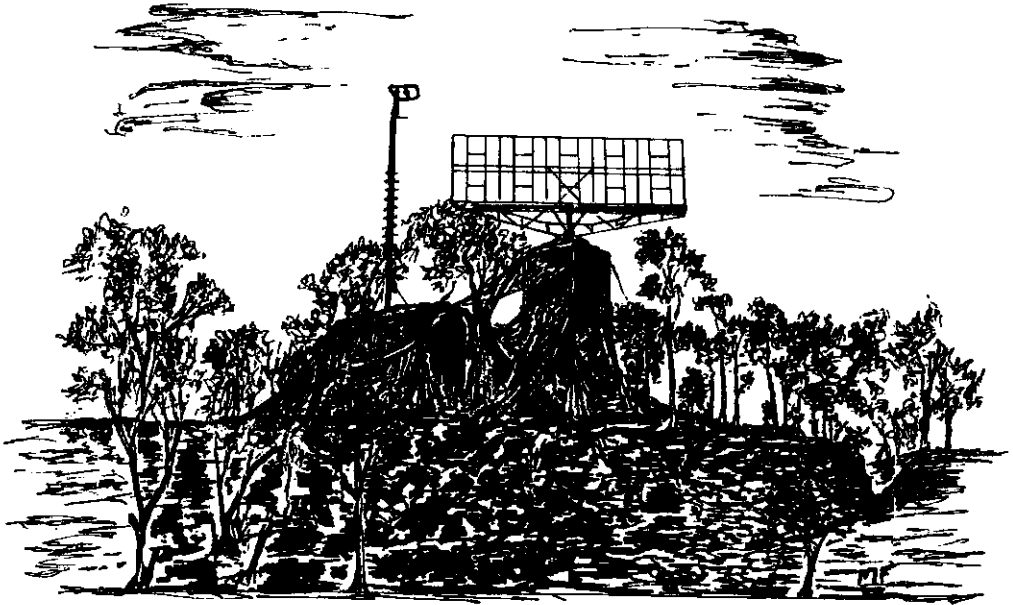


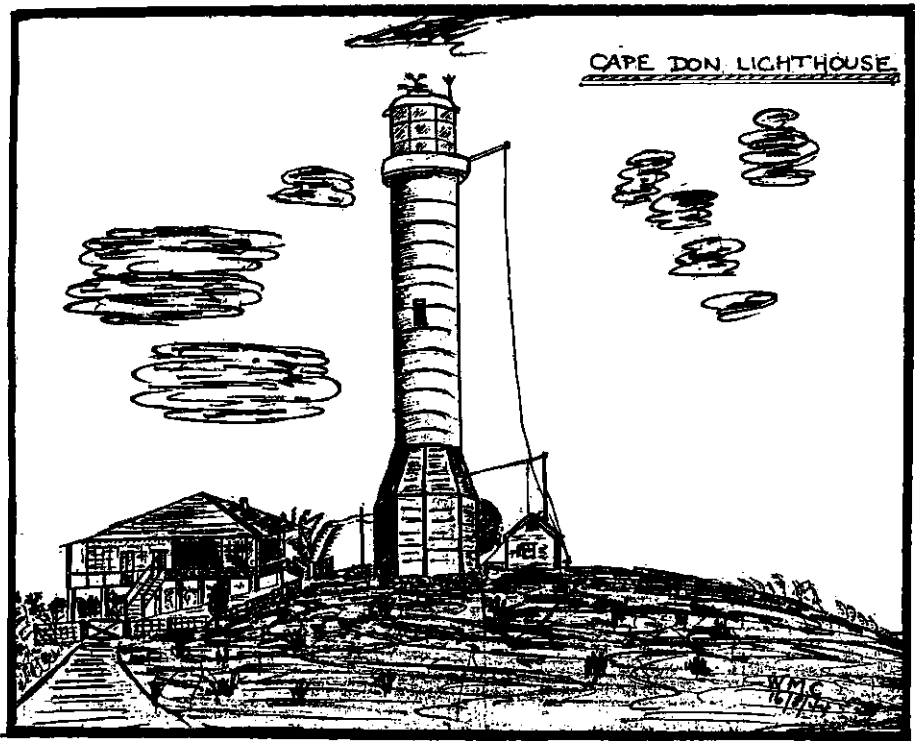
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(Fenton)

46 RADAR CAPE DON



46 RADAR, Cape Don. The COL No. V.

Edited by **MORRIE FENTON**



CAPE DON LIGHTHOUSE, 1944. A sketch of the famous landmark drawn by Max Counsell while at 46 Radar, 1944.

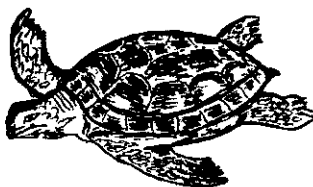
The History and Stories
of

**46 RADAR
CAPE DON**

A RAAF RADAR STATION

on Cobourg Peninsula -

now the Gurig National Park.



Edited by **MORRIE FENTON**

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46 RADAR

CAPE DON

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Edited by

Morrie Fenton

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Morrie Fenton

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Harry Freeman	Cliff Burnett
John Reen	Lionel Gilbert
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Vaughan Kingston	Tony Hick
Pat Fox	Rod Harris
Jack Fraser	Morrie Fenton
Terry Spencer	'Radar Yarns'
Max Counsell	(The Paul Butler story)
Jim Harper	

The photo credits are many.....in particular I mention: Rod Harris, Jim Harper, Bill Sanderson, Cliff Burnett, Jack Fraser, Max Counsell, Lionel Gilbert, Ron Sawade - and the Christmas Day photos are from 'Pictorial III.'

The Historical material came from the Parks and Wild Life Commission of the Northern Territory - the Moir and Owens story from aviation records and newspapers.

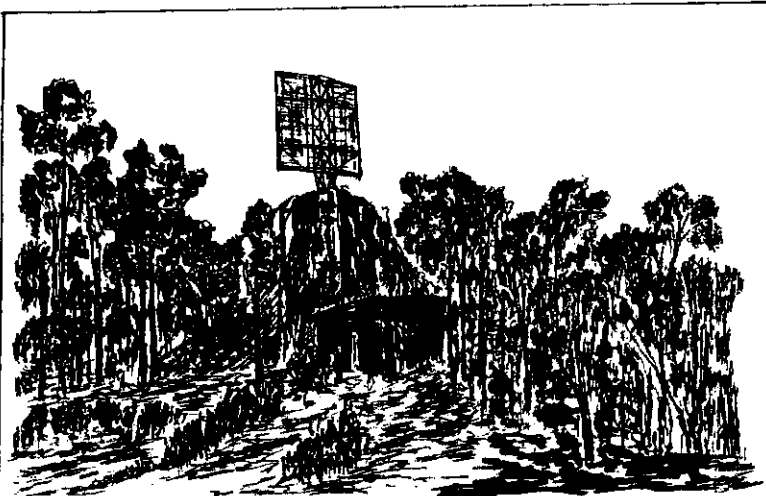
It is my hope that this story will add just a little to the rich history of our northern coastline - of Cobourg Peninsula and Arnhem Land particularly.

Morrie Fenton,
March, 1997.

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Editor's Note. A few differences and variations may be noted from story to story. It would be strange if there weren't any. Additionally, stations were continually changing, and this also results in descriptions and opinions which differ. Each man's story should be read as his recollection of his station, or of an incident, as he recalls it now, after 50 years.

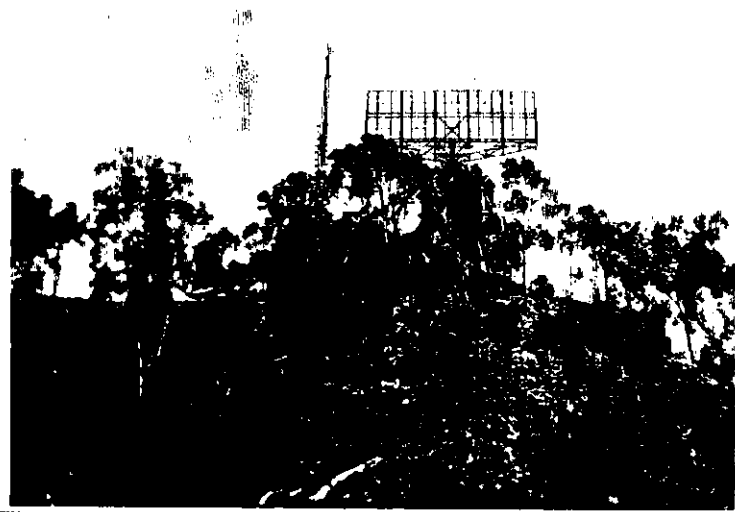
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46 RADAR, CAPE DON. The sketch above is of an early 'Tower A.W.' of the type at Cape Don in 1943...the operations area was about a mile south of the lighthouse. The generators and W/T hut were close by.

In 1945 the A.W. was replaced by the large English COL seen in the photograph below. This was on the headland north of the lighthouse and within easy walking distance.

46 Radar was very isolated, with no roads or airstrip- no motor transport, no phone or landline. A Walrus amphibian landed on the lagoon from where a light railway lead up to the lighthouse. Mail, stores and Personnel were brought to the Don by launch also.



FOREWORD.

No. 46 RDF station holds a special place in my memories. It was my first command, if only for a couple of weeks, and I was the first C.O. of the station. I had no thought that I was actually making history, even though I religiously wrote up the A50 sheets. I am therefore delighted to have been asked to write a 'Foreword' to this history. Morrie Fenton has set himself a daunting task in trying to assemble the history of the war-time radar stations from the A50's and the fading recollections of the participants. It is a task which needs to be done, since the unique features of these stations will never be duplicated. Small, often isolated units, they had their own culture, and had to rely on their own resources to solve all sorts of niggling problems. Many a young man found the challenges of this life brought out strengths that he never imagined he had.

No. 46 was one of the luckier stations. It was the last transportable AW installed in NWA and benefited from the hardships and the lessons learned from the installations of its predecessors in the area.

Accommodation and living conditions were good, by the standards of the time. Isolation, boredom and irregular supplies, the bane of many stations, were features that could not be overcome.

I am sure this history will be a worthy addition to the growing literature of WW2 Radar.

Harry Freeman,
C.O. No. 46 RDF Station,
15th. January, '43.

COBOURG...A HINT OF ITS HISTORY.

Until war struck at the North Australian coastline in 1942, Arnhem Land was almost exclusively Aboriginal tribal country. There were a few church mission stations with perhaps two or three mission folk at each. A mission boat made its way from station to station along the coast with supplies; and there was one well known lighthouse.

For centuries past, there had been occasional visitors along that stretch of coast...Maylayans...Macassans...even from China...but their visits were only to seek water and provisions...to trade or barter...or to prepare their catches of trepang and sometimes shark for transport back to their home country.

In 1623, the Dutch ship ARNHEM, with Willem van Colster as Commander, made its way along the coast from the Gulf of Carpentaria - and gave the land its name. Abel Tasman, that renowned early explorer, sailed these waters in 1644 and turned south through Dundas Strait into what he then called van Diemen Bay...but he soon turned north again without venturing too far.

The French and English navigators followed, with Nicholas Baudin being perhaps the first in 1803, his ship being 'Le Geographe.'

In 1818, Lieutenant Phillip King, son of Governor King, made his first voyage along that part of the coast in his cutter, 'Mermaid,' and named many of the coastal features...and at the westernmost extremity of Arnhem Land he named Cobourg Peninsula after Prince Leopold of Saxe-Cobourg, Uncle of Queen Victoria, and later King of Belgium. To the westernmost tip of the peninsula he gave the name Cape Don - to honour Lieutenant - General Sir George Don, KCB, the Lieutenant-Governor of the Fortress of Gibraltar.

The English, to establish a hold in this new land on the route from Port Jackson to the East Indies, attempted to set up several 'Outposts of the Empire' in the vicinity:

Fort Dundas in Apsley Strait in 1824. This was on the strait between Melville and Bathurst Islands.

Fort Wellington in Raffles Bay in 1827,

Victoria at Port Essington, near Croker Island in 1838. The last two were east of Cape Don, along the coast of Arnhem Land.

These all failed...though cattle and pony descendants of their livestock are still in the bush on Cobourg Peninsula, and there are some ghostly stone remnants and ruins of Victoria still to be seen.

Early this century came the era of the coast adventurers, well described in the books of Ion Idriess...when shark fishermen, crocodile hunters, mineral seekers and miners scoured the coastline, the inlets and the rivers, considering themselves successful if they received sufficient income to keep themselves and to provision their boats. Then with the outbreak of war, the military garrisons, naval patrols and air stations brought the easy camaraderie of service life to all the northern coastline areas, and these years marked the beginning of a new era for all tribal Aborigines, particularly so for the generations that followed.

The many Radar stations scattered along hundreds of miles of coastline were undoubtedly significant points of contact in this period of transition.

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THE CAPE DON LIGHTHOUSE.

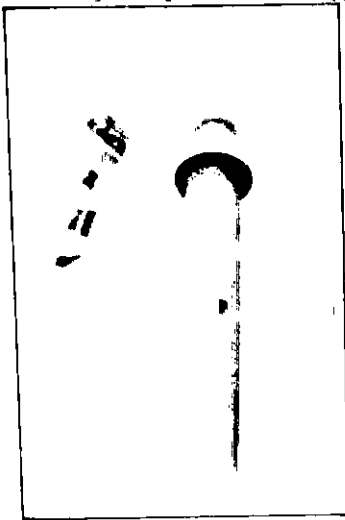
The Cape Don lighthouse has long been a well known and even famous landmark at the entrance to Dundas Strait where it marks the sea approach to Darwin from the easterly and northern directions. The tall light was constructed over a two year period from 1915 to 1917 - and was built on the most westerly point of the Cobourg Peninsula, on what is now the Gurig National Park. Across the strait is the eastern part of Melville Island, the home to many of the TIWI people - and Darwin itself is approximately 180 kilometres or more south west of the lighthouse.

Iron construction is said to have proved popular in overcoming the termite problem, but the heat inside iron buildings proved so great that the decision was made to build the Cape Don tower of concrete. However, as no metal aggregate was available locally, all of the materials necessary for its construction were transported from Melbourne and trans-shipped to be landed a few miles from the site. From here, a horsedrawn tramway was built to bring the materials to the building site. The tramway is believed to have continued in use until 1943 when the RAAF established a radar station at 'The Don.'

When it was completed, the light tower was some 28 metres high, and the lantern was 50 metres above mean sea level, and could be seen from a distance exceeding 35 kilometres. Vapourised kerosene was the fuel used; the lens was of three panels, floating in a bath of mercury, and the lens was turned every fifteen seconds by descending weights via a large clockwork type mechanism.

A team of up to ten men laboured over three 'dry' seasons to erect the lighthouse and its attendant houses and buildings. It was first commissioned in August 1917 after which it began its long and lonely vigil, showing a single white flash every five seconds.

A delivery run for mail and supplies was arranged from Darwin each fortnight, and heavy fuel supplies and materials were delivered by lighthouse tender while mechanics also checked the mechanisms. Strangely, no wireless communications were established until 1937. The lack of communication with Darwin was to become very evident as early as 1929. No electricity was generated at 'The Don' until the RAAF installed generators in 1943...at this time two lighthouse attendants remained on duty during the war, but their wives and families had left their Cape Don homes for a safer home away from the war zone.



The Cape Don light was modernised, first in 1970 when diesel generators and a tungsten halogen lamp was installed, and again in 1983 when a bank of solar panels was installed. The lighthouse attendants were then withdrawn as the light was now completely automatic.

#####



Vickers Vellore

MOIR AND OWENS.

Back in 1929, the lack of wireless contact at 'The Don' resulted in a rather unusual and newsworthy adventure story and sequel.... The English aircraft firm Vickers had designed a new long range aircraft - the Vickers Vellore. The first design was improved and the second model emerged as a large, single engined biplane with a wingspan of almost 80 feet, an open cockpit, and a cabin where mail and parcels could be stored. It was decided to prove the new aircraft on a long flight to Australia, and two experienced Aussies were chosen as crew...F/Lt Moir and F/O Owens. To prepare the plane for the long flight, an Armstrong Siddeley Jaguar engine was fitted.

The departure day was March 18th. 1929, and on that day the aircraft, G-EBYX, climbed into the skies with a full load of 5000 lbs and set course for the Mediterranean. But engine problems developed, and an examination was made at Benghazi. This was followed by a forced landing at Mersa Matruh with more engine faults and damage to the plane itself.

The aircraft was repaired, and the flight was resumed on 28th. April - on through the Middle East, India and the Dutch East Indies with the plane battling storms and bad weather.

On the last leg of the flight, engine problems struck yet again when it began labouring heavily...power and speed were lost...and on the night of Saturday, 18th. May 1929, the situation became desperate for the two aviators. Somewhere over Melville Island a light was sighted. It was of course, the Cape Don lighthouse, and the crippled aircraft and its anxious crew changed course and headed for it.

The lighthouse keepers realised the emergency on their hands when Verey lights were sighted. They lit fires which then enabled a crash landing to be made in an open, if very roughly cleared area. Afterwards, with no wireless communication, and not even a canoe to cross to Melville so that news of their plight and safe landing could be carried to Darwin, the men were thought to be lost, or to have crashed....and there was even the thought that they could be at the bottom of the sea!

Eight days later!!!! and still with no news of Moir and Owens, one man... pilot Brain of Qantas....decided they could still be alive, and set out to look for them. On Sunday, 26th. May, he arranged to be in touch with the Darwin Post Office at 6 p.m. and set off in his DH50 to fly as far as Croker Island.

With no sightings on his outward flight, he commenced the return when his wireless operator sighted the crashed aircraft at Cape Don. Back at Darwin, the news was flashed to the southern cities, then on to the world...and the steamer KYOGLE was contacted by wireless so that Moir and Owens could be picked up and brought into Darwin. Here the two were met and greeted by the Government Resident, Colonel Weddell, also by the crew of the aircraft that had found them, and by the usual government officials.

Meanwhile, the Cape Don lighthouse quietly continued with its nightly watch...

#####

TODAY.

The Cobourg Peninsula has now become the Gurig National Park and the Cobourg Marine Park, and most of Arnhem Land is part of an Aboriginal Reserve accessible to others only by permit.

The lighthouse, and its helipad is now known as the Cape Don Lighthouse Complex, and is on the Register of the National Trust. It remains Commonwealth property, however, and its maintenance and servicing is still a Commonwealth Maritime responsibility carried out by crews moved in by helicopter.

The houses and other buildings are now vested in the Cobourg Peninsula Sanctuary Land Trust which administers control over the peninsula. Because of vandalism, ranger staff have maintained a watch at the site since 1993, but recently a fishing-cum-tourism venture has shown interest in improving and using the houses as accommodation for its visitors who wish to try the wonderful fishing and exploring possibilities of the place. Between 1950 and 1970, the Aboriginal people living around 'The Don' were encouraged to leave the area and move to settlements where the children could attend school, but in recent years some of the traditional owners of the land have returned, again hunting and food gathering in the peninsula lands, but also taking their part in the management of the area.

The Cape Don Lighthouse Complex, dating from pre WW 1 times, can now be described as a relic of a system which has ceased to be, for there are no longer any manned lighthouses on watch around the Australian coastline. Automation, solar energy, helicopter crews and even satellite navigation have taken over. But the Cape Don lighthouse, a sentinel for the last eighty years at the entrance to Dundas Strait, will long remain a dominant landmark of the Cobourg area.



I was on the second Bailey Boys' course starting about April 1942. Near the end of the course several of us were selected to leave early and start Officer Training at Bradfield Park. We then went to Radar (RDF) School at Richmond, and four of us were posted to Mascot in January 1943 to set up new stations. My station was No. 46 at Cape Don; the others were LW/AWS for unspecified locations in North Eastern Area. At Mascot we were given office space and a list of items an earlier group had requisitioned as a guide to what we needed.

One of our first duties was to report to the AOC (AVM Williams?) at Potts Point. We fronted up for a brief interview which I remember as formal but friendly. I think he felt that we were 'boys on a man's errand'; in any case a few days later all but one of us found ourselves demoted to second-in-charge with an older officer appointed to command. We were a bit put out, but also somewhat relieved. My C.O. was F/O Ted Shaw who had been a publican at Phillip Island in peace-time.

It took about five weeks to assemble all the stores, and during this time a few additional personnel were attached to us. A clerk for each station; at least one DMT between us, and a truck on loan, but I don't think the main complement arrived until just before we left. There was little work for them, so they were used by the station as extra hands.

We left Mascot in February, with the personnel travelling via Melbourne and Adelaide to Alice Springs by train, and then in trucks to Larrimah, then on again by train to Darwin. The stores went independently via Broken Hill with a small detachment to look after them. They met up with us, I think, at the Radar (RDF) Wing at Batchelor, or maybe at Knuckeys Lagoon. The Wing (or was it the Area RDF Officer as Wing had barely been started) had already organised things for us, and I found that the tower had been erected. I think an Airfield Construction detachment had done this. While waiting for transport to Cape Don, I visited the Fighter Sector and was given a map with a reference grid, and the W/T Operators arranged frequencies etc. I also visited 31 RDF station one evening. Transport to Cape Don was on Navy vessels, either the TOLGA or the TERKA. These were sister ships that had been requisitioned by the Navy and provided general transport around the area. At Cape Don there was a landing jetty with a hoist, and a notice above it - 'Abandon Hope All Ye Who Enter Here.' Unloading was orderly, but as there was only a small launch to carry everything from the ship to shore, it took about three days. One surprise was to find that there were several RAAF personnel who had been left there as caretakers after the tower had been finished. They were very annoyed when we told them that we had been getting mail addressed to people we didn't know and returning it to sender.

A lighthouse had been built at Cape Don in 1917 with three houses. The lightkeepers' families had been evacuated, and it had been arranged that the RAAF would have use of two of the cottages. One was used for Admin. and Officers' quarters, while the other accommodated some of the airmen. There was a lot of space on the wide verandahs, but I think some tents were still needed.

There was a narrow gauge tramway from the jetty to the lighthouse, a distance of about 200 metres, with a man powered trolley. The Doover site was about 800 metres to the east with access by a rough path. A rubber wheeled handcart was used to haul equipment to the site. We only had a bicycle pump to keep

the tyres inflated. The equipment included two Lister diesel alternator sets. Although I have no recollection, they must have been partly dismantled to get them there. I think we installed them under a substantial branch of a tree, to which we attached a block and tackle.

The installation went ahead fairly smoothly. Our limited resources were adequate and there were no serious shortages of equipment, but we had to rely on manpower for transport. The construction party for the tower had bashed out a reasonable track to the Dover, and I only remember a few gremlins. The first was that we had nothing to mix the battery acid in except kitchen utensils, and at first Ted Shaw was unwilling to let them be used. After a few expedients proved hopeless, he finally relented. A consequence was that Fighter Sector had ceased listening out for us. The operators managed to get a message through by breaking into another net. Down came a number of signals, all in code. I tried to decipher them, without success. I was humiliated...all my training in cipher (two hours) was wasted. F/O Shaw was rather sarcastic. Finally I realised that the time/date headers were peculiar and that I had been using the month instead of the day as the deciphering key. Sure enough, when I decoded all the signals, one of them was an advice that in future the American notation for dates was to be used! How was I expected to decode it without first knowing about the change it announced?

The aerial feeders were a balanced pair, unlike the co-ax which had been used in earlier stations. At least I didn't have to use the buggery bar! Instead I was given a device which was meant to measure standing waves and a diagram of the feeder arrangements. When I put power on, the discharge tubes in the TR switch kept blowing. Eventually I looked closely at the feeder diagram and found that it was wrong. One of the sections was a quarter wavelength too short or too long. I have forgotten the details but when this was corrected everything was OK.

A little more fiddling and we were on the air with only one diesel alternator working. It was nearly a month before we got the second one on site and working, but the Listers were reliable beasts. I recall looking at the first one after it had been running for a week or so and marvelling at the steady way it kept going.

As you can see, the installation of 46RS was almost free of hassles. I didn't think this was unusual till reading recently of the troubles which beset some of the other stations. Credit must be given to whoever organised the siting and got the building and aerial up before we arrived. Incidentally by the time we got there the termites had been busy on the masonite lining of the equipment room in the tower, but the GI lining on the outside was intact.

Wing did their best to keep supplies up to the station, but with no road access or airstrip, we had to depend on the Navy, and their ships only arrived at intervals of about six weeks so there were no fresh rations. The lightkeepers kept a small flock of goats, and supplied us with milk. We bought a young goat from them once and the natives caught some fish for us. A Walrus could land safely near the jetty but only if tides and winds were right. There was a beach nearby (Alkira)* and a Tiger Moth landed there once to take out a sick airman, but it was too dangerous for regular use. I note from the history sheets that supplies to us and to the lighthouse were not coordinated, and I remember some of the disappointments when supplies and mail arrived for them and not for us. Then the next ship might be for us only.

**The beach has been called 'Alkira' in 46RS records also. The Atlas seems to name the bay 'Alcaro.'*

The station establishment included a batman, and one was actually posted to it. He was a pastrycook in civilian life, and so for the first month or so the station had fresh bread. One day the AOC visited the station and F/O Shaw asked the batman to prepare something special for dinner. The AOC complimented him and next week he was transferred to Area HQ!

Only a few men at Cape Don stand out in my mind. Ted Shaw was the oldest, fairly well steeped in RAAF ways, and kept the station on an even keel. He organised concerts and an athletics meet where the batman ran a book. One of the races was for the Aborigines and all of them were bribed not to win by various persons. The result was hilarious. The Medical Orderly, Cpl Harman, was versatile. He had a St. John's Ambulance Certificate, and was also a lay-reader. On one occasion the Aborigines called him in as mid-wife when a woman was having a difficult birth. Our Fitter/DMT, Cpl Dann, was a bit of a larrikin, but a very competent fitter. His offsider was at best 'average.' A young Aborigine called Charlie, aged about 15, hung around the engines and helped with maintenance. He was alert and a good learner. One of the Operators was known as 'Texas Ted.' He had a .22 pistol, and until he was stopped, took pot shots at rats when they entered the Doover.

There was a minor crisis when our tobacco supplies ran out. Most of the Guards were heavy smokers and became very twitchy. After all the good tobacco was used up, they tried the nicki which they found pretty awful. Strange mixtures of dried leaves were tried as well. Ted Shaw had instituted a password system which was treated as a joke, but on at least one occasion a Guard, suffering from withdrawal, insisted that a Mechanic go back to the Orderly Room and get the password before he would let him in the Doover.

The A50's mention the fitting of a pump to the water supply. The water supply was stored in an underground tank, designed for three light keepers and their families. It proved hardly adequate for fifty men. And as with other stations, we had a couple of bombs to demolish the station if attacked. These were kept under cover some distance away and had the necessary wiring and detonators ready. Soon after we arrived there was a grass fire, lit by the Aborigines, and the bombs had to be quickly moved. The lightkeepers had been on their own since their families had been sent south a year earlier. Not surprisingly, their actions were at times a trifle irrational. There was hardly any work for them as the light was only turned on when requested from Darwin, and this only happened a couple of times while I was there. For some reason, one of the keepers was not talking to the other two, and arrangements for rosters, messages etc were made via notes written on a blackboard.

There was a camp of Aborigines close to the lighthouse, and I understand that they had moved there from Darwin after the bombing started. We had little to do with them apart from buying fish from them. We had a shotgun, and got them to shoot some birds for the pot. After one try we decided that bully beef was better than parrot! There was a small amount of trading for artifacts, and one day an airman was asked if he would like a pearl. A price was negotiated but the agreement was hurriedly cancelled when he found that he had negotiated, not for 'a pearl,' but for 'Pearl!'

44 Radar Wing had a policy of rotating staff from the remote stations to those closer to Darwin where rations were better, and sometimes there was a picture show. And so on September 3rd 1943 I embarked to leave Cape Don when I was posted to 105RS at Charles Point.

* The term 'Radar' was adopted in September 1943. The first term used had been 'Radio,' then 'Radio Direction Finding,' or 'RDF.'

Posted from 319 RS at Fenton in late August '43, and staging through Radar Wing, I arrived in Darwin with a party of eight airmen, mostly Security Guards for 46 Radar, about September 1st. We sailed at midnight aboard HMAS TERKA, and accommodation was certainly basic, for we slept on deck. After a pleasant and uneventful day, we arrived at Cape Don late in the afternoon of September 2nd, and the bosun ferried me ashore in a dinghy. I still recall my surprise at the Navy's relaxed style of dress...the bosun wore a large floppy hat that looked like a ladies' straw. The party of airmen remained on board for stores unloading.

From where we landed, a light rail track ran up to the lighthouse, and luggage and stores were pushed up to the light on a trolley. I had been there only a short while when a messenger arrived from TERKA...the Captain had requested a RAAF Officer to come to the ship. So I was ferried out to TERKA and escorted to the bridge, where the Captain unleashed a magnificent bellow, directed at the mixed Navy/RAAF party at work in the hold below:- "Get that scum off my ship!"

He declared they had breached our cargo, in particular our beer supplies, and demanded what disciplinary measures we intended? I explained that the Security Guards were not directly under our control, and we would have to signal Darwin to have them attached for disciplinary action. Then who would be accused, who could supply evidence, and who would be witnesses? All of this I explained carefully, particularly the restricted powers of a 'detachment commander' in our circumstances. Later someone broke it to me gently...the skipper was a 'wavy Navy' reservist, called up from the Yachtsmans' Scheme, and in civvy street had been the Professor of Jurisprudence at the University of Tasmania!

I found two of the lightkeepers at the Don were easy to get on with, but the third was a somewhat surly character who had fallen out with the other pair. His watch changes were accomplished by him walking around one side of their house verandah and his relief coming around from the other end.... the changeover was thus accomplished without personal contact!

The water supply came from a well in the clear area between the houses, and originally was pumped by a windmill. To meet the increased demand, the RAAF had supplied a pump-jack, driven by a 'one-lung' petrol engine of agricultural appearance. The engine, a 'hit-miss' governed model, broke a rocker arm and so we were back to the windmill until a replacement arrived.

The radar was a 'tower A.W.' at this stage and it performed well and reliably, as I recall. Its diesel alternator sets (Listers?) were about a mile or so from the lighthouse, so our living quarters in two of the houses had no 'mains' power. We had two AT5/AR8 communications sets - a battery powered version at the H.Q. house for Admin. traffic, and a mains powered set at the Doover for operational traffic.

I only recall one glitch in radar coverage, when an unidentified aircraft was observed high overhead, and, not being detected by radar, was reported as a visual only. Sector identified it as enemy, resulting in a terse signal from Wing directing that I check over the entire set personally, which turned up nothing more than a possible dry joint. This, when re-soldered, yielded no detectable improvement in performance. Meteorologically caused performance anomalies were just not well recognized, at least in the field, at that time!

It was probably about this time we received - unsolicited - a compact little battery-powered H.F Transceiver, with several crystals, for use on pre-set emergency channels - in case evacuation became necessary. Which was a prudent, if not a very cheering provision! I saw no paperwork, or heard further mention.

Two breakdowns stick in my mind...the major one being of the transmitter H.T. transformer. The overload kept popping out, which proved to be due to an insulation failure of the H.T. winding which had gone down to core. This was replaced by a spare which soon failed similarly. Temporary repairs resulted in H.T. voltage being substantially reduced, but the set limped along with reduced performance.

Later we 'cooked up' one of the failed transformers, connecting the secondary to the mains - the voltage across the primary was now quite low. When the transformer was nice and warm, we filled the case with sump oil. After cooling, the transformer was put back into service. It worked sweetly, and we were back to normal power. The sump oil suggested itself when we inspected a failed spare and found it contained a teaspoon of salt water. How?...Why? One suggestion was that some gear had come out to the Don as deck cargo - and had encountered salt spray en route.

The second breakdown was a seizure in the turning gear drive. One shaft had to be driven out of its bearing with an axe. With the aerial disconnected from the drive, it was 'walked' around by an aiman on the tower roof, but we stayed 'on air.' With the offending shaft and bearing cleaned up and re-lubricated, the drive soldiered on happily.

With the changeover from IFF MkII to MkIII, we were visited by the BL4 installation team, and the installation went in sweetly. But one night after midnight there was a rather eerie aftermath when a MkII response was observed. The II to III changeover as I remember it had added a second and lower trace below the normal trace, and the BL4 had fed the lower trace. But this MkII response appeared on the normal radar trace, as had the original MkII responses. But further, I think this odd return had shown the MkIII coding.

All of which is consistent with the story which later drifted back on the grapevine...the source was a MkIII transponder in which the tuning had gone out of whack, and now tuned through 200 MHz.

Cape Don did not have a strip, so we were supplied by Navy and by the RAAF Walrus. On the Navy side, I remember a visit by a Fairmile sub-chaser. It was a lovely wooden vessel, engined with twin Anzanis. I've often wondered how those engines came into Allied hands! I was invited on board, and I can remember drinking warm beer in a very compact wardroom - with disastrous consequences! Anchored beam-on in a moderate swell, she rolled markedly. The swell also posed problems for the Walrus. In taking off, the pilot had to get his port float out of the water, and commenced his run by heading straight out into the swell. Then, picking the critical moment, he swung at right angles to run along the top of a wave.

In an attempted take-off on December 7th., the drill came unstuck when a float dipped back into the water, straining a wing root. The upshot of which was the return of the Walrus to Darwin under tow by the supply vessel SAPPHIRE. Reports of this journey only filtered back on the grapevine, but apparently the Walrus had to run its engine for much of the trip.

The availability of water at the lighthouse well/windmill attracted quite a few birds, and on one occasion a carrier pigeon was noted amongst them, distinguished by a little metal cylinder fixed to one leg. With breadcrumbs and like attractions, we tried to catch it.

The house of the lighthouse men had a light wire fence around it, more a symbolic boundary than a useful barrier. The pigeon would occasionally run into 'lighthouse land' and then back into the general area. It looked rather battered, as though it may have been attacked by hawks. The lighthouse staff in pre-war times had represented the Government presence in the area, and hence could claim a range of appointments:- Postmaster, Protector of Aborigines, Justice of the Peace, Protector of Flora and Fauna etc. etc.,

and they now claimed the bird as coming within their jurisdiction, apparently as 'Protectors.' So whenever the pigeon ventured under their fence, we enticed it back onto RAAF land where we finally caught it. A real comic opera scenario which needed Gilbert and Sullivan to do it justice. The message was from an Army Water Transport vessel, reporting engine trouble and that they were at anchor in either 'Snake' or 'Shark' bay. As Snake Bay on the top of Melville would have meant the bird was hopelessly off course if heading for Darwin, I guess now it must have been Shark Bay which is only 5 or 6 miles east of Cape Don.

There were a number of official visitors during my term at Cape Don, one being the Commanding Officer of Radar Wing, F/Lt. Wadsley, and the Medical Officer, F/Lt. Clarke. The Wing C.O. made a comparatively brief inspection, and seemed pre-occupied with other concerns. We had two aircraft bombs for emergency demolition, and I was busy running a tree-slung line to the slit trench where the dynamo exploder was to be located. I recall discussing with Rex Wadsley the comparative merits of bottle necks and timber insulators boiled in sump oil! Ingenuity was the keynote on radar stations!

In another surprising incident, a young native came in with an odd message. It had a rambling text which included snippets of poetry (I recall bits of Omar Khayyam) and came from an old beachcomber living near the mouth of the East Alligator River, perhaps 70 miles south east. His basic query was simple....could we tell his messenger the date of a recent minor earth tremor to enable him to reset his calendar. The message was on very heavy paper, like a page torn from a bank ledger.

I could date the tremor - I recalled sensing something odd while working in the Orderly Room, and looked up to see our ceiling hung kero lamp swinging vigorously.

Earlier in the war, an Army team had operated in western Arnhem Land, trying to round up a mob of wild Timor ponies, for which task they had established several fuel dumps along the coast, and had left a truck behind on pulling out. The old beachcomber had removed the truck engine and installed it in his boat. He had taken a lubra as wife, and the messenger who brought the calendar enquiry was one of their sons. Perhaps fearing a hostile reception, they had only brought the boat part-way to the Don and walked the last section of the journey. The son also queried the possibility of trading which was agreed, and a piglet was later delivered for Christmas dinner, in exchange for a drum of flour, I think it was.

A surprising feature of the Don scene was the fuselage of a crashed aircraft. The wing, tail, engines and instruments had been removed. Local folklore explained this as the remnants of a crashed participant in the London-Melbourne air race of 1934 but I could find no mention of it when I checked.*

I was posted to 312 on Wessel on 16th. December 1943, and was first flown back to Darwin. All I can recall of that flight was that the pilot expressed doubts as to whether his camera hatch was sealing fully (it was in the belly of the aircraft), so he landed on Darwin Harbour to check. If indeed it had been leaking at all, it was sufficiently minor to permit him to leave the aircraft for an hour or more while he dashed to the dentist at RAAF Darwin 'to have a tooth checked.'

In many regards, in NW Area at least, WW2 had its funny aspects.

*The story behind the aircraft remnants at the Don is fairly well explained in the story of Moir and Owens in the Historical section of this story.

EARLY DAYS AT 'THE DON.'

Vaughan Hingston.

My recollection of events of the time is somewhat hazy, but I hope the following anecdotal information will be of some value.

I did not accompany the original party from Mascot, having travelled from Melbourne via Adelaide to Birdum in December/January 1942/43. I was posted to 44 RDF Wing on 14th. March and to 46 RS on 17th. March. I note from my records I was posted back to Wing on 20th. March which appears to indicate that radar personnel were attached to Wing no matter which stations they subsequently served in the Area) and so my next recorded posting was to 3PD Brisbane on 3rd August 1944.

Whilst I was not part of the original party my recollection of my travel to Darwin by troop train (more accurately cattle train) is reasonably vivid. My recollection of Quorn is that we were handed over from the charge of the RAAF W/O to an Army Officer and we appear to have been under Army command for our overland trip. My experience would probably have been similar to that of the 'originals.'

The weather in January was hot and dry, and we did our best to get some relief by sitting on the side of the train with legs dangling to catch any breeze; the slow speed did not help to create such a luxury. As far as I can recall the journey to Birdum took about eight days. We had occasional relief when the train stopped to take on water from bore pumps, and we all took advantage of a cool shower.

The toilet facilities were, as to be expected, primitive: but the speed of the train allowed us to jump off when the need arose and jump back on again without much effort. I don't recall considering the conditions of the trip to be too uncomfortable, which would be an indication of a youthful adventure mentality, and as it was often said at the time, we were at war.

On arrival at Birdum, I was admitted to the Medical Quarters with some minor ailment, and had occasion to visit the latrine, which was a construction of a number of holes in the ground covered with pine boxed toilet seats with lids. The lid of the seat I used was up, and so I did not see a warning painted on the top of the lid which read...VD PATIENTS ONLY. In a panic, I reported my lapse to the Medical Orderly who said "Don't panic...Nobody uses that seat so it's the safest!"

The stay at Birdum seemed to be otherwise uneventful with the exception of a visit from the well known radio personality of the time, Harry Dearth, who was highly entertaining. And a very dedicated and energetic Salvation Army Chaplain also contributed to relieving boredom by organising a few sing-songs and concerts.

So then I was posted to Wing and 46 RS as I have mentioned. I joined 46 at 132 RS at Knuckeys Lagoon. I was one of the seven men who accompanied F/O Shaw on the merchant vessel to Cape Don with part of the original equipment. I recall the vessel was a commandeered private merchant ship, very rusty and weather beaten. It was, however, a comfortable break from Darwin heat to enjoy the sea air and the relaxation of a slow sea journey to Cape Don. We apparently sailed close to the coast, and I recall one crew member making regular depth tests. We were accommodated on deck.

Cape Don was, as you know, a lighthouse station in peacetime, and was commandeered by the Government during the war for defence purposes. There were three separate residences constructed with the Territory climate in mind. They were reasonably large with wide verandahs on three sides, a living room, kitchen, and two or three bedrooms. The three lighthouse keepers

occupied one house; the other two were acquired by the Government. The Officers and Sergeants occupied one, and we other ranks occupied the other. The Orderly Room and Medical Section were part of the Officers' and Sergeants' residence.

Our amenities were few, but we improvised with the occasional cricket game - cards, and we had the luxury of a hand operated gramophone, two records, and a few needles. My guess is that the lighthouse keepers' family had left this behind. The cook, who appeared to be feeling the isolation more than most, would, when he had finished cooking our meal at night, start the music with one unforgettable record - "While Rinaldo he wishes, She washes the dishes, In my little house by the bay."

The catering rations were limited and the cook had to draw on his imagination to vary the menu; but there were few complaints. Some rations did run out after some weeks, particularly MSV (Meat and Vegetables) - a tinned ration which was popular with the cook as it gave him room to vary the recipe. The other tinned ration, Bully Beef, (Corned Meat) was always acceptable, but that also at times became scarce. Dog Biscuits, hard as a rock but healthy, were plentiful and were always enjoyable spread with jam and tinned Maxim cheese. Dried egg powder, dried potato powder and dried milk were part of the kitchen supplies. Baked beans were popular too, but the supplies seemed to run out well before the next supplies arrived.

Mail was undoubtedly the one 'supply' we missed most and of course was delivered every few months, either with the normal rations supply, or when an occasional light aircraft flew over and parachuted a mail bag to us. I recall a time when we were desperate for mail, and one genius thought it a good idea to send a message to Base that we were 'out of matches.' The idea being a light aircraft would be likely to drop such an item, and there should be a good chance that perhaps mail would also be dropped. To our surprise, our message found the right response, and an Avro Anson arrived over the area a few days later.

The aircraft flew quite low and circled a few times before dropping a small parcel attached to a small parachute. We watched with excitement as the aircraft appeared to begin its return to Base, when we saw the parcel was caught in the undercarriage. The pilot seemed to realise the problem and tried to release the parcel by frantically dipping his wings. His tactic was successful and the parcel was released, only to be dropped into nearby mangroves where it disappeared. Quickly, one W/T Operator signalled the pilot and asked what was in the parcel. The answer...MATCHES. We needed matches like the proverbial hole in the head. But we were grateful our efforts to get mail did not succeed - mail in the mangroves would have been a disaster.

The operational Doover was situated some distance away from our living quarters. As Radar Operators, we worked on a schedule of four hours on and six hours off. We walked to the Doover and operated the radar screen in groups of two - one hour at the screen and one hour off. We were kept busy most of the time as enemy aircraft blips could appear at any time. I cannot recall how often during my time we detected enemy aircraft, but in the early days it was often, but reduced as the months passed. During our hours off the screen we made use of a home-made hammock swung between two trees. Here we slept or read or just enjoyed a tropical moonlight. I should say our presence at the Cape Don station was worthwhile from the perspective of its purpose which was to detect enemy aircraft in time to warn Darwin of their approach.

Probably to relieve boredom, John Swanson (Hank) and I decided to run a

small business in the way of a Laundry Service. We would offer to wash and iron shirts and shorts for a charge of sixpence and threepence respectively. Mick, one of the Aborigines, was persuaded to become our first employee and was paid for his services in cigarettes and coin. Mick would light up the copper, cut up the Sunlight soap, stoke the washing as it boiled clean, and help with the ironing. My nickname at the time was 'Hink,' and so the Business of HINK AND HANK LAUNDRY SERVICE commenced. Both John and I became qualified accountants in civvy street, and so we may have been developing our latent talent for business. We did not do any arduous work, apart from ironing, and we enjoyed the diversion. The laundry business had a short life, as after a few weeks a severe water shortage occurred and the enterprise lapsed.

We did have a small RAAF Canteen which stocked luxuries like cigarettes, tinned fruit, tinned cream, boot laces, envelopes, writing pads and similar items. This was stocked as supplies arrived with mail and pay. The canteen supplies ran out fairly rapidly as we used our pay for such luxuries.

Three or four Aborigines were employed on a permanent basis and paid by Government issued plug tobacco - nicki-nicki. There were a few heavy smokers among the airmen, and as with other supplies, there was often a dire shortage of cigarettes. Some of us who did not smoke relieved the situation in a small way, but I clearly recall some men scouring the ground for butts. This was after they had already purchased all available supplies of nicki-nicki from the Aborigines.

The Medical Orderly was one Corporal Harman. He was a fairly dedicated individual and looked after our small medical ailments, but if some more serious ailment occurred, it was a matter of degree as to whether that person was returned to Wing for treatment. A case in point was when John Swanson had a number of his front teeth knocked out or seriously damaged during a game of cricket. John remained at the Don for a considerable time before he was spotted back to Darwin for treatment.

During my time at 46RS I remember we had an official parade on Anzac Day, the only official parade I can recall. And Corporal Harman who was a Lay Preacher conducted a Church Service. Then in the evening we had a concert. LAC Price was the main talent behind the concert, and he was painted and appropriately dressed as Mo McCackie, and did an impressive impersonation of 'Strike Me Lucky It's Mo!'

I had volunteered to recite 'Gunga Din,' but I had little or no part in the programme preparation. And so the concert began with the National Anthem. The stage had a makeshift screen and I was asked to be behind the screen to deliver the first item. I had no knowledge of what was in front of the screen until it was pulled back, and there to my embarrassment was a catafalque draped with the National Flag. Responding to the situation, I delivered "They shall grow not old as we who are left grow old...Age shall not weary them nor the years condemn. At the going down of the sun, and in the morning...We Will Remember Them."

I did later get to deliver my Gunga Din.

I was posted back to Wing in November 1943 and was picked up by the Mission vessel ST FRANCIS which dropped me off at Bathurst Island. I had to return 'by available means,' and while waiting I enjoyed the hospitality of the Missioner, who I think was the renowned Father McGrath. Eventually a Navy vessel arrived, and a young Lieutenant announced, "Hingston, you'd better come back to Darwin with me." I don't recall thanking him for the offer.

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A FEW RECOLLECTIONS OF CAPE DON.

Pat Fox.

I was at Cape Don from 6th. April to September 1943. As the Operations Record book confirms, it would have taken eighteen days to get the Doover operational. I cannot recall who put the Doover together, but I remember pushing stores from the jetty, on a trolley running on rails, up to the residences, and with the help of the natives, pushing radar equipment to the radar site.

I also remember the pleasure and excitement when the infrequent mail services delivered, and the terrible disappointments when a ship passed by without calling in with mail or supplies. Another memory is of the failure of the windmill, in a calm, to pump sufficient water, and as a consequence, showers were banned.

We were limited in enjoying diversions such as picture shows because of our isolation, but somehow managed to get along well with sports meetings, debates and a concert.

In hindsight, and comparing Cape Don with subsequent postings in the Territory, I would now regard 46 RDF, in present parlance, as a 'hardship' posting.

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Ed. Note. *Many of us found that our Radar Stations were close by some of Australia's famous old lighthouses. For those interested, an extremely interesting and comprehensive history of the Cape Don lighthouse (and others) appears in "From Dusk to Dawn : A History of Australian Lighthouses" by Gordon Reid, and published by Macmillan Aust. 1988.*

SETTING UP 46 RDF IN '43.

Terry Spencer, (Radar Mech)

In the last week of February, 1943, I first travelled to Adelaide where I met up with the other men of our radar unit. Then in the afternoon we were loaded into old corridor coaches and we were off northwards to Terowie. On again from the railway town, this time on the narrow gauge northern railway, the train had to stop frequently to clear the firegrate of ash, while we enjoyed fantastic scenery like that painted by the Aboriginal artist Namatjira.

Some where along the line we were transferred to cattle motor trucks...then Army trucks which were not much better. We could not sit, but had to stand and hold on to the roof.

A stop at Alice Springs...then we were on the road to Darwin. We were given a look at the Devil's Marbles, and eventually arrived at Batchelor where the RAAF had its repair and salvage unit. Finally we reached Darwin which had been bombed, and were unloaded into the still habitable buildings, while our radar gear was dumped in one of the storage sheds.

The newly arrived Spitfires of No. 1 Fighter Wing were now based in Darwin. As a Radar Mechanic I was quartered close to where our gear had been dumped so that I was one of those who could watch it and report damage or theft. As luck would have it, we were right across the road from the armourers' range. Every morning at daylight a Spitfire was jacked up on the range and all the guns tested. First single shot with the .303 guns, then bursts of fire - the sights adjusted and further single shots and bursts, and this was repeated with the heavy calibre guns, the .50 calibre and finally the big 20 mm. cannons. It was deafening, but we could not get away from the noise. When they had finished with the guns, the engineers would come and test the engines, the noise again deafening. It was mid-day at least before the aircraft was pronounced ready for action. No ear muffs were issued for radar personnel - the armourers' assistants were the only men I saw wearing them.

Finally we heard that the Bishop's one time sea transport and supply ship, the 'SOUTHERN CROSS' had been secured for us. It was quite a large motor ship, 60 or 70 feet long and twin screw. All the gear for the station had been taken to the wharf by motor transport, and the sailing time was set for dawn the next day. When we arrived at the wharf, we found the crew already busy. The mess staff were going to feed us and the engineer's crew, all local Aborigines, were in the engine room attending to the two huge 4 cylinder oil engines. These were old crude oil Bollinger engines with hot-bulb ignition. Each engine had a great primus blow lamp directed on its ignition bulb. There was a great continuous roar, each engine being attended by one of the Aborigines with a blanket over his head to protect him from the heat of the blow lamp. When the bulbs were nearly red-hot, the starting cylinder was adjusted to the start position with a crow-bar and the compressed air turned on, with each engine starting in turn. Before the blow-lamp was turned off, each cylinder was tested for ignition by turning on a tap in the cylinder head. If it squirted flame, the cylinder was firing OK, but if smoke came, the bulb probably required more heat. The SOUTHERN CROSS pounded along until we reached the lighthouse about mid-day. The ship was anchored close to the wharf, and we unloaded first into the ship's boat, then unloaded again onto the wharf.

We were not allowed to have motor transport because fresh wheel tracks could be seen from the air and give away the location of the station. We had to make do with a trailer for the two large Diesel engines and the generators for the power plant, which all had to be manhandled. After these, the cargo mostly consisted of the radar receiver and transmitter housed in domestic refrigerator-sized cabinets, then the communications gear handled by its own crew, and the heavy but reasonably portable power line. It had to be all stowed during the evening before the Japanese reconnaissance planes were about. There was a small gauge railway and hand trolley on the side of the little harbour. We would go as far as possible in one direction until we came to the points which were shifted with a crowbar to allow us on the other leg of the railway. I think there were four changes in direction before we reached the top of the thick ridge where the lighthouse and the three large houses stood. The radar crew were to live in one house, the administration crew in another, and the lighthouse crew of three retained their own residence.

As we reached the top, we heard a roaring noise like a wind coming, and the earth started to sway like the deck of a ship. Several more tremors came during the afternoon but did not interfere with the unloading. Everything was stored in or under the three houses as we did not want to show signs of activity which could be seen from the air. There was a windmill and well

for water, but work on the windmill was stopped because an operational windmill is an indication that some people are being serviced by it, and because of the numbers of footpaths we made as we walked about. It was finally decided that we could repair the pump-jack and work it with a small engine. The overhead tank was filled once a day and we had showers in a concrete building. We came and went along the old tracks. The Japanese reconnaissance planes used to fly overhead but did not seem to take much notice of our activities, so we must have concealed everything fairly well. While we were settling in we had two more quakes. We could see the waves in the earth as they travelled, just like a wind coming, and the trees also looked as though they were bending before a wind, but the wind was not there.

The biggest problem which confronted us was to transport the two large Diesel engines and the alternators up to the operations area on the little trailer intended to be pulled by a utility. We had no prime mover, only human traction for this ridiculous trailer. After much struggling, we finally got the engines and generator to the concrete beds we had prepared for them. The next thing was to connect our generators first to the signals hut and then to the operations room where the antenna, the transmitter and receiver were housed. Adjoining was a small mechanics' workshop and bench for the test equipment. On my first night watch in the operations room before we connected the power, the place was dead silent. Normally the blower which cooled the two power valves of the transmitter would be working, but on this night the whole place was pervaded with a strange crackling sound. This turned out to be the sound of large termites eating the woodwork! We had a small quantity of creosote which we used to protect the essential parts of the building.

The watches were arranged so that each of the operations staff had one day stand-down per week. These were often spent on long exploratory hikes. One that stands out in my memory was a walk to a point which took us to a wide bay with a wide sandy beach. This would have been close to Popham Bay. On this expedition we found an old four-cornered bottle like a modern Schnapps bottle. It was well worn by sea and sand. The letters were engraved into the glass, not raised as on a modern bottle. We tossed for it, but I lost. I have discussed this bottle with a Dutch friend who said such bottles were made in Holland a long time ago, probably contemporary with the Dutch explorers and adventurers who used these northern shores for shelter.

We were strictly separated from the local Aboriginal population. I often wondered why we did not see any Aborigines, and any chance association was discouraged. At the end of the war, when I returned to study medicine, I discovered that one of the reasons was to protect them from any chance of infection with malaria. Before our first posting to North Western Area, we were closely questioned about our previous residence in Australia. Those who had resided north of Brisbane were posted south. There had been one accidental infection, resulting in a high death rate, so what appeared to be unnecessary precautions were certainly warranted.

There was very little communication between the radar staff and the lighthouse staff, who were apparently under Navy administration. The Navy used to visit us to replenish our stores and fuel and we were warned of their visits so that we could help unload. I can remember only two occasions when the lighthouse was put into operation. The first time would have been just after the Battle of the Coral Sea. We were told it was to guide survivors.

Later it was operated for one night only...we were told this was to guide an important convoy through the Dundas Strait. It was a very powerful light with three beams which lit the area from one horizon to the other.

The mechanics and operators, having access to the small workshop, used to manufacture various decorations for wives and families at home, such as brooches and rings. These were made from dural, sea shells, tortoise shell and buffalo horn. One English radio operator told us how they became known as 'foreigners.' He said the Air Force workshops were often asked to handcraft various things for the Resistance movement, which were known as 'foreign orders,' officially illegal, but allowed if their destinations were to be Allied countries or resistance movements. These were for radios, compasses and sometimes engine parts or gun parts. As the orders dwindled, the name 'foreigners' stuck to unofficial manufacture of decorations for family gifts, which was one way of letting the families know we were well and thinking of them.

Periods of extreme range over the horizon and echoes of extreme range were noted from time to time. I thought I could relate these phenomena to temperature inversion. At times we could plot the outline of Bathurst and Melville Islands, and on one occasion we were able to plot aircraft taking off from their Timor airfield. 'The Bug' was a mysterious echo which moved with great speed. These often originated at the extreme far end of the trace, sometimes hovering around the middle of the trace, then progressing at reduced speed to zero or infinity and decreasing in strength. I have often wondered if these echoes originated from meteorites grazing the upper atmosphere on a tangential path. This would explain the mysterious behaviour of the echo moving up and down the trace and tending to hover around the middle.

From time to time we saw a small echo in Van Diemen's Gulf, not much higher than the echo from the surface of a rough sea. This echo troubled us a bit because it came and disappeared and only moved slowly. The possibility of a submarine periscope was considered but none of our operator staff had seen a submarine echo. Plain language communication on the radio was prohibited. I think this matter was logged and reported to the administration staff who could report it in code. I remember soon after these sightings the Navy made a supply visit and we heard about a small Japanese submarine stranded on the Bathurst Island fringing reef. We were told that the submarine was deserted and propped up with timber cut from the island, and one of the sea cocks left open, showing that the crew was about with hopes of refloating at high tide. Later we understood that the crew had been killed and buried in unmarked graves, and that the navigator's code book was never found.

46 RDF as it was then known, received a commendation for rapid and accurate plotting of enemy aircraft before one of the raids.

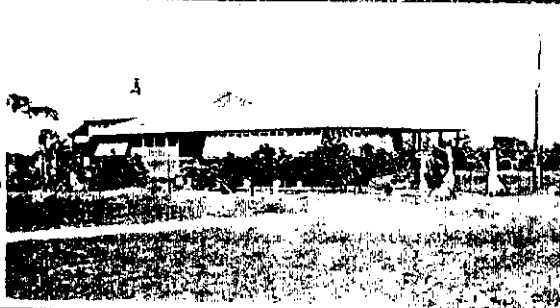
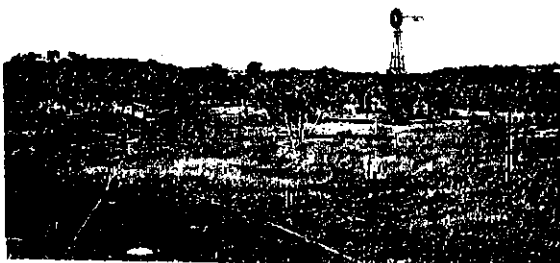
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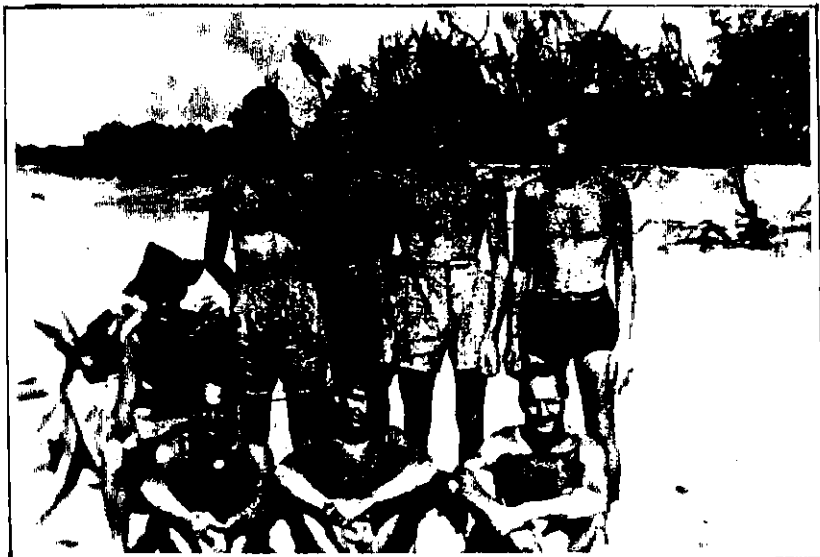
CAPE DON VIEWS.

(From the top down.)

1. The view from the Doover looking south.
2. ML429 calls at the Don, evidently carrying men from other stations. This craft called fairly often.
3. Looking south from the houses past the windmill.
4. The Officers' and Sergeants' quarters.



Photos from Jack Fraser's collection.



46 RADAR, CAPE DON. These appear to be the two best group photos available, despite the poor quality of the lower photo. At top the group is the crew when the A.W. ceased operating. Regrettably names are not known...and the lower photo shows most of the station personnel when the COL was about to close down. In this group are Rod Harris and Clem Richardson on the left, and Tony Hick and Jack Kelly in the centre rear row. The top photo came from the Bill Sanderson Collection:- the lower from Rod Harris.



THE DIARY HISTORY OF 46 RADAR.

Morrie Fenton.

46 RDF station first began its service life at Mascot on 15th. January 1943 under the control of Eastern Area, and with Pilot Officer A.H.Freeman as Commanding Officer, pro tem. At first there were only eleven men attached to the unit - and after only eleven days Flying Officer E.H.Shaw took over as C.O., with P/O Freeman evidently remaining as the second I/c Officer. In February came advice of the unit's move to North West Area, and some of the equipment was delivered to Alexandria Goods Yards for delivery to Melbourne under the escort of two airmen. F/O Shaw also left Sydney to arrange supply and delivery of some outstanding items.

The remaining men of the unit - now 24 strong - followed on to Melbourne the next day, and the unit was able to re-assemble at 1 ED at Ascot Vale; but their stay in the bright lights of Melbourne was cut short after only one day and they were again on their way via Adelaide, this time their destination was Terowie.

After two days enjoying the 'comforts' of the Terowie staging camp with its dust and heat, the unit was on its way yet again on 'The Ghan,' bound for arrival at Alice Springs on 27th. February. But again no time was lost, for their departure by convoy for Larrimah was scheduled for the following day.

The unit was on the road for three days before arriving at the Larrimah Army Staging Camp - one night's rest was enjoyed, then it was 'All Aboard' the 'Spirit of Protest' bound for Adelaide River - an overnight and sooty journey which finally ended at 44 RDF Wing at Coomalie on 5th. March.

After almost two weeks at Wing, the unit first moved on to 52 OBU at RAAF Darwin - then on to the camp area where many radar units lodged for a spell - 132 RDF at Knuckey's where the usual and inevitable red tape was attended to. The Officers and men other than the Guards were attached to Wing - the Guards to the Security Guards Unit - and there were even a couple of visits from Wing Officers making their very important inspections - until finally on 1st. April an advance party of seven, commanded by F/O Shaw, embarked for their new location, now known to be Cape Don, the site of perhaps the most northerly light house actually on Australian soil. On their arrival, two of the keepers' houses and outbuildings were handed over to them by the Head Light-house Keeper.

By the 3rd. April, the equipment with them had been unloaded and the vessel was able to leave. The remaining men of the unit arrived three days later, and 46 RDF began to settle in as a unit.

The radar equipment was the Australian A.W., and as only a short time was necessary before the unit was able to become operational, it is obvious that the control tower would have been ready and waiting - also a site for the generating units. By the 15th., the W.T. equipment was installed and working, which was just as well really, for on the 27th., after contact had been made with 5 FS and 52 OBU, a signal was sent requesting the attendance of a Medical Officer to attend a sick airman.

The M/O arrived by plane the next day, landing on a beach some 5 miles from the unit, the plane departing immediately because of the incoming tide, but it returned the next day and the sick man was flown out to Darwin, probably to 1 MRS.

46 RDF first attempted to go 'On Air' on 28th. April, but a few teething problems delayed the occasion until the 30th. when a 24 hour watch was established. The unit was by then adequately manned with 2 Officers, 26 men and 22 guards - a total complement of 50 men.

May 1943.

The first full month of operations for 46 RDF proved to be pretty quiet really, -doubtless the unit was weathering a time of 'shake down' into a regular routine of watches, duties, guard rosters and what-have-you. The Equipment Officer from 44 Wing arrived by air - a mere Flying Officer who nevertheless deemed it his duty to inspect the unit during his 4 day stay - and TERKA - a small stores vessel which with its sister vessel TOLGA serviced the outlying stations of NWA, arrived with stores and rations, and departed again after two days.

The big event for the month was the very brief visit of the Air Officer Commanding - the AOC of NWA, Air Commodore Bladin, who arrived on the 28th., inspected the unit - doubtless there was a parade and an address, then he departed, all this being on the one day.

During May, 7½ hours were lost because of breakdowns - a very reasonable effort for a new station.

June 1943.

TOLGA - sister ship to TERKA - arrived on the 7th., bringing mainly light-house stores and mail - and then over the next few days calibration tests for the new RDF station were carried out by an Anson plane at 4000 feet. The results were anything but startling - the best range being 63 miles. But the station results changed dramatically and the station demonstrated its true capabilities on the 20th., the 22nd., and the 28th. when enemy aircraft were detected at 140 miles - 112 miles and 128 miles - with the best range during these operations being 150 miles. These results were excellent indeed.

TERKA arrived on the 28th. with stores, gear and most importantly 'mail for the troops,' also an ASV beacon.

Only 7½ hours were lost during the months on account of breakdowns - and the total station complement was 52.

July 1943.

Early in July, an enemy raid was mounted over the Pine Creek area, and although this was beyond the normal range of the station, ten plots were logged - with the best range being 210 miles. The month then settled down in routine fashion - CHINAMPA and VIGILANTE arrived and departed - P/O Freeman received advice of his promotion to F/O, - a Walrus aircraft delivered mail and stores - and the station Fitter DMT and the Medical Orderly received advice of promotion to the rank of 'Acting Corporal.'

The lugger AROETA also delivered mail for the light house keepers - with no mail for the Air Force boys - but the troops were placated somewhat on the last day of the month when mail was dropped from a passing aircraft - probably a 6 Communications Unit plane.

Only 1½ hours were lost this month because of breakdown.

August 1943.

Enemy raiders were detected on 7th., 11th., 12th., and on the 20th. The ranges varied from 30 miles to 180 miles...and most importantly for the morale of the operators - a congratulatory signal was received from Wing. This was preserved in the station Diary, and so can be copied for this record:

(Above this line is for signals use only)

TO: 38 39 46 105 307 RDF STATIONS		Originator's Number	Date	In reply to Station and Date
FROM: 44 RDF WING		23417	17/11	
CONGRATULATIONS	TO	ALL	STATIONS	ON
THIS	MORNINGS	PERFORMANCE	RESULTING	IN
100%	DESTRUCTION	ENEMY	AIRCRAFT	
				5
				10
				15
				20
				25
				30
				35
				40
				45
				50

This message must be sent BY WRITTEN		This message must be sent BY CYRNER		Originator's Instructions* Degree of Priority*	TIME OF ORIGIN
and sent: _____ to sent by W/T		and sent: _____ to sent by W/T			170500/Z
Priority		Priority			T.O.N.
* The Special Agent is responsible that these details are transferred to the appropriate portion of the message form and that all possibility of compromised handling of information by routing to persons not designated thus the address, etc., is avoided. Failure delivery of the message these details are to be returned to T.O.N.					

(Above) The signal received by the stations at Bathurst Island, Port Keats, Cape Don, Pt. Charles and Peron Island.

Other than plotting these raids, station activity for the month was restricted to the always welcome arrival of CHINAMPA, which carried in the equipment for 46 RDF a pump and engine for the water supply. Also 48 of the Guards and airmen completed 20 hours of training in defence in gas, rifle, sub-machine gun, grenades, fieldcraft and fire control.

September 1943.

September proved noteworthy for 46 RDF station, principally for some remarkable plots at extreme ranges - but nevertheless the usual daily activities continued in the regular manner.

All RDF stations suddenly became 'Radar Stations,' - and early in the month P/O Reen arrived to replace F/O Freeman who had been with the station from its earliest days as C.O. and then Second Officer - and calibration flights by an Anson and a Hudson took place under the direction of F/O Bullen from 1 RIMU. The work and service of two Radar Operators was rewarded with their promotion to Corporal - evidently those men deserving recognition for their service were now being chosen.

Two enemy raids were tracked - the first over the Batchelor area on 7th. September when 16 plots at 135 miles to 122 miles were logged...also on the 15th. over the Brocks Creek area when 13 plots at 165 miles to 150 miles were passed on to Fighter Sector. A 'Goody' was received. Pilot Officer Reen received promotion to Flying Officer on 8th. September; and on the 9th. an open air concert and campfire supper was arranged by the Entertainments Committee which should also be applauded for arranging a card evening on the 16th., and a cricket match between station Headquarters and the Technical Staff.