THE RADAR BRANCH

RAAF ASSOCIATION (N.S.W. DIVISION) INC

Website: http://www.raafradar.org.au

Email: contact@raafradar.org.au

Patrons:	**Air Commodore D. Bowden AM (Ret'd)**
	Air Vice Marshal R.B. Treloar AO (Ret'd)
	W. Fielder-Gill (Life Member)
President:	**Air Commodore T.C. Delahunty AM**
Correspondence	**Secretary, The Radar Branch**
	2 Preece Close, SPRINGFIELD NSW 2250
	Phone: 02 4322 1505

BULLETIN NOVEMBER 2009

Our Patrons and Committee join me in wishing all members, spouse and friends
"Compliments of the Season"

FUTURE EVENTS

XMAS LUNCH: – 'THE SYDNEY ROOM' CITY TATTERSALLS CLUB

THE CHRISTMAS FUNCTION WILL BE HELD AT TATTERSALLS CLUB WHICH IS CENTRALLY LOCATED IN THE HEART OF SYDNEY WITH EXCELLENT ACCESS BY PUBLIC TRANSPORT

(I)	**Day - Date - Time :**	Friday 4 TH - December 09 - 12 noon
(II)	**Venue:**	'The Sydney Room', 2nd Floor City Tattersalls Club
		198 . 204 Pitt Street, Sydney
(III)	**Dress:** -	Coat and Tie
(IV)	**Cost:**	$60 per Person
(V)	**Menu:**	Glass of sparkling wine on arrival and bar tab for limited drinks.

Other drinks at members' cost, available from private bar in Sydney Room

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The luncheon will be a selection from Tattersall's renowned function menu which will allow everyone to taste a substantial variety of food across a range of cuisine.

There will also be Xmas cake with tea and coffee
(Please note any special dietary requirements with your acceptance slip)

(VI) **Travel –** City Tattersalls Club is conveniently located in Sydney Central CBD. It is a short walk from Town Hall Rail Station and is close to the corner of Pitt and Market Streets, on the eastern side of Pitt Street. It is also adjacent to the Monorail Station and is easily accessed by bus from Circular Quay.

(VII) **Car Parking –** The most convenient car parking is almost opposite at the Hilton or Piccadilly in Pitt Street.

Members should return the slip provided with this Bulletin and send as soon as possible to the Treasurer at the address shown and no later than **27TH NOVEMBER 2009** with your cheque made in favour of 'Radar Air Defence Branch' **OR** annotate if you wish to pay on the day.

Alternatively, you can send your details and numbers attending by **EMAIL** to contact @raafradar.org.au and pay on the day.

We would welcome a donation (such as a bottle of wine or chocolates) towards 'Lucky Door' prizes.

Please note that copies of the Bulletin are posted on the website at **www.raafradar.org.au**

Please wear a name badge (any shape or size) and don't forget to indicate any special dietary needs on the return slip. **Please Note: Family Members and Friends are most welcome.**

If you wish more information please contact our Secretary (details above) or email contact@raafradar.org.au

RAAF Association Headquarters 'Christmas on Harris 2009'

RAAF Association Headquarters Christmas Function will be held at the Ultimo Community Centre, William Henry Street Ultimo, at 1200 for 1245pm on Sunday 29th November 09. Cost is ZERO and is open to all NSW Division members.   If you wish to attend please notify The Secretary, RAAF Association (NSW Division), PO Box A2147 Sydney South NSW 1235 before 17th November for catering purposes. Raffle prize donations would be greatly appreciated.

PAST EVENTS

BATTLE OF BRITAIN ANNIVERSARY LUNCH – 15 SEPTEMBER 2009

The Battle of Britain Lunch was well attended by RAAFA members, including members from Radar Branch. The annual lunch is a wonderful opportunity to catch up with friends so please put a note in your diary for next year.

COMMITTEE MEETINGS

Our Branch Committee meets at the Defence Plaza Building, Pitt Street Sydney. The next meeting will be held at 1000am Tuesday 10 November 2009. The NSW Division State Council Meeting was held at the Defence Plaza on 15th October 2009. The National AGM will be held at the Bankstown Sports Club, Sydney on 23-24th June 2010.

SPECIAL NOTICE

RADAR RETURNS – End of an Era

Members who have subscribed to 'Radar Returns' newsletter produced by Warren Mann would be aware that the October 2009 was the last printed version. Radar Returns was launched by the late Peter Smith, who as a Wing Commander and CO of 3CRU, was a great supporter of maintaining the history of the origins of RAAF radar. Warren Mann has maintained Radar Retuens and made a profound contribution to the Radar community in Australia and overseas. Radar Returns will live on in the website at www.radarreturns.net.au and material is now publicly available on the National Library of Australia and will be regularly updated by the Australian War Memorial. Warren is seeking a suitable person to work with him in an honorary capacity to eventually take on the function of Web Manager/Editor in due course. If you are interested in military history and willing to adapt to website management, please contact Warren Mann at:

The Editor, Radar Returns, 39 Crisp Street HAMPTON VIC 3188,

email: whcmann@optusnet.com.au

On behalf of the Patrons, Committee and Members of Radar Branch NSW, I extend our congratulations to Warren Mann and express our appreciation for the great legacy from Radar Returns over many years.

SPECIAL FEATURE

'RON HUNT RECALLS'

Ron Hunt was an Air Defence controller between 1968 and 1972. Ron joined the RAAF in September 1968 with a four year Short Service commission as an Air Defence Officer. He spent a few months at 2CRU then completed his fighter controller course at 1CRU and Officers' Training Scholl at Point Cook. He spent the remainder of his term in the RAAF at 3CRU and became one of the initial team of RAAF members to take over the development and maintenance of the HUBCAP operational computer system from the original civilian contractors: Plessey Radar and Scientific Control Systems Ltd. His recollections are both witty and informative of radar air defence at the beginning of the computer age. The full transcript of Ron's stories can be found on the website. Ron currently lives in Jakarta.

"The World is Flat"

One day I was using a controller's console practicing accessing the various grid reference functions. One could enquire, for example, about a certain location by asking the system to give the position as a range/bearing . an x/y co-ordinate, a GEOREF co-ordinate . or even as Latitude/Longitude. This was 'light years' ahead of the analogue radar system I'd been trained on at 1CRU. But my mathematical background made me intrigued to know exactly how these grid references were calculated. So . I knocked on the door of the hut where the SCSL programmers worked. One of the guys opened the door. I asked to see the 'rules' explaining how the various grid references were calculated. That caused a stir. No-one had asked such a question before and there was a kerfuffle over whether or not I 'should' be given access to such 'highly classified' material!

The Squadron Leader responsible for operations was consulted and he ruled that I did indeed have a 'need to know' . and that I should be given access to any rules I asked for.

That resolved, I was invited in to the 'programming hut' and pointed to the cupboard that contained all the books of rules. It took a little while to get to understand what I was looking at . but then realised . to my horror . that the rules were entirely flawed. There was no effort at all to use any three-dimensional geometry. Rather, the rules determined all grid references as very simple offsets from the 'base' location of the radar. In other words: the rules blandly presumed that the world was flat!!

I immediately protested! It's wrong, I exclaimed!

I expected that someone would understand the importance of this discovery. But . no. Instead I was quietly counseled. I was told that, to stop the computer system from becoming too bulky and inefficient, it was necessary, sometimes, to 'cut a few corners', and so, within the operational region that the radar covered . the inaccuracy that resulted from the 'simple' calculations was so tiny that it was of no consequence.

I fully understood the meaning of what I was told, but I was not convinced that the error was all that tiny at all! As far as I could see it was simply PRESUMED that the error was tiny. I didn't believe that anyone had actually calculated it. So . I would.

The Williamtown Base Squadron library had a book of 13-figure log tables which I needed for my quest. My first task was to develop the mathematics to 'really' cross-calculate between a Latitude/Longitude and a radar range/bearing. That was NOT a trivial task! That done I then set about calculating the positional deviation between a real location and a 'wrong' location (ie, one determined using 'flat world' calculations). I wanted to present my results graphically at ranges from 50 NM out to 500 NM. That was further than the radar could 'see' (normally, anyway) . but I felt it was necessary to reach some standard airline reporting points because the computer needed to 'draw' the flight path corresponding to every flight plan.

It took several weeks of 'slog' . but I finally completed the work and presented it to my Squadron Leader. The report showed that the deviation WITHIN the radar coverage was quite significant . and outside radar coverage it was 'huge'. Next day I was invited to explain (in English!) what it all meant . which I did.

The result was that the contractor was formally challenged . and they immediately agreed to make changes to reduce the deviation so that it REALLY was trivially small.

In other words . they accepted that the world was not flat after all!

XMAS LUNCH 2008 – 'THE SYDNEY ROOM, 2ND FLOOR , CITY TATTERSALLAS CLUB, 198 – 204 PITT STREET SYDNEY

12.00 Noon Friday 4th December 2009

Please return by 27th November 2008

Treasurer
The Radar Branch RAAF Association NSW
PO Box 470
MORRISETT NSW 2264

1. NAME: õ

2. I will/will not be able to attend the XMAS lunch and will be accompanied by my spouse/partner/family members/friends (please include given and surname)

    NAME/S: õ

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3. I enclose my cheque made in favour **"Radar Air Defence Branch'** for the sum of $õ õ õ õ õ õ õ . being payment of $60 for each person attending.   Number attending: õ õ õ õ õ õ ..

    OR

    Number attending õ õ õ and I will pay the sum of $.................being payment of $60 for each person

4. Please advise whether there are any special dietary needs: õ õ õ õ õ õ õ õ õ õ õ õ õ õ õ õ õ

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5. Please advise your contact details below if you wish further information or advice

    Your phone number or email: õ