AIR ENGINEERING TRAINING



"The whole aspect of sea war is so utterly changed by the prodigious and daily development of aircraft".

> - Admiral Lord Fisher, the inventor of the Dreadnought Battleship, in 1919 after the experience of World War I.

World War 1(1914-18) was a period of intense development and growth in naval aviation as the Royal Navy sought to apply the aircraft's attributes to naval warfare. A very close relationship between the RN and the RAN in those years meant that Australia shared in this development and Australian Cruisers serving in British waters were modified to carry and launch wheeled aircraft at sea. Continued operation of naval aircraft in the RAN was impracticable in the l920's due to economic reasons and the operation of aircraft from RAN Cruisers did not recommence until the 1930's. The Light Cruisers HMAS MELBOURNE, SYDNEY and BRISBANE, the first two built in 1913 and BRISBANE in 1916, operated aircraft during World War I. HMAS AUSTRALIA, Battle Cruiser (21,600 tonnes) also operated aircraft during that war.

Of the many launching solutions tested, the flying off platform was the simplest and easiest to install and many Cruisers were fitted with platforms from which wheeled aircraft routinely operated. In larger ships such as HMAS AUSTRALIA, the platforms were built on gun turrets extending out over the barrels; in smaller Cruisers such as SYDNEY or MELBOURNE, the gun mounts were too small to support the structure and platforms were built over the gun but supported from the deck. In either case, the platform was rotated into the relative wind and the aircraft took off under its own power.

In 1928 the seaplane tender HMAS ALBATROSS commissioned and operated naval aircraft until 1934 when she was sold to the Royal Navy in part payment for HMAS HOBART.

During World War II the next generation of Cruisers, HMAS AUSTRALIA, SYDNEY, HOBART, CANBERRA and PERTH were large enough to carry and operate an aircraft. By the time they entered service the launching platform had been replaced by a catapult. All five ships were to make effective use of their aircraft during the early years of World War II.

Prior to 1956 when HMAS NIRIMBA commissioned to begin training naval apprentices, artificers for the Fleet Air Arm technical categories were either entered from shore as qualified tradesmen or navy trained as mechanicians from the adult entry Air Mechanic Air Frames and Engine categories.

Of the 1956 entry at NIRIMBA:

Apprentices A E Collins, R J Moores, G J Price, R G Ray and D A J LeMarchand were selected for air engineering training assuming the title of Aircraft Artificer Apprentice.

Training in the Air Engineering School began in the hangar in which the school is domiciled today and the first officer in charge of the Air Technical School was Lieutenant Reg Green. He was assisted by a civilian instructor Mr J Bootle who is still instructing in the school at time of writing.



Equipment for training the aircraft artificer apprentices was spartan in the early days and consisted of one Griffin XX engine, some aircraft sheetmetal components, and one sectioned chrome plated gas turbine engine.

Since the beginning of the Air Technical School, civilian instructors have been:

J Bootle, J R Miller, D Cunningham, E Taylor, T Mews, B Hollis, J Inkson, L Farrugia, B Williams, B Davies and D Brown. (Lou Farrugia former RAAF mechanic, is now deceased. His son Michael has been employed in HMAS NIRIMBA since 1975 as a storeman).

Officers in Charge of the School have been:

Lieutenant Reg Green, Lieutenant J Wakefield, Lieutenant R Hay, Lieutenant R Webster, Lieutenant J Morrison, Lieutenant W Davies, Lieutenant Commander R Robb, Lieutenant Commander Williams, Lieutenant D Hannah, Lieutenant Commander P Tribel, Lieutenant Commander E Wills, Lieutenant J A Cullen and Lieutenant D I McMillan.

The record of continuity of training of Aircraft Artificer Apprentices in HMAS NIRIMBA was a little sketchy in the years 1956-1962. Around 1960, the Federal Government decided to disband the Fleet Air Arm; and as a result none of the four Aircraft Artificer Apprentices who joined in the first entry graduated.

Two transferred to Engine Room Artificer Apprentice and two took their discharge. Between 1957 and 1962, ten Aircraft Artificer Apprentices were entered at HMAS NIRIMBA, but none graduated.

The Aircraft trade training in HMAS NIRIMBA received a shot in the arm in 1962 with the impetus added to the Fleet Air Arm and from that time onwards, a steady stream of Aircraft Artificer Apprentices were entered, though classes were small in size. The first of this stream to graduate were Aircraft Artificer Apprentices, Hair, Jones, Makilla, Niarchoe and Carstens. From 1962 to 1972, a total of 140 Aircraft Artificer Apprentices began training in HMAS NIRIMBA and of these 112 graduated. Thirty six Aircraft Mechanicians were also trained at HMAS NIRIMBA during the same period.

After the implementation of the sailor structure and training review (SAILSTRUC in 1972, the category underwent radical change along with the other technical categories in the Navy. The apprentices' time at NIRIMBA was reduced to two years and the former Aircraft Artificer Apprentices became Apprentices Air Technical with a civilian trade equivalent of Fitter.

Since 1976, adult trainees of the Air Technical Branch have trained in NIRIMBA under the Phase Training Scheme.

Whole or partly dismantled aircraft of the following types are currently in the inventory of HMAS NIRIMBA for aircraft engineering training:

DOUGLAS DAKOTA GRUMMAN TRACKER BELL SIOUX HELO WESSEX 31 B HELO SEA VENOM

Although the DAKOTA aircraft may seem to readers to be a little outdated, it is a technical fact that the hydraulic, fuel and engine control systems still provide a suitable training aid for aircraft engineering trainees in Air Technical Airframes and Weapons Electrical fields.





38 Skilled Hands at Sea

The Staff of the Air Technical School in 1983 comprised:

Lieutenant J A Cullen RAN, Senior Training Officer, (OICAES)

Lieutenant C Appleby RAN, Instructor Officer

Lieutenant P G Kelly RAN, Instructor Officer

Lieutenant I G Larsen RAN, Development

Lieutenant N Hall RAN, Quality Control

CPOATA G W Clues, CPOATA N P Kelly, CPOATA C W Liddicoat,

CPOATA B K Ridler, CPOATA G M Sullivan, CPOATA D I Taylor,

CPOATA L G Hillier, CPOATA D T Hughes.

CPOATC T R Geverding, CPOATC D E Mouser, CPOATC R C Kirkman, CPOATC F Klasterka, CPOATC M Alexander.

CPOATWL R Craig, CPOATWL J C Purdie, CPOATWL R J Cooper.

POATC T J Murphy.

POATWL M C Ball, POATWL J P Holmes, POATWL J Toovey.

LSATA R W Boyce, LSATWL M H Foster.

ABATA J F Bartram, ABATWL G A Hedger, ABSE G A Stubbs.

ABAVN A Mather, ABATWL J Smyth.

Civilian Instructors:

Mr J S Bootle STI

Mr D Brown TI

Mr B Davies TI

Mr J I Inkson TI

Mr B R Williams TI

Mr D F McMinn - Stores and Tool Control.



Mr John Bootle Instructor Air School

Personalities among the civilian staff above are Mr John Bootle who was serving in HMAS NIRIMBA in 1953 when the place was RANAS Schofield, as Chief Aircraft Artificer and he rejoined NIRIMBA in 1957 in that rank and worked in setting up the Air Technical School and Mr Jim Inkson who first served here in 1946 in the Royal Australian Air Force party sent here to convert the former Royal Navy Air Station HMS NABTHORPE into RAAF Station Schofield.

Lieutenant Ian Gregory 'Swede' Larsen of the 1983 Air Technical staff retired on resignation from the RAN in June 1983. Ian was an outstanding Navy sportsman in the fields of Rugby, Tennis and Athletics. Ian Larsen was a former HMAS NIRIMBA apprentice.

In planning for the 75th Anniversary of the Royal Australian Navy in 1986, it is intended to make airworthy the DOUGLAS DAKOTA C47 Number N2-90 and to service all aircraft to a ground running state. Details of this planning are contained in Chapter 19 - Aircraft and HMAS NIRIMBA.

1983 saw the most dramatic change yet in Air Technical Training in HMAS NIRIMBA. The Government accepted the recommendation of the Defence Department to phase out RAN Fixed Wing aircraft in accordance with a programme which was published as follows:

- a Six A4 Skyhawks to be withdrawn from service by 30th June 1983 and to be disposed of as necessary. The remaining four Delmar modified Skyhawks to be withdrawn by 30th June 1984 and disposed of.
- b The Grumman Tracker aircraft fleet to be retained until 30th June 1984 and then disposed of.
- c RAN Macchi aircraft to be transferred to RAAF in 1983.
- d The RAN HS 748 aircraft to be transferred to the RAAF in 1984.

The Government also decided to have the RAAF TFF and Macchi aircraft take over the above water warfare support task from 1st July 1983 and the P3 Force to assume responsibility for and provide some Fleet support in the fields of Anti Submarine Warfare and Surveillance from 1st July 1983.

This did not mean the end of the Air Technical branch as the highest priority was then directed by the Department of Defence (Navy) to the development of the RAN Helicopter Force.

Although the entry of Air Technical Apprentices ceased in January 1982, the Air Technical School has continued to train adult Air Technical sailors and will continue to do so in the future.



Mr Jim Inkson

