached a similar "can't advance - can't retreat" situation" with a bomb they would tow the offending bomb on a trolley out into the bush and blow it up. It just so happened that by following a circuitous route into the bush the Americans did their blowing up quite close to our "boundary". One afternoon just after stand down they detonated a bomb and a jagged bomb fragment shot across our "parade ground". Having grabbed the piece I hightailed it over to the American CO who apologized and promised to 'put out a poop sheet" telling everyone to keep away from the Australian radar.

The station was fully operative within two to three weeks but Fighter Sector reported our tracks were parallel to those reported by other stations with the natural assumption that our assumed station position was in error. This was corrected by making a somewhat rough survey to fix our coordinates with respect to the Army Survey positions around Fenton.

There was some suspected "fifth column" activity in the area when a flare was set off about a mile from our camp when a night raid was overhead. In addition our unit truck was disabled when someone put sand in the sump. Naturally the incidents were investigated by Army Field Security but they did not uncover anything locally.

One night, during a raid, we lost W/T contact with Fighter Sector and the "scuttlebutt" was that the operators had taken to the slit trenches. This resulted in the AOC personally supervising the filling in of the said slit trenches.

Following this incident we tapped into a passing overhead telephone line near the radar station. This brought a somewhat irate Major from the Australian Ack Ack Battery at the strip. Later, when peace was restored, we passed plots direct to him as they were using the same grid references.

301RS AT KANOKOPI

Keith Hinchcliffe

During October 1942, having been at 37RS at Milne Bay for a few months, I was posted to 301RS at Kanokopi. The unit was under the command of Cpl Colin Knight, a radar mechanic, and there were three operators.

Our vantage point commanded a view across the China Strait and also the entrance to Milne Bay. Our prime job was to report on Japanese shipping movements, and of course enemy aircraft, but I cannot recall any of the latter while at Kanokopi. The set was an aircraft ASV with only a short effective range, 5-10 miles from memory, and information was passed on to Milne Bay by W/T signals.

Being so few in number and having reports of Japanese stragglers after the August/September attack the unit was deliberately made to be inconspicuous - particularly from the air.

Our desire for anonymity was not shared by a Group Captain who visited us. He chided us as being lazy pointing out that if we had had any pride in our camp, we would have put in coral paths throughout the camp. On hearing this, Cpl Knight stood with hands on hips and looked skywards and said, "and it would make a _____ good target, too !"

That comment drew the retort, "You will finish the war as a Corporal, Knight !"

Maybe the Group Captain relented because last year Col's son rang me and I learned that Col had died in 1988 from cancer but he did finish the war as a Sergeant.

My stay at Kanokopi ended in late November 1942 when I suffered an attack of blackwater fever. Fortuitously it happened on the day a medical officer arrived on an inspection. He made arrangements for me to be evacuated for treatment at the hospital in Milne Bay.

My papers were allegedly endorsed to the effect that I should not be posted to any unit unless hospital facilities were available. In true fashion, the Air Force lived up to its reputation.

In December I duly returned to 37RS from which I was posted in April to 305RS at Goodenough Island and then moved with the unit to Kiriwina in May. In 1945, I went with 162RS to Morotai and Balikpapan. Hardly being close to hospital facilities.

314RS AT ONSLOW WITH THE SECOND LOT OF RADAR EQUIPMENT

John S Flett

I took over command from F/Lt R W Fletcher on 15 November 1943. The radar and all the operator's equipment had been burnt down. A new LW/AW Mk II was sent and installed on the same site as had been previously used - on top of a hot and dusty sandhill.

We decided to "buy" a lot of sandbags and each member of the unit including me, the CO, had to spend two hours per day filling sand bags. We built the Op's room into the summit of the sandhill with a sandbagged race leading down to the base of the hill. Using cement from the

PWD we set down a cement floor and cement washed the sandbag walls which kept the Op's room free from blowing sand and much cooler. A large tent fly was used for the roof.

HQ sent down a well known painter, an RAAF accredited camoufleur, to advise on camouflage and we were then in pretty good shape.

The unit was calibrated by an RAAF Anson. Accompanying the pilot was a gentleman from the Australian Fisheries Department who was surveying the WA coast for a potential fishing industry. He claimed to see large schools of fish from the aircraft but when I was with him I was not convinced.

Soon after my arrival at Onslow a Beaufort crashed on our rather rough strip and we were asked to assist in salvaging and protecting the plane. Within a week an RAAF 60 foot launch, en route to Darwin, caught alight while refuelling and sank. The fire was attributed to spontaneous combustion in very hot weather. I had a signal to salvage the launch as it had valuable instruments on board.

The aircraft gave little trouble as a team of RAAF salvage men, under the command of a Warrant Officer, was sent to do the work. The launch was another problem.

We tried floating it using 44 gallon drums tied to jarrah beams with steel wire ropes put into place when the tide was low enough to allow us to dive down. With the next high tide the wire ropes cut through the heavy jarrah planks.

As luck would have it, an American vessel anchored about 1000 yards off the jetty and paid a visit to an American naval team living alongside us. The latter had two officers and about 50 other ranks manning four anti-aircraft batteries. Having found that the vessel was a salvage tender I asked to speak to the captain about our problem launch. Then I went out by motor boat and met the 'old man" and his corncob pipe.

He said that they would easily pick up the launch and asked where I would like it to be taken to. A landing barge was lowered from the tender and at high tide they grappled the launch, winched it up under the barge and then motored over to the mother ship. There the barge and launch were lifted onto the deck.

A signal was then sent to Western Area HQ advising them that the launch had been salvaged intact and would soon be delivered on the wharf at Fremantle. I gathered that the signal received a mixed reception at HQ and even a suggestion that perhaps I should be given a reprimand. However, they soon forgot the threat of any action when they learned that the launch had been delivered.

The RAAF salvage unit cleared the Beaufort from the strip and we went back to normal - operating as a radar station.

Onslow was a happy unit. The American Ack Ack battery stayed for about six months or so and eventually 76 Squadron moved out of Potshot on the shores of Exmouth Gulf.

As with other LW/AW stations we did have trouble with the Ford 10 alternators. The water pumps packed up and there were no spares. So my mechanic, a resourceful fellow, welded two 44 gallon drums together making one large tank. Connecting the tank full of water to the Ford with pipes kept the unit functioning for some months.

A few days before I left 314RS we were alerted to prepare for a cyclone. Jarrah planks were buried in the ground and the doover was tied down to these "dead men" as best we could with steel ropes. Some tents used for accommodation were collapsed. The cyclone levelled the jetty and bent and twisted the array but not much other damage was done.

The night before the cyclone struck I flew to Potshot and slept in the CO's quarters. S/Ldr Fletcher had rigged up a cool place to sleep with wire netting with spinifex grass for the side walls. I took off for Perth on the day of the cyclone when the whole station was wiped out.

A NASTY FRIGHT

Len Ralph

Len was posted from 306RS at Bulolo back to 41 Wing at Port Moresby. As air transport was not available he joined a convoy at Wau which followed the Bulldog Track. The convoy of 20 jeeps and trailers slogged to Edie Creek at the head of Bulldog Creek. After struggling on for many weary miles, clearing the trail where necessary, a staging camp was finally reached high on the spine of Papua New Guinea. It was a Sunday and a compulsory rest day for the drivers.

Those wishing to leave the compound during the day were warned to go armed as the local people, the Kukakuka, were unpredictable and headhunters who still had unpleasant habits like removing heads to be used as ornaments in their homes. Being so forewarned, Len took his 303 rifle and wandered along a narrow jungle track absorbed in the beauty of the primeval tropical rainforest.

Abruptly blocking his path was a fearsome figure of a dreaded Kukakuka, painted and feather-be-decked, arrow to bow !!

Petrified, Len exploded with the universal Australian greeting of - "G'day !"

He waited in fear and trepidation and was surprised with the response - "Good afternoon Taubada."

The fearsome apparition explained that he was the local school teacher and liked to hunt in the traditional way on his day off.

135RS AT PINKENBA QLD

Joan Evers (nee Ipkendanz)

Having completed my radar operator's course on 28 November 1942 I spent four and a half months at No 8 Fighter Sector in Brisbane. Finally I was posted to 135RS and we spent six weeks at Sandgate waiting for the equipment to be installed and become operational.

On 28 June we moved to Pinkenba where I spent the next year and eight months. It was our first experience on a small station "out in the sticks". The station was made up of a number of wooden huts where we slept, showers and toilets were outside and only cold running water. Each hut had a washroom at one end and a small divided room at the other end for those coming off night duty.

The washroom and ironing and washing area had a long galvanized trough with a number of cold water taps. Also provided was a number of small oval wash tubs where one could take a hip bath water being heated in the wood fired copper we used for washing. Being located next to a plywood factory we did have a ready made supply of timber offcuts.

One large hut was our recreation area which also had the canteen and reading room. The middle of the hut was marked out for a badminton court for which we erected a net. The canteen did a good trade on small stations because when working shift work, we didn't leave the station for about 10 days when we then had three days leave.

The canteen stocked all forms of toilet and washing items, papers, magazines, paperbacks, stationery, shoe polish, laces and food items such as biscuits, lollies, soft drinks, chocolates and cigarettes - all in good supply - and some personal items which were not mentioned in those days !

The Salvation Army Welfare Officer used to visit regularly and we looked forward to that as many were away from home and often lonely. They would bring reading matter, sweets and lend a helping hand to the ones who wanted comforting. From memory, I think they also supplied a sewing machine which we used to make underwear, pyjamas, sometimes a skirt or blouse to wear on leave. They were often made of calico and trimmed with coloured pockets and borders cut from table cloths - anything which did not require clothing coupons.

The station was surrounded by American units, huge stores depots, Eagle Farm Air Base, the American CB's [US Navy **C**onstruction **B**attalion], a submarine base and various Ack Ack units. Most of these units invited us to their entertainment nights, pictures and concerts by visiting American entertainers and supper afterwards - large slabs of chocolate fudge cake and coffee in their mess.

As we were some miles from transport at Ascot tram terminus we were allowed to hitch a ride on the American Liberty Trucks when going on or returning from leave - especially those from the nearby CB unit where quite a few friendships were formed.

Every so often we would have a dance in our "rec" hut and often invite friends from nearby units. I can recall that when the word got around at the CB unit, on the night we would be swamped with CB's and sometimes had to call off the dance and close the station !

Some of our American friends were appalled at the lack of recreational facilities and offered to build a tennis court. They came in with bulldozers, loads of soil and heavy rollers. Within 24 hours we had a tennis court which only had to be completed by the RAAF personnel erecting a fence. I do not remember who supplied the nets, rackets and balls but we did have a tennis court which was a very popular venue for those off shift.

Pinkenba radar station was built in the middle of a swamp and in the wet season was partly under water. To get from hut to hut walkways were built up to a height of 2-3 feet with ash and coke and we were issued with Wellington boots. During any wet period we would be infested with hundreds of small green frogs in the huts, on any ledge, tops of doors, in our beds, sleeves of coats and even shoes under the beds. Thank goodness we had green mosquito nets to keep the mosquitoes out -they also helped with the frogs while we slept.

We only had one vehicle so had to walk to the doover when it was unavailable, which was most of the time. The ute was used to get daily food supplies from the Army depot as well transporting us to the doover and other chores.

Originally I joined the WAAAF as a DMT but transferred to radar before doing the DMT course. Not doing the course did not seem to make much difference because on most units on which I served as a radar operator, I also doubled as a DMT when he/she was not available and this was quite often.

At 135RS I would come off shift at 8 am, have breakfast and then collect the daily rations from the Army depot as well as collecting the stores for the nearby ack-ack units. On other days I would collect the canteen supplies or drums of fuel for our unit. Our radar mechanics were also responsible for maintaining the ASV beacons for the flying boats using the Brisbane River and often I would drive them out to the beacons.

During regular maintenance periods, some mechanics would suggest that we fill in the time by cleaning the aerials with steel wool to stop corrosion and improve reception. This idea was not very popular as the ACO towers at 208RS were very high and the GCI ones, such as at 135RS, were not much better.

NOTES ON 50RS AND 340RS

A G (Alex) Culvenor

Alex has made notes from his diary and these have been left in that form to cover the wide field of his experiences.

1943

22 Sep 50RS, at Tsili Tsili, was raided by Japanese bombers and there were five to seven casualties including Jack Clancy whom I replaced.

4 Oct Arrived at 50RS. They lived well at this unit and the first evening meal was : Roast Beef, Roast Potatoes and Beans. Rice Pudding. Breakfast on the next morning was bacon and REAL eggs. During the month there was a Red Alert

almost every night but lots of cloud cover and bombers had trouble finding Tsili Tsili but none in finding Nadzab. It was done over daily. All native gardens were deserted and bananas were there for the taking. Poker gave way to bridge - no cash left in the camp.

19 Oct Notified that we are shifting soon to Gusap but later changed to Amami.

22 Oct Fresh pancakes and crepes for breakfast. 5th Air Force rations not bad - we did not envy the AIF boys down the track on bully beef and biscuits. Started to pack up camp. Jeep out of action because of a collision - parts not difficult to scrounge but no time to replace the front "diff" as the move is not far off.

27 Oct Notice to pack at 10 pm. Panic plus !

28 Oct Pulled doover apart to move that evening but no transport.

29 Oct Departed Tsili Tsili for Amami by Goony Birds [DC3's]. Basic camp already for us as we were replacing a Yank unit using ASV and Yagi aerials [SCR602?]

30 Oct Commenced erecting doover at 5 am with the assistance of Adams, the camoufleur. He recommended that we place the radar on stumps in case of flood from the nearby Amami River. The natives were sure we were crazy - but upon stumps it had to go. Perhaps a wasted effort when time was most valuable.

31 Oct Faults developed by the move. Self and Eric Child worked through the night on one fault or the other. Amami River strong flowing, clear water, excellent drinking, good for washing and swimming.

7 Nov Bad raid on Nadzab - plenty of dog fights overhead. Our bombers were caught about to land after a raid with nowhere to go.

9 Nov Another large raid on Nadzab. 50RS located Japs 50 miles out and fighters were up there waiting. 18 aircraft shot down. "Congrats" telegram from Fighter Sector.

10 Nov Good rations getting low - we are back on Aussie rations.

12 Nov More radar faults -more late nights - rectifier problems.

13 Nov Moved into huts vacated by Yanks. Much panic when natives disturbed a snake whilst cleaning under the hut.

18 Nov Stan M and self pig shooting in Sago swamp and became hopelessly lost. Unable to see the sun because of trees and vines - finally heard the Markham River and followed it back to camp, just on dark.

23 Nov "Ding Dong" making a banjo from a cake tin and telegraph wire.

25 Nov Cleaned out camp and burned the rubbish. Several bullets in it - much noise.

26 Nov Tiger Moth brought the first mail in two weeks.

27 Nov Padre arrived in a Piper Cub.

30 Nov First Goony Bird since the Yanks departed. Lots of mail. 2000 lbs of gear, 29 bags of parcels.

1 Dec Heavy rain most nights. Aussie rations now, have been spoilt by 5th Air Force rations.

18 Dec Rifle shoot was interrupted by a Piper Cub which stalled whilst landing and crashed. YMCA officer hurt by box of Comfort Fund stores hitting him in the back. The ex-B25 pilot lost his teeth when his face hit the instrument panel. A DC3 on the way to Gusap called later and picked up the pilot and passenger.

23 Dec Harry and Vic shot a 10 foot carpet snake at the latrine.

25 Dec Decorated the camp. Natives arrived for a "sing-sing". The dance started at 3 pm in the camp and finished at 11 pm - adjourned then to the village through to 8 am.

26 Dec Natives brought a live young pig to camp as a gift. Much bartering however by the boss for the "gift". Camp in a terrible mess after the "sing-sing".

27 Dec Doug arrived with my piano accordion and its end stove in. Mechanics pulling the wrecked Piper Cub to pieces.

1944

8 Jan Loads of petrol to roll from the strip. We dumped them into the river and pulled them out at the swimming hole next to the doover and the generators.

10 Jan First full parade for weeks. The boss went mad at the new cook for not knowing drill. Poor devil had never seen a rifle before coming to 50RS. He couldn't cook either ! Padre arrived by Tiger Moth at 2.45 pm.

15 Jan MacKay not well - fever of an unknown type.

16 Jan Earth tremors. Tents and huts shook. Cricket popular but it is too hot. There are some good players among the young fellows in the camp.

28 Jan Went up river to cut black palm logs for seats in the new chapel and recreation hut. Floated the logs down river but experienced some trouble as black palm is extremely heavy and was not showing above the water.

31 Jan Another "bull" parade to match all "bull" parades. Speech lasted 40 minutes with discipline, respect and dress the order of the day. Bill Glover fainted in the heat. It turns out that he has the "wog" also.

7 Feb Yours truly also not feeling well. Several in the camp feeling likewise.

10 Feb Liberators going up the valley in droves. They appear to take off in batches of ten, then circle until it builds to fifty or so at a time. Eric McCoy, Frank Madden, Eric Child and I went up river to make a raft. We had a narrow escape floating it down, it turned over on top of us in the fast river. We finally walked home and left it.

13 Feb My temperature is over 100^{o} - really feeling ill. I think the medical orderly is down with malaria and no help to any of us.

14 Feb Ted Furlonger, ex 3BA Ballarat, arrived with guitar & all.

18 Feb Gun fire from the other side of the valley. Lightning aircraft strafing the grasslands. The pilot of the Piper Cub told us of an old airfield some Japanese stragglers held for two days. The boss livened things up - no shooting, grenades to be primed, no unconcealed lights, prime the doover bomb - carry rifles everywhere.

24 Feb Not well. Attempted to play cricket. Unable to eat.

27 Feb Signal arrived alerting us to possible enemy activity. Then Doug came over to our camp and reported that they had expected a paratroop raid on Nadzab. Jack Grey, Ritchie, Chicka Begg and Joe Haines posted. Poor Joe nearly went mad after receiving the news, hit his head on the boss's door sill and was dazed for one and a half hours.

2 Mar RAAF dropping bombs on something on the other side of the valley. Vic feeling better and diagnosed my trouble as being the same as Bluey, jaundice. He will probably send me to hospital - no fatty foods, only dog biscuits and jam the order of the day.

5 Mar Still waiting for an aircraft, although I am feeling better with the diet of biscuits and jam.

6 Mar Decided I need not go to hospital as I am feeling better and terribly hungry.

13 Mar Transceiver speaker transformer open circuit due to corrosion - a typical fault in this country. Rewound the secondary.

20 Mar Herb Dearicott departed on posting, the Douglas was into the grass before it lifted.

24 Mar The boss wouldn't allow any work on the strip, after all the work making a grader !

2 Apr Doug Harold left on a kite to go to hospital. Five more cases of jaundice. Yours truly beginning to feel much better. In fact putting on weight. Explosions and dust on the other side of the river, causes unknown. We understand that a Liberator blew up in Nadzab this morning, according to a radio message.

5 Apr Set up an aerial to get Port Moresby. A Douglas brought mail, butter, bread and meat. Manufacturing of crib boards from black palm is now popular. Made a note in diary that Herb was seeing "Pat" - who was Pat ? Was she Eric's future sister in law ?

11 Apr Ben brought back from Nadzab a few point fives, red black and blue ones. I tried to delouse a blue one on the primus. It exploded of course, no one was hurt but the primus was seriously dented.

13 Apr Tension in the camp over working parties to unload the Douglas aircraft. McCoy is the centre of the dispute with Siegele and was put up before the boss.

14 Apr Extra duties because of NCO's meeting to clean up the tension in the camp.

21 Apr About 100 bombers went over early headed for Wewak no doubt. Around 2.30 pm 60 or so staggered back - not really indicative of losses. One struggled and circled the camp. The aircraft belly-landed somewhere across the plain and a Thunderbolt fixed its position by diving low over the kunai grass. More firing across the other side of the valley with fighter craft strafing something on the hills. No explanation given.

21 Apr Left at 6.30 am for Naroween(?) with Roy, one of the guards. Back home at 4.30 pm with a load of fruit. That evening Roy had a nightmare. He thought he had a snake in his bed - we thought that the Japs had him and the camp was in an uproar with yelling.

30 Apr Cpl Friday arrived to test the doover.

1 May Much labourious work repairing a burned out soldering iron. Had to shorten the element and will have to take care not to let it burn out again.

3 May Reports of scrub typhus at Bat Island !

9 May Decided to slaughter "Jenny" the pig for fresh meat. We got things ready for cooking in boiling water but no sign of "Jenny". She appeared at 2.00 pm and we finished dressing the carcase at 6.00 pm. Filled the refrigerator with meat and tried pickling the remainder - pork for dinner was beautiful.

12 May Brought the old Piper Cub frame up from the strip.

14 May The pickled meat will not keep and we had to throw it out.

15 May On the move - informal parade to get instructions. Five of us were detailed to pull the doover apart.

16 May The Head Boy and his Mary were upset by our departure. We were all packed by Wednesday the 17th but no transport.

18 May First Douglas arrived at 7.30 am. Two aircraft, working in relays, moved us to Nadzab where we staged camp - not going direct to Tadji. What a day ! Finished at 6.00 pm, only a snack to eat, slept in our clothes at 48OBU as we may have been called out at any moment.

20 May This place has parades. Eric, Stan and I went AWL for the morning parade so copping afternoon fatigues. Still waiting to move.

24 May Up at 3.00am packing camp gear into trucks, then unloaded them.

31 May Battery chargers stolen.

2 Jun Advised that we are on the first available kite for Tadji. P38 and P47 collided overhead in a mock dog fight. The P47 pilot parachuted but the P38 crashed and burned out killing the pilot. New CO arrived, his name is Cedric Zahara being ex-3DB in Melbourne.

7 Jun Rumour of the Second Front in Europe.

8 Jun What a mix up ! Started loading trucks at 1.00 am. Aircraft everywhere but no one to advise which were ours. We hastily prepared handwritten manifests but three aircraft went without them. The aircraft loads missed the special aircraft and one almost failed to become airborne as an extra truckload was put on board. The pilot was white with anger and furious as well. We were unable to take petrol and this did not prove to be a problem as Tadji had plenty. We "acquired" some new tents in the loading bay as ours were almost unusable. I stayed behind to clean up the mess in the loading bays and to burn the bits which we left.

9 Jun Last aircraft loaded at 1.00 am, departing finally at 5.45 am. 50 RS turned out to be staging on the beach pending the outcome of shelling of Jap positions from off-shore ships and bombing by aircraft.

11 Jun First chance to do maintenance on the array and doover. The gear is badly in need of a major overhaul and the heavy rain did not help.

13 Jun Working continuously now to put the gear in top shape as we understand that we are moving ahead with the 5th Air Force. Many problems with the time base, intermittent faults plus a snake under the cabinet. Apparently it moved in to dodge the rain.

17 Jun Discovered that the wooden plates for the turntable had disappeared, probably left behind at Nadzab, Eric Child made replacements. Helped Arthur develop photographs for the Yanks in my spare time.

26 Jun News arrived that 50RS would definitely be disbanded and that a new unit would press ahead with the Yanks. Everyone was very upset at the decision, mostly because we were no longer part of the 5th Air Force.

30 Jun Talk of a Jap push -everyone on the alert.

2 Jul Eric posted home and I was posted to 340RS.

5 Sep Tom is in hospital with the wog again. This will delay his trip home as he has been posted. Cleared his papers just in case he is able to make the aircraft tomorrow.

9 Sep Over to Alli Island to repair a motor generator set for the Army. Later I copped guard duty for not changing the batteries in the boss's radio. As if I did not have enough to do.

16 Sep We are about to move to Aitape - but not safe as yet. Anything is better than loading bombs.

19 Sep Strong winds very nearly wrecked the tent.

28 Sep 340 still not moving. Colley went to look at another site by L5. Too swampy.

30 Sep Helping George Murray with spares stock taking. Admin. is getting bound up with paper work - war must be nearly over. All jeep and generator spares we had scrounged had to be listed !

1 Oct Cal and Les caught selling grog to US 164th. MP's are everywhere.

6 Oct Rebuilt chapel amplifier for American Chaplain. Payment was two battery operated portables - neither worked.

9 Oct Black day. High surf off our beach. Wind brought down several tents and six drowned.

12 Oct The last items of 50RS gear shipped to Madang. "Zara" posted to 340. Beaut.

5 Nov My box beside my bunk stolen - along with wallet and papers. Got my suspicions but no proof. Tent was in darkness whilst at the pictures.

6 Nov Found the empty box on the beach.

13 Nov Spending time refurbishing the equipment. Changed frequency of BL4. Stan not looking too well - very thin.

19 Nov On duty - so started making a new collar for the doover.

20 Nov Doug Dowe came down from 152RS for lunch. Helped with Mess set. F/O Reid arrived later for a yarn.

21 Nov George and I worked late on the new collar for the doover, it looks OK.

22 Nov Trouble with the pumping unit we scrounged at Nadzab. Fitted new pulley end seals. It's just worn out.

23 Nov On the air at last. Strange aircraft about. 152RS and 340RS both plotted it. Whilst on this beach Doug Dowe and us at 340RS spend nearly all our spare time repairing wireless sets and amplifiers for surrounding camps. All camps alerted that we need parts.

29 Nov Cricket very popular between units. We manage to play about twice per week. Some of our young fellows are good -but overall we manage to get beaten.

2 Dec 340RS is moving back to Aitape - so the big clean out begins. Boss getting worried about the old Admin building on the hill so we drove up to make a claim on the site and left Stan and Laurie on guard.

4 Dec We start move back to the Hill - slowly - as the Yanks interrupt with off shore shelling over the Hill.

5 Dec Archie shot himself in the foot - visited him in hospital. Our camp is set up on the beach below the Hill. George Murray, ex-builder, is casting a toilet bowl from cement and plans to install a septic tank.

17 Dec Rumour that all 15 month tour troops to be posted home. Suits me.

20 Dec Doover now operating on the Hill as AIF pull out.

24 Dec Posted Home and leaving for Port Moresby on 26 December.

GOING ON LEAVE

Tony Craig

Going on leave from 56RS at Cooktown was quite an involved procedure that started with a trip by Hale's boat to Cairns. This boat called in once a week if we were lucky. An alternative was to hitch a ride with either a RAAF or American plane at the strip.

At the time of my leave planes called in when they were going north but overflew the strip when flying south. First I put in some 36 hours playing black jack with the Americans stationed at the American Weather Office - luckily winning a bit of cash in the process.

But then things became a bit desperate as my leave was passing and I was getting nowhere. There was only one solution and that was for me to go to New Guinea on the way to Townsville. So I joined the crew of a DC3 from 36 RAAF Squadron.

We flew to Port Moresby and then did a quick trip to Milne Bay. This was in the middle of the Milne Bay Do and we must have established the world's record for the shortest stay in the Bay - only long enough to unload. Still with the crew I flew back to Port Moresby and then on to Townsville the following morning. They even let me fly the thing.

My leave, like anyone else's, passed too soon and I had to go back. But luck was on my side because everything was so clogged up with traffic that I got an extra few days until they could get me on a north bound train. Here my luck held as for the first time in my life I enjoyed a first class sleeper. Still lucky - there were two chaps from my radar course in the same compartment.

They had a couple of bottles of cheap wine that seemed to have "evaporated" during the night on the way to Gladstone. Naturally we were hungry when we got there and leaving most of our gear on the train, we went down the main street looking for a decent restaurant. We found one that served steak. It was so good that we had a second one. On looking out we found that the train was "choofing" on its way northwards. We had overstayed our welcome.

All sorts of plans were explored, such as getting a taxi, when about half an hour later along came a goods train. The four of us climbed aboard, walked over the roofs of the few carriages to get to the engine. There two of us stoked the engine in an endeavour to catch the troop train, which we had missed. As the day wore on we realised that there was no chance of this happening.

Towards the quiet evenfall of the day we pulled up the goods train wherever we thought there was the possibility of a hotel where a quiet beer might be had. About midnight we arrived at Rockhampton long after the troop train had gone through.

We wandered the streets looking for a hotel which would put us up or anywhere else to sleep. I can still remember seeing this brand new Services Club, brightly lit up but it turned out that it had not then been opened.

However, there was an open window and inside those beautiful beds. So we tumbled in through the window and slept on top of those beds.

With the dawn there was the sound of aircraft. That's it, I thought so we hitched a ride out to the strip. We went to the American Master Sergeant, the Director of Air Transport, and got put on the manifest for Townsville. Soon afterwards we boarded a beautiful Douglas aircraft which must have only recently arrived from the States.

We arrived in Townsville a long time ahead of the troop train. Fortunately some other friends on the train had looked after our gear for us.

We were sort of happy ever after.

A SHORT SPELL WITH THE RAN

Hugh Peaston

Having spent a month down at Port Kembla, after being at Shepherd's Hill, I got posted to, of all places, HMAS Rushcutter where the Navy was starting up a radar school on HMAS Kuttabul. Together with a couple of other guys, we were expected to set up a mechanics training course for the Navy.

They were equipping at that stage Hobart, Warramunga and Arunta with English radar equipment and we set to and drew up a curriculum for them. We also helped with the installation on the ships. We trained quite a number of naval radio mechanics in the intricacies of radar.

I guess you have all heard that we used to say to people coming to the Radar School that if you were mad it did not matter, it really helped to understand radar.

Fortunately for me I had left Kuttabul when the Jap subs came in and sank her. At the end of the time spent with the RAN I was posted back to Richmond where I found that I had been made a sergeant instructor.

That was the beginning of my fairly long association with Radar School.

AMERICANS AT RADAR SCHOOL

Hugh Peaston

Sometime late in ’43 or mid ‘43 a Colonel Quanrud from the 13th American Air Force heard “that the RAAF had a radar school”. When he came down to look at it, he was totally amazed, completely fascinated by the technical excellence of our mechanics. He had heard field reports by this time and so he promptly talked to the powers that be at Wagga - no I think he bypassed Wagga and went straight to Melbourne.

American CO’s in the field were asked to nominate men to attend Radar School at Richmond and they apparently seized the opportunity to rid their unit of all their misfits, mischief makers, malcontents and murderers. I had the job of receiving the first course of about 25 Americans to arrive at Radar School under Quanrud’s orders.

They came to the School and a more nondescript mob you have never seen before. My CO Jack Cramer-Roberts said - “Hugh, they are all yours. Prepare a course for them to go through”.

So I set to and wrote on the black board a whole series of questions, about 40. So I said to this mob - put your name, number and rank at the top of the page, pick up your pencil and start answering the questions starting at 1, when you reach a question you cannot answer, put your pencil down. The whole crew put their pencils down before they had reached question 1.

As it turned out, they were diesel mechanics, automechanics, messmen - almost any mustering except radar. They were terrible people really. They actually murdered the barman at the Windsor pub and a number of them went AWOL. We deported three back to America. Those who murdered the barman were put in clink and I think that they too were deported.

The upshot was that whole mess was sorted out and the next lot we got were technically trained.

From then on we got groups of about 20 Americans per course and as their numbers grew we asked the Americans to supply technical officers as well to assist in the teaching situation.

We got a couple of very good guys. I had a young man called Lawrence C Murdoch who was about 6 ft 6½ inches. He had to come into the room twice before you could see him. He was skinny - a graduate from MIT - and he had so much theory that you could not believe it. But he could not solder, he could not do anything with tools at all. He was a very nice informed young man. I had him on my staff together with some of other American officers, a Captain Howells and a couple of others.

We literally ran a second school because strangely enough they did not learn at anywhere near the same rate as the Australians. Their basic training in other words was very much behind ours. Because of their tremendous manpower, the Americans tended to segment their people into highly specialized areas. The concept, which the Australians had, that each mechanic had to be totally self sufficient in all the disciplines required to keep a radar station going had never occurred to the Americans.

For us to impart our training philosophy to them was quite difficult and in fact to train a course from America usually took four to six weeks longer in order to graduate them. It was a peculiar thing really, we found that in any course of 20 or so you could find one or two top people and then there was a tremendous gap down to the less than 50% area.

The comparison with an Australian group would be that, in 20 people, you would have four or five in the top position and then the next seven or eight were not that far behind and it was rare that you found somebody totally incompetent or incapable of picking up the technology.

We trained hundreds of Americans and the interesting aspect was that Quanrud was so impressed with the LW/AW that he would order them in tens whereas the RAAF would order in ones or twos.

MONEY NO GOOD

Anonymous

Editors' Comments: The basic facts of this story are true but, for obvious reasons, the number of the station, its location and the names of personnel and the visiting officer who told us the story, have been omitted.

The scene was a radar station on a small tropical island, a verdant jewel in an azure sea remote from civilisation. A lonely radar operator reclined beneath the swaying palms on a coral strand lapped lazily by the refreshing water from which he had just emerged. Strong bronzed and virile he watched in fascination the brilliant shafts of light from the westering sun radiating across the cloud-scattered sky and enjoyed the balmy evening air heavy with the scent of frangipani.

As the rays of the sun faded, the airman realised he was not alone, another subtle fragrance stirred his senses and the one melodically spoken word "Tabbita" sent his mind flitting to a vision of the comely village girl he had openly admired a day or two previously. A subtle caress, an eager response led to a predictable outcome in "this other Eden". This secluded spot became a trysting place and wisely or unwisely this airman rewarded his paramour with silver coins for which she had expressed a great desire.

Farther along the coast, on a rocky vantage point, some American spotters kept a lonely vigil and it was not long before this libertine of the balmy tropical nights had added some more silver dollars to her piggy bank.

Aiming at maintaining a monopoly, our American Allies - in both love and war - upped the ante.

The "gift" soon became £1 and this was the "going rate", in accordance with the laws of supply and demand, rapidly became £5.

The resulting effect was that this young girl, a member of an otherwise impecunious race, was rather quickly being put on a path to becoming a local millionairess.

The above describes the events before my visit to the unit. On my arrival the CO said, "Glad you've come along. I have a problem that should be right up your alley considering your experience as a patrol officer. It concerns a native lass and I've agreed to hear the headman's complaint tomorrow".

So next morning we set up court in the native built recreation hut. A grim faced headman and several village elders - a picture of misery - were ushered in by the guard sergeant.

Following came a pleasant faced village girl, all of 16 years old, in an advanced stage of pregnancy, obviously enjoying the attention her presence created. She accommodated her swollen body on a proffered stool and surveyed the room with expectant eyes.

The gravity of the situation appalled me. In anticipation of the complaint yet to be made my mind frantically sought a just solution aimed at keeping the matter suppressed at all costs.

"What is it you wish to tell me, headman?"

"Tabbita, the money is no good."

"What do you mean, the money is no good?"

"Tabbita, the Americans say the money is no good."

Without much ado the headman strode across to the teenager, took the woven basket which she was carrying and emptied the contents on the table before my eyes. Spread on the table were Australian and American coins, one and five pound notes, lots of greenbacks of various values and **MONOPOLY MONEY** in denominations up to a hundred pounds - no wonder the Americans had become frustrated.

"Yes," I said. "Some of the money is no good. The Air Force will take the bad money and pay you ten sticks of trade tobacco and ten tins of bully beef for it."

The hang dog looks of the village headman and his henchmen disappeared like magic. With "Thank you Taubada, thank you Taubada," they gathered up the 'good' money and departed with glee while the girl waddled along behind still clutching her little basket. Well, what had I been worrying about? It was only a matter of priorities as far as the headman was concerned.

Maybe the Comforts Funds people would have been surprised if they had known how some of the game's money, provided by them, had been used - or had it been abused?

FOOD AND FUEL AT 304RS

Cec Blumenthal

Food arrangements under the Army were rarely adequate. At 304RS on Normanby Island we were initially on American rations. While these were not entirely to our taste we always received our right issue.

When we came to be supplied from Australian Army depots things changed dramatically. Since we had no say in picking-up supplies, not once did we receive our balanced rations. Anything not available at the time was made up with dehydrated parsnips or carrots. Yeast for bread making rarely arrived, probably filched by someone making jungle juice.

At one stage I got so sick of seeing all those drums of parsnips and carrots that I sent 70 drums back to the Army which caused some ructions.

Initially the cook made scones using Enos Fruit Salts from the canteen and then I found a recipe from one of the elders at the local village for making sourdough bread using coconut milk and lemon juice cordial, also from the canteen.

But we were more fortunate than the chaps out on Bathurst Island on 38RS as we had a ready supply of fresh fruit, some vegetables and at times a good quantity of fish.

Because of the poor food supply from the Army a nearby unit had overdrawn some 1200 rations in a few months. The situation did improve when someone at that station managed to get a complaint right through to the Minister in Canberra. He arranged for an independent investigating officer to be sent to our neighbour and to 304. I came out of this rather well as I had a 2 inch thick file of unanswered correspondence on the matter.

Fuel for the Ford 10 motors driving the alternators became a problem when we were told that we could not have any more 73 octane petrol because it was needed for light aircraft. So I ordered 56 octane petrol known as range fuel as higher octane fuel was unsuitable for the motors - overheating, burnt out valves, etc.

Instead we got distillate as though we had an oil burning stove. This happened several times even though I had been most specific as to the 56 octane rating. Eventually the problem was solved in regard to the petrol.

I then recommended that the distillate be removed as it was a fire hazard in the bush and suggested, as an alternative, they could provide an oil burning stove which could ultimately dispose of it.

So we received a nice three burner oil range to replace our wood fire and camp oven.

COAST WATCHING ON BATHURST ISLAND

A E (Bill) Woodnutt

Editors' Comments: Strictly speaking, coast watching is not radar and should not be part of this history project. However we feel that since its activity has not been reported elsewhere, and it was a form of air warning, it deserves inclusion.

The American 49th Pursuit Group, under the command of Lt Col Paul B Wurtsmith, arrived in Darwin about three weeks after the first raid. Bill Woodnutt has said that it only took one raid for Lt Col Wurtsmith to realise that more time - adequate warning - was needed to get his aircraft up to 16,000 feet to meet the enemy. He went further by saying that all the credit for the establishment of the coast watchers, and the successful tactics used against the enemy in the many raids which ensued, should be given to Lt Col Wurtsmith.

Late in March 1942, on the recommendation of the Signals Officer F/Lt Reg Thorogood, W/Cdr Tony Primrose decided to establish a coast watching station at Cape Fourcroy with LAC Bill Woodnutt, a W/T operator, in charge. Two other airmen, AC1's McCoy and McKenzie - both clerks - accompanied him.

Cape Fourcroy was the closest point to the territories occupied by the Japanese who used it as a navigation point and a rendezvous for the fighters and bombers before attacking Darwin. Low flying enemy aircraft often buzzed the island so the camp was heavily camouflaged.

Bathurst Island Mission was abandoned after suffering a rather prolonged and severe enemy air attack. However, two natives, Louie and David, were picked up from the mission just beforehand. These natives stayed with 8X2 and 38RS and more can be read about them in Hal Porter's *Adventures in Radar*. Brother Smith, Father McGrath's offsider, gave the group a 10 foot dinghy which when fitted with makeshift mast and sail was put to good use.

The call sign for Cape Fourcroy was 8X2 and Fighter Sector at Berrimah used 8X7. During daylight hours R/T (Radio Telephone) was used because they enjoyed good clear signals. But towards evening the signals faded and it was necessary to switch to Morse Code or W/T on a higher frequency. This necessitated changing aerials and retuning the transmitter. After heavy losses were inflicted on the Japanese by the Kittyhawks during daylight raids night raids increased and of course night schedules had to be maintained.

The unit was extremely isolated and probably the most advanced outpost of the RAAF at the time. But one consolation was that they had an unlimited supply of beer and stout which was salvaged from the wreck of the "Don Issedro", a cargo ship from the Philippines, which had been bombed and gone ashore about three miles from the camp site. The beer was cooled by an innovative adoption of the old Coolgardie safe. A tepee shaped tent was made from sticks and cotton material and cooling was achieved by dripping petrol onto it.

From its beginning, 8X2 was very efficient and their efforts were recognised as evidenced by the following letter:-

Headquarters & Headquarters Squadron
49th Pursuit Group
USAFIA

26 April 1942

To : AOC (Air Commodore Bladin)

Subject : Commendation (Act Cpl Woodnutt)

It is the desire of the commanding officer of the Fighter Sector to bring to your attention the excellent performance of the W/T crew stationed at Cape Fourcroy, Bathurst Island.

On their first day in operation the messages received from that station were letter perfect and the information furnished as to the number of enemy aircraft involved in raid, altitude, course etc, were of great value to the controller.

This station has definitely proven its value and Act Cpl Woodnutt and his crew are to be commended.

Paul B Wurtsmith.
Lt Col, A. C.
Commanding.

There was a makeshift landing strip adjacent to the camp and Doc Fenton made several visits. He apparently made his first and only attempt at dentistry on Bathurst Island, using a foot treadle drill, to fill two "mean" molars which were troubling Bill. Two Navy pearling luggers, the "Ibis" commanded by Lt Eric Soderstein and the "Red Bill" commanded by Lt Bill Thornton, made irregular visits and presumably carried both mail and supplies.

Cpl A E (Bill) Woodnutt received the BEM for rescuing the navigator of a Beaufighter after it crashed into the sea. John Scott, a radar mechanic, witnessed the event and thought it rather ironic that the pilot who could swim landed on the land whilst the navigator, who couldn't, landed in the sea. Bill took a small rubber dinghy and the whole rescue took over an hour and a half in shark and crocodile infested waters.

In Bill's own words. "The ocean swim was not too bad, though I feared the huge sharks which I had often seen cruising these waters. Crossing a rather wide estuary that lay between my camp and the beach on which the pilot, Tiny Wilkins, had landed was a different matter. This estuary teemed with crocodiles, which I had many times observed sunning themselves on sandbanks and beaches. As I had long since learned the wiles of the "croc" and the danger of even approaching the edge of these waters, I wasn't frightened, I was bloody terrified. To this day I suffer from sharkophobia and crocodilophobia."

The citation said that the BEM was awarded for courage and endurance displayed in rescuing a comrade [Sgt Byrnes of 32 Squadron] from the sea on 29/12/42, while with 5FS at Darwin. Cpl Woodnutt later remustered to aircrew and ended the war as a Flight Lieutenant with the RAF.

This incident occurred on Bill's second tour of duty at Cape Fourcroy as he returned to Darwin after a few months but was asked to "volunteer" to return after a very short spell on the mainland. 8X2 stayed on Bathurst Island until Christmas Day 1942 when 8X2 closed down and the members enjoyed a good sit down dinner with 38RS at Lubra Point. A second similar unit, 8X3, was located on Peron Island, to cover any Japanese raids which might come from Ambon.

SHIFTING 101RS TO COLLAROY

Prof D E Swan OBE

Originally 101RS, a modified SCR268 known in the service as MAWD (Modified Air Warning Device) was stationed at North Head, Sydney, NSW, within the Army area. P/O Swan was almost straight out of Radio School. When asked about circumstances associated with moving the unit from North Head to Collaroy he said:-

"Well I cannot remember the exact dates. It was somewhere towards the end of the first quarter or the beginning of the second in 1942 and we only operated at North Head for a couple of weeks. There was just me, as Radar Officer, with four mechanics and eight operators. They thought that this was an economic way of running the station. We ran the station within the bounds of North Head Military Fortress.

One evening I was called in by Brigadier Whitelaw, who was called the Commander of Fixed Defences and he pointed out that our radar set was ruining all his communications with his coastal batteries north and south of Sydney and he asked me if I could find another place.

He also mentioned that the Jap ships were in the Coral Sea and that if we could site MAWD better, Sydney's air warning would be improved considerably.

So next day I took one of my four mechanics, a fellow named Andy Thomson, and we boarded a double decker bus at Manly and sat right up front at the top. We went out to Palm Beach and on the way back we got out and walked right up to the top of Collaroy Plateau.

With the help of the Army we moved forthwith to Collaroy which remained as a RAAF radar site until the end of the war."

Imagine in the RAAF today a young P/O, only a few weeks out of Radar School, being allowed to resite a station after a walk-cum-bus trip with one of his mechanics.

NEVER A DULL MOMENT (305RS)

Editors' Comments: A more detailed account of 305RS may be read in the book *Secret Action of 305* by Norm Smith and Frank Coghlan, available from the RAAF Museum at Point Cook, Vic. The following story covers only one incident.

Early in May 1943 305RS and its protective platoon of Australian Infantry abandoned Goodenough Island and sailed unescorted northward aboard the ketch rigged vessel "Will Watch". In hindsight it's difficult to believe that this old wooden 100 ton freighter could have survived with sails hung in the breeze like a beacon for Japanese submarines and aircraft which frequented the area. Certainly those aboard felt vulnerable and appalled when they realised that they were evidently expendable as well.

But a manifestation of Divine Providence swept in on the wind. Huge cloudbanks obscured the ship from above and reduced visibility at sea level. Without doubt a fair percentage of the aircraft that droned overhead belonged to the enemy. Fortunately none broke through the cloud base.

The station was installed successfully on Bomatu Point, Kiriwina. Immediately long-range warnings of enemy aircraft approaching from the north were radioed to Milne Bay. RAAF and Army guards set up defensive positions around the camp and doover using chunks of coral and bags of coral sand, as no native rock or silica sand existed on this completely coral island. A single anti-tank rifle and Bren guns were set up pointing out over the deep waters of the Solomon Sea. Rostered guards searched the horizon night and day for signs of an enemy attack on this outpost.

More than a month passed and supplies of torch batteries, among other things, were exhausted. The fitter was required to refuel the Howard motors at midnight. Following this procedure on the night of 23 June he placed a kerosene lantern in the usual "safe" place along the tunnel-like track through the lush tropical growth to the power units. As Allen Browne was pouring petrol into the tank of one Howard, fumes must have drifted to the lantern and caused a flash to the drum of petrol and then on to the engine room.

Half an hour later the result was one severely burned Fitter DMT, one destroyed native-built engine room and two partly destroyed Howards, cooling under piles of coral sand emptied out of bags snatched from nearby gun positions.

While the medical orderly cared for Allen Browne, personnel on duty cleared up the area as the radar mechanics set about reconstructing one of the Howards. Four gallon drums were improvised as petrol and oil tanks; doover parts were used to replace the magneto so becoming the only Howard in the SWPA with electronic ignition and bared alternator wires were taped.

The bitzer burst into life and the radar was on the air again at 1600 hours that day. However, the emergency W/T power was out of commission and contact had been lost with Milne Bay for fourteen and a half hours. This led Fighter Sector to suspect that the Japanese had overrun the station. WOM Dick Trotter had to supply the name of a close relative before the controller was assured that normal operations were recommencing.

Such a conflagration would have been visible many miles out to sea thereby possibly alerting an enemy submarine if it happened to be on the surface charging its batteries. As night fell the guards were doubly alert and a tense atmosphere prevailed.

Guard Ron Ackerley called the senior radar mechanic to the doover in the early hours of next morning. There on the oscilloscope trace stood typical triangular blips from surface vessels, pulsating in unison with the ocean swell. CO Bruce Aldrich and the Army guards were alerted by phone and a general stand-to ordered.

Vessels were dimly visible as they came inside the radar's minimum range of two miles. Army guards watched the craft as they moved westward parallel to the reef. Several miles on they

were amazed to witness a full scale landing by American forces through a break in the reef which otherwise encompasses the island.

According to an announcement on radio KWID, San Francisco, it was a great victory for the American forces. It was broadcast as part of the 4th of July celebrations in 1943 that Woodlark and the Trobriand Islands (which includes Kiriwina) had been captured with "little or no resistance."

Great surprise was expressed by the Americans when they discovered that 305 RAAF radar station had already "captured" the island. They also added that it was just as well that nothing had been done by the Australians that may have been interpreted as opposition to the landing.

What if the engine room fire had been a few hours later ? Many years afterwards one of the mechanics, who was there at the time, was told by the custodian at the minerals section of the Brisbane Museum that, while acting as a liaison officer with the Americans landing on Kiriwina during WWII, he was greatly surprised to find Australians already in occupation. Sometimes, methinks, the radar hierarchy may have kept their secrets too well !

EXTRACTS FROM ADVENTURES IN RADAR

F H (Hal) Porter

Editors' Comments: Some more extracts from Hal Porter's book *Adventures in Radar*.

No One Wants to Know Anyone Who Wants Anything

The usual business of scrounging began as soon as I learned that I was appointed as CO of 109RS which was a MAWD and on its way from down south. It is true that "no one wants to know anyone who wants anything". I did "fairly legally" get a Chevrolet truck as the first step but thereafter things were a bit tight.

Official sources were not interested - too much bother. The Americans helped where they could. Darwin's Army Town Major gave permission for us to take a water tank from a certain house. This we did, starting with no tools other than a bar of steel and a hacksaw. Two of the mechanics, Bernie Heinz and Bob Harrison and I returned in triumph and then started the task of cleaning and repairing it.

Rumour advised that two new refrigerators were in the Bank building but the Town Major refused, as they were civilian property. A week later the Bank and the refrigerators disappeared, in rubble, under Japanese influence and we still had no refrigerator. Tents arrived and gradually the station acquired enough gear to make a camp. The medical orderly had somehow got round the doctor and obtained his kit of necessities.

New bodies arrived, eager though untried. A power line was needed, so shadows slipped into town and climbed power poles. Someone's lights went out but back at 109's base a nice coil of wire rested against a tree.

During one raid a bomber was shot down, and long before Intelligence arrived a bomb release panel with its switches, parts of a radio set and a coil of wire were hidden under a tent. Many stations in Darwin operated on bits of Jap planes, as there were few spares available.

After much begging, pipes and water pumps were obtained from the Works Maintenance Unit. While I was arguing with F/Lt Murchison that more pipes were required, two radar mechanics, "Mac" McDougall and Bob blissfully loaded the truck with their requirements. And so it went on. Timber was scrounged. Galvanised iron and even a few tools were found. The shovels the Army had left overnight at the waterhole they had been digging were not forgotten.

The unit moved 100 miles from 105RS to 31RS where Ray Ryan welcomed us. Our hosts at 105RS were glad to see us move as they found our scrounging came very close to home. Phil and I had some trouble keeping the peace knowing that anything left unattended would be lifted.

MAWD Arrives

An urgent call came one night for all available personnel to go to Winnellie. As many of 31's and 10's personnel as possible, armed to the teeth, wearing tin hats and carrying gas masks boarded the truck and were driven at break neck speed by LAC Xavier to Winnellie. We were worried. Were there parachutists or saboteurs ? Instead an unperturbed American trotted up and said, "Say you guys. Is this your equipment ?"

Sure enough there was our MAWD - two huge trailers perched on two railway trucks in the siding. With much cursing the unloading was achieved and the long 11 mile tow to 31RS began at 2200 hours. We had an American guard, or was it guardian, PFC Al Troop who curtailed our speeding and we then proceeded at the stately speed of three miles per hour.

MAWD had been carried part of the way from Brisbane on the "Spirit of Protest". Perhaps the officials of the NT Railway were unaccustomed to handling large trailers on their system. Whatever the reason, no one measured the height of the trailers or the height of the lowest overhead railway bridge. The result was the complete demolition of one of the few Commonwealth Railway bridges in the region.

But our MAWD was not designed to be a "bridge buster" so several days were spent on her repairs.

Then our selected site was announced. Strange to say but the place was 60 miles back down the railway about eight miles north of the siding at Adelaide River. As in the Army, one is mucked about by experts. Our job was to provide local cover for Batchelor and assist the ack-ack defences commanded by Major Mander-Jones.

The American 49th Pursuit Group provided us with two ten wheel trucks to tow the two trailers containing MAWD. We loaded barracks equipment on their two trucks and our own Chevrolet carried our wonderful water tank that was filled with other gear. The equipment heaped on the trucks was more than eight feet above the tray and a few brave airmen perched on top of the tank. They stood out like the Statue of Liberty.

The trek started at 0800 hours at two miles an hour on the bush track from 31RS and rose by 50% when we hit the highway.

The best simile to describe the noise of the convoy was the music of the Turkish Patrol. The roar of the truck engines in second gear was drowned by the rattle of equipment and the musical notes of heavy gear rolling in the tank.

Chalk signs adorned the sides of the trailers:

"Curtin's Conducted Tours."
"On the Road to Tokyo."
"Wirth's Circus."
"We Open Tonight."

By midnight the Chevrolet raced forward at 50 mph to find Mount Woods, our site. By 4pm the site was found and a base formed and frantic efforts were made to clear a road for the convoy which arrived at 9pm. At 10pm supper.

It can be said that some difficulty was encountered moving the trailers to the top of the 200 foot knob where we wanted to place the gear. Steel ropes snapped and the whole crew embarked on a fast learning curve but we eventually got it there without further damage.

The mechanics worked through day and night and used a 100 watt light to facilitate the workings. That is until one night when two RAAF officers arrived at the top of the hill speechless after the climb. After getting their breaths back, they said that enemy bombers were approaching and no doubt would appreciate our "beacon".

Results at this site were rather erratic and after all our effort the unit was moved back to Darwin but not before it provided us with an awe-inspiring breakdown. I had jokingly asked Al Troop whether the large wire wound potentiometers controlling the 3,000 volt negative (bias) supply ever failed whereupon he laughed and said that never ever happened. But ours did ! The results were frightening.

Two of the mechanics and I were standing at the power supply - a very heavy duty slow revving Le Roi petrol engine of immense proportions. Suddenly there were intense screams of tortured metal, several pistol-like shots and the frantic chattering of all the protective relays. No poker machine jackpot ever remotely sounded like this.

The visual devastation shook us. The high rupture fuses for the alternator were smoking and in shreds. The four valves in the rectifier circuit supplying the transmitter with its 20,000 volts were bright red in the metal parts and the glass envelopes. In fact the electron charges extruded holes through the metal plates and the glass leaving both glowing.

The ammeter needle for the alternator had hit the stop at 150 Amps so hard that it was completely wrapped around the stop, immovably pointing to an abnormal position.

But it was the engine that suffered most in spite of all the protective gear. The coupling bolts to the alternator had twisted as the engine stopped almost instantaneously from 1800 revolutions per minute. Examination later showed the crankshaft had pulled the studs holding the bearings out of the sump.

We started salvaging and found replacement parts that soon had the electronic side ready for action. On the other hand the Le Roi needed a lot of help. Even stripping it down was a mammoth task, the crankshaft alone took two men to handle it. Of course the repair of the damaged sump was beyond our resources and we appealed to the nearest Army workshop for urgent help. This they gave without question or paperwork and we were operating again a few days later.

The boys of 109 were a wonderful crowd and I often wonder if the large percentage of Western Australians had helped things along.

A SITING TOUR WITH A DIFFERENCE

Cyril Short

Cyril was an officer with 114MFCU at Los Negros, having “served” his time as a radar operator and been commissioned, when the American Command indicated that they wanted a long range radar to be located on the north coast of Manus Island which was some 30 miles behind the Japanese lines. The station was primarily to act in a supportive role for the 5th Bomber Group. This Group was travelling 1,000 miles to bomb Guam and there was a need to provide an air sea rescue service for damaged planes on their return flights.

The practice was to station Catalinas at 100 mile intervals to pick up any aircrew who ditched. The need was very similar to many other areas - a suitably placed radar station to monitor IFF signals and to closely follow any distress code (code 6) from a bomber's IFF and plot the spot where the signal disappeared. The presumption was that that spot marked the location of the ditched plane and the Catalinas were then sent to pick up survivors. Many lives had been saved this way.

Cyril lead the siting party and travelled on a US Navy PT boat accompanied by about 12 US Cavalry men. The PT boat had a Bofors mounted on the foredeck as its main armament.

The boat travelled along the northern coast of Manus Island and one morning around 5 am, when they were about 300 yards from the shore, the Bofors opened fire on a suspected Japanese submarine - it turned out to be a pile of rocks but it certainly woke everyone up.

As the sun rose a house was seen half way up a ridge and the decision was made to put a party ashore to investigate and also look for a suitable site for an LW/AW station. The party went

ashore in a rubber boat and arrangements were made for the PT boat to pick them up the next morning.

Having landed they found a clearing and dug a foxhole, piling the sand on the land side for extra cover, before trying to find a suitable site for the LW/AW. In one direction there were only swamps so they doubled back and found a native village.

It was then that Cyril noticed something strange - the Americans were sauntering around and certainly were not "at the ready". After some more exploring without success they went back to the village and down to a stream to have a drink of water.

When it was noticed that the American sergeant was missing the Lieutenant could not have cared less, which was thought to be a bit odd to say the least. They slept the night in their pre-pared foxhole and the following morning Cyril asked that the 12 US cavalrymen be split into two parties to search for the sergeant. One party went along the beach and the other along the native track. After walking about eight miles the only thing found was a US army boot print heading east but no sergeant.

That night was spent in another native village and the next morning the PT boat was signalled and the group was picked up still minus the sergeant. Throughout the whole exercise the American cavalrymen sauntered around almost in a daze and did not seem to care about anything. It was then he learned that these poor blokes were the sole survivors of a company of men who had been cut to pieces by the Japanese on another mission only a day or so before being sent on this trip and they were still in a state of shock.

The sergeant was found three weeks later, absolutely "troppo". Natives from another village found him and paddled their canoe past Japanese posts to bring him back.

Several weeks after the incident Cyril was advised that the CO of the American Cavalry unit visited 114MFCU and suggested that Cyril should get a "mention in despatches" for his efforts. The CO's reply to that suggestion is purported to have been:-

"No member of my unit will get a decoration or MID unless he is ex-aircrew."

AN AMERICAN LW/AW MKII

Len Ralph

41 Wing received a request for assistance from an American unit that had an LW/AW MkII. This unit was intended to act as a back up for an SCR270 (the high tower 100 Mc/s with three big trailers), but it was not working. So I was sent to rectify the position.

First stop was Finschhafen and then about 30 miles up the coast past the rather infamous 'Scarlet Beach' where only a few weeks before there had been a big battle between the AIF and the Japanese.

It was not really the fault of the Americans, who had caused the failure, because they had not been given any instructions on how to set the unit up. From memory I repaired about 40 odd separate faults many of which had been put in by the Americans through lack of knowledge of the equipment.

When I got it going and picked up an echo, I rang through to the main radar unit and said, "I've got an echo at 100 odd miles", - or whatever it was.

"Just a minute", they said followed by, "No, sorry, something's wrong - you haven't".

"Yes I have," was my reply, "I'll follow it in for you".

So I tracked it in until they picked it up with their SCR270 which really established the bona fides of the LW/AW MkII with the Americans.

I was there for about a fortnight - it was interesting as they were fantastic people. But when you lined up to get your 'chow', everything would be peaceful and quiet when suddenly a fight

would break out. I was always frightened that one of these huge blokes would fall on me. Delightful blokes, they were absolutely marvellous to me.

Editors' Comments: Who on earth would send equipment, to a crew who were not trained in that type, or even a similar type, without an instruction manual !!

104RS AT KISSING POINT, TOWNSVILLE

W J(Bill) McGowan

We picked up the American Gunlaying radar from the dispersal area at Cape Palleranda and it was then modified to become MAWD. Originally it was sited at Castle Hill but proved to be a total failure. It was then transferred to Fort Kissing Point where it operated quite well.

Our quarters consisted of some Main Roads huts and we messed with the Army who were in charge of the guns there. At the time we were probably the only RAAF unit that had a "wet" airmen's mess as the Army kindly let us use the facilities of their Other Rank's mess. Great was the drinking thereof which resulted in some mighty hangovers.

Our DMT got onto what he thought was a great lurk. On his off duty night he would head off to the "Red Light" district and line up in the queue where he would sell his place in the queue to some Yank for a fiver. There were plenty of free spending Yanks there at the time. Then back to the tail of the queue. Like all con games there has to be a "mark", in this case the Yanks, and if there was no mark when he got to the head of the queue he would turn around and start at the tail end again.

The time was early 1942, the Kokoda Trail fight was on and aircraft movements were very high, increasing to all day and all night. We literally worked our butts off for many weeks on end during this period.

I well recall the night when Jim McLennand and I were operating, we got a blip about 80 miles out. The information was passed on to 6FS who asked us to keep an eye on it because it was not in the usual place for New Guinea traffic. We later found that it was a Japanese Kawanishi flying boat out from Rabaul.

It was the night Townsville was bombed. What a cock-up, a right royal SNAFU. Townsville was under a Brown Out and when the sirens sounded it went to a full Black Out except for the wharf which was lit up like a Christmas Tree. We had a great view as the searchlights picked up the planes and the ack-ack was blazing away at it when down came the bombs, which luckily fell harmlessly in the sea about a mile from us.

Two nights later, I think, another aircraft came down and the Americans claim to have shot it down. This could well be because we tracked two aircraft out to about 40 miles, one echo disappeared from the screen and the other turned back - it turned out to be an American Kittyhawk.

As a diversion, in our off duty hours we would sit on the cliff top about 70 feet above sea level and take pot shots at turtles when they came up to breathe. One day George Briggs was resting his 303 in a forked stick and sitting on a box - he moved too quickly, the box collapsed, the 303 swung down and George finished up shooting himself in the foot. There was quite a "to do" about the incident and that was the end of the turtle shooting.

Then four of us were posted to Western Area. Being Victorians and not having been home on leave for quite some time we started thinking about what could be done about it. The first job was to steam open the envelope addressed to the Adjutant of No1 ED at Melbourne Showground, containing our movement order. To our dismay, on the bottom was typed "these personnel are urgently required in Western Area."

Tut Tut, this won't do - so very carefully this offending paragraph was trimmed off the bottom of the page with a pair of sharp scissors and we resealed the envelope.

We had a whale of a time in Melbourne for about four weeks before entraining for the West where we arrived on a Sunday and did not report to WAHQ until the Monday. There we received a rocket for not reporting on the Sunday and being a day late. We had a hard time trying to keep straight faces. a day late indeed, we were four weeks late and no one tumbled.

ASV BEACON MAINTENANCE IN SWPA

Vern Berrett MID

Most of the beacon installations were carried out by Vince Tolson and Earle Anderson. I would like to pay tribute to their pioneering efforts carried out under difficult conditions. Climbing coconut palms using leg irons, lopping tops off palms and winching up the beacon cartwheel antenna was no mean feat. I can remember Vince saying "you had to be strong in the legs and weak in the head" for the job.

After spending some time in administration, it was decided that a personal visit to the various beacons and squadrons would be more beneficial. John Knox accompanied me on the journey that took a long time and involved a lot of travel.

The first call was at Tami, an island just off Finschhafen. It was well situated on a cliff overlooking the sea. Whilst climbing up onto the beacon I scratched my leg, whereupon an army of large red ants took to my A2 blood which was a very painful experience.

Tami Island was a special place, renowned for the "foreign order trade". This venture was well organised for all ranks, but the operation of the radar station was not to be interfered with. Each week the boat went over to "Finsch" for station provisions and raw materials, such as perspex, badges, chains and shells etc were procured. The finished products were sold to the Americans going home or on R & R leave. Profits were shared and a lot of money went home via pay books.

One day I accompanied the medical orderly across the lagoon to treat a native who had pneumonia. The hut was full of smoke from the usual inside fire and we had the fire extinguished. The orderly prescribed sulphur drugs, to be taken every three hours. The time was indicated by pointing to the angle of the sun and the tablets were placed on the table.

Flying out of "Finsch" a day or two later, we noticed that the native's hut had not been burned down as would have been done if he had died - the burning down drove out the "evil spirits" in case of death.

At Momote on the island of Los Negros, the beacon was as usual on the top of a coconut palm but it had rotted and was unsafe to climb. We obtained permission to cut the palm tree down and fortunately there was little damage done to the antenna. With the help of a NZ engineering unit the antenna was made to look "like new".

At Kiriwina in the Trobriands, the beacon platform was near the airstrip. I mounted the said platform carrying the service gear and looked up at the antenna. What did I see? A huge red, green and black spider - his body was the size of your fist and the span of the legs about 8-9 inches.

I looked at the spider and then my 38 revolver and back at the spider. As my thoughts were 90% spider and 10% beacon, the spider had to go. So I shot it down!

A BRILLIANT IDEA ??

An entry in the A50 History Sheet for 27RS on Dunk Island dated 29 April 1943 reads:-

"Cpl Lodd of No1 Carrier Pigeon Section arrived from Townsville with the purpose of establishing a pigeon service with Tully."

What on earth was behind this visit. Did anyone think that a pigeon could fly faster than Japanese planes ? The mind boggles and it makes one wonder who initiated the thought.

PERON ISLAND - 61RS

A D Banks

This station had the doubtful honour of tracking the last Japanese plane over Darwin. It was 1 May 1945, the first clear day after the wet season when the plane was detected out to the northwest. Plots on this and other aircraft were passed on in routine fashion but when the plane flew inland past Adelaide River and then turned back towards enemy territory the alarm bells started ringing. The enemy reconnaissance plane passed between Darwin and us before the scrambled fighters could catch it.

On this station many of us came under fire for the first time. It was a fine Sunday morning and it was decided that the off duty personnel would have a swim and picnic at the southern tip of Peron Island. We drove down about five miles on the tractor trailer combination and spent some time swimming in the rock pools, sunbaking etc and watching a Liberator about five miles further south.

The Liberator seemed to be circling at about 1000 feet and occasionally firing at something. There were about 20 of us, stark naked lazing about and then the Liberator headed our way. The nose, belly and tail guns opened fire as it passed over a clump of rocks about half a mile from the shore. Then .5 bullets started pounding the rocks where we were. We managed to get our heads behind rocks but there were 20 bare white bottoms making perfect targets.

Miraculously no one was injured. Some twenty bullets were dug from the sand with several having passed through the wooden floor of the trailer, doing very little damage.

Peron Island was visited by the gallant Z Force in the "Krait" and we went fishing in one of the ship's boats across to the mouth of the Daly River. Hand grenades were tossed into the water holes at low tide and natives went in to retrieve the fish. They felt for them on the bottom with their feet, then having found one this way, they would jab it with a spear and toss it up onto the land. A catfish landed near my foot and a spike pierced my instep resulting in severe pain and swelling. The "Krait"- yes I spent the most painful night of my life in a bunk on the "Krait" and for years after the war, there was a hard blue lump on my instep where the spike had penetrated.

AWL ON ACTIVE SERVICE (61RS)

R J (Ron) Richards

One day a fellow radar operator and I were ordered to report to the Orderly Room at 61RS on Peron Island where we were told to make ready to fly to Darwin for a dental examination. Who or what initiated the order still puzzles me as neither of us had sought any dental appointment.

Anyhow the next day we boarded one of Fenton's Ansons and flew to Darwin where we had our teeth examined. Not having any explicit instructions about the return trip to Peron Island we decided to go on a "jolly" to Mendil Beach. Several hours later on returning to the Fighter Control Unit we were told that we had missed an aircraft to Peron and that on our return we would be dealt with accordingly - meaning that we had been AWL.

On our return the next day we were paraded before the CO. Despite rumours from the station jokers that we were to be shot, the CO awarded us three days field punishment to be carried out in our own time. The loss of pay amounted to 19 shillings and sixpence that the paymaster duly extracted from our pay books.

The field punishment was clipping together thousands of rounds of 303 ammunition under the watchful eye of a serious guard. When I enquired as to the logic of the exercise he assured me of the necessity to be at the ready to repel a Japanese invasion. This was in June 1945 and the majority of us knew that the shooting war had long since passed us by. However, the two miscreants completed their punishment to the satisfaction of all concerned.

In retrospect, the logic of the exercise was that if two radar operators had not gone AWL on Mendil Beach in June 1945, then Peron Island would not have had the necessary ready-use ammunition at hand to repel a Japanese invasion.

WERE WE EARLY RADIO ASTRONOMERS ?

At 23RS at Lytton around October/November 1942 the screen was blanketed out with interference around sunrise and it disappeared after the sun rose. Two of the mechanics, Ed Simmonds and Tom Buckland, claimed that it was probably due to sunspot activity and that dawn would have been an ideal time for the enemy to attack. There is no record in the A50's.

Then in October 1945 the CO of 59RS at Lee Point, F/O a D Banks was called to the doover as some unusual interference was being detected at a bearing of 270^{o}. It was on the night of the new moon. The pattern was like unsynchronised "walking sticks" and, from memory, about four in number approximately one inch high and moving along the trace in either direction. When the moon set, the interference disappeared. It was firmly believed at the time, that what they saw were reflected radar pulses from the moon. When CSIRO reported, about a year later, that they had successfully bounced a signal off the moon, F/O Banks wrote to them mentioning the experience at 59RS. He did not get a reply.

For sometime the editors chased a story that one of the Bailey Boys had altered the time base of an AW and had been severely reprimanded for bouncing a pulse off the moon. The officer concerned has refuted this urban myth.

HOW I BECAME A MEDICAL

Dr L a (Lionel) Gilbert

In May 1945 I was made the camp medical orderly and given charge of the medical tent !! The CO, F/O Max Sinclair, had noticed, while censoring mail, some assignments in medical biology for my Teachers' College course. After which I spent an afternoon with the MO at No2 Squadron, up the road on the Stuart Highway, for supplies and advice.

The chief problems were tinea, otitis externa, some gastric and pulmonary complaints, slow healing sores, boils etc. Tinea was treated with Mycozol; plenty of bismuth for stomachs; mercurochrome for otitis externa, linctus camph. and mist. expectorant for colds etc and sulphanilamide powder for sores reluctant to heal.

The medical tent became my fatigue duty instead of chopping wood !

KNUCKEYS LAGOON (132RS)

Bob McDonnell

132RS was formed at 1RIMU, Croydon at the end of July 1942. Half the station travelled overland to Darwin and the other half by the MV Wanaka calling in to Townsville, Cairns, Thursday Island and Groote Eylandt before reaching Darwin. Rough weather was encountered and at Townsville the wharfies walked off the job so the loading was finished by the Army. En route the crew of an American plane was rescued - in a dinghy after their plane had crashed.

The gear was an early English Mk V GCI and the antenna was manually turned. The operator sat in the antenna box cranking bicycle pedals (rubber thank goodness) acting on instructions being sent by push button controls from the operators on the CRT's in the receiver truck. [It must have been like being put in solitary confinement away from the action !]

Both 132RS and 150RS antennas were great for drying clothes by night. On hot nights, one could get a bit cooler by sitting on the platform in front of the antenna as it slowly revolved through 360^{o} - unless some idiot decided to speed it up and you were then liable to go into the water in the swamp.

There was a raid one night when we were quartered at the Eleven Mile. We rookies sped for the slit trenches. The first man in was a guard, a Darwin man, who crouched in the bottom with rifle

and fixed bayonet pointing skywards. The next man in was nearly impaled and on uttering many words, the only answer he got was "parachutists".

DIARY EXTRACTS FOR 31RS - LATE DECEMBER 1942 TO JUNE 1943
Allan Brayne

1942

24 Dec Arrived at 31RS at Dripstone Caves.

25 Dec Excellent Christmas dinner put on by the cooks.

27 Dec Plane picked up at 180 miles during the day.

30 Dec About 2200 hours unidentified ships picked up.

1943

3 Jan Picked up permanent echoes at 290 miles - hills near Wyndham. One of our bright mechanics had added another condenser in parallel with the main time base condenser with an on/off switch. Every third sweep our operators unofficially switched to double range.

21 Jan Witnessed my first raid at 0010 hours (52nd on Darwin). Two planes passed overhead at 10,000ft were caught in searchlight beams and headed out to sea again. Planes came in again, picked up in beams, ack ack opened up but firing was inaccurate. They went inland and bombs could be heard further south. Two Jap planes over again at 2220 hours. I was on duty and we picked them up at 90 miles. Bombs were dropped further south.

6 Feb Jap reconnaissance planes over - one shot down - on duty - took them out to 127 miles.

21 Feb Went for swim in pool on Rapid Creek. Pool surrounded by swiftly running creek and palm trees. Drum with our clothing on it, rolled over, depositing clothes in the creek. There was a rush downstream through thick scrub to head off clothes but only some were recovered.

27 Feb Received word that large enemy movements expected within a couple of days. About this time two or three new Ford trucks were delivered for use in case of evacuation under enemy action. Had a trial evacuation without warning. (I cannot now remember what delayed me but I was just in time to see the last of the trucks disappearing up the road.)

1 Mar Set off for Berrimah in the morning but utility was damaged when it nosed into a deep rut and we had to be towed back. Set out again in the afternoon and we were bogged for three or four hours. Phoned for a truck to pull us out but this also bogged and we had to phone for another which did the trick. Arrived back at 2100 hours.

2 Mar Jap recco over in the morning. Air raid in the afternoon. Jap planes picked up by us at 96 miles. Telephone line to camp and W/T found to be broken although line to Fighter Command intact. Relaid lines during the raid. Japs strafed Coomalie Creek destroying one Beaufighter on the ground. Japs lost three "certs" and three probables. A number of RAAF personnel wounded.

4 Mar Jap recco over while we were at Berrimah. Could see it high up with ack-ack bursting around it.

7 Mar Witnessed Jap plane being shot down. First a short burst of gun fire overhead, a thin stream of smoke at 20,000 ft heading out to sea and then 10 miles out another burst of fire. The plane fell as a blazing ball into the sea.

15 Mar About 1030 hours received word that Japs were coming in and went straight on duty. Picked them up at 96 miles. Our planes met them at 30 miles out. Around 1115 heard dogfights overhead and soon afterwards some bombs bursting over towards Darwin. Rushed outside - fighters zooming high over the harbour. I was told that 22 Jap bombers flew in a perfect V formation dropping their bombs over the town. They hit two oil tanks and a few buildings including American Headquarters. In the brief glimpse, I was able to have, I saw two planes coming down in flames over Point Charles. There were terrific dogfights between Spitfires and Zeros while the bombers did their work. The oil tanks were still burning at 2100. Jap losses were 12 Zeros and 2 bombers for certain and 3 Zeros and 3 bombers probable. We lost 4 fighters but two pilots were saved.

22 Mar Watched Spitfires touching down only 30 feet away from the roadside strip after returning from action. One bounced badly cutting grooves in the asphalt with the wheel rims and had to go around again. Another, caught by a crosswind from the dispersal road, nearly ran off into the trees. Arrived back at 2130 hours after thumbing eight rides and walking the last four miles.

10 Apr Sports held in the afternoon on beach between the RAAF and Army. Air Force won the sprints, Commandos the two mile event, tug-of-war and others. Came sixth in the two mile.

3 May Unusual meteorological conditions. Picked up Tanimbar Islands at 325 miles. Later during the "dog" watch, hills at Dilli on Timor were picked up at 380 miles at 310^{o} with signal to noise ratio of 3/1.

27 May Light seen half a mile out to sea and half an hour later thumping heard at bottom of cliff like someone drilling to insert explosives. Guards covered bottom of cliff while I guarded the doover with a tommy gun. Nothing could be seen on the beach. Later a couple of guards from 109RS came along the beach without telling anyone. We saw them crouching at the bottom of the cliff and one struck a match. Fortunately one of our guards challenged - there were three rifles and a tommy gun trained on them, with safety catches off. A couple of nights later while walking through the bush to the doover, a body came crashing towards me. A bullet was up the spout by the time it hopped past me - a bloody wallaby.

7 Jun Went to the horse races between Livingstone and Adelaide River. Did not do any better than 4th placing even with only six horses in each race.

8 Jun Received word that I was posted to 307RS on Peron Island and Jim Goulder to 308RS at Millingimby.

9 Jun We said goodbye to Lew Knight and the rest of the boys on 31RS and went in the truck down to 44 Wing.

At 31RS, like many other stations, there were anxious times for radar mechanics when there was the possibility of a raid and the doover had developed a difficult fault. I well recall one incident when everything tested all right but the overload kept popping out. I just happened to see an arc-over in one of the Micro Pups. Another time a scorpion shorted out the sweep switch in the aerial turning gear.

Editors' Comments: The equipment at 31RS was one of the six "experimental pre-production" models of the AW manufactured by Radiophysics Laboratory and the NSW Government Railways. It gave excellent results at Dripstone Caves - an outstanding compliment to Dr J H Piddington and his design team. The output of the transmitter was only 10 Kilowatts yet it achieved long ranges as mentioned by Allan Brayne, particularly when the atmospheric condition known as Temperature Inversion occurred. It could be said that 31RS

was the proving ground for the AW transmitter and receiver that became the backbone of the RAAF Air Warning Network.

AN OVERSEAS FACT FINDING MISSION

Andrew Thomas

Editors's Comments: Bill Nash and Andrew Thomas were sent overseas in April 1944 to find all they could on radar counter measures. Not long before Andrew Thomas passed away, Walter Fielder-Gill interviewed him. The following is an extract from that interview and relates to some of their non-radar experiences during the trip to both the United States and the United Kingdom.

We had to rough it a bit. We went up to Brisbane and then to the United States in a Pan American Boeing flying boat. We were a bit cramped actually. The crew were Pan American stewards but it was on charter to the US Navy, NATS - Naval Air Transport Service. We set off from Brisbane and spent the first night at the island of Espiritu Santo in the New Hebrides. We had nice accommodation given to us there. We went to the films and saw "Laura" which was very famous and a good film.

We flew on then via Canton Island where we stopped for refuelling and then to Honolulu. Landed at Pearl Harbour or rather alighted on the water at Pearl Harbour - not landed.

Incidentally we saw some evidence of the Japanese attack on 7 December 1941. We had two or three nights in Honolulu - there was some delay in getting the aircraft headed for San Francisco. We were on the same aircraft all the time.

I remember we ran out of money, Bill and I. In those days Australia did not have diplomatic representation overseas very much except in London and Washington - certainly not in Honolulu. I said to Bill that we had better go to see the British Consul to see if we could get any money from him.

The British Consul as it turned out that afternoon was out golfing. Probably on one of the better courses there. But we saw his clerk who was a very distinguished looking, typically austere Englishman. Under pressure from Bill and myself, he agreed to ring the Consul to see if he could get approval to advance some money to us.

He told the Consul about us when he finally got him on the phone and having seen our identification documents. The Consul said yes and the Clerk said - "But sir. They are asking for $25 each. Each sir. $25 each sir".

The Consul did not apparently think that that was too outrageous and said - "Yes, you may give them $25 each".

By the way when we reached London the first thing that happened to me inside the front door of Overseas Headquarters was that the Accounts Clerk picked on me saying - "I want your pay book. I want to deduct US$25 from your pay book."

Bill Nash tells me that he did not have his deducted for some years.

Then we set forth up to San Francisco. By the way on the flying boat one engine went U/S half way across but we kept on going. We had four engines so we had a pretty comfortable reserve.

The next leg of the trip was in a civil airline to Washington via Chicago, spending two or three nights in San Francisco.

It was a DC 4 I think. Very advanced - more advanced than we had. We spent a bit of time in Washington with W/Cdr Reddrop and other RAAF officers. Then we went up to New York and had a few days there just being entertained and generally living it up, having a nice time. The Americans received us extremely well - most hospitable, couldn't be nicer.

We arrived in April 44 and were still in blue uniform. On the way back we were in summer uniform. Bill and I created a fair bit of a sensation. We got ourselves down into New Orleans and went into a department store.

All the lifts came to the ground floor, operated by girls at that time. They had never seen any servicemen in shorts. And in Washington, the police authorities spoke to the Australian Ambassador telling him that Australian servicemen should not wear shorts as they were regarded as being immoral.

So the Australian men serving there who had been accustomed to wearing shorts had to wear long trousers. If you think back on it, all American servicemen always wore long trousers.

One of the experiences which was an eye opener to us both was when we travelled by train, two nights and three days. It had a dining car and one morning we sat down to breakfast at a table for four. A middle aged woman and a young woman came in and both sat down opposite to us. They started to chat about the breakfast menu and what they were going to have.

Into the dining car came a US colonel, a black man, but a full colonel, and the young girl became very distressed and upset. She was on the point of being in tears. Finally she got up and stamped out of the dining car. The older woman said to us - “You boys might not understand what has been happening but that young woman feels that she has been morally defiled because this black man has come into this dining car and sat down to eat in the same car or room that she was in. She just could not stand it”. It was a complete eye opener to us. They were southern people and it was the same across from Houston to San Francisco.

I should tell you how I got from the UK to America. We flew separately because by then it was thought that we had acquired a lot of extremely valuable information. The authorities were not prepared for both of us to be knocked down in one aircraft so we went on separate ones. Even from England to America and from America to Australia. I followed Bill and we both came back as civilians because the alternative routes were via Ireland or via Lisbon.

In the event the bookings were made via Ireland. I had to go down to Harrods and buy myself a pair of sports pants, a sports jacket and a civilian tie so that I looked like a civilian. Landed in Dublin at Shannon airport and the immigration officer looked at my passport and said - “Which ministry do you come from ?”

“Air Ministry.”

“Oh yes.”

I supposed I must have been the 500th he had seen going that way. Across the Atlantic from Shannon to Baltimore was a real Pan American flying boat - Clipper. First Class with beds - I changed into pyjamas, slept in the bed and even had a shower aboard. My seating companion was a famous person - Edward G Robinson, the actor. He had been over for the US Government working in Europe and the UK. He asked me to help him out, he had a big problem. He had a box about 15 inches or more square and about six inches deep with about three layers of cigars in it - all magnums. He said that if he broke the box it would pass through Customs OK but if it was unopened he would be hit with a lot of duty. He gave me a great handful of cigars and Edward G Robinson got his cigars in duty free and I got enough cigars to keep me going for a few years.

I finally came back to Los Angeles for about half a day and then to San Francisco and back to Australia by aircraft. It was interesting when I got to Brisbane, it was a US Army military aircraft - another DC4 - not as comfortable as going over.

We got to Eagle Farm and Australian Customs were waiting for us. It was night, 11 o'clock or thereabouts and they said: “All US servicemen over this way - Australians that way. You

go through, sir". So I went through without a check at all. They went through the Americans with a fine-toothed comb for liquor and cigarettes.

MEMORIES AT 23RS - LYTTON

Ray Kelly

Only a couple of things come to mind about my six week stay at Lytton, my first posting after Radar School in August 1942. The first incident involved catching the Navy.

Hoping to catch some big fish in the Brisbane River I bought heavy tackle including a strong linen line. The strong tide was coming in when I cast my line and all I caught was a Navy launch by getting my heavy line wrapped around the propeller shaft. I must say that they were very nice about it.

The other memory was when I suspected a fault in the high tension power supply to the cathode ray tube. Nominally the voltage was 4,000 volts but the maximum range on our Palec VCT/V test equipment was only 1,000 volts. No worries, I thought, I will add a 5 megohm resistance in series and then check. Shortly after I picked myself up from the floor and retired as gracefully as I could. I had not reckoned with the poor insulating qualities of the test prods ! [Being "splatted" by high voltage was experienced by virtually every radar mechanic during the war and it is a wonder that we all survived.]

ARCHER RIVER - 311RS

Sydney A Keighley

With 312 and 313RS we went to Thursday Island on the RAAF ship SS Wanaka leaving Sydney early in February 1943 in a convoy. We had to call into Newcastle for an emergency medical case and then proceeded alone up the coast with only occasional aerial surveillance. Near Fitzroy Island we ran into a severe storm and landing barges carried on the foredeck damaged the tarpaulins over the hatch so creating water damage to the cargo.

At Thursday Island our gear was inspected and pronounced as U/S. A Sunderland flying boat brought in a new Mk I AW set for us. After 311RS received the new gear the unit was moved to the Archer River in a converted Hobart mud barge "The Wombat" sailing under the flag of the US Small Ships.

We were escorted down the Gulf of Carpentaria by Beauforts from Horn Island and since we were in the middle of the wet season "The Wombat" was able to enter the Archer River and moor within a 100 feet of the camp site. Unloading took about three days using two surf boats tied together, the heaviest load being the utility.

The site was only 10 feet above High Water Level. The surrounding terrain was flat, interspersed with mangrove swamps, for 20 miles or so which meant that we had to rig up our own artificial permanent echo in the swamp a few miles away for fine tuning of the equipment.

Aurukun mission was about four miles away and the unit had the use of their 28 foot launch for regular visits to the mission and the airstrip. But this usage involved a deal with them - we had to fix the launch's motor. This was a single cylinder 1903 Regal petrol/kerosene motor and was lying in a large number of pieces. It was re-assembled and a Howard magneto modified to suit. The engine was fixed so providing us with the means of regular transport.

The mission was a Volunteer Air Observer Corps station reporting to Thursday Island and it also had a rudimentary air strip for the Royal Flying Doctor Service which could accommodate planes up to an Anson. Calibration Flight's Anson used the strip for low altitude flights but a Hudson had to come from Thursday Island for the high altitude calibration.

Supplies and mail were provided by a mission lugger from Thursday Island with occasional mail deliveries being made by the Catalinas at Karumba.

A Japanese float plane had buzzed the mission shortly before we arrived and a submarine had also been reported further up the Gulf. As a result three US torpedo boats paid a visit and gave us a delightful lunch. One of the skippers was the chap who picked up General MacArthur in the Philippines.

On another occasion the small ship "Britha", skippered by a chap named "Ruska" (mentioned in Ernestine Hill's book *The Great Australian Loneliness*), brought a cargo of out of date biscuits consigned to us no doubt by someone with a sense of humour. There were sufficient of these tins to build a solid garage for our ute !!

INSTALLING MK V COL's IN THE NORTH WEST AREA
Ian R Leith, extracts from his diary.

59RS at Lee Point
On August 22, 1943 109RS closed down. Our MAWD (I always have trouble with that word - my dear mother's name was Maude) had given good service and we did get some "goodies" from Fighter Sector but it was time to move on. The next day with nothing to do, day or night, I went down to Adelaide River for an eye test. Only saw some nurses ! On the way back we had some ICE CREAM, drinks, and HAMBURGERS at the Red Shield. Home at 2230 hours. Good news was waiting for us that **we** were to take over **31's New Doover !! British Mk V GCI.** Best luck we could ever have - we are very happy about it.

On 24 August we did a lot of work dismantling ours - the poor old MAWD - at last we saw it towed away. The following day we moved to our new site - Lee Point - a new 140 foot tower !! Can see for miles, islands and all. Cape Don and Charles Point quite visible. Rather windy up top!

27 August we started work on the doover itself. Solid work continued from 30 August to 4 September, all day and every day, on the doover, up on top of the tower and down below. 140 feet with 1000? steel steps on the ladders, working on the array and matching and phasing it.

On one day in this period, when Allan House (from Melbourne) and I were half way up the centre of the tower, threading 1/8 inch copper wire feeders through perspex spacer rings and wearing leather safety belts, six Jap Betty bombers appeared flying just above the tree tops. They were headed for the RAAF strip about seven miles away. The nearest plane was so close we could see the Jap looking at us clearly - eye ball to eye ball. They made a great mess over there dropping daisy cutters. It always amazed me that they never "visited" us at a later date !!

On the night of 4 September we had the transmitter on the air pushing out a lot of energy - 100 Kw - nearly got burnt on the feeders up top. The mast tower is 200 feet above sea level, gives a great clear view, transmission and reception over the full 360o but is rather high for me as it waves about a bit in the wind.

On 5 September John and I did a lot of work on our hut. Put galvanized iron sides to lift the tent height and earth and gravel for the floor which we packed down hard - well above the outside area - quite effective. It has a psychological effect on one to have a clean level solid gravel floor. I re-arranged the position of my bed too. Feels much better. Nice to have a writing table - reminds me of my old writing desk. I turned the top of the table over and it makes a good washing table.

We have a "scientific" water catchment system - clean rain water - 2 X 44 gal drums and taps - via a scrounged double tent fly over our tent and outer area in front. Really good. Set another jelly. Had apples today.

On 6 September we were still building the platform for the Mk V receiver. The next day we had a bullshit parade at 0830 followed by a raid of 18 bombers. Two plus five probables shot down for the loss of two Spits - poor show on our part.

The receiver was put together on 10 September on the new platform. Then we had a general clean up and aligned the receiver, built shelves for spare parts, valves etc. All the equipment working very well. Can get PE's at 175 miles with a signal to noise ratio of 3/1. It was decided to go on the air on Monday 13 September 1943 which we did at 1300 hours with good results.

38RS on Bathurst Island

My posting to 38RS came through on 2 December and I went to 44 Wing on the 3rd. Met a lot of old cobbers, made arrangements with Mr Williams re Important Telegrams and as usual worked on typewriters until 9 December when I flew out to Bathurst in a Dragon Rapide with Doc Fenton (ex Natimuk School!!). We landed at the Mission on the way and enjoyed the flight very much. I noticed that the natives are very inquisitive but the RAAF men very indifferent !! First impressions are favourable.

19 December - we have had seven planes since the 10th and there was mail for me every day. I am getting on well with the natives who are a very funny people who love to joke and laugh. The women and girls are very shy. They take no notice of us bathing in the nude as they are half naked anyway, the men wear loin clothes. Women's breasts are mostly flat and ugly to us -few have beautiful figures - only the young ones about 17 years.

25 January - we had word that the Mk V equipment is coming and we started building the new engine shed for the Lister diesels. At the end of the month there were terrific winds and surf and the tide was the highest for some time. Two boats came with the new truck and the Mk V equipment. The barge was ruined in the very heavy surf and is stuck on the beach. Three of our men were on the "Koolabar" and went away with her.

1 February - boat gone, barge still stuck on the beach - **only half of the equipment was taken off the boats !!**

2 February - a plane arrived - the first for 11 days. The sea was extra heavy after a terrific cyclone last night. Truck and tractor bogged in the sand ! Transmitter still stuck on the hill - only two or three tons of it !! It has been a massive job so far.

3 February - When we do our washing Old Captain keeps the fire going boiling our clothes ! Wilfred drives the tractor and truck and also cuts their hair. He tells us when he takes Katy "alonga bush for MOOMBRA" !! They're a queer race. Just tribal laws !

6 February - The second boat **has gone back with the diesels still on it !!** All of the other equipment was taken off.

8 February - radar operator Fibbs was caught across one phase of the power supply and just screamed. When the power was cut off he just dropped to the ground and we thought that he was dead ! Our new CO Mr Jordon asked my name and said that at 44 Wing he had been told that I was a Mk V specialist - good to know what others think of my work. Legs aching tonight.

9 February - a Personal Occurrence Report came through today and I got my LAC back-dated to 12 April 1943. I have been an LAC for nearly 10 months ! But I am not complaining as long as I get Cpl soon. I am feeling tired with so much work to do.

17 February - four kites have come and gone - no mail for me. The kite that came in today had nothing on it. Still nothing in the canteen. Meals slightly improved. Fred moaning as if he pays for our food himself. All he can talk about is "ration this" or "ration that".

22 February - we had FRESH MEAT and SPUDS for a change. We are having "quite a big job" getting the three ton transmitter up the hill.

29 February - we picked up a radar sighting of a surface vessel at 2300 hours and it was identified as "rats" [enemy] - so all personnel had rifles, ammo, tin hats, hand grenades etc at the ready until the "raider" disappeared ! Was it a dipole on a "met" balloon ??

Doc Fenton came out on 6 March and on landing on the beach, he caught one wheel in wet sand and finished up "in the drink" up to the engine ! The natives laughed and all of us grabbed the tail and pulled it out quickly. Doc took it back to Batchelor - no worries.

31 March - one of the natives told me I was a corporal which was confirmed the following day and it was back dated to 1 August 1943 - **just eight months ago** ! [One wonders how the native knew.]

19 April - my posting came through today. I have finished my work on yet another Mk V - what a massive physical job of getting it up the hill.

On 22 April I left Bathurst Island.

It was, looking back, the heaviest task I have ever been involved with in the whole of my life.

We, that is the aborigines and us, had to cut a strip 25 feet wide up to the top of the 170 foot hill and were expected to haul the gear up to the top using only a block and tackle and the tractor which we did. The trees were small and light on the sand-hill and provided an unreliable anchorage, even on the other side of the hill, for the steel cable. Firstly the cable snapped, then it was the time of the year when the rains came which didn't help. We became bogged up the hill, both the tractor and the transmitter still in its wooden case.

Editors' Comments: The story told by Ian Leith highlights the unsuitability of the heavy English equipment in advanced areas. Certainly the Mk V COL had a longer range than the AW or LW/AW but the time taken, after landing, to become operational was much longer than the Australian made sets.

One wonders why replacement of stations such as Cape Don and Cape Fourcroy on Bathurst Island was made when the theatre of war was moving away. One hopes that the decision was made on the basis that they, with their longer range, would become part of a peacetime surveillance scheme.

One obvious lesson from the Bathurst Island exercise, and other incidents for that matter, is that the installation team should have included some members of the Army Engineers, or at least RAAF personnel trained by them, to alleviate and expedite the "gutbusting" physical side of moving and lifting heavy items. Perhaps even more important, the right handling equipment would have made the work quicker and much safer.

CAMOUFLEURS

Full credit should be given to the part played by camoufleurs who were probably instrumental in saving many lives. Their work was very successful as evidenced by the fact that very few radar installations were attacked by the Japanese. There are some good examples of the camouflaging of stations in the Pictorial volumes which are in the course of preparation.

The camoufleurs were part of the Department of Home Security that was set up in July 1941. They were not servicemen being classified as "accredited" but they were treated as if they were commissioned officers of the RAAF.

It appears that Prof Dakin, a zoologist with a long interest in animal colouration and concealment, played a large part in the training of camoufleurs and it is believed that he was mainly responsible for them not being commissioned. His argument was that if commissioned, at some stage, their advice could and probably would be over-ruled by a senior officer.

Design of Camoufleurs' Cap Badge
Drawing by Maurice Cork

Walter Fielder-Gill remembered that there was a quotation in the RAAF Camouflage Manual which came from Shakespeare. Walter then supplied that quotation from Macbeth – Act V, Scene IV, Before Birnam Wood.

"Malcolm – Let every soldier hew him down a bough
And bear't before him; thereby shall we shadow
The numbers of our host, and make discovery
Err in report of us."

We are fortunate in that quite recently contact was made with Maurice (Morrie) Cork, a former camoufleur. He has kindly supplied a drawing of the cap badge with which they were issued. There was a similar motif on their epaulettes, not unlike those worn by Flight Lieutenants. At a distance they looked like RAAF officers as they wore the same type of uniforms. Not actually being part of the RAAF did, at times, put them at a disadvantage. It has been reported that they had to "cadge a lift" to various places and on other occasions it was hard to convince people that camouflaging measures had to be taken.

The camoufleurs came from many walks of life; artists, cartoonists, teachers at technical colleges etc. Having found that Eric Joliffe, of *Saltbush Bill* fame, served in the North West Area contact was made with him to see if he was involved with any radar stations in the region. Regretfully he was not involved in our field. But he did say that one of his friends has said that his only claim to fame was when he once camouflaged a latrine so successfully that the unit's CO did not find it until it was too late.

Various people have, in their contributions, stated that a camoufleur visited the unit and did portraits of some of the men, so creating diversions which would have improved morale.

Their task for radar installations was different to other military establishments and aerodromes. The finished products showed a measure of ingenuity and certainly were not stereotyped - they all looked different. Bob McDonnell reports that 150RS, a GCI station, was camouflaged to look like a race course complete with stand, tote and running rail on which they walked during the wet season.

The treatment of most of the types of radar was comparatively easy but trouble was encountered on some of the remote islands where vegetation was sparse or with high towers such as the 140 foot one at Lee Point, 59RS, and at the ACO stations. In these cases the shadows cast by the towers had to be controlled by either adding bits to the towers or by changing the surroundings to mask the shadows.

Three specific cases deserve a mention.

Morrie Cork went to Peron Island where the shadows were a problem and tracks had been worn like spokes in a wheel pointing to the doover. No material could be taken from around the unit so timber and sea weed were collected from the beach at low tide by six men using a two wheeled trolley hauled by rope lines. The shadow and cart wheel patterns had to be

changed and this was done by spraying the sea weed with tar so altering the overall appearance of the place.

The second example, related by ex-Guard Sergeant Charlie Watkinson, is as follows:

"An officer came to 315RS at Cape Ward Hunt and said to me and one of my guards, 'Right oh ! Get your gear, bully beef and biscuits and we're off on patrol.'

Boy, was he a walker, we clambered over all the steep hills - mountains I call them - around that area. When we got back we found he was a camouflage expert.

The next thing he shocked us with, 'Cut down all the trees around the doover.'

We were right in among the Japs and we were congratulating ourselves that our camp and doover were well hidden from the enemy by the rain forest. But he pointed out to us that the natives had cleared small patches all over the hills for gardens and we should copy that.

So we cut down the trees and the local people built a native hut around the doover and thatched it with sago palm leaves. In the end, the hill top looked just like a native garden with an access track, just as expected. I never knew camouflage could be such a wonderful protection."

The third example of excellent camouflage was given by John Reen who reports two incidents at Wessel Island, 312RS. A reconnaissance aircraft could not find the station and went back to report that the unit had been wiped out! The second aircraft which came from a Northern Queensland base also could not locate 312RS and dropped the mail well out into the scrub and it was many weeks before it was found.

Any surplus camouflage material was put to good use. Bob McDonnell recalls that at 132RS they took some of the left-over netting, removed the scrim, joined pieces together, cut up some cork life buoys to make floats and "flogged" some lead in Darwin for sinkers. A fishing net was born ! It was great dry but when wet it needed a truck to retrieve it - however the resulting fish were appreciated.

Editors' Comments: In many cases there had to be a compromise as trees and growth affected the performance of the unit. At Cape Ward Hunt the camoufleur's action was beneficial to the radar which was fortunate. The reader is reminded of LAC Joe Lynam's action at 338RS on Long Island where he cut down trees to improve the performance of the doover in an area where there was no clearing for gardens. A camoufleur who later visited the unit was not really appreciative of Joe's work.

SOME SNIPPETS FROM A50 HISTORY SHEETS

On 15 September 1944, at 27RS, Dunk Island, F/Lt Simpson wrote :-

"Two new type of orchids found. A pencil and bottle brush orchid make a total of eight now found on the island. These consist of the two golden orchids, two varieties of ground orchids and two tree orchids yet to be named. To quote Banfield, 'This is veritably an orchid grower's paradise'."

Personal feelings were expressed from time to time as shown by F/O B P Baker who, on 31 August 1945, stated, "Will exchange one radar station complete for passage to AUSTRALIA for one officer and 29 men."

However, it is nice to read that S/Ldr Chilton, CO of 44 Wing, used the A50 to record his appreciation of the efforts of radar personnel when the Wing was disbanded on 22 August 1944. The final paragraph of his entry reads :-

"In achieving all this [establishment and maintenance of stations], the degree of personal service given by the individual members of the Wing has been higher than is normally expected of men who joined the service to serve. Many have toiled under most arduous

conditions to establish radar stations where not even the aboriginal could live before. Many have maintained vigilant watch despite the extreme tedium of the job. Some have worked at higher pressure for long hours every day at Wing Headquarters.

Their work is not glamorous, it is secret and not talked about. Their reward is their pride of achievement".

STANLEY ISLAND - 45RS

Keith Backshall

I well remember the last day in Cairns, it was early November 1942. We had a ten hour leave while the ship was in port and we all decided that we needed a dog as a mascot and it was agreed that we would all look out for one. When we all assembled back at the ship it was found that the boys had collected more than a dozen dogs of all shapes and sizes. We settled on a black and white Fox Terrier who had a colourful career on Stanley Island chasing goannas and birds. That is until one day he went AWL and we found that he had been swallowed by a rock python.

We left Townsville on the lighthouse tender "Cape Don" and after servicing several lighthouses en route we were finally dumped on the beach at Stanley island with our only means of transport being a rubber wheeled tractor. The island was very densely wooded and the first job was to make a road up the steep side of the island which was about 1000 feet high. Because of the grade a zig zag road was built. We managed to get a camp established just below the peak and cleared a site for the radar. Most of the gear was manhandled and it took many, many weeks.

The tractor had to have several bods stand on its front to keep it from up ending. The two 25 KVA diesels were the real problem and our progress was only a few yards a day until we cut down trees to make "Fred Flintstone" wheels and axles from the tree trunks. We found that we could only get a few hundred yards out of each set of axles as they caught fire from the combination of the weight being carried and the friction.

One operator had his knee crushed during this operation and had to be flown out. We often laughed - or was it cried - at the contrast with how the Yanks would have handled the task.

SOME INCIDENTS INVOLVING CALIBRATION FLIGHT

Jack Hillier

Gerry Pentland MC DFC

In Calibration Flight we had a pilot named S/Ldr Gerry Pentland MC DFC. Gerry was, I believe, the first instructor in the Empire Air Training Scheme. He was the first man who flew non-stop from Townsville to Moresby in an Avro Anson. He was the first one to fly over The Hump in New Guinea in a light aircraft. He was first, first, first. He was at that time, I suppose, in his late 50's. He was certainly not a young man - but he sure could fly an aeroplane.

According to records at the War Memorial, S/Ldr Pentland arrived at 1RIMU on 25 June 1943 as a Subordinate Commander to the OC of Calibration Flight.

In 1943 when I was at Townsville, I had the task of calibrating a lot of stations to the north. Aircraft were supposed to come up from down south, Ansons I believe. Instead an old DH84 arrived at Garbutt, Townsville flown by Gerry, accompanied by his fitter Jimmy Pulton(?).

I remember the morning we were going to leave Townsville to go to Iron Range. We got out on the tarmac and the F/Sgt mechanic was jumping up and down, really going to town and said, " Who let this expletive expletive aircraft out of Mascot ?"

"Well" I said, "it belongs to S/Ldr Pentland."

We learned afterwards that he borrowed it for a day and returned it months later after going all around Australia.

The F/Sgt said, " The so and so thing should never have left. It is not airworthy."

I thought - "Oh my God I have to fly in this thing !" and asked, "What's wrong with it ?"

The magneto was crook, and something else was crook. So I said to him, "Can you fix it up?"

"Oh yes. We can fix it", he replied.

The next morning we took off. It was a real circus flying in this aircraft with Gerry Pentland. He had a big trunk, which was reportedly half full of whisky. It was also said that Gerry could not fly unless he had had a few noggins - I never saw him partake before flying. This old bloke used to love to fly in clouds, around islands etc.

In the old DH84 there were two seats up front and I used to sit up with Gerry. He had an old home made navigation calculator and would chuck it and a military map to me, saying, "Here you are. You can navigate I am going to have a look at the country-side".

On this particular occasion we left Townsville and got somewhere up near Port Douglas north of Cairns. He was flying around an island saying - "Nice countryside, nice place". We were having a lovely time.

Eventually we got to Iron Range. We came in from the west on the east-west strip. On looking down we could see crash tenders, ambulances, fire tenders and everything else racing up and down the strip waiting for us.

I said, "There must be a crash somewhere".

We landed and next minute up comes the CO and he is bloody ropeable, "Where have you bastards been ?"

"Oh" says Gerry, "What do you mean ?"

"You are an hour and a half overdue. We have been round looking for you."

Gerry was very contrite - we did not have any radio or anything for communications. He was a S/Ldr but he was always in trouble.

"We thought you had pranged," said the CO.

"Oh no, we were just having a look at the countryside." When landing an aeroplane, Gerry was really crazy. It frightened hell out of you the first time. He would just flatten her out, glide in and cut the motors and when you were about 10 or 15 feet above the ground would say - "We're handing over to Jesus now." Then crunch, you would kangaroo down the strip until you finally came to rest. You got used to it after a while.

He was an absolute character, but could he fly an aeroplane, he was really good.

Now the DH84 that he "borrowed" from Mascot was identification number A34-38 and was returned to 3CF in Sydney on 22 November 1943. So we had had it for five or six months.

Pinocchio the Flying Pig

We caught a little wild pig at Iron Range and decided that we would have this as a mascot. So either Sproddy or Ron Chappell drew a pig on the nose of the old DH84 and we called it "Pinocchio the Flying Pig". We carried him in a spring loaded cathode ray tube box until he outgrew it.

He went around Australia with us. Of course he grew bigger and bigger until finally he was too big to be airfreighted around the country with us. I believe that he was auctioned off at one of the RAAF bases, it might have been Richmond, and they got about £200 for a RAAF

charity - he was such a famous pig by this time. I can't confirm this but that is what I believe happened to him.

The Take Over of Broome

We went up to Darwin, Batchelor and then across to Broome with Gerry. We took over Broome. As we flew into town Gerry said "We have to stay somewhere. Look at all those empty houses".

So we went to see the boss of the town, whoever he was, I can't remember now, and said we needed some houses - I forget how many - because we had aircrew, ground crew, myself, Gerry and all the rest. So we took over three or four houses, and had the water and power connected again.

They asked who they should charge it up to. So we said "Charge it to the Air Force. Send the bill to Headquarters in Melbourne".

About two years later they were still fighting over who was going to pay the bill. The Take Over of Broome Town - that's the way Gerry worked, he did not muck around, he just went in and did the job.

In fact wherever we went they would say "Lock everything up. Here comes the rotten calibration crew again, they'll steal anything, do anything just to do their job".

They were handpicked really, our navigators were top notch, our pilots top notch, everyone had to be the best in their field because they had to fly very accurate courses at very accurate levels. Gerry was almost the odd man out but boy could he fly an aeroplane - he was the boss who organized everything and the section ran very well.

A Sojourn in Hospital

There were all sorts of incidents when you start thinking about them. Once in Darwin - we were down at Batchelor, I think. It was the time when they had 150,000 troops there.

When Calibration Flight came into an area they hid everything because they did not like us. When we all contracted dysentery, they liked us even less. You can imagine what would happen if the troops in the area had become infected.

They had this little Dutch doctor and he was the first bloke who admitted us into sick bay. I can still hear the doctor saying on the phone to the hospital, "I've got zix Japs with the 'diary' down here. No, No. Not Japs - Japs".

Well, all bloody hell broke loose. They "shot" us down to this hospital and put us in cages within cages within cages. Not a fly was allowed to go near us. We were there for quite a long while, the whole lot of us.

The ultimate insult was when they had to inspect us in the final stages to make sure that our bowels were clear. It was so unusual that they had nurses and everyone gathered around for this inspection. You had to get up onto a table and get more or less in the foetal position with your knees up and this great tube about two feet long was put up - you know where. They were all peering in. One of the pilots said, "I have never been so embarrassed in all my life. Absolute embarrassment it is". He was ropeable.

It did not worry me too much because I was glad that we were being cleared. That was a terrible experience. They certainly panicked in the area because if that had gone through the 150,000 troops - Whew !

A Flight from Paradise

Who on earth called that Godforsaken hole Paradise I really do not know. [Some radar people with a knowledge of Milton, referred to it as Paradise Lost] You could fry eggs on the rocks, 45+^{o}C outside the LW/AW tent and you can imagine what it was inside. There was a suicide at that unit - the poor chap could not take the conditions.

Now about the escape from Paradise. We drove by road from Noonkanbah to Paradise and back to Noonkanbah where I got on the Anson to go back to Broome. It was early morning and as we were flying along it got a bit boring so we thought that we would do some hedge-hopping.

We were chasing horses and mules and saw a station homestead with out-buildings. So we said - "Let's go and wake the bastards up".

We went vrooom down between the house and the sheds and then noticed a big wire between them. I forget the name of the pilot but he was good except at the end of this trip.

Then we saw something like an oil derrick. So we did a few "wheelies" around it, flying tight circles around the damned thing, the old Anson almost standing on its side with its Cheetahs roaring like mad. The next thing we noticed were big guy cables coming down from the tower. So we decided that we had better fly properly and get back to Broome.

We pranged in Broome. The aircraft overshot, went into the swamp and we took the whole thing to pieces between the tides. It happened at low tide and before high tide we had stripped all the motors and everything out of it, leaving only the frame. The Army helped us do that.

Another Prang

I claim to have the world record for winding up an Anson's wheels - no one could ever beat me on this one. We were down at Onslow and were going across to North West Cape - Exmouth Gulf. Alan Moir was the pilot I think. I was sitting in the second dickie seat - we had all the gear on board and we were 150 pounds over loaded. He was just sitting there and I asked what was wrong.

"Don't know whether we are going to get off", he said.

"What do you mean ?"

"We are overloaded and there's a bloody great sandhill 50 or 60 foot high right at the end of the strip. I'll tell you what I will do. I'll gun her up and get her up into the flying position before I release the brakes. Now when I say GO, you wind up those bloody wheels like mad".

So there I was with my head down and couldn't see anything with my hand ready to wind the wheels, left-handed of course. I could see him there gunning her up and I could feel when he let her go. I could see his feet and him trying to lift her up with the flaps and the elevator. We were kangarooing down the strip, the Cheetahs were right over past the red line, everything was flat out. We just staggered over those sandhills and boy did I wind those wheels up.

All the way to Exmouth Gulf we had to fly about 10 feet above the water. When we got there we found we had a crosswind on the strip. Hell ! What are we going to do now ? We had to land - we could not go back. We landed and overshot the strip. The next thing there were sticks and limbs - trees not our own - and things flying past, fabric ripping, the wings nearly falling off. We stopped and looked over the nose and there was a little canyon right in front of us. I don't know what colour my face was but I knew he was as white as I reckon I was. That grounded us for more than a week while they got parts and did repairs. The ailerons had had it, all the fabric had to be replaced. What a mess that was. We were lucky to get out of that one. Those were the kind of things that happened.

I have just found a note in my old diary for Thursday October 26 1944 to do with the prang at North West Cape. All I said was:

"Matching and phasing checked. Gear packed. Departed Onslow 1303. On North West Cape at 1346. Anson brakes failed on landing and aircraft ran into scrub, damaging fabric and bending flaps. Equipment taken to Doover".

That was the only comment I had at the time so apparently it did not seem to worry me too much.

A Flight in a Tiger Moth

Once I went to Derby by Tiger Moth. The plane was in the hangar. The pilot said, "Hop in". So I hopped in and I thought that he would taxi out but instead the pilot gunned the motor.

We took off from inside the hangar. As we went out the hangar doors we were almost airborne. It was quite an interesting flight really.

CAPE DON - 46RS

Paul Butler, Morrie Fenton, Jack Fraser, Lionel Gilbert et al.

A lighthouse was established at Cape Don, on the tip of the Cobourg Peninsula, in 1915. The light, during the war, was only lit when needed by allied ships. Three permanent buildings existed and civilian keepers remained in one of them while the RAAF occupied the other two - F/O Shaw, P/O Reen and the sergeant mess orderly in one and the technical staff in the other. The 25 guards lived in tents in the bush with each section or group having their own messing arrangements.

A light rail line and trolley was used to transport supplies and this was worked by manpower because it is alleged that some of the early guards had shot the horses used pre-war.

On arrival at the Don there was a sign on the wharf stating "Abandon Hope All Ye That Enter Here" and many thought that it was most appropriate.

The original equipment was an AW and it was later replaced by a Mk V COL. Bill Sanderson was in charge of the installation party putting the Mk V gear in place. Luck would have it that we interviewed Bill just prior to his death in 1988 because he was able to report that there was no aggregate for concrete work in the vicinity. To overcome this problem he got the aborigines to collect stones from the beach and surrounding areas. Each native had a hessian bag, worn apron fashion, into which he placed the small stones and carried them back to the unit.

There were many operational successes but one of the least popular ones was when the station plotted US Liberators, patrol-ling up and down an area about 50 miles out to sea when they were supposed to be attacking Timor. The assessment was that this was when the crews were approaching the end of their tour of duty.

The staff in the operations room sat on an aerial bomb and there were others in a depression nearby. The bombs were covered by camouflage netting and one day during a bush fire a radar mechanic named Ron Peterson climbed among the bombs pulling the burning netting away. Others on the scene wasted no time in putting as much distance as possible between them and the bomb dump.

Instructions were that in the case of an enemy attack the bombs were to be placed under the alternators, in the W/T hut etc, insert detonators in the bombs, run wires to the slit trench and blow everything up from there. On having a practice demolition run it was found that the wooden box frame of the exploder was riddled with big white ants. They got rid of the quarter inch termites by placing the exploder box on a meat ants' nest -the ants did a better job than the men could.

Jack Fraser served on 46RS from 26 August 1943 to 15 March 1944 and during that time he remembers being told by dignitaries in a captured German flying boat that 46RS was the most isolated RAAF post anywhere. [This may have been geographically correct but many other stations felt that their outpost could lay claim to this statement on the basis of lack of supplies etc.] Apart from the "Turka" which took him to The Don and the Fairmile Subchaser No 429 on which he left, he can recall only four visits, the dignitaries, one supply ship, the "Lady Yvete" and Doc Fenton in his "Duck" - Supermarine Walrus amphibian.

Food and General Deliveries

There were problems with supplies in the early days and it is to be remembered that the RAAF supplied food twice daily to the aborigines - mainly flour, sugar and tea. Jack Fraser recalls that once they ran out of most food ending up with only bully beef, some weevily rice and number of 40 pound tins of sour dried apricots. No tea, no sugar, no smokes of any kind.

Repeated requests were made to HQ without result but the boys got by, in a sort of a way, by buying some supplies back from the natives at extortionate prices. Smokers were distraught, going to great lengths to get anything that resembled tobacco. An airman's bed was cut up - he was known to put his butts down the hollow steel legs. Others dug up the grass around the base of the lighthouse looking for fag ends tossed in the past by the keepers from the top of the lighthouse. These men were hard to live with at the time.

At last the unit was advised that supplies were on their way and delivery was made by a small yacht named the "Lady Yvete" which sailed into the tidal lagoon. She brought food, tobacco and other much needed supplies and a change in diet: SIX pound tins of bully beef instead of the ONE pound tins previously sent. Some at The Don thought that others in their group were going "troppo". They changed their minds when the officers and crew of the yacht appeared dressed only in lap-laps made from the yacht's curtains.

Christmas 1943. No mail or food had been received for ages and they were told that a "Duck" from Com Flight was on the way. The radar operators kept the boys informed of the plane's slow progress and it eventually arrived to cheers and waving from the ground. But the sea was rough and the plane could not alight. So after circling a few times the pilot wagged his wings and headed back to Darwin. This was too much for the guards who fired on the "Duck" with their Bren guns from their trenches.

On his arrival back at base the pilot apparently reported that he had been fired at. A few hours later another similar plane came back and landed on the tidal lagoon - a dangerous practice as it had old pieces of steel rail stuck in the mud, with a few feet showing above the water, to mark the boat channel. A native dug out canoe was commandeered and went out to the plane. The pilot was the CO of Com Flight, Doc Fenton. He brought supplies and mail but all that Jack Fraser's section saw of the goodies was a big box of beer and a box of beetroot.

All the same the flight made Christmas 1943 for Jack who received, among other things in his mail, a Christmas cake from a youth group in his home suburb. The fact that a bottle of hair oil in the parcel had broken and been absorbed by the cake did not spoil it, he said.

The guards camped quite a distance away from the rest, generally not mixing. Some thought that they lived better than the others as the goat herd dwindled. When supplies did arrive they had the job of transporting the goods from the wharf to the store. A goodly quantity seemed to disappear on this short trip.

Over a period of time the position did improve.

An experimental drop was made by a Vultee Vengeance, which was, according to Frank Brown, disastrous - slabs of meat hanging from trees, mail and newspapers scattered far and wide. After this episode 46RS was supplied about once a month by a torpedo recovery launch. With a tidal range of about 12 feet the boat was soon on its side surrounded by half a mile of mud ! Fortunately the tide always seemed to come in again.

Deliveries were also made by a "Duck", which chugged along - there was no mistaking it on the screen. On one occasion the bag which was thought to contain mail only held amendments to Air Force Orders !! On a later trip the crew on the "Duck" forgot its starting handle but the handle of the tractor used to install the Mk V Col fitted and did the job.

Towards the end of the war, fresh meat and vegetables together with the latest films improved conditions immensely. In August 1945 the "Duck" crashed on take off, no one was injured but all the out going mail was lost - never to be recovered.

Health

Initially there were not many health problems apart from the usual dermatitis, tinea and dengue fever. However, one airman had infected sores on his posterior caused by him mucking around with a native woman. Apparently the husband caught him in the act and he was jabbed with an aboriginal pronged fishing spear.

Frank Brown, a Medical Orderly, was posted to 46RS in April 1945 and having spent 20 months in New Guinea absolutely enjoyed himself at The Don. He said that the weather was superb and there were no health problems by the time he arrived only having to treat a few aborigines for infected cuts and minor ailments.

A Chink in the Cloak of Secrecy

Paul Butler reveals that, to let the folks back home know where they were and beat censorship, they evolved what was thought to be a nice code. By including a greeting in each letter, beginning with "Love to Clare" in the first letter followed by "Regards to Albert" for C and A respectively, it took seven letters to spell out Cape Don. While they thought that this was a bright idea, it was completely unnecessary.

There was a blue enamel sign at the lighthouse which read "Telegraph Office". Paul had sent a telegram home to advise them of the new Postal Group Number. "Imagine my surprise on arriving home to see the actual telegram".

VIA RADIO CAPE DON VIA DARWIN RADIO X558 20 WORDS 2/6 8AM
11TH PASADELA
MRS F BUTLER
1 DARLEY ROAD RANDWICK NSW
PLEASE ADDRESS FUTURE LETTERS TO GROUP 665 RAAF DARWIN PAUL W BUTLER
10-50PM

Certainly it was February 1945 but it does not say too much for security.

A BOX OF NUTS

Cec Blumenthal

In mid 1942 when we were at Dripstone in addition to trying to find bits and pieces for both 38RS and 39RS I was asked to help in the assembly of a tall steel tower. This needed specially machined bolts to provide rigidity. I made enquiries about these nuts and bolts at RAAF Drome Equipment Section and several days later some boxes arrived.

They were very light and when we opened them we found that they contained ALMONDS not the type of nuts and bolts we wanted !!

335RS THE FIRST RAAF STATION TO BE INVOLVED IN A LANDING

Sources: RAAF Historical Section, W N Smith et al.

Planning for what was the first involvement of a RAAF radar station in a landing in the SWPA was carried out by 41 Wing. The following signal to F/O Katz, dated 4 December 1944, shows how S/Ldr Israel clearly defined the responsibility of each member of the support group to the station personnel.

TO 41 OB

FROM 41 WING

FOR F/O KATZ. YOU AND SGT SMITH ACCOMPANY 335. AC1 LOOMES RADAR OPERATOR WILL ARRIVE 5 DEC WITH TOMMY GUNS. HE WILL BE POSTED TO 335. YOU WILL BE RESPONSIBLE FOR INITIATING INSTALLATION SITING AND MATCHING. P/O BELL TO SUPERVISE CAMP CONSTRUCTION AND OTHERWISE ASSIST YOU. P/O COLLEY RESPONSIBLE FOR SUPERVISION UNITS MOVEMENT AND GENERAL ADMINISTRATION. STATION MUST BE OPERATIONAL WITHIN 12 HOURS AFTER ARRIVAL. SWEEP 360 DEG IF POSSIBLE. OTHERWISE COVER REQUIRED SEAWARD NORTH WEST NORTH AND EAST. YOU AND SGT SMITH RETURN HQ EARLIEST AFTER STATION OPERATIONAL

The story of the events from the time the unit was formed was recorded in 1944 and this, to us, is an historic document and therefore is included in its entirety. It is fortunate that Mrs R J Hill of Hampton VIC, LAC A J Hill's widow, forwarded a copy of *Malta of the Pacific* which had been distributed among the former members of 335RS. Eric Brindle supplied the copy of the final chapter or Epilogue which was missing from the original sent by Mrs Hill.

The personnel recorded their experiences when everything was fresh in their minds - not some 45 years later - and this is considered to be of historic significance.

On a visit to the RAAF Historical Section in Canberra, it was found that the article was written by Sgt W A Vawdrey and was submitted to the authorities at Milne Bay for approval on 23 November 1944.

He then called the story:-

RADAR UNDER FIRE

by Sgt W A Vawdrey

A story of the 'hidden service', a little known branch of RAAF ground staff, operating against the Japanese, the greatest Secret Weapon of the war - Radar.

Apparently Sgt Vawdrey was asked to change the title before sending it to his confreres. The same story with new title and an "anonymous" author follows.

MALTA OF THE PACIFIC

A history of the RAAF Radar Station which took part in the American Invasion of Arawe Peninsula, NEW BRITAIN.

Foreword

Pilelo Island.
Sept. 7th, 1944

Most of the facts narrated in this history have been derived from eye-witness accounts, and from the diaries of the members of the unit. Every effort has been made to ensure an accurate portrayal of events. A final chapter, embodying a farewell to Pilelo, will be added when the unit arrives in Milne Bay. I wish to thank all those who have helped to make the preparation of this history possible, either by supplying information (verbally or by the loan of personal diaries) or by correcting and verifying details.

The Writer

MALTA OF THE PACIFIC

CHAPTER 1
-In the Beginning-

No 335 Radar Station formed at Canberra, ACT on August 15th 1943, and began staging at Mascot, NSW on September 11th.

The following personnel left Mascot on October 5th; Pilot Officer J G Colley (Commanding Officer), Cpl Jeffs A F, LAC's Anderson G, Brindle E, Gallagher P A, Greaves N C, James M L, Maguire G G, Paine G S, Semmons F N, Taylor J, and AC1's Clark S, Cunningham P L, Cottrill A L, Cummins W J, Daley C J, Gill A R, Hill A J, Kelly H M, Kanowski B V A, Murphy G G, O'Callaghan W A, Peirce L, Thornton K J, Teale W L, Thomas R, Thurn A S, and Walsh H S. (Five others left the unit at Port Moresby).

At 12.20 pm on October 5th, the "Virgin Queen", the last of the Douglas transports (C47's), took off from Mascot aerodrome. Two DC3's flew through to Port Moresby the same day. The others made several stops at airfields along the East coast and reached Port Moresby on the 6th and 7th.

On arrival at Ward's Strip, personnel were transported with their equipment to 41 Radar Wing, 8 miles from Moresby, where they camped for the following eight weeks.

At Moresby, the unit was joined by Sgt Kelly M D, Cpl Nicol M W A, and LAC Woodland R, and later by an installation officer, P/O L Bell. (Cpl Nicol was in hospital when the unit left Moresby.)

Originally intended as a replacement for an American radar unit on Yule Island, plans were altered at the last minute, and 335 was chosen for a special mission. The order to move came on the night of Tuesday November 30th and eight C47's were loaded for an early take-off.

At dawn, the Douglases began the one a half hour flight to Goodenough Island, in the D'EntreCasteaux group. Camp was pitched alongside the 148th American Field Artillery, part of the 6th Army Task Force, to which 335 RS was assigned. On Goodenough, the unit prepared for speedy installation of the radar gear when the objective was reached.

Cpl Giraud joined the unit in place of Cpl Nicol. Two other members of the Installation Party arrived, F/O B Katz and Sgt Smith N.

Saturday, December 11th, trucks were loaded by moonlight, and at 8 am next morning, men and equipment embarked on LST 470, an invasion transport barge. (LAC Paine and AC1 Loomes A, a new arrival, were left in hospital.)

Eight barges, escorted by two corvettes, sailed at 3.30 pm (Sunday December 12th), arrived at Buna, after a wet night, at 8.30 am and set off again in the afternoon.

At 9 am the next day, the barge convoy reached the Buka River area, about ten miles south of Finschhafen, from where they were to take part in the invasion of Arawe Peninsula, NEW BRITAIN.

CHAPTER 2
-Initial Landing at Arawe-

The landing of the 6th Army Task Force at Cape Merkus, Arawe Peninsula, NEW BRITAIN, was a diversion for the main invasion which took place at Cape Gloucester, ten days later.

The main Arawe landing force left the staging area, Goodenough Island, by LST's on the afternoon of Monday 13th December. On departure, Brig-Gen Cunningham (in command) made a stirring speech, promising "no withdrawal. Your job is to grab a strip of beach and stick to it."

The LST's, in addition to men and equipment, carried numbers of amphibious tanks of the "Alligator" and "Buffalo" type and a smaller version, the "Duck."

A 335 RS advance party, consisting of P/O Bell (Installation Party) and LAC James M L (raised to temporary status of F/O !!) travelled with photographer Damien Parer and two Australian war correspondents, on BrigGen Cunningham's transport.

After an "Air Raid Red" on the morning of the 14th, when the aircraft passed almost overhead en route to bomb Goodenough, the LST's reached Buna at midday.

At Buna, the force was joined by a naval escort of two Australian destroyers and several US destroyers and corvettes. Most of the 1500 troops were embarked on the Australian transport "Westralia" and a rubber boat company was carried by a destroyer.

Tuesday afternoon, December 14th, the convoy left Buna. The sea was like glass and the night pitch black with low hanging clouds. During the darkness, the force was joined by LCT's bringing artillery and ack-ack units from Finschhafen.

Approaching within two miles of Arawe, just before dawn, three black masses loomed out of the west. They were the Australian cruiser "Shropshire", with two American cruisers and for half an hour they subjected the mainland and the island of Pilelo to a terrific bombardment.

Orange coloured flares gave garish illumination, and showers of sparks, flashing tracers and venomous tongues of flame made a fantastic gala spectacle, while the unleashed fury of the naval guns thundered a head-splitting salute to the dawn.

The barges, already loaded, were dropped off the "Westralia", which immediately left the vicinity. While speedy destroyers raced up and down, close inshore, hurling salvo after salvo at the Japs, the landing force of tanks and barges moved round to Pilelo Channel, the Eastern entrance to the harbour, under the lee of Pilelo Island.

Rubber boats dropped by a destroyer near the South Western entrance (Arawe Channel) made the first landing on the Western side of Pilelo taking a small radio station.

A lone Beaufighter, coming in low over the barges from the east, was fired on in mistake for a Jap. Then a force of US Bostons and Mitchells roared over and fiercely began bombing and strafing Jap positions on the mainland.

The remainder of the rubber boats, in attempting to land behind the Jap lines at the Eastern end of Amalut Plantation were caught in a vicious machine-gun cross-fire and withdrew with heavy losses.

As the landing forces neared the beach, Zeros and Vals (divebombers) swept over the hill and furiously bombed and strafed the invaders. Barges leapt from the water, as if propelled by submarine forces, when bombs fell close by.

The beach-head was taken by the 112th Cavalry without serious loss, and the defenders withdrew to the higher ground of the plantation, leaving quantities of rice and ammunition and one undamaged 20mm cannon.

P/O Bell and LAC James, with a small party of Americans crossed to Pilelo Island in face of machine-gun fire. On the beach they were joined by members of the rubber boat detachment, who had forced the seven Jap defenders of the radio station to take refuge in a cave near the beach, from where they had machine-gunned the incoming barge.

Following a direct hit by a Bazooka, a Jap darted out, shot an American between the eyes and stabbed him, before he was felled by Tommy Gun fire. The rest of the Japs were accounted for by the flame thrower.

Positions on the mainland were consolidated that day in face of heavy air attacks. On Pilelo Island, P/O Bell was placed in charge of a guard post at the deserted mission, where he was joined the next day by the main body of 335.

CHAPTER 3
-Arrival on Pilelo Island-

Tuesday afternoon, December 14th, 335 RS went ashore near the Buka River, to clear a camp site in the dense tropical jungle. Two tent flies were strung up and beds unfolded beneath them.

After tea, all hands unloaded ammunition and supplies for the artillery and ack-ack units which linked up through the night with the main force from Buna.

Sleep that night was broken by several “Reds” and the roaring of a persistent bulldozer, engaged in clearing the jungle a few yards from the camp. Towards morning, the low rumble of artillery could be heard from the direction of Sattelberg, where the AIF's advance was covering the flank of the American 6th Army in its invasion of New Britain.

Equipment was divided among three barges, and at 6.30 pm, in the course of a “red alert”, the convoy of six barges, escorted by corvettes, sailed for Arawe. Non-essential equipment was left behind in the charge of AC1 Loomes, who arrived that day from Goodenough.

Shortly after midnight, orders were received to return to the mainland. When day broke, the convoy turned in sight of the New Guinea coastline (15 miles distant) and headed once more for Arawe, which they approached in the afternoon.

As they neared the objective, floating wreckage drifted by and beach and cliffs bore witness to the devastation of bombs and shellfire. Of Japs there was no sign, but a sharp lookout was kept, and rifles at the ready. A small patrol barge passed, its occupants proudly displaying a captured Jap flag.

After floating about for half an hour, the barges navigated the treacherous coral reefs between the island of Arawe and Pilelo, the South Western or Arawe Channel.

Columns of water were shooting skywards as the Americans shelled enemy machine-gun positions three miles eastward along the South side of the Peninsula, and the chatter of machine-gun fire was clearly heard.

At 4.30 pm (Thursday December 16th), LCT 386 with the technical equipment and most of the personnel, ran ashore on the tiny beach of Pilelo Island.

And then....like rockets from the sun itself, Zeros and divebombers roared out of the sky, the rattle of their cannons and the whine of engines combining in a terrifying intensity of sound.

Momentarily stunned by the unexpectedness of the assault, the Australians stood stupidly as tracers flashed about their heads.

Then they dived for cover among the equipment on the deck. Swooping down in consecutive runs, the Japs strafed the barges for 30 minutes in defiance of a curtain of lead hurled at them by American .5's. One or two of the members of the unit opened up with 303's.

Then it was all over, almost as suddenly as it had begun. Miraculously, there were no casualties in the unit, but strained expressions bore evidence to the shock of that first furious attack - their baptism of fire.

CHAPTER 4
-First Night-

Spurred by the memory of staccato bullets and screaming engines, 335 began unloading their equipment.

Sgt Smith (installation mechanic) and LAC's Brindle and Greaves, on an LCT in quest of missing stores, grounded on a reef about 200 yards from Orange Beach, the initial landing point of the Americans. They were obliged to spend the night in the harbour.

Stacking and camouflaging equipment on the beach at Pilelo continued until dusk. A second search party crossed to Orange Beach, where they were strafed, and eventually located some of the equipment on a LCT in the harbour. They transferred the gear to their own barge and returned to Pilelo.

In the rough native quarters abandoned by the enemy, there was ample evidence of that surprise dawn attack - scattered clothing, overturned equipment, bags of rice (which we ate later) and two Primus stoves, probably captured by the Japs in the course of their victorious Pacific campaigns.

Just before dusk, a lone Zero strafed the beach. The weary airmen took turns with the half dozen picks and shovels in digging shallow fox-holes for the night. The last trench was finished about 10 o'clock, only minutes before the first raiders came over.

From their barge on the reef, Sgt Smith and his two companions had an impressive view of the bombing that night. A haloed moon shed a misty radiance over the harbour, and silvered the wings of the attacking planes as they came over in twos and threes to drop their bombs.

Pilelo Island, and the sea around, bore the brunt of the assault with an estimated 120 bombs. The pale moonlight was seared with geysers of flame, and the peninsula writhed under the mighty barrage of sound.

There was little sleep for the occupants of the fox-holes, as they listened to the drone of the engines, the click of the bomb-doors opening; the swish of the deadly missiles; the tense, endless seconds seemed like hours as they crouched and prayed.

Three bombs exploded within 50 yards of the tiny patch of beach, where they lay in their shallow trenches beneath the mangroves.

Except for one short barrage from naval vessels and shore emplacements, directed at a twin-engined recce, the guns were under orders to withhold their fire so as not to disclose their positions.

The dawn came at last, and with it a short respite from bombs. There were no casualties among the members of 335. Breakfast was a scanty meal of regulation emergency rations, augmented by coconuts. Then began the first of many hard, strenuous days of toil, sleepless nights and consistent air attacks.

CHAPTER 5
-Site Chosen-

Pilelo Island is less than two miles north and south, and three quarters of a mile wide, with a saucer-shaped contour formed by an outer ridge of coral, dropping sheer to the rocks, one or two hundred feet below.

At the Northern tip, the mangroves overhang a narrow strip of sandy beach, approached through a gap in the encircling reef.

The harbour of Arawe is bounded by the peninsula to the East and the Arawe Islands in the North, West and South.

Pilelo is the most Southerly of the group, and is separated from the tip of Cape Merkus (the South-West corner of the peninsula) by the Pilelo Channel, about half a mile wide and the route taken by the landing forces. To the West is Arawe Island, with Arawe Channel in between.

Like other islands in the group, Pilelo has a coral foundation with a rich top soil and dense vegetation. The rainfall in the area is high, but Pilelo has no natural water supply, the native inhabitants being dependent on a brackish well near the beach.

For months after the bombings, there was little fruit on the island, except coconuts, just a few turpentine mangoes and lemons, an odd bunch of bananas and an occasional sauersop. Normally paw-paws and breadfruit are plentiful, and there are a few oranges and pineapples. Edible nuts and berries abound, the "bor-bor" (or Calip) nut, like an almond, with a thick purple husk, being the tastiest.

The natives are very fond of the "bor-bor" nut, and Pilelo is also the richest local source of the highly prized betel nut, for which visits are made by neighbouring villagers.

Although for months after the landing, the island was devoid of bird life, varicoloured parrots, eagles, kingfishers, honey-eaters, willie wagtails, flying foxes (fruit eating bats) and other varieties inhabit Pilelo and the adjacent islands. Wild pigs abound, so do snakes and rats.

The site chosen for the radar installation was close to a deserted mission, situated on the outer ridge at the North East side of the island, overlooking Pilelo Channel and the Amalut Plantation on the mainland opposite.

The mission house was a well built two storey structure with a couple of native huts nearby, and surrounded by a garden of multi-coloured shrubs and plants. The immediate approach from the beach was along an avenue of flaming hibiscus.

This picturesque spot could not be used for living quarters as it was exposed to enemy fire from the mainland, so tents were concealed in dense jungle a few hundred yards back from the cliff, where there was a shallow depression.

As far as could be ascertained, the missionary was a German Catholic of Irish ancestry, Father O'Connell. The natives described how the Japs took him away, hands tied together, and later reports said that he had been shot in Rabaul.

Anti-British literature, German books, a map of the locality and an envelope addressed to Father O'Connell, German Mission, Pilelo Island, were found in the mission.

An English Protestant missionary in Kumbun, a neighbouring island, was forced by the Japs to live on native food, and died of malnutrition. His grave is on Kumbun Island.

Many of the inhabitants of the local island, of which there were three villages on Pilelo, took to the mainland hills at the Jap invasion. Most of them returned when the Americans landed.

Two natives received medals from Brig Gen Cunningham, one for leading his fellows back through the Jap lines, and the other for supplying valuable military information.

The natives were used as labour gangs by the invasion forces, and were quartered on Kumbun Island, where they were controlled by ANGAU (Australian New Guinea Administrative Unit) made up of Army men specially selected for their island experience.

Police Boys of the Royal Papuan Constabulary assisted the ANGAU representatives, acting as guides for the American and ANGAU patrols, which, from the first landing, penetrated the Jap lines and provided a most efficient intelligence service throughout the campaign.

CHAPTER 6
-Radar Begins Operations-

That first day, Friday December 17th, a "Jeep" track was cut half a mile through dense jungle and coral outcrop, rising to a height of 120 feet. All the equipment, as it reached the top, had to be camouflaged.

About 7 am, Zeros and Vals bombed and strafed, sinking a small sub-chaser in the harbour. High ranking officers aboard escaped a ducking, the wounded among the crew being brought to Pilelo, where there was a field dressing station.

Sgt Smith and his two companions were towed off the reef that morning by two other LCT's and taken to Orange Beach in a smaller barge. As they ran ashore, a large flight of Zeros and Vals roared in low and began bombing the beach-head. The three airmen found cover on the deck. They returned to Pilelo later in the day.

A small party went to the mainland and brought back most of the missing equipment. There was Jap rice, without sugar, for dinner, and the scanty water supply was subsidized with coconut milk.

In the afternoon, two Zeros swept over in pursuit of a Fortress which was dropping medical supplies. For tea there was Jap rice, half a cup of unsweetened coffee, and biscuits. Bombing continued throughout the next night and shrapnel fell over the camp.

Next day, December 18th, erection of the radar gear began. About 24 Lightnings (P38's) provided air cover most of the time, but whenever they were absent, the Japs came over to strafe and bomb.

The water shortage was alleviated by a heavy shower of rain. Lemons and coconuts were the staple diet. During the day, the balance of the equipment was brought from the mainland.

A Bofors 40 mm was installed near the mission, which was being used as a temporary mess. There were raids during the night, but the Bofors did not open fire.

Saturday, December 19th, a force of 21 Bostons (A20's) bombed and strafed Jap positions about two miles distant on the mainland. It was an impressive sight to see stick after stick of bombs rain down, like dozens of big black eggs, burst into flames, and send up huge columns of thick black smoke.

At 5.30 pm, the radar was operational, 48 hours after the unit landed on the island, and at 9 pm, the first shift, comp-rising AC1 Thornton (mechanic) and AC1's Gill, Cunningham and Murphy (operators) went on duty.

CHAPTER 7
-Heavy Night Raids-

Although the radar gear offered no protection against shrapnel, bombs or strafing, operating continued throughout the raids, while sandbags were being filled with dirt and stacked around the site.

Food improved slightly, but still consisted mainly of rice, with sugar and tinned milk. About 70% of canteen supplies, and some equipment, were missing.

Monday night, December 20th, “Washing Machine Charlie” recognized by the characteristic sound of his engines, refuelled and came over several times to drop bombs.

Next morning, F/O Katz and Sgt Smith, of the installation party, returned to Port Moresby, taking with them the first outward mail. Their barges were strafed on the way to Finschhafen.

Tuesday, December 21st, 20 to 30 Zeros and Vals were intercepted by P38's (Lightnings) and P47's (Thunderbolts). In the fierce and thrilling dogfights that took place, two Zeros and one P47 were seen going down in flames. The P47 pilot baled out and was rescued from the sea by a barge.

Not half an hour after the fighter cover left, Zeros and Vals attacked. That night, the Japs delivered their heaviest bombing of the campaign. Of an estimated 137 bombs dropped, the majority fell on and around Pilelo island.

Working 15 hours a day, often under blazing sun, with an average of four hours in the trenches at night, harassed by strafing Zeros during the day, short of food and water, the first few weeks were a gruelling test of courage and endurance.

Early Wednesday morning, December 22nd, approximately 100 bombs were dropped, and the enemy used flares to illuminate the target area. A report of enemy barges approaching was not confirmed. Friendly fighters patrolled the skies that day and the next, and the Zeros stayed away.

Thursday night, a dozen planes dropped 60 bombs. It was an eerie and disconcerting experience to hear the click of the bomb releases as each bomb was unloaded, and very bad for the nerves when the first explosion was heard some distance away, and each one that followed walked closer and closer until the stick was finished.

Friday, December 24th, sandbagging of the radar installation was completed, and the excavation of a W/T-Plotting Room began. Radio Tokyo's Xmas greeting was a report that Arawe Peninsula and Pilelo Island had been recaptured. There were further raids during the night.

The main invasion of Cape Gloucester on Xmas Day did not greatly affect the air war in the Arawe sector. From two to four bombing and strafing raids were expected each day. Work slackened off slightly, although because of the hours spent in the trenches, shift workers failed to benefit to any great extent.

Strafing raids continued on Sunday morning (the 26th) and in the afternoon, 24 A20's (Bostons) bombed and strafed the main-land, where the Japs were slowly being forced to retreat. There were four raids that night.

The erection of a mess and kitchen with tarpaulin and tent flies was commenced. Zeros came in to strafe, but after only one run, were driven off by Thunderbolts.

Next morning (Monday 27th) the radar gear picked up a large flight of about 100 planes moving towards Cape Gloucester. They were intercepted West of Arawe and 61 were reported to have been shot down.

On their return, they passed over Pilelo, which the escorting Zeros strafed. Fighter Sector later advised that 335 RS was responsible for the successful interception, and congratulated the unit on its achievements.

Two raids were experienced on Monday and Tuesday nights (27th and 28th) and a further raid on Wednesday night.

At 3 am on Thursday, December 30th, six bombs landed on the island. During the day, the road to the beach was continued through to the new mess site. There was some strafing in the morning, a lone Zero dropped one bomb in the afternoon, and more bombs fell at night.

A RAAF Radar Officer and an Australian Army Defence Officer visited the unit on the 31st. About noon, Zeros and divebombers strafed and bombed the area, also an outgoing convoy. Twelve planes reported shot down. That morning a severe earth tremor shook the island like a haystack. The first raid-free night was that of December 31st - January 1st.

Number 21 Fighter Sub-Sector (on the mainland) supplied the following official figures in the area between December 15th and 31st inclusive.

Raids (on which bombs were dropped)	40
Number of aircraft involved	372
Number of bombs dropped	433

It was also claimed that approximately 100 enemy aircraft had been destroyed in the area.

CHAPTER 8
-Air Attacks Less Severe-

New Year's Day was fine and warm. During the morning, Vals and Zeros strafed the area. In that first week of 1944, air attacks, although consistent, were limited to nuisance raids on which very few bombs were dropped.

Tuesday, January 4th, Fighter Sector reported that the plane known as “Washing Machine Charlie” had been shot down by a Beaufighter.

January 5th, seven bags of mail arrived, first received for six weeks. In the afternoon, a native canoe containing four men, one woman and two children approached from enemy-held territory.

P/O Bell interrogated the natives, and information valuable to the American Forces was obtained. One of the men had been tied up by the Japs all the previous day. The party were later handed over to ANGAU.

Friday, January 7th, A20's (Bostons) bombed and heavily strafed Jap positions about three miles away, which the artillery had shelled the previous day. One Boston, flying very low, seemed to strike a tree, and crash landed in the sea near the beach. All the crew were rescued. An artillery barrage followed the air assault.

Next day, B25's (Mitchells) came over in waves, and heavily bombed and strafed the same positions, after which the artillery delivered another barrage.

During the night, six bombers which had been turned away from Cape Gloucester by the ack-ack, unloaded anti-personnel and demolition bombs on the island. Shrapnel cut through the trees and fell over the camp. One bomb landed 50 yards from the nearest tent. The raiders were over intermittently for five hours.

Sunday, January 9th, A20's attacked Jap positions along the Puli River, about ten miles away.

The following day, several LCT’s arrived, bringing AC1 Loomes with the equipment left at Finschhafen, Cpl Nicol and LAC Paine, and some mail.

Light raids continued throughout the next few days. At 7.40 am on Thursday January 13th, A20's again attacked Jap positions about three miles away. Fighter cover was provided that night.

About breakfast time on Sunday January 16th, artillery dotted the Jap positions with smoke shells. Then a force of 17 Liberators, followed by 22 Mitchells, with a fighter umbrella of 12 Lightnings, launched the heaviest and most spectacular air attack of the campaign.

Waves of Liberators roared majestically in from the South, dropping their bombs from a height of 5,000 feet. Concussion waves (like heat waves) were seen rising from the ground, then, like a million crackers, flames shot up, followed by slowly mounting pillars of smoke. In the midst of the smoke and flame, coconut tops were thrown about like match-wood.

With the exception of one stick which landed in the sea, the bombing was strikingly accurate.

The snub-nosed Mitchells, in groups of three and four, roared in low from the South-West, unloaded their bombs, and sweeping round in a wide half-circle, came in again from the West, belching lead from the nose, sides and belly. Tracers seemed to float on the air as if handfuls of coals were being thrown from the windows.

Overhead, Lightnings dived and swooped gracefully, but no enemy aircraft appeared.

The last Mitchell dropped a red flare, which was the signal for the artillery to begin a 45 minute barrage. Then tanks, supported by infantry, advanced against the Japs. The objective was gained and approximately 100 Japs were killed for the loss of 23 American dead.

The following day, P/O Bell and Cpl Giraud left for Port Moresby. They escorted a Jap Major Prisoner of War to Finschhafen.

From the Jap officer's diary, it was learned that the enemy believed the artillery, and probably General Headquarters, were situated on Pilelo Island, the reason why the island bore the brunt of the air attack.

Wednesday January 19th, the ABC broadcast part of a speech by the Minister for Air, Mr Drakeford, in which he said,

"The RAAF guard unit which went in with the Americans at the invasion of Arawe are doing splendid work under hazardous conditions. This is the first time the RAAF ground staff have participated in an invasion of this type."

On the 20th, two P39's (Airacobras) which flew low over the island on their way up the coast towards Gasmata, were fired on by American ack-ack. F/O Horwitz, from Air Board, arrived that evening to inspect the radar gear, and left next morning.

About this time, a lone Zero began making sneak raids around 9 am each day, coming in low behind the hills so that the radar gear would not give warning of his approach.

At 4.30 am, Saturday January 22nd, 14 bombs landed on the island, and the 9 o'clock Zero dropped one bomb. The construction of a more permanent mess hall and kitchen was begun, and Sgt Hardingham arrived on posting.

On Monday night January 24th, in a very heavy raid, about 20 bombs fell on the island, one stick of eight landing at the foot of the cliff, just below the camp. The enemy strafed the cliff edge, to the extreme discomfort of the airmen sheltering among the rocks.

Next day, "Madame Tojo" (the female announcer over Radio Tokyo) said, "The radar installation on Pilelo Island had been destroyed last night by heavy bombers."

Thursday January 27th, a force of P47's came over about 8 am to ambush the 9 o'clock Zero, which sneaked in about 8.30 am, dropped one bomb and escaped unharmed.

Light raids continued to the end of the month. A Church Service on the 30th was interrupted twice, firstly by the 9 o'clock Zero which dropped one bomb, and later by a P38 for which there was a "Red." That afternoon BrigGen Cunningham inspected the camp.

Monday, the last day of the month, LAC Willet and AC1 Hutchison arrived on posting. That same day, a battery of 90 mm ack-ack arrived and was installed.

CHAPTER 9
-Last Days of Air War-

Tuesday, February 1st, the bomb-proofing of the W/T Plotting Room, which had been blasted out of coral rock, was begun. There were two small raids in the morning and evening.

At 3.30 am Thursday, two bombs fell at the SE corner of the island, close to the ack-ack battery known as "Fort Worth". Just before midnight, two more bombs fell close to the camp.

Early next morning, two bombs fell between the camp and the beach. During the day, a US Bomb Disposal Squad blew up unexploded American bombs.

Sunday, February 6th, the unit conducted its own Church Service with the address by P/O Colley and the scripture reading by LAC Peirce. LAC Kelly spoke on "Human Reactions", among them "Reaction to Danger". In the course of his address, a sneak raider dropped one bomb. The congregation fled to the trenches.

Sgt Kelly departed on posting that day. In the evening LAC Loomes lectured on "International Law". A few raiders were over in the night, and the 90's opened fire.

At 4.30 pm on the 7th, divebombers raided the mainland, LAC Loomes was hit in the leg by a piece of shrapnel, taken to hospital and evacuated on the 11th. Four bombs were dropped that night and Fort Worth was strafed.

On the 8th and 9th, several raiders were over, mostly singly or in pairs, and were met by heavy ack-ack. Next day there was a rumour of a possible paratroop attack.

A force of 32 Liberators passed by on Friday, the 11th. Early next morning, about eight or ten bombs fell in the area.

Sunday, February 13th, a searchlight was installed at Forth Worth. While adjusting his Tommy Gun, Sgt Hardingham accidentally shot himself in the foot, was admitted to hospital and evacuated on the 18th.

An Invasion Alert occurred on the 14th and rumours were rife of Jap paratroops massing at Rabaul. After the "All Clear" it was found to be only a practice.

A message received that day from General Krueger, Chief in Command, American 6th Army;

FROM: HEADQUARTERS ALAMO FORCE APO 712
TO : 6TH ARMY TASK FORCE 14.2.44

MY HEARTY CONGRATULATIONS TO YOU AND ALL MEMBERS OF YOUR COMMAND FOR A FINE PERFORMANCE IN EXPLOITING THE SUCCESS OF ARAWE AND THUS CONTRIBUTING TO A COMPLETE VICTORY OVER THE ENEMY IN WESTERN NEW BRITAIN. KRUEGER

Friday, February 18th, a sneak raider about midday dropped one bomb in the sea, close to some LCT's anchored near Arawe Island.

Next day, February 19th, a single raider dropped one bomb in the sea near Fort Worth. Two more searchlights were installed on the island, and a new company of Americans arrived. An American Chaplain visited the station and conducted a service the following day.

On the 23rd, six LCT's came in, and LAC Oliver arrived on posting.

The last raid in the area was that of February 19th, when a lone raider dropped one bomb in the sea near Fort Worth.

From December 15th to February 19th, official total of raids in which bombs were dropped was given as 97. Over 1400 bombs were estimated to have fallen in the area, about 75% on or around Pilelo, which was said to be the most bombed island in the South West Pacific.

CHAPTER 10
-The Calm After the Storm-

March 2nd, the first heavy rains of the wet season began. Two days later, the blackout in the area was lifted to 10 pm.

About this time, PT boats began using Pilelo as a refuelling base, and a barge tanker was moored to the jetty.

On the 9th, the unit was given a small Jap landing barge for use between the island and the mainland, and on the 18th it was put into commission.

Cpl Willet and Sgt Nicol departed on posting on March 10th and 20th respectively.

It was reported by the Americans that during the campaign the 148th Field Artillery, using 105 mm howitzers, fired 23,000 rounds, constituting a South West Pacific record.

On 27th, Sgt Hardingham returned from hospital. LAC Hewitt arrived on posting two days later.

At this time, enemy forces which, a fortnight ago, had been within eight miles, had been dispersed, and there was no organized resistance within 80 miles.

For the following eight months, the unit carried on with nothing more to break the monotony than an occasional posting. Along with swimming, volley ball, for which a court had been prepared, was the popular sport. Regular visits were made to the mainland for picture shows.

April 7th (Good Friday) P/O Alder arrived to assume command in place of F/O Colley. The following day, LAC Kelly departed on posting.

A fire destroyed a tent and some personal equipment on the 13th. The last day of the month, F/O Colley left for Port Moresby. He was accompanied by LAC Gallagher, who was to have an eye examination.

That afternoon, most of the unit attended a native "Sing-Sing" on Kumbun Island, during which Brig-Gen Cunningham presented two natives with medals.

May 4th, native labourers began building a wall of coconut logs round the radar installation. Five days later LAC Murphy left on posting, followed by LAC Cottrill.

The construction of a medical hut with sapling frame and sisalcraft walls began on the 20th. Iron for the roof came from Gasmata.

A radar maintenance party arrived on June 3rd. Next day Cpl Woodland left on posting. His replacement, Sgt Vawdrey, arrived on the 18th.

Throughout July, 11 members of the unit contracted dengue fever. LAC's Clark and Semmons were also admitted to hospital, and later evacuated.

The last of the American posts on the island moved out, including the one at the mission. The mission house, damaged by shrapnel and strafing was pulled down and a combined orderly room and store building, was erected under the direction of LAC Clark. Sisalcraft was used for the walls and roof.

Two small living huts were built by members of the unit, and a large American tent was pitched very high for a new W/T Plotting Room, the need for an underground shelter having long passed.

Throughout preceding weeks, native labourers had cleared the area around the camp of undergrowth. Towards the end of August, they built a recreation hut, native style, using sac-sac and poles from damaged native huts on the beach.

On August 9th, first mail for over a month arrived.

Wednesday, August 23rd, a signal was received ordering the station to cease operations and prepare to move to Milne Bay when shipping could be provided.

At 10 am that morning, the radar was closed down, after eight months continual operating, in which there had been only one serious breakdown, lasting 24 hours.

Two days later, dismantling of the radar gear began. By the end of the following week, the technical equipment (except the W/T sets) and such stores that were not in use, had been packed and transported to the beach in readiness for embarkation.

EPILOGUE
-Farewell to Pilelo-

When we sighted the "Ena" off Pilelo Island at the end of a calm, grey day (Monday October 30th) we experienced the first traces of uneasiness. Was this our - er - ship - this relic of another age, tall masts nodding slightly in semi-silhouette against a broad band of gold on the Western horizon ?

Those of us who first visited “Ena” were not too happy about the voyage before us. They said we could never hope to sleep on her - not all of us at once. (How right they were !) There was nowhere else but the hatch - with a tarp over it - and that would take less than half our number.

Most of us were too eager to get away, to see new sights, maybe go home on leave (!), to worry about such dismal prospects - and then there was all the work of loading before us.

It was finished on Tuesday, the huts were left empty (suddenly and strangely desolate!), the bare empty squares where the tents had stood now patches of desert, mute testimony to something past and done with. Tea, from emergency rations, was almost a picnic, with fires burning up tables, chairs, cupboards. To steal them yesterday would have been a crime: today we feed them to the flames, these discarded stage-props of the passing parade.

Grey, threatening storm clouds were settling over Arawe when we went aboard just after dusk. With all our bodies and personal equipment, we swamped the tiny decks midships and for’ard - decks that were no more than alleyways between hatch and rail.

The last load (the Jeep) rattled through the winch (powered by an ancient donkey engine older than my father!), the barge that brought us over from Pilelo Beach (where the swimming was better than we'll ever know again) pulled away from the “Ena”, the crew battened down and erected the tarpaulin, and the hatch (plus one alleyway!) was ours !

We stayed beside the jetty that night. With the small midships hatch, we endeavoured to make the best of an impossible situation, and try to lie down, if not sleep. Early next morning, the rain came down in sheets, the wind rose and the sea became rough, and when we crawled out of our sopping blankets at dawn, cold and stiff, the grey cloud pack was pressing down on us, and distance was obliterated.

Into that unpromising seascape sailed the “Ena”, her one ancient engine barely capable of overcoming the resistance of the wind and sea. It was hard to retain one’s position on the hatch as she rolled - and providing of course, that someone sicker than yourself hadn’t grabbed your place. It was harder still to keep one’s internal organs on a steady keel, and a procession of white-faced martyrs went to the rail, their doom written all over their features.

The weather improved slightly on the second day, and a fleeting glimpse of land gave us all hope. At 3 am on the third morning, the beacons on Cape Ward Hunt blinked at our passing. (What wouldn't!) That evening, there was singing on the poop, and far away to starboard, a great patch of white light whitened up the sky - Oro Bay - under a mottled grey ceiling, faintly lit by a fugitive moon, the sea was like black crepe, broken here and there by crinkly bits of white.

The following day, with the cloud-capped volcano at Tufi looming massive on the starboard, the “Ena” battled with the wind and tide to pass Cape Nelson before dusk. Darkness won, and the “Ena” (and her despairing passengers) turned and ran before the wind all night.

Next day, under a blue sky, with a spirited head wind, we tried again to pass the Cape - and failed. This time we ran back to Ambasi anchorage, a few miles behind. Just on sunset, we sailed cautiously into the bay, our volcanic friend looming close by. The engine idled. The “Ena” scarcely moved. “Sixteen fathoms” ! Down roared the anchor.

The waters of the bay were dead calm, and luxuriant tropical growth met the water in a tangle of green, a solid wall of vegetation, broken by a scattering of native huts. A puff of orange cloud glowed on the western incline of the mountain, and a rose window glowed in the massed, smoke-grey cloudbanks, whose battlements and ramparts were gleaming gold from the setting sun.

A lakoitoi paddled towards us. Darkness came reluctantly, like the falling of transparent veils, one upon the other. Things a long way off faded first, as the horizons came creeping in towards us, and day was fully night.

We had a pleasant day at Ambasi, replenishing our water supply from the creek, swimming and airing damp clothes, and trading bully beef for coconuts, paw-paws, mangoes, bananas, pumpkins, woven arm bands and girdles, and being taken down by the shrewd natives.

At 6 am on the seventh day, in a calm, blue dawn, made slightly lurid by the skipper's profanity, anchor was weighed, and the "Ena" put to sea. This time she passed the Cape with hours to spare and settled down to a steady five knots.

At lunchtime, on the following day, the "Ena" rounded East Cape and entered the bay, a lovely sight with coconut palms and greenery round the foreshore, the water crystal clear and sparkling, the towering mountain range deep blue behind, the sky pale with white cloud mixed equally with blue, and 30 miles between us and our anchorage.

Dusk fell, and the camp lights round the shore came on gradually, starry golden eyes in the brooding blackness. They grew and multiplied, serried rows of twinkling starlets, gleaming across the water (had Nature scattered the foothills with diamonds?) and everything dark and gloomy on the mountain sides above.

The "Ena" passed a clanging buoy, red light flashing with its warning, and sailed down the lane between the anchored ships. Blinkers flashed their messages.

"What ship is that ?"

"RAAF motor vessel "Ena" (If only you could see her !)

"Stand by for'd (One more night on the hatch - after that.....?)

"LET GO !" yelled skipper Hayes, and the anchor rattled down into the murky depths of Milne Bay.

FINIS

Arrivals and Departures since August 23rd

Departures F/Sgt Hardingham G (Sept 12); LAC Clark S (Sept 18)
LAC Gill R (Oct 9)

Arrivals Sgt Beckett E (Sept 8); LAC Hardiman L (Sept 9)
LAC Donaldson R (Sept 27); LAC Mott K (Oct 12) and on Oct 30 (on the "Ena"), AC1's Adams W M, Bovis S H, Byron B R, Davies L M, and LAC's Gibbs A, Heffernan F, and McMahon R J

Note: For his work at Arawe (and other places) P/O Bell was awarded the MBE.

FAMOUS LAST WORDS

A poor radar op lay a dying
At the end of a bright summers' day,
His cobbers had gathered around him
To carry his fragments away.

Now the range rack was right through his gizzard,
The BL4 wrapped round his head,
By the look of the mess round the doover
T'was plain he would shortly be dead.

With a calm peaceful look on his features,
As on a test set he lay,
The mechs gazed in great admiration
As these parting words he did say.

Take the 100TH from my kidneys,
The condensers from my brain.
From my chest take the flaming transformer
And assemble the doover again.

You'll find dozens of valves in my stomach,
The hand wheel take out of my neck.
From my heart you can get spare fuses
For there's lots of good parts in this wreck.

Take the T-R switch out of my elbow,
Get the voltmeter out of my spleen.
Had I not put my foot through the CRO tube
In this horrid mess I'd not been.

I've plotted my last range and bearing,
Given to Ops my last height.
Though once I was merry and cheerful,
I now am a sorrowful sight.

Now send up a couple of dipoles,
Place one at my head and my toe.
On the one on my head put the log book
So they'll know there's an op down below.

I'll be high o'er the clouds in the morning,
No doover before me to curse.
Fly me swiftly across to the mainland
So I'll die in the arms of a nurse.

APPENDIX A

LOCATION OF OPERATIONAL RADAR STATIONS

The starting point for this list was the official listing of stations. In some cases it appears that the place mentioned was the unit's mailing address rather than their actual location. Every effort has been made to make the list as accurate as possible, however, as mentioned in the text, secrecy seems to have been applied to some movements of stations and quite a lot of the A50 History Sheets do not now exist. Once again, maybe E & OE is applicable.

Of the 210 operational locations about 42% were overseas with a little over half (22%) being in Papua New Guinea. 29% were in either Western Australia and the Northern Territory or islands just off the coast of those States. The remaining 29% were in the Eastern States but none were positioned in Tasmania.

NOTES: * - Station never numbered
τ - Multiple Sites

ABBREVIATIONS:

42(55)	42RS renumbered to 55RS	NB	New Britain	SMG	Saint Mathias Group
ADMI	Admiralty Islands	NSW	New South Wales	SOL	Solomon Islands
BOR	Borneo	NT	Northern Territory	SA	South Australia
DEI	Dutch East Indies	PNG	Papua New Guinea	VIC	Victoria
DMG	Dutch New Guinea	QLD	Queensland	WA	Western Australia

RADAR STATIONS

	Shepherd's Hill *
	Port Kembla *
	Parkes *
7	Wedge Island SA
10	Cape Jervis SA
13	Cape Otway VIC
14	Wilson's Promontory VIC
15	Metung VIC
16	Gabo Island VIC
17	Burrewarra Pt, Moruya NSW
18	Saddleback Mtn, Kiama NSW
19	Bombi NSW
20	Tomaree, NSW
23	Lytton QLD
24	Caloundra QLD
25	Sandy Cape QLD
	Reformed as No 167
26	Cape Cleveland QLD
27	Dunk Island QLD
28	Fitzroy Island QLD
29	King Spur, Pt Moresby PNG
31	Dripstone Caves NT
	Pt Charles NT
	Fenton NT
	Exchanged number with 310RS
32	Rottnest Island WA
33	Cape Naturaliste WA
35	Stony Ridge, Albany WA
36	Hammond Island QLD
	Horn Island QLD
37	Gurney, Milne Bay, PNG
38	Cape Fourcroy, Bathurst Is. NT
39	Port Keats NT
40	Merauke DNG
42(55)	Bowen QLD
43	Portland Roads QLD
44(56)	Cooktown QLD
45	Stanley Island QLD
46	Cape Don NT
47	Gin Gin WA
	Kalamunda WA
	Geraldton WA
48	Jurien Bay WA
49	Point Lookout QLD
50	Dobodura PNG
	Tsili Tsili PNG
	Amami PNG
	Nadzab PNG
51	Point Danger QLD
52	Mutee Head Qld
53	Mount Surprise QLD
54	Collaroy NSW
55	Bowen QLD
56	Cooktown QLD
57	Belgian Gardens, T'ville QLD
58	Mt Spec, Paluma QLD
59	Lee Point NT

60	Cape Van Diemen
	(Melville Is) NT
61(307)	Peron Is NT
101(54)	North Head, Sydney NSW
	Collaroy NSW
102	Point Danger QLD
103	Stradbroke Is QLD
104(57)	Kissing Point, T'ville QLD
105	Point Charles NT
108	Quamby QLD
109	Mount Woods NT
	Adelaide River NT
	Dripstone Caves NT
	Lee Point NT
131	Kogarah NSW
	Kyeemagh NSW
	Ash Island NSW
	2 OTU Mildura VIC
132	Knuckey's Lagoon NT
134	Bunnerong Park, NSW
	Beverley Hills NSW
135	Pinkenba QLD
136	Bunnerong Park NSW
	Alligator River QLD
138	Waigani, Port Moresby PNG
	Dobodura PNG
144	Cannington WA
150	Adelaide River NT
151	Merauke DNG
152	Ash Island NSW
	Tadji PNG
153	Port Moresby PNG
	Finschhafen PNG
154	Truscott Strip WA
155	Ash Island NSW
	Exmouth Gulf WA
161	Adelaide River NT
	Truscott Strip WA
	North West Cape WA
	Sattler NT
	Morotai DEI
	Balikpapan BOR
162	Knuckey's Lagoon NT
	Morotai DEI
	Balikpapan, BOR
163	Essendon VIC
	Lutong BOR
164	Bankstown NSW
	Bargo NSW
165	Bargo NSW
	Quaker's Hill NSW
166	Labuan Is, BOR
167	Lingkas, Tarakan BOR
168	Tarakan BOR
169	Marsden Park NSW
170	Marsden Park NSW
207	Lilli Pilli NSW
208	Mine Camp, Swansea NSW
209	Benowa QLD
210	Toorbul Point QLD
211	Home Hill QLD
220	Bones Knob, Tolga QLD
224	Old Southport Rd, Darwin NT
227	Yanchep WA
228	Rockingham WA
251	Collaroy NSW
257	Casuarina, Darwin NT
301	Kanokopi, Milne Bay PNG
	Saidor PNG
302	East Cape, Milne Bay PNG
	Old Southport Road NT
	Balikpapan BOR
303	Townsville QLS
	Forduma, Tufi PNG
	Boirama Island PNG
	Port Moresby PNG
	Meimeiara Island PNG
304	Cape Pierson, Normandy Is PNG
	Gurney Strip, Milne Bay PNG
	Hood Point PNG
305	Mwononoia, Goodenough Is. PNG
	Bomatu Point, Kiriwina PNG
306	Bulolo PNG
307(61)	Peron Island NT
308	Millingimbi NT
	Cape Pasir, Tarakan BOR
	Deniliquin NSW
309	North Goulburn Island NT
	Tarakan BOR
310	Vlaming Head WA
	Exchanged numbers with 31RS
311	Archer Bay QLD
	Nissan Island SOL
312	Wessel Is NT
	Wells Feature, Tarakan BOR
313	Mornington Island NT
	Nissan Is SOL
	Cape Cunningham, Jacquinot Bay NB
314	Onslow WA

315 Cape Ward Hunt PNG
Middleburg Is PNG
316 Kombies PNG
Morotai DEI
Coal Point, Labuan Is BOR
317 Old Drysdale Mission WA τ
Sir Graham Moore Is WA
318 Batchelor NT
Cape Don NT
Cape Van Diemen NT
319 Fenton NT
Drysdale WA
Truscott WA
320 Mitchell River QLD
Puruata Island, Torokina SOL
321 Millingimbi NT
Cape Arnhem NT τ
322 Tanah Merah DNG
323 Boepel DNG
Mapi Post DNG
Muara Island BOR
Brunei Bluff BOR
324 Paradise, Noonkanbah WA
Cockatoo Island WA
Papen Is BOR
325 Corruna Downs WA
Labuan BOR
Miri BOR
326 Cape Leveque WA
327 Reddells Beach, Broome WA
328 Red Hill WA
Wallal Downs WA
329 Warriearran WA
330 Koitaki PNG
331 Tami Island PNG
332 Lae Terrace PNG
Malahang PNG
Sio PNG
333 Goodenough Is PNG
334 Gusap PNG
Cape Gloucester NB
335 Pilelo Island NB
Emirau Island SMG
336 Glibu, Trobriand Islands PNG
Tufi PNG
Safoa PNG
Oro Bay PNG
337 Kiriwina PNG
SE Point, Momote ADMI
338 White Road, Long Island PNG
Matafuma Point, Long Is PNG
Biak DNG
339 Yule Island PNG τ
340 Bat Island ADM I
Tadji PNG
Tadji Beach PNG
Tadji Point PNG
341 Mulgrave Is QLD
342 Mt Spec QLD
Eilanden River DNG
Victoria, Labuan BOR
343 Townsville QLD
Mt Spec QLD
Sattler Strip NT
Balikpapan BOR
344 West Montalivet Island WA
345 Bipi Island ADMI
Los Negros ADMI
Harengan Island ADMI
346 Bundralis ADMI τ
347 Mockerang Point ADMI τ
348 Tadji PNG
Tumleo Island PNG
Humbolt Bay, Hollandia DNG
349 Hansa Bay PNG
351 Lee Point NT
Balikpapan BOR
352 Sattler NT
Kokoya Island, Halmaheras DEI
354 Lingkas, Tarakan BOR
355 Sadau Is BOR

410 Gin Gin WA This title was issued as a RAAF unit title while RAAF personnel, using SCR 270-B equipment, trained USN personnel at Gin Gin WA. The unit was then disbanded and reformed as 47RS.

UNNUMBERED STATIONS

Shepherd's Hill The first radar station installed and operated by the RAAF commenced in January 1942 - two months before 31RS at Dripstone Caves. The gear was later moved to Bombi where it became 19RS.

Port Kembla An Army AW station operated for a short time by Don Kennedy and crew before they set up Kiama.

Parkes No record has been found so far that this station actually operated. It was a GCI.

INCOMPLETE STATIONS

The civil works were completed at the following stations which never became operational as equipment was not installed

1 King Island, Bass Strait
2 Flinders Island, Bass Strait
8 Elliston, SA
9 Whyalla, SA
11 Robe, SA
12 Cape Nelson, VIC
21 Smoky Cape NSW
22 Yamba NSW
141 GCI, Wingfield, SA
202 Victor Harbor SA
203 Cowell SA

LOCATION OF ASSOCIATED UNITS

FIGHTER SECTORS[4]

1 Sydney NSW
Bankstown, NSW
2 New Lambton, NSW
3 Townsville, QLD
4 Port Moresby, PNG
5 Darwin, NT
6 Mt Lawley, WA
7 Preston, VIC
8 Brisbane, QLD
Amberley QLD
9 Cairns, QLD
Milne Bay, PNG
Goodenough Island, PNG
Dobodura, PNG
Madang, PNG
10 Darwin, NT
Sattler, NT
Darwin, NT
Morotai, DEI
11 Yanrey, WA
Giralia WA
Potshot WA
Lae PNG
Nadzab PNG
Cape Gloucester PNG
Tadji PNG
Morotai DEI
Labuan BOR
12 Horn Island, QLD
Townsville, QLD
Torokina, NB
13 Garbutt, QLD
Merauke, DNG
14 Camden, NSW
Goodenough Is, PNG
Kiriwina, PNG
Los Negros, ADM I
Tarakan, BOR

[4] All Fighter Sectors were reclassified to Fighter Control Units on 7-3-44 and then renumbered by adding 100 to the original unit number (eg 7FS became 107FCU)

RADIO INSTALLATION AND MAINTENANCE UNITS

1 Coydon NSW[5]
2 Townsville QLD
3 Milne Bay PNG
Kranket Is, Madang PNG
4 Nadzab PNG
Noemfoor DNG
Morotai DEI
Labuan BOR
5 58 Mile, NT
6 Morotai DEI

RADAR WINGS

41 Port Moresby PNG
42 Townsville QLD with detachments at Horn Is QLD and Port Moresby PNG
44 Adelaide River NT

RADIO SCHOOL[6]

1 Richmond NSW
Maryborough QLD

[5] Renamed to Radar Development and Installation Unit (RDIU)

[6] Renamed to RDF School and then Radar School

APPENDIX B

YEARLY SUMMARY OF COURSES AT RADAR SCHOOL

	1941		1942		1943		1944		1945		Total	
COURSE NAME	**N**	**P**	**N**	**P**	**N**	**P**	**N**	**P**	**N**	**P**	**N**	**P**
Radar Instructors	1	5									1	5
Officers A	2	13	7	49	5	20	2	6	3	5	19	93
Radar Mechs A	4	76	9	146	21	268	20	184	26	298	80	972
Officers G			10	68	11	76	4	21			25	165
Mechanics G			23	362	35	516	3	84			61	962
WAAAF Radar Ops			20	440	6	159					26	599
RAAF Radar Ops			29	534	40	808	18	169			87	1511
Station Admin. Officers			1	6	4	13					5	19
Filter Officers			2	20	18	66	6	29			26	115
Filterers							11	57	1	7	12	64
GCI Controllers							*2	15	3	18	5	33
Sig. Officers Introduction							6	28	5	34	11	62
Aircrew Special					7	36	11	100	6	44	24	180
NCO Mech. G Refresher							5	30	3	8	8	38
RAF Radar Instructors									2	17	2	17
Mech. Conversion G to A									7	36	7	36
US Ops			1	12							1	12
US Mechanics G			1	6			16	238			17	244
US Mechanics A							13	171			13	171
W/A to Radar Mech. A									1	3	1	3
AS Radar Conversion									19	97	19	97
B24 Radar Ops Insts							1	11	2	18	3	29
B24 Bombing Insts							1	11			1	11
B24 Radar Ops							1	92			1	92
B24 Bomb Aimers							1	33	4	105	5	138
Armament Officers Rad									4	27	4	27
B24 Navigation Basic									2	11	2	11
B24 WOA Insts									1	1	1	1
B24 Radar introduction									3	72	3	72
B24 WOA (E) Radar									1	58	1	58
B24 Air Navigation Rad									1	19	1	19
B24 WOP Radar									5	288	5	288
B24 Bombing Leaders									6	52	6	52
Totals	7	94	103	1643	147	1962	121	1279	105	1218	483	6196

WHERE:

N = Number of Courses and P = Number of Personnel
W/A = Wireless Assistant.
WOP = Wireless Operators.
Rad = Radar
Insts = Instructors
Ops = Operators
AS = Aircrew Special
A = Airborne Radar
G = Ground Radar

***** The first course for GCI Controllers in 1944 consisted of 10 members of whom three were Dutch Officers of the NEI Air Force.

AFTERWORD

The task of assembling the information, compiling and editing *Radar Yarns* has taken much longer than originally envisaged. Nonetheless we have thoroughly enjoyed doing it and hope that a significant step has been taken to record part of the history of RAAF ground radar which may otherwise have been lost.

Unfortunately space precluded the use of all the stories received, but more will be included in the other proposed books on the operational and technical aspects of RAAF ground radar.

The reader is reminded that the whole of the collected material will be placed in archives at the end of the project so that future researchers will have access to data not contained in official records.

To the former radar personnel who have not already forwarded information, an appeal is made for them to do so immediately. By so doing their stories will be stored, along with the others, in archives in the interests of posterity.

Special thanks go to Liz Simmonds who did all the paste ups for the illustrations and locality sketches and assisted in the compilation. Hal Porter's continued assistance is very much appreciated. Over the course of the project he virtually became an associate editor.

Naturally this work could not have been undertaken without the complete and dedicated support of our wives, Liz and Merle. Their encouragement and forbearance enabled us to spend the large amount of time and money the project required.

Ed Simmonds
9 July 1991 Norm Smith