

RADAR RETURNS

ECHOES FROM THE PAST AND PRESENT

“God cannot alter the past, but historians can.” - Samuel Butler

Editorial

Welcome to 'RADAR RETURNS' - the newsletter devoted to keeping Australia's radar heritage alive. At this stage, I intend to produce this newsletter on a quarterly basis, and with your support, I hope to keep everyone abreast of the latest developments in radar today and in the recording of radar history. Although this newsletter will have a distinctly RAAF flavour, that doesn't stop anyone contributing their views or recollections on the employment, achievements or development of radar in any of the other services.

The level of enthusiasm I discovered at the BLIPS reunion prompted me to consider the development of this newsletter. Although the various 'radar' groups in each state provide an excellent level of support, there is no central organisation to provide everyone with information on a regular basis. In particular, I wanted to ensure that all your recollections, memories, 'tall tales and true' and memorabilia are recorded before many more of you become fading echoes in the ether. I don't want this

newsletter to be a one way street either. I want to provide you with as much support as I can so that you can keep in contact with comrades and maybe find out about incidents which, until now, you had not been able to research.

You will find sections within this newsletter covering varying topics. There is a Q&A section to address some of the burning issues which have been bothering people for a while. There is a section describing the progress within the Radar Archive and Research Facility at 3CRU as well as a few notes on events in the world of Air Defence today. Despite great advances in technology, no one has repealed the laws of physics, so, radar still performs to the same principals as those which were applied during WWII.

I would also like to emphasise that this newsletter is not restricted to those who have worked with radar as an operator or technician. It concerns all those personnel who supported the radars, who provided them with food and fuel, with protection in the field and those who employed the information provided from within the 'doovers'. So don't think that, just because you didn't sit in front of a screen or fix an antenna, you are not

included in this vehicle for the exchange of information. I have ceased to be surprised by how a small piece of information, from someone who didn't think it was important, brought together a jumble of facts to complete a picture of radar and its people.

By way of introducing a sense of participation in this newsletter, there is also a competition included with each edition. This competition is simple. Just identify the scene in the photograph. That can be by way of the location, the equipment or the people within the photograph. The prize - my undying gratitude and an honorable mention in the next newsletter. The reason - these photographs are copies currently held in our archives which we have not been able to identify. So - I thought - why not ask the people who were there at the time. You never know what we may have hidden within our files.

I hope you enjoy the reading to be found in this inaugural edition and anticipate that you will continue to provide the level of support I have come to enjoy from working with 'radar people'.

Pete Smith - 3CRU

Q & A

This column will be set aside to answer any questions which have been posed since the last edition, and, hopefully, provide a few answers as well. As this is the first edition, I haven't directly received any questions but we did receive some enquiries during BLIPS which needed a reply. Additionally, if you have any information which may enlighten our answers even further, please write to us and put us on the right track. Here goes for the first lot of posers:

Q: "Is it a fact that WAAAF personnel were included with RAAF personnel on at least one Radar Mechanics course at Maryborough?" (*John Scott - QLD*)

A: The mustering of Radar Mechanic was opened up to the WAAAF in 1945 but the unit A50 History Sheets for the Radar School do not mention any WAAAFs being on course. If training went ahead, it probably would have been for Air Mechanics as training for the Ground Mechanics ceased towards the end of 1944.

Q: "I am interested to know more about the setting up of stations - particularly 38RS Bathurst Island, 46RS Cape Don and 61RS Peron Island. There is some information in 'Radar Yarns' and 'More Radar Yarns' but, for example; what sort of party set up 38RS, designed the buildings, where did the material come from,

who set up the water supply, who laid out the ramp and who built **The Steps** up the hill etc?" (*Ron Sawade SA*)

A: *38RS Bathurst Island.* Station personnel established the station with an AW Transportable Tower. The same crew built the quarters using materials sent from Darwin. **The Steps** were constructed by Harry, an expert woodsman, with the help of a couple of natives. Harry may have been a guard but we have not been able to discover his surname. Likewise, the water supply cannot be attributed to any particular person as it was an ongoing exercise of one failed attempt after another before ultimate success.

Presumably, the ramp Ron refers to is the timber slide used when disbanding the unit. Don't know who was responsible for that item. Once again, there are no names recorded in the unit's A50 sheets.

A Mobile Installation Section under FlgOff Bill Sanderson was involved when the Mk V COL was installed - he did the concreting and other civil works. Ian Leith was involved on the equipment side.

Morrie Fenton is currently putting together a history of this unit and he may have more specific information if you need it. [*See the Book Production Section*]

46RS Cape Don. Once again, station personnel installed the original AW and FlgOff

Sanderson, and party, were engaged on the civil works when the Mk V COL went in. The biggest problem for him at Cape Don was the lack of aggregate for the concrete. Bill employed local natives to collect stone from the beach in sugar bags to overcome this deficiency.

61RS Peron Island. Currently, we have no details on this establishment of this station, but presumably the station personnel erected the unit as it was an LW/AW.

Q: "What was the maximum number of RAAF Radar Stations in operation simultaneously during WWII and at what approximate date?" (*Noel Prentis QLD*)

A: In my analysis, I have only grouped the formation of stations in six monthly periods - I did not see any justification for going into more detail because of errors in the official list and it would have involved spending more time in research without any guarantee of any improvement in the accuracy. However, on that basis, the maximum number in operation was 124 in the period Jan - Jun 1945. The maximum stations established was 43 in Jan - Jun 1943 followed by 24 during Jun - Dec 1943.

Q: "What was the known maximum range at which an enemy aircraft, or any aircraft, was located by a RAAF radar?" (*Noel Prentis QLD*)

A: Monthly reports mainly list maximum ranges for the month and don't say whether they were for enemy or friendly plots. They also don't detail whether the plots referred to were inbound or outbound, or if they were IFF. From the information we do have, the maximum range on enemy planes by an AW was 175 miles by 36RS at Hammond Island just before the Coral Sea battle. Many LW/AWs reported enemy ranges of 160-165 miles from sites a lot closer to sea level.

On friendlies, the COL at 23RS picked up a plot at 180 miles coming in during SEP42. ACOs at 207RS and 224RS reported pick-ups around 190 miles on several occasions.

For the trivia buffs, our current radar (a Westinghouse AN/TPS-43), with a fixed 10 second rotation time, can detect targets out to 240 nautical miles. All our present civil Air Traffic Control radars employ IFF **only** for tracking traffic around Australia.

Q: "Which radar stations were subjected to direct enemy attack?" (Noel Prentis QLD)

A: While several stations were the subject of enemy attack, it is difficult to determine whether they were direct attacks or whether they were 'fringe benefits' for the enemy when other targets were their primary focus. In other words, the answer you require is very difficult to determine accurately. If you were the

subject of one of these attacks, I guess you weren't concerned about that finer point; they were just as dangerous whichever way they were intended.

Q: "Which RAAF radar stations landed with Australian invasion fleets into enemy held territory?" (Noel Prentis QLD)

A: Borneo was the only location where radar stations landed with Australian invasion fleets. Not all were in the first wave. OBOE ONE at Tarakan - 114MFCU accompanied by 167, 308, 354 and 355RSs went in with the first echelon but did not land until the second day. 168, 309 and 312RSs went in with the second echelon. OBOE TWO at Balikpapan - a detachment of 110MFCU with 302, 343 and 162RSs went with the invasion fleet. OBOE SIX at Labuan - 111MFCU went in with 316, 323, 324, 163 and 166RS with the first batch landing six hours after the 9th Division.

At other times, detachments of personnel arrived with the first wave to set up communications to allied fighters squadrons (eg the Admiralties Invasion) and at other times, the radar personnel were too impatient and landed on an island before the invasion took place (eg 305RS on Kiriwina Island).

Q: "Do RAAF records show that a Japanese plane was reported to have used Mornington Island as a base during 1943, and, that guards

and a Lewis gun etc travelled up the island to check this report which was made by an Aboriginal stockman?" (Eric Unthank VIC)

A: There is no mention of the incident in the unit A50 History Sheets (313RS).

Eric was able to supply more information upon request and this follows. However, if anyone else can help us with this incident, please contact us.

"The following incident took place in 1943. Although I am rather hazy about the actual date, I think it would have been between April and June, as I think FLTLT Mathieson was still in charge of the unit.

The mission [station] had a herd of cattle on the island and aboriginal stockmen were responsible for their care. One of these stockmen, returning from one of his trips up the island, reported seeing an aeroplane with red dots on its wings. From his responses to questions, it was assumed that it was a seaplane.

The CO decided to investigate and had one of our two Lewis machine guns mounted in the back of the Fargo utility - our only transport - and accompanied by CPL Syd Beck, CPL of the Guards, drove to the area indicated by the stockman. I do not recall who else went on this expedition but LAC Stan Burgess almost certainly drove the truck.

The final outcomes are also

hazy after so many years, but I think that signs of a camp were found and it was confirmed that the plane had flown in under our radar beam and landed.

This event is quite separate from that reported in *The AGE* some years ago, where it was said that there had been a Japanese naval presence in the vicinity of Mornington Island late 1943 or early 1944."

So, if anyone else can help out on this enquiry, let us now and we will ensure that it is recorded.

[All the above research was carried out by Ed Simmonds]

Archives

Within 3CRU, we have established a "Radar Research and Archive Facility". Although this is not a very large facility in comparison to other research centres, it is very important as it is, I believe, the only one dedicated to radar and its history in Australia. To date, most of the historical content has been supplied by generous contributions from individuals who have allowed us to copy their personal records or photographs. You have seen a lot of these in the 'Radar Pictorials' series of books. Ed Simmonds and Norm Smith are also supplying a significant amount of the information currently in the facility and it is

steadily growing. BLIPS also allowed us to increase our stock of WWII information and memorabilia and I wish to thank everyone who provided their material at this event.

I would therefore ask you, if you have information, in any form, I would be very grateful if you would allow us to copy it to ensure that does not become lost at a later date. This heritage, and your history, is too important to be confined to a forgotten storage area. You may have some vital information which will add to a better understanding of radar and its people during the war.

Just before BLIPS, 3CRU received a contribution to the archive which was of such significance it has been given its own title. As some of you may know, Mr John Worledge played a vital role in the production and development of radar during the war. Before the war, he was the senior design engineer in the Chief Electrical Engineer's section of the NSW Railways Workshops. and, with the commencement of hostilities, he was placed in charge of radar production in the Wilson Street Defence Annex. The now famous LW/AW, owes its genesis to the efforts of this practical engineer. Additionally, his contribution to the development of radar within the Army and Navy, as well as the RAAF, have been overlooked for too long.

So it was with some excitement that I visited his daughter, Mrs Jacqui Judell,

when she informed me that she had some of her father's papers which we may be interested in. Mrs Judell's generosity and support now mean that we now have complete series of photographs on the erection of a number of service radars, very rare photographs of radars in service, photographs of radars we did not know existed or had only heard rumours of, and written descriptions of John Worledge's experiences working in this field during the war. With the size and significance of this information, it had to be recognised in its own right. Therefore, within our facility today, a large part of our information is referred to as part of 'The Worledge Collection'. Over the next few issues of this newsletter, I will attempt to describe some of the information that has come out of this collection and its significance to us.

Book Production

After a long silence on the history and use of radar in the Armed Forces, a couple of people are busily recording the this important part of our heritage. Presently the following volumes are fresh off the presses:

Morrie Fenton advises the story of 38RS Bathurst Island will be ready for distribution by Christmas this year. And the cost....an astonishing low price of \$7.00. This 84 page effort contains the recollections

of 20 personnel who served on the station, and, as with all of Morrie's books, they are an interesting read with well researched material. While you are ordering this volume, you should also consider ordering copies of 'The Exmouth Story' (\$6.00), 'The Radar Sketchbook' (\$5.00) and 'Souvenir of Truscott' (\$4.00). The prices all include postage and can be ordered directly from the address below:

Morrie Fenton
27 Lasscock Avenue
LOCKLEYS SA 5032

While we are on the subject of books; the 'bible' of radar in the SWPA during WWII has hit the streets. Ed Simmonds and Norm Smith's labour of love is now available and is a must if you have any interest in radar at all. You never know, you may even be mentioned by name. 'Echoes Over The Pacific' has been extensively researched and covers the employment of radar by all sides during the war in the Pacific. If you already have it, you will have seen that it comes with high praise from Air Marshal I. Gration AO

AFC (rtd), the previous Chief of The Air Staff. If you haven't obtained a copy yet, just send \$26.00 to us at 3CRU (address below) and we shall ensure that you get your copy, postage included, as quick as we can stick down the envelope. Your cheque should be made out to the '3CRU Social Club' and ensure that you supply us with your complete mailing address. (I couldn't think of a better Christmas present this year, even if it is to yourself.)

Picture Hosers

And now for this month's mental exercise. On the following page there are two photographs of some of intrepid radar personnel. The top photograph five unknown airmen in Borneo, judging by the building in the background, the vehicle they are leaning on and the uniforms they are wearing. Exactly who are they - we don't know. Can you help with their identity or the location, or even what they were doing there?

The lower photograph comes with a bit more information. It shows a scene from Hammond island in March 1942. The athletic personnel are hauling the spindle of an AW antenna up a ramp. Can you identify anyone in the photograph or, give us some more details on event in question. Is it the initial erection of the radar or a repair operation?

If you have any details concerning these photographs, just drop us a line at the above address and you will be contributing to the continued development of radar history.

If you wish write to us with any questions or information, please address all your letters as follows:

Radar Returns
c/- 3CRU
RAAF Base
WILLIAMTOWN NSW 2314

