



RADAR RETURNS

ECHOES FROM THE PAST AND PRESENT



The foul sluggard's comfort: "It will last my time"

Thomas Carlyle (1795 – 1881)

CONTENTS

Editorial.....	1
The Legacy of Peter G Smith.....	2
Technicalities & Generalities.....	2
A Serious War.....	2
Faded Echoes	3
Geelong 2005	4
Personal Notices.....	4
Publications.....	4
Surviving Bat Island.....	5
Peace	7
Radar & the Environment	7
The RAF Air Defence Museum ...	7
New Radar for Navy	8
A Dog's Life.....	8

EDITORIAL

This Issue

This time we are on our own. The material accumulated by Pete Smith made producing the previous issue relatively easy, but now those of us who are left must call on our own resources.

Fortunately, those resources are not inconsiderable. For example, there are at least ten surviving veterans of WW2 RAAF radar who have been authors, co-authors or editors of published works relating to wartime radar, recording their own experiences or collating and editing those of others and most of these are still actively concerned with filling out the record. One of the principal functions of *Radar Returns* at this stage must surely be to give an outlet to them and to the many others who have interesting and historically important stories to tell.

Some of these are represented in this issue: read on!

Distribution

The current distribution list for *Radar Returns* stands at just over one thousand, which represents quite a lot of work and not inconsiderable printing and postage costs. We can cope with both of these and would do

so happily if we were convinced that those who receive it find it interesting and worth reading. However, I can't be sure of that because, so far as I can tell from the probably incomplete records inherited from Pete, we have had no feedback of any kind in the last five years and more from at least half of those who get it.

Consequently, some of you will find with your copy of this issue a simple form. If you find RR interesting and would like to continue receiving it, please complete the form and return it as promptly as possible.

Finances

My rather desperate comments on the financial position of RR have drawn a prompt response. In the few months since the last issue we have received some 180 contributions totalling almost \$3,800, some of them generous indeed. This has given us enough to produce our three issues a year for another year or so at least.

With the cooperation and approval of Corinne Smith and Tony Reading, who are looking after Pete's affairs, we have established a satisfactory banking arrangement so that the resource can be managed responsibly.

A feature of the contributions was the large number of them sent under cover of letters expressing shock and sadness at Pete's death, sympathy for Corinne, and approval of our efforts to keep the enterprise afloat. Most of these letters I have not been able to answer but I should like their authors to know that I was touched and very grateful to get them.

What Now?

There seem to be four requirements for this publication's continued survival:

1. there must be an accepted editorial policy and an adequate and continuing supply of material which accords with that policy;
2. there must be sufficient financial support to allow proper publication

and distribution costs to be met for several issues ahead;

3. there must be an editor (or editorial group) who is fully aware of and sympathetic to the interests and needs of the readership; and
4. there must be a tightly controlled distribution that ensures that all of those and only those who are genuinely interested get the publication.

As Acting Editor *pro tem* I see it as my task to establish a sound basis for meeting these requirements and I will need a lot of help.

I will need help to have sufficient relevant material coming to me so that each issue is catered for well in advance without my having to hassle my friends to write something for it.

I will need a continuing trickle of financial contributions to ensure that the costs are spread fairly among the readership.

And I will need cooperation and understanding in establishing a complete, up-to-date appropriate distribution list.

Those of us who were involved with radar during WW2 are aging rapidly and our memories are increasingly fallible. For various reasons, the wartime history of radar and its application in the field have been very poorly documented. It is important that each one of us records whatever we can remember of the technological and operational aspects of early radar. It is surprising how often an apparently minor point dovetails with other information to yield new insights. Please don't underestimate the importance of your own memories.

Warren Mann (Acting Editor)

Please address all correspondence for *Radar Returns* to:
Radar Returns,
C/- 39 Crisp Street,
Hampton, Vic 3188
Phone: 03 9598 2193; Fax: 03 9521 6724
Email: whcmann@optusnet.com.au

THE LEGACY OF PETER G SMITH

It is only in comparatively recent years that there has developed among WW2 radar veterans the sense of community and shared memories that has fuelled the need for regular reunions. Though there were earlier stirrings, mainly at the local state level, the first substantial indication of this trend was the Bendigo reunion in 1992. At that time, most of us were in our early seventies or late sixties and typically learning to live with retirement. Bendigo was organised by what was and still is the largest and most active of the state associations of RAAF radar ex-service people, the Radar Air Defence Branch of RAAF Association, NSW, based in Sydney and headed by Walter Fielder-Gill.

The success of the Bendigo function suggested an unfulfilled need for national communications and especially for reunions. Walter and his team responded with another national reunion, BLIPS in 1995 at Nelson Bay. This again was successful, but it did not solve the general problem of communication.

A year or so before the BLIPS reunion, a new commanding officer had taken office with No 3 CRU, the RAAF's principal radar unit based at Williamtown. Wing Commander Peter Smith was young, keen and very interested in the history of his craft. He joined and became a vice-president of the Radar Air Defence Branch and took an active part in the organisation and running of BLIPS, getting to know and becoming known to many radar veterans.

At Williamtown, he set up a library/museum of radar publications and memorabilia with emphasis on the development of radar during WW2. Though this was primarily used as a teaching aid for Air Force radar trainees, it was a useful and timely repository for important historical material which might well have been lost or destroyed without it.

Shortly after the BLIPS reunion, Pete Smith published the first issue of *Radar Returns*. He sub-titled it "Echoes From the Past and the Present". In the first Editorial he described it as a "newsletter devoted to keeping Australia's radar heritage alive", undertook to produce it quarterly and ascribed its genesis to "the level of enthusiasm I discovered at the BLIPS reunion".

He then made a significant statement of his objectives:

"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."

Pete was posted to Canberra (JORN project) w/e late 1996, and just over a year later he left the Air Force to settle in Brisbane. Part of his baggage in these moves was *Radar Returns*. Most of the memorabilia etc that he had accumulated at Williamtown was despatched, eventually, to the RAAF Museum at Point Cook, Victoria.

Since then, for more than six years, Pete produced four and, more recently, three issues each year without the benefit of Air Force resources, on his own except for such help as Corinne, his wife, was able to give, depending on an uncertain flow of voluntary contributions from his readership to minimise the burden on his own financial resources.

He did all this because he believed in us. He genuinely believed that those who were involved in the development, construction and application of radar during WW2 had a special place in the history of our nation and that it was his privilege to be able to make some contribution to the preservation of that history. His presence among us, and in particular his publication which opened up a much-needed line of communication, played a major part in stimulating memories of a time early in our lives that many of us had almost forgotten and of which few had appreciated the full significance.

Let us do whatever is necessary to make sure that Pete's vision is realised. His hard work and self-sacrifice is an inspiration to us all.

TECHNICALITIES & GENERALITIES

Pete Smith had a special area of competence in information technology, the application of

computers in management and communications.

It was this skill that provided scope for a most productive partnership. For some years, Ed Simmonds had been gathering material on the technicalities of WW2 radar history in Australia, but the cost of producing a publication based on it was prohibitive. Pete suggested that a CD would be the best medium for such an enterprise. They collaborated and the outcome was *Technicalities & Generalities relating to RAAF Ground Radar in World War II*, published as a CD in 2001.

A small batch of *Technicalities & Generalities* was produced and sold quickly. After that, Pete produced copies to order, the last one being despatched not long before his untimely death.

Ed Simmonds approached me recently asking whether I could produce such CDs. When I agreed that I could do so, he generously suggested that I produce to order and that the proceeds should go to the production and distribution of *Radar Returns*.

Consequently, as from the beginning of 2005, I shall be able to supply orders for this most interesting CD at the cost of \$20 each (including postage). Cheques should be made payable to 'Radar Returns' and orders should be addressed to:

Warren Mann,
Radar Returns,
C/o 39 Crisp Street,
Hampton, Vic 3188

A SERIOUS WAR

On 6 September 1944, 326RS at Cape Leveque conducted a sports day for the children at Lombadina Mission. 45 children took part in 23 events.

Additional events were held for the tiny tots, married women and old buffers. Unit personnel provided prizes and refreshments with funds from voluntary subscriptions. 21 unit members as well as the lighthouse keepers Mr & Mrs Kitson and Mr David attended.

On 8 September a 5 ft grey nurse shark drove 12-15 hammerhead sharks ashore. Sgt Jeffers, showing utter contempt for the denizen of the deep, rushed fearlessly into one whole foot of water, grabbed the grey nurse by the tail and hauled it up onto the beach. It was killed and cut into steaks which provided two meals for the unit.

Ed Simmonds Odds and Sods

FADED ECHOES

If you can provide further details on anyone mentioned in this section, please send them to Radar Returns so that their histories can be accurately recorded. [Editor]

Mervyn Hartwig Harms, 26/12/1922 - 17/5/2004

Merv Harms was a 'two-tour' radar operator and, like so many others, he and his wife, Pauline, supported the reunions and histories of the last sixteen years, attending and enjoying Bendigo and Nelson Bay.

He had an impressive list of stations to his credit. From his personal diary, he was able to write a wonderful description of transporting 321RS's LW/AW by train from Sydney via Adelaide and Terowie to 44 Wing at Darwin, then eventually on the *Southern Cross* from Milingimbi to Yirrkala where a very cool reception by the Missionary awaited them. The station came on the air in August 1943, with Merv on the first shift. His story of 321 added greatly to the history of the station.

Merv also served on 319RS, 39RS, 61RS and 59RS and was able to contribute memories to most of these station histories, adding richly to each. Back in Adelaide after the war, Merv was a regular supporter of the Signals and Radar Group, where he was able to catch up with a few of his NWA friends. Ron Sawade was one radar man he was happy to meet again. Our sympathy goes to Pauline and their family.

Corrie Fenton

Hugh Maxwell (Max) Sutherland

Born 24/11/1925 - Died 19/9/2004

Max spent his early life at Box Hill and later at Echuca. His father died when the family lived at Box Hill. Max left school at the age of 14 and took a job to help the family through this difficult time.

On his 18th birthday he joined the RAAF as an aircraftsman and began a distinguished career that lasted 37 years and saw him rise to Warrant Officer in 14 years. He served in Japan between August 1946 and December 1948; some of this time was spent at Hiroshima. Max's other service included several stations and training units in Australia as well as in Malaysia and Singapore. In March, 1952, Max married Rita Murphy at Arthurs Creek in Victoria.

We first met them at a reunion of former members of 305RS at our

home in February 1987. After another 305 reunion in July 1988, we founded the Radar Branch, RAAFA in March 1989. Max and Rita joined within a month and have been regular participants and contributors until his illness.

Max is survived by Rita, sons Trevor and Noel and daughters Judith and Kaylene, 11 grand-children and 5 great grandchildren. To them all we extend our sympathy and that of all members of the Radar Branch.

Noel Lynam, Radar Branch, RAAFA Queensland.

Isobel W Palk (nee Barnicott) Born 15/05/1924 - Died 4/8/2004

Born in Brisbane, Isobel grew up in the Rocklea area and joined the WAAAF as a clerk in June 1942. She served in several units including 2, 3 & 8 Fighter Sectors and at RAAF HQ in Melbourne. After the war, she went into nursing for 3 years. She married in 1952.

Friends remember her as a "beautiful girl", and quickly add that she had not only physical beauty but a beautiful nature - "an all-round beautiful girl". Isobel joined the Brisbane Radar Branch of the RAAFA in July 1989 and was also a member of the WAAAF Branch. On Anzac Days she marched sometimes with the Radar Branch and at others with the WAAAFs, but always attended our post-Parade celebration. In spite of some severe difficulties, Isobel attended reunions at Nelson Bay (1995), Wagga and Maroochydore and was a regular supporter of all the Branch activities and meetings until illness overtook her. Even in hospital, her concern for a young disabled man led her to phone several organisations in an effort to find more suitable accommodation for him ("an all-round beautiful lady").

Her husband pre-deceased her but she is survived by four sons and a daughter. To them and to their families we extend the sympathy of all members of the Radar Branch, RAAFA Queensland.

Frederick Charles Robjant Born 28/6/1921 - Died 30/8/2004

A member of the first ground radar mechanics course, Fred was one of the youngest of that group which was made up entirely of direct entries. On completing the course, he became part of the installation party which established the first RAAF radar unit at Shepherd's Hill in Newcastle, along with Les Bell and other well-known

mechanics from the same course. He subsequently served on 15RS (Metung), 16RS (Gabo Island), 17RS (Moruya), 26RS (Point Cleveland), 40RS (Merauke) and finally 163RS (Lutong, Borneo). He was a dedicated and highly competent technician and one of the few radar mechanics to reach the rank of Warrant Officer in wartime.

In May 1944 he married Betty, with whom he celebrated their 60th wedding anniversary earlier this year. After the war they settled in

Melbourne, first in East Keilor close to his work with the DCA at Essendon Airport, later in Burwood then eventually in Macedon. He was a very practical man who built and /or extended all his homes. When television was coming and TV sets were expensive, he built his own. For a while it was the only set in the area and provided entertainment for the local children.

He was active in community affairs, a keen tennis player, a proud family man and had a wide circle of friends, amongst whom he will be greatly missed. He was an active member of the Victorian RAAF Radar Association and took part in reunions (Nelson Bay, Wagga and Maroochydore) until failing health frustrated him.

Our sincerest sympathy goes to Betty and their family

Dr Anthony C Craig

Born 6/6/1924 - Died August 2004

Tony Craig served as a radar operator on 44/56RS (Cooktown), 323RS (Boepel, Dutch New Guinea) and 347RS and 345RS (Admiralty Islands), becoming a corporal. His service in Dutch New Guinea inspired him to write his self-published book, *Where Birds of Paradise Fly*.

He was educated in Brisbane and, as an ex-serviceman, graduated in Dentistry at the University of Queensland. He represented his school in swimming, water polo and rugby union. His skills in the water caused him to challenge his CO at 345RS (guess who?) to swim around Harengan Island in the Admiralty group on VP Day. It was unforgettable.

Tony and his wife, Nina, gave regular support to our functions, health permitting in later years. We deeply regret his loss and will not forget the man he was. We give thanks for his life and extend our sympathy and best wishes to Nina and their family.

Walter Fielder-Gill, Radar Air Defence Branch, RAAFA, NSW

George A Day 1914 - 2004

Born and educated in England, George joined the civilian staff at the Bawdsey Research Station in 1936. In 1940, he transferred to the technical staff of the RAF and in 1942 was seconded to the RAAF for special radar duties with the rank of Flt Lt. For the remainder of the war he was engaged in technical work associated with the installation and operation of radar equipment in Australia and the SWPA, making a significant contribution to its success.

In 1946, he took his discharge in Australia and joined the research staff of CSIR Division of Radiophysics. He became involved in the installation of the Radio Telescope at Parkes and subsequently became Station Manager at Parkes.

George became widely known among the radar fraternity in Australia. He married an Australian girl, and he and Gwen were regular supporters of the activities of the Radar Air Defence Branch, RAAFA. He will be greatly missed. Those who have known George over the years will extend to Gwen and her family their deep sympathy and best wishes.

(Compiled with help from the Radar Air Defence Branch, RAAFA, NSW)

John Henry Rothery Gair Born 22/6/1924, Died 13/10/2003

Roth, as he was known, was born in Tumut, NSW. The family moved around a lot, ending up in Melbourne where he went to Melbourne Grammar School. On his 18th birthday he joined the RAAF as a radar operator. Soon after being posted to Darwin, Roth was found to have poor eyesight which ultimately led to his discharge on medical grounds in 1944.

This was the beginning of both a significant deterioration in his sight and a remarkably diverse business career in a wide variety of small businesses. When he died he was a director of a thriving skylight business. He leaves behind his wife of 57 years, Jean, two sons, John and Bill, their wives and four grandchildren. Over the years he had kept in touch through many Anzac marches and lunches.

Jean W Gair

Colin MacKinnon Died 5/10/2004

Colin was probably unknown to many of you but he was a marvellous support in the early days of our exercise as he researched the CSIRO files for me.

It would not have been possible to cover some aspects of our history without his help. He also was a big contributor to the finances of *Radar Returns*.

As a radio buff, he had a large collection and knowledge of WWII radio, and applied unsuccessfully for a grant from the AWM. The AWM inadvertently sent him the submission by the successful person whose title was something like *Wine Tasting in Southern France during WWII*. There is no justice.

I depended on Colin and Pete Smith, both of whom were much younger than I. Yet I am still here at 80+!

Ed Simmonds

Leo Charles Rodgers Born 8/1/1924 - Died 6/3/2004**Jack Gabbertas 1915 - 2004****Audrey Lillian Christensen (nee Thornander) 1924 - 2003****GEELONG 2005**

Arrangements are well advanced for the reunion next May in Geelong, Victoria. The first Newsletter has been circulated to those registering their interest, and most of those proposing to attend will have made their accommodation bookings or will be about to do so. That is wise because information to hand suggests that the demand for accommodation in Geelong at that time will be higher than expected.

The working party is now planning the program of activities. In one way this is less stressful than was the case in earlier reunions because members of the working party are all Victorians and can make quick trips to inspect or experience proposed activities. The second Newsletter, scheduled for the end of January, will outline the program and give details of the costs. We think you will find the final arrangements interesting and appropriate.

If there are any people who want to come but have not yet registered their interest in the reunion, we suggest they do so promptly. For information contact Warren Mann, convener of the working party (for contact details, see page 1 above).

PERSONAL NOTICES

My copy of *Units of the Royal Australian Air Force, Vol. 5; Radar Units* has disappeared, I know not where. Despite its many inaccuracies, this book is a research tool for me. If you have a copy which is surplus to

your needs, please contact me, Morrie Fenton, 27 Lasscock Ave, Lockleys, SA 5032, phone: 08 8443 8717.

I have been desperately trying to get a copy of the first publication: *Radar Yarns*. I have *More Radar Yarns* and several of Morrie Fenton's publications. If someone has a spare copy, I would be most grateful to be able to buy it. Fred Box, 49 Bluff Road, Black Rock, Vic 3193, phone: 03 9598 2914

PUBLICATIONS

Radar Returns has available one copy each of *More Radar Yarns*, *RAAF Radar in World War II Pictorial I*, *Pictorial II* and *Pictorial III* kindly donated by John Hillier for sale to support this publication. They are available to the first applicant on or after Monday, 15 November at the publication price of \$20 (+\$4 postage).

In the last 15 years or so there has been a flurry of publishing among radar veterans from WW2. Ed Simmonds, Norm Smith and Morrie Fenton have been prominent in this activity and there have been a number of others. For many veterans, these books and booklets have been important memory-joggers and linking factors. Unfortunately, many if not most are now out of print.

It has occurred to us that there may be people who bought some of these publications or, perhaps, may have inherited them, who no longer have a need for them. On the other hand there are people (as evidenced in the Personal Notices) who are keen to acquire particular volumes.

Radar Returns is prepared to set up a Publications Exchange, essentially a register of publications available and another of people wanting particular publications, so that the best use is made of the dedicated work of those who have been the authors and editors.

Another objective of the Exchange will be to compile a list of the publication details and supply status of as many as possible of the now considerable number of publications concerned with Australian radar activities, equipment and so on, especially those covering the WW2 period. Finally, another list will include any internet website which may be relevant.

Radar Returns will publish these lists and updates of them from time to time.

Contact Warren Mann (see page 1).

SURVIVING BAT ISLAND

Len Brighton, known to many for his 35 years of radar experience during the war and after and at ranks ranging from LAC to Wing Commander, has produced a memoir of his service on 340RS and the notorious Bat Island which he presented at a RAAFA luncheon of radar folk in August last. It adds some fascinating sidelights to what has already been published about 340 in Radar Yarns (p 65), Echoes Over the Pacific (p 215) and elsewhere. Here is an edited excerpt from his talk.

The next morning (11 March, 1944), the ship arrived at Bat Island just before dawn. We were all woken up and had our first look at the island. What we saw I will never forget. There, close to us, was the tropical island you see in travel brochures, pure white sandy beach (very narrow I must admit), surrounded by a deep blue sea gently breaking over the surrounding reef. The island appeared to be covered in coconut trees which extended right down to the beach and hung out over the water just as coconut trees are supposed to do. The view was awe-inspiring and we could not believe our luck in being sent to such a beautiful and peaceful looking place. It was good that I felt that way initially because within a few hours I was to do a complete about-face.

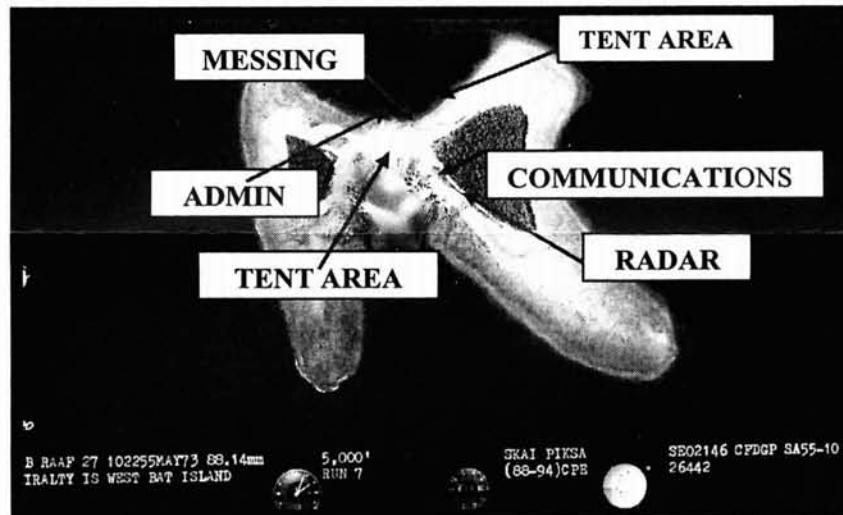


Fig. 1 Aerial View of Bat Island.

The next thing was to get the ship unloaded. The hold was opened and we began getting things out and positioning them on what little deck space was available. We were then told that unloading was to be done at all speed. It appeared that the ship had no wish to remain at the island longer than was absolutely necessary. I don't remember much of the unloading process but I can imagine it posed some problems because some of the gear was quite heavy and bulky. We radar mechanics, with the other radar staff, were responsible for the proper handling of the technical equipment.

Because the ship was keen on getting hell out of the place, the unloading consisted of getting our gear ashore and parking it on the beach wherever we could find a spot. Shifting it to where it was required was to be done after the ship had gone. The fuel was contained in 100 or so 44-gallon drums. The agreed method of unloading these was simply to toss them overboard and somehow persuade them to float ashore. As could be expected, most of them showed no inclination to float in the direction desired so a lot of boat work and swimming was involved before we got them to the beach. Once they arrived they could be safely left in the water where they just sloshed around in the shallow water without escaping back out to sea. Getting them out of the water and up the beach was something to be attended to later.

Having got all our gear stowed safely the next task was to get on with our primary job and that was to provide radar cover for the Admiralties landing. On our little island there was only one possible place we could install the thing but nevertheless our CO whose job it was to establish the siting, got all dressed up in his jungle gear, complete with his cork helmet, gun, compass and machete, formally sited the radar and then handed the job over to the five mechanics to erect it.

Within a day or so after arriving at the island we were fully operational and had erected our sleeping tents, a medical / administration area and of course the kitchen and mess. Things settled down to a fairly boring routine as there was not very much to do. An American guy, who was sent with us to measure the tides, lent me his standard issue 45 Browning automatic, which fired the same ammunition as a tommy gun, of which we had plenty. You could hit a coconut at thirty or forty yards with that and I became quite good at it, which wasn't surprising considering the amount of ammunition I used.

Bat Island is the most southerly island in the Purdy Island group. One morning we detected an aircraft, which was not showing any identification and therefore assumed to be Jap, coming down the chain of islands and obviously circling and having a look at each. Everyone got their gun out and our Bren guns were manned while we watched this guy until he finished his examination of the next island up the chain from us. Then, to our extreme relief, he headed back towards New Guinea. This was unfortunate for him as we were the only inhabitants on the entire chain of islands. I don't know what would have happened if the Jap aircraft had reached us because we had nothing to hide under.

After we had been on the island about a week a few of our guys became ill and unfortunately our medical orderly was one of the first to go down. We did not know what the illness was so they just went to bed and stayed there. Most of them were dosed with aspirin (there was not much else) but there did not appear to be any more appropriate treatment. About a week after the sickness descended on us, our CO got what was diagnosed by someone as acute appendicitis and our headquarters in the Admiralties arranged for a US Motor Torpedo Boat (MTB) to be called in off patrol to pick him up. This was done in double quick time and the medic on board had a look at the other sick guys and decided that, he should take a couple of the worst cases back to base for expert attention. The MTB

got back to the Admiralties in the early morning; by breakfast time the authorities knew we had a plague of scrub typhus and all hell burst loose. This disease was not unknown as they had had an outbreak in the Markham Valley a few months before. At that time there was no known cure for it, except to let it run its course. After a few days the patient could lose consciousness and remain so for up to about 30 days. If he regained consciousness he would live but could suffer some long-term effects such as brain damage, eye or ear trouble and other nasties.

Once the authorities knew of our problem they told us what was the cause. The island was infested with rats, which all carried fleas; the bite of this flea transferred the scrub typhus to humans. Knowing the cause of our problem was one thing but it would have been helpful if said authorities had given some prior advice on how to avoid being bitten by the typhus-carrying flea. And a suitable repellent may have helped. No such luck; no advice, no repellent, and in my humble opinion they did not give a tinker's curse what was happening to us. I met some of them in later years and discovered they knew of the problem before we went to the island but did not have the interest, or competence, to warn us or provide us with precautions.

However, from the time they knew of our trouble we got pretty good service and sometime that day a small Albatross flying boat arrived at the island with a couple of replacement staff and instructions to pick the sick guys up and take them back. As can be appreciated the replacements were far from excited about their postings because they knew what was on the island. Every time someone went sick the flying boat came out and evacuated the sick and most times brought a replacement.

After several weeks there were only five of the original staff remaining on the island. Of these, one was a mess hand while the others were four of the original five mechanics. One of the mechanics, Dick Crowther, went down with the bug. He survived but never did recover properly and finished his days some time in the 1970's while running the family shoe shop in Melbourne.

Although all these guys were going down around us we still had no idea how serious the situation was and just

thought it was something you would get over in due course. Certainly, to my knowledge, no one got into a flap about what was happening and no special precautions were taken to avoid whatever it was we were plagued with. Even now I do not know what precautions we could have taken.

It appeared that most of those infected had been bitten while in bed. Some of the guys had stored food such as biscuits and sweets under their pillows during the day. This attracted the rats which managed to leave some of their fleas behind. I do not know how the others managed to avoid getting the bug but I probably survived because I did not sleep in my bed most of the time. Instead I slept on a large packing crate up at the radar site at the other end of the island from the normal sleeping quarters and as far as I can recall seldom slept in my proper bed. The packing crate was not all that comfortable but it sure beat the hell out of getting the bug.

Even though we had bigger troubles than we were aware of at the time, life went on much as normal, with the unit fully operational. We were to find out the true situation some time later.

As I have said, the island was lousy with rats and they used to come into our operating and maintenance tent in droves every night. In order to get rid of them someone dreamed up an electric trap which was supposed to kill them. All it managed to do was to give them something to eat and a bad shock. It did nothing to reduce the number of rats in our tent.

When we went to the island it had been agreed that we would be resupplied by a lugger after some weeks. The time arrived when our supply of stores, particularly fuel, indicated that we needed a visit from said lugger. But nothing happened and there was no word as to when it might arrive. The Albatross used to bring us a few things but weight and space reasons meant the supply replacement we could get by this means was limited and we were reduced to skimpy rations. Then, late one evening a small boat appeared on the horizon and started to circle the island. One of the guards came charging up from his look-out point shouting "the so and so Japs are here".

By this time we had established that it was not a lugger but a motor patrol boat. We were not sure who owned it so everyone prepared to repel invaders. It circled the island a couple

of times just outside the reef line but we could see that the crew were dressed as sailors and the flag was white with something red on it. Suddenly, one of the sailors hopped out of the cockpit, ran forward and took the canvas cover off a gun mounted on the front deck. We fully expected a burst and I guess everyone ducked or got deeper into his hole. I know I did. Fortunately, however, he just loosed off a couple of rounds skywards to attract attention from anyone who may be around so we took the chance and waved.

The boat turned out to be an Australian Navy motor patrol boat which had been given the job of delivering our stores when the lugger had met with some misadventure. It was just about to go back to its home port when we waved. It was small enough to get in through the narrow entrance to the lagoon where there was no lack of enthusiastic help in unloading our stores.

After a further short period of operation, during which nothing much unusual happened, the powers that be suddenly decided that we should be withdrawn from the island. There appeared to be some conflict about this because one headquarters was telling us to quit while the other was telling us to remain operational. However, later that evening, HMAS *Stawell* turned up and confirmed we were quitting. We were advised that we were to leave all but our personal effects behind and get to hell off the island. Unlike our original ship the *Stawell* managed to anchor in between the northern wings of the bat and we were surprised at how close it was able to get to the shore to take us on board. We did not do much to prepare for our departure but just collected our clothes and a few records and just left expecting that that was the last we would see of the island and our gear. However, we were sadly mistaken.

During the days preceding the decision to leave we had been on restricted rations and it was advised that the H.M.A.S. *Stawell* would give us a meal as soon as we got aboard rather late in the evening. One of the officers came and told us that a meal was being prepared for us but apologised that it would not be much to write home about as they too were short on rations. Before long two sailors arrived on deck with a big washing tub full of steaming hot baked beans and we hopped into it.

We must have been really hungry because I recall that meal to be the most enjoyable I ever had in my life, and I still have a sneaking affection for baked beans and tomato sauce.

The only thing I can recall about the trip away from the island is bidding the bloody place good bye as it disappeared into the dark behind us as we steamed away. I guess I was pretty tired because the next thing I can recall is waking up with the ship anchored in Hayne Harbour in the Admiralty Islands.

NOTE: This is an edited excerpt from a much longer piece which records Len's experiences on 340RS from the time of its formation in October 1943 until he left it early in 1945. He goes on to describe how in May of 1944 he and several others from 340RS who had escaped the ravages of scrub typhus were sent, reluctantly, back to Bat Island together with a detachment of even more reluctant 'volunteers' from 346RS to retrieve the radar equipment and whatever else of value had been left there. This operation took three days and he makes it quite clear that extraordinary precautions were taken to avoid any risk of infection. I am sorry that space has not permitted more from him. (Editor)

PEACE

What did you do on Wednesday 15th August 1945, VP Day?

I remember listening on the radio to the celebrations which were taking place in Melbourne. As I listened, I was overwhelmed by a momentary sense of unreasonable rage and anger. Here were all these people celebrating whilst I, who had endured four and a half years of service, had to sit on my own on a rotten little island and listen to them having fun. Of course we had our own little celebration, but it isn't easy to get excited when all you have to party with is bully beef and dog biscuits.

It was quite different at the other end of the island at Radar Station 317. Apart from setting fire to the mess, they then engaged in a water fight, with the commanding officer, F/Lt. John Weir, being the main target. Of course, John was well able to look after himself and no doubt held his own in the water battle.

Nevertheless they did manage to upend him into the flour bin.

*The WORM
(Wandering Old Radar Man)*

Tell us about your memories of the day when the war finished, a day, I am sure, that we all recall vividly. (See also Tony Craig in Faded Echoes above) Editor.

RADAR AND THE ENVIRONMENT

The University of Adelaide is working on leading-edge radar imaging that could assist in better understanding climate change. And the timing could not be more appropriate with many more nations preparing to sign the Kyoto Protocol. The Kyoto Protocol seeks to impose political constraints on nations based on the connection between climate change and increased emission of greenhouse gases such as carbon dioxide (CO₂). It allows for trade in carbon-credits between nations, but requires new technology for monitoring and verification.

To overcome the uncertainties of the carbon cycle and its impact on long-term climatic trends, Professor Shane Cloude from the university's Centre of Expertise in Microwave Radar is developing a new type of radar sensor to provide global 3-D maps of vegetation structure, which can help reduce these uncertainties and ultimately improve our predictions of climate change.

Changes in vegetation structure, induced by climatic conditions, natural disturbance and human activities, can have a substantial impact on carbon storage and the exchange of greenhouse gases such as CO₂ with the atmosphere. Fossil fuel burning and deforestation, which release CO₂, are believed to be the two dominant contributions to the rise of atmospheric carbon over the past 50 years. Trees store carbon in their biomass and so forests have the potential to act as carbon sinks, to re-absorb some of the excess CO₂. Given the importance of forests in both scientific and political terms, there remain surprisingly large uncertainties in our global knowledge of vegetation biomass.

In addition, the dynamic processes of carbon flux due to changes in vegetation and its interaction with the wider carbon cycle call for a better quantitative understanding of the spatiotemporal variations in biomass. With the erosion of large-scale land-based observation networks, interest is turning to remote sensing technologies to make a big impact in this area and establish reference global maps of

biomass for input to climate change models.

One key technology is microwave radar imaging from space satellites. It was realised more than 20 years ago that microwaves have the advantage over optical sensors of being able to penetrate dense forests and provide a signal related to the total biomass of the vegetation. However, radar brightness alone does not provide the kind of accuracies required.

A new approach is being developed that relies on measurement of forest height by using a radar technique called polarimetric interferometry which is both well suited to satellite technology and can provide the accuracy needed for global mapping.

This method employs two passes of the satellite in orbit over the same scene and, by very accurate measurement of the phase or time shift between the two signals in different polarisations, provides an estimate of the mean vegetation height. Height is then used to estimate biomass via growth models or allometric relations. Initial experiments with this mode of the satellite will take place in 2005/06 using the new Japanese ALOS satellite with a possible global mapping mission to follow by the end of the decade.

A calibration site will be established in South Australia and data from a well-characterised forest test site near Injune in Queensland will be used to validate the technology.

(Adapted from a Media Release issued by the University of Adelaide, 5 October 2004)

THE RAF AIR DEFENCE MUSEUM AT NEATISHEAD, NORFOLK, UK

The NSW Radar Air Defence Branch has been in regular contact with the RAF Museum and, in 2004, we have been able to send them copies of four more books on RAAF radar which have been donated by their respective authors.

By courtesy of Ed Simmonds, we have also sent them copies of two important documents:

The Radar Situation in the South-West Pacific Area by Group Captain GP Chamberlain, OBE, RAF written in February, 1944 (the Chamberlain Report) and

The Development and Use of Radar in the Royal Australian Air Force by Wing Commander A G Pither, RAAF,

written in December 1946 (the Pither Report).

These documents are important as, at the time each was written, the author was the RAAF Director of Radar. Copies have also been sent to the RAAF Museum, Point Cook and the Surveillance and Control Training Unit Library at RAAF Williamtown. There is a very interesting sidelight to the production of the copy of the Chamberlain Report. While RAAF radar historians were aware that the report had been written, no one was able to find it in the various Australian Archives. Our friends at the RAF Air Defence Radar Museum located a copy in the National Archives, London, in 2002. However, the typing was so faded that they were unable to make a copy to send to us.

Subsequently, Ed Simmonds was in contact with Michael Bragg, author of *RDF1*, who gave him a copy of the "very faded" Chamberlain Report that he had obtained in England. Liz Simmonds painstakingly studied this document and rewrote it all in long-hand. From this, Ed typed the document we have today. We are most grateful to Liz and Ed for their work.

In recent months, the Museum has sent us copies of their early newsletters. There is little of interest to RAAF historians in them but we now have a complete file of them. Due to the downsizing of RAF Air Defence and Radar over the past couple of years there was a possibility that the RAF station at Neatishead would be closed. This would have meant that the Museum itself would have had to move, possibly to London. However, RAF Neatishead is not to be completely shut down and the museum remains there.

We are still seeking copies of books, etc on RAAF radar to donate to the Museum. Should any reader have one or more publications they are willing to donate, please contact Ted Dellit, 3/29-31 Telopea Avenue, Caringbah, NSW 2229 Phone: 02 9525 8490)

Ted Dellit

NEW RADAR FOR NAVY

A \$25 million Australian-designed radar identification system will be installed in Australia's new *Armidale* class patrol boats, boosting the Navy's capability to track down illegal vessels. Adelaide-based BAE Systems will be contracted to provide PRISM III radar identification systems for the

12 new patrol boats. It is expected that BAE will also be subcontracted to provide through-life support for 15 years by the patrol boat prime contractor, Defence Maritime Systems.

This Australian-designed and developed radar identification system will provide an increased surveillance capability and better protection for Australia's coastline. PRISM III is a passive electronic system that can detect microwave frequencies, such as those used by marine radars, and identify the type of radar being used. In combination with other sensors, this system will help the Navy to identify who is in Australian waters and increase the ability to track down illegal vessels.

Defence selected the PRISM III after evaluating available systems worldwide. The PRISM III system is already fitted to the Navy's mine-hunters and has proved both effective and reliable.

Construction of the first *Armidale* class patrol boat, the *Armidale*, is progressing on time and on budget. It is due to be delivered in May 2005.

Adapted from a Media Release issued by the Minister for Defence 18/8 2004

A DOG'S LIFE IN PNG

306 RS arrived at Bulolo in PNG on 27/2/43, just after the battle for Wau had been concluded. However, Lae, at that time a major Japanese airbase, was only 60km by air from Bulolo. Hence there was a lot of aerial activity.

Fourteen months later, the war had left Bulolo behind and there was much speculation as to what would happen to 306. About mid-April 1944 orders came for 306 to be moved to Nadzab which is about 70km north of Bulolo. After spending 2 days in Nadzab, 306 was ordered to return to 41 Wing in Port Moresby. By 31 July 1944, 306RS had been disbanded.

Jack Roper, who was there at the time, tells the following story.

It concerns radar operator, George "Butch" Oliver. Butch was a redheaded young fellow, with a fiery disposition to match. However, he was good company, a good friend to everyone and had kindness to a fault. In his wanderings around Bulolo, probably during the month of March, Butch had found a lost dog. He claimed that it was lost, but considering the value that the local people placed on their dogs, you would have to wonder! On the

day of departure from Bulolo, Butch lined up to board the Douglas DC3, kitbag in one hand and the dog on a lead in the other. When F/O Eric Padman saw the dog, he told Butch that the dog had to stay. Butch is alleged to have replied that if the dog had to stay, then so would he. We can only guess how Eric got out of that one. However it came about, the dog got on the plane and ultimately went to 41 Wing at Port Moresby.

Soon after arriving at 41 Wing, the dog produced six puppies, so suddenly Butch had seven dogs to feed. The story has it that at mealtimes, Butch made a habit of walking around behind his mates, grabbing morsels of meat from their plates. He assured his victims that they couldn't possibly want that particular piece of meat, as much as his dogs needed it.

Jack didn't know the end of the story, that is, how the dogs finished up, when Butch was posted home some short time later. Unfortunately, shortly after he had been discharged from the Air Force, Butch Oliver was killed in a road accident, in Chapel Street, Prahran, a suburb of Melbourne.

Len Ralph remembers that dog. There was an occasion when he had to return a small radio which had been repaired to its owner, Squadron Leader Bert Israel, who was then the CO of 41 Wing. Bert lived in a small house which was adjacent to the parade ground. The knock at the door was greeted by frantic barking and when Bert opened the door, there was the little hound, firmly determined to keep him out.

What a remarkable change in life style that dog had experienced - to start off as a miserable half starved little mutt in a native village in the highlands of PNG to become a much loved companion of the commanding officer of a major unit of the RAAF!

*The WORM
Wandering Old Radar Man*