

Guest Speaker: Les Anderson

Subject: “*From Swordfish to Skyhawks – the story of Carrier Flying*”.

Once again we were treated to the variety and depth of experience and talent within our membership. Right from Jack Blackman’s introduction, Les’s presentation was not only a thoroughly researched history of carrier flying, particularly as it relates to the RAN, but was enhanced by his having had hands on involvement in the service. Well supported by photographic projection, he led us through the evolution and development not only of the planes and ships, but also of the supporting systems. The graphic evidence of incidents that occurred along the way brought home the reality of the inherent dangers involved.

Naval aviation could be considered to have started in 1910, when a civilian pilot Eugene Ely took off in a biplane from a platform on an American cruiser. He also achieved a landing a couple of months later on a platform on the battleship USS “*Pennsylvania*”. For the next 20 years wheeled aircraft were launched from conventional warships, with seaplanes lowered into the water for take-off. Wheeled craft pilots then had to enjoy the option of finding an on shore landing field or ditching close to a friendly ship, hopefully to be picked up, albeit with loss of one’s plane.

During WW1 Britain had the Royal Naval Air Service (with some 80 Australians serving) and America also had an emerging Naval Air Service. By 1917 the British had adapted a cruiser HMS “*Furious*” with a crude downward sloping flight deck – not aerodynamically ideal. The RAN battle cruiser “*Australia*” was our first to launch an aircraft – from her quarterdeck in 1917. She also tested a launch platform on top of her gun turret, providing a take off run of just 4 metres.

By the end of WW1 the British Navy was the world leader in virtually every aspect of naval aviation, but the first ship designed and commissioned as a true aircraft carrier was the Japanese “*Hosho* in 1922”, with the Royal Navy’s HMS “*Hermes*” following in 1924 and USS “*Ranger*” in 1934. Between the wars, Britain, USA and Japan all commissioned several purpose designed carriers. Australia’s HMAS “*Albatross*”, a seaplane carrier with no landing provision was built at Cockatoo Island and commissioned in 1929. Leading Seaman Donald McGowan was the first RAN aviator killed in an aircraft accident, flying a Seagull from the “*Albatross*”. The ongoing contest for control of the Fleet Air Arm resulted in the RAAF assuming control in 1930 which reverted to the Navy late in the decade. Naval aircraft played a huge role during WW2 including destruction of the Italian fleet at Taranto, and the crippling of German capital ships including the 50,000 ton “*Bismarck*” by a Swordfish. Then there was the attack on Pearl Harbour by the Japanese naval air arm and the massive Pacific Ocean carrier battles including that in the Coral Sea where for the first time the ships of both navies remained out of sight of each other. We had no carrier in WW2 but many of our RAN aviators served with distinction on British and other ships.

Although from 1935 most Australian cruisers carried an aircraft, it was in 1948 that the RAN took delivery of its first real carrier, the 20,000 ton HMAS “*Sydney*”. Aircrew initially came from the RAAF, RAF, Royal Canadian Airforce and trainee recruits trained by the RAAF. That same year the naval airfield at Nowra, established during WW2 by the RAN, was commissioned as HMAS “*Albatross*”, with that year being recognized as the birth date of the Australian Fleet Air Arm.

A relatively small carrier by today’s standards, the “*Sydney*” carried the Hawker Sea Fury (top speed 830kmh) and the Fairey Firefly aircraft. During the Korean War, “*Sydney*” lost 3 aviators and 9 aircraft.

She was a “straight deck” carrier (the deck 210m x 30m running along the fore/aft axis). Les was able to detail all the disadvantages of this deck configuration with planes landing in direct line of those already parked up forward. He explained the operation of the 9

arrester wires for grappling by the plane's tail hook, the "last resort" wire barrier which rose up just prior to each plane's arrival to protect the stowed planes and the function of the batsman in guiding the planes on to the deck. With planes ideally landing at 25-second intervals, the environment was a highly dangerous hive of activity. Les cited a number of incidents, including one where the pilot missed all arrester wires, bounced hard on the deck, jumped the wire barrier and wrote off 5 planes including his own. Les's later description of the "angled flight deck" clearly highlighted the advantages of this subsequent layout, with landings not endangering stowed planes and with overshooting craft simply able to go around again.

To assist take off, the "Sydney" had an hydraulic shuttle to which the plane was attached by a wire strop. This had a kick like a mule, with acceleration equivalent to nearly 4.5gs. *"The technique was to open the throttle full power, brace the left hand against it, jam the right elbow into the pit of the stomach to prevent from dragging back on the control column with the right hand during launch and stalling the aircraft, and brace the head against the headrest. The pilot had absolutely no control over the aircraft until well clear of the ship's bow".*

In 1956 the new carrier HMAS "Melbourne" arrived. Apart from the *angled flight deck* mentioned above, she had 2 other great features – the *mirror landing system* taking over from the batsman and the *steam catapult* which reduced the "kick" by starting more slowly and accelerating rapidly. These 3 inventions greatly reduced aircraft accident and fatality rate.

The aircraft that came with the "Melbourne" were the pure jet De Havilland Sea Venom night fighter (top speed 920kmh) and the Fairey Gannet turbo prop designed for anti submarine work. The Gannet was particularly solid, to which Les can attest having stepped out unharmed from one with his fellow crewman at Nowra after it had cut a swathe through trees. In 1967 the RAN switched from British to American planes - the popular McDonnell Douglas Skyhawk (top speed 1,130kmh) and Grumman Tracker. These 2 planes served on the "Melbourne" for nearly 15 years until RAN carrier flying ceased in 1982 – the end of an era which had lasted just 34 years. RAN helicopter flights served with distinction in the Vietnam War; - the ongoing role of the Australian Fleet Air Arm now is to focus on helicopters carried in small warships.

Whilst Les's presentation concentrated on the aircraft and aircrew, he paid tribute to the extensive support crew – aircraft handlers, ordnance crew, engineers, electricians, supply crew, medicos and all those others essential to the running of a ship including the seamen - and our own Admiral Ross Swan who was captain of the "Melbourne" for 2 years. Brian Morgan's vote of thanks admirably summed up the sentiments of all present that not only had Les given us a succinct historical summary, but had maintained our absolute attention and interest from the very outset.