

# A109 LUH arrives for RNZAF

Contributed by Chris Gee

**THE FIRST** of the RNZAF A109 LUH helicopters have arrived and are being introduced to service by the specially formed Helicopter Transition Unit (HTU). In a ceremony held at Ohakea Airbase on May 13th, Prime Minister John Key opened the new No.3 Squadron hanger to an array of domestic and international dignitaries, before another ceremony was held by the NZ Defence Force to bless and formally accept the aircraft.

Built by AgustaWestland in Italy, the A109 LUH (Light Utility Helicopter) is the first new operational aircraft that the Royal New Zealand Air Force has taken delivery of since 1970. Also in use by the armed forces of Australia, the United Kingdom, Malaysia, South Africa, Sweden plus the US Coast Guard, the A109 LUH will be known in RNZAF service as the 'Mako'. Its civilian version, the A109 Power, has also become very successful and widespread.

The A109 LUH replaces the venerable Bell B47G Sioux (known by many for its iconic use in the television series M\*A\*S\*H) which the RNZAF has operated as a basic trainer since 1965. Although adored by many of its pilots, the Sioux is not without some handling quirks. As one pilot who cut his teeth in this aircraft eloquently said; "I've heard plenty of people say that if you can fly a Sioux you can fly any helicopter. You learn about the mechanical aspect and all the ways that you can control the helicopter, but we think there is another 'spiritual' dimension to flying a Sioux."

Beyond its training role, the A109 will perform many operational Light Utility roles for the RNZAF for which it is much cheaper to operate than the NH-90 (due here later this year) and UH-1. In particular, thanks to its advanced communications suite, the

A-109 LUH will be a very efficient C3 (Command, Control, Communications) platform, able to orbit for three hours at relatively low cost.

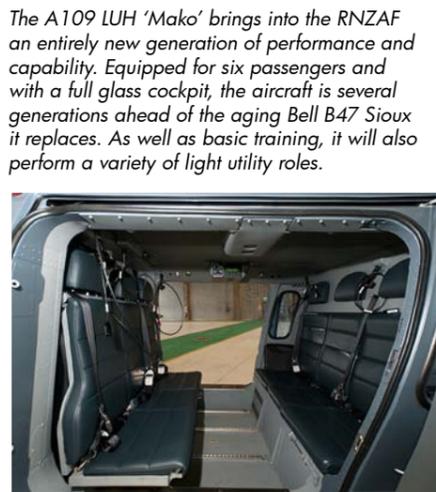
Operated by a crew of three (pilot, co-pilot and crewman), the A109 is vastly more capable than the Sioux. Powered by two 607SHP Turbomeca Arrius 2K2 turboshaft engines, it boasts an NVG compatible glass cockpit with 4-axis autopilot and can be fitted with a 250' winch, NightSun, and a 7.62mm MAG58 machine gun out of the left cabin door. The tricycle undercarriage is retractable and 400kgs of equipment can be carried on the hook.

### The Helicopter Transition Unit

The programme is worth \$141 million, including hangarage, spares and extensive manufacturer's support from prime contractor AgustaWestland. The RNZAF will receive five helicopters plus one attrition airframe, as well as purpose-built facilities for No.3 squadron who will take over the new hanger from the HTU. Warrant Officer A.J. Bailey explains, "The experience of other organisations and defence forces shows that trying to continue a capability output while you introduce a new aircraft is fraught with dangers, so the HTU was established.

We will have about 16 months of operational testing and evaluation and there will be a slow capability release over that period. Once the last NH-90 helicopter is handed over, HTU will be no more. Setting up the HTU allows us to follow the 'Crawl, Walk, Run' principle, so we are testing our capabilities in a benign environment, without the pressure of operational tempo. It's great for safety."

The HTU are currently in possession of three of the flyable aircraft and the attrition airframe, which arrived as a completed aircraft and is being stripped down by HTU for spares (a cheaper



The A109 LUH 'Mako' brings into the RNZAF an entirely new generation of performance and capability. Equipped for six passengers and with a full glass cockpit, the aircraft is several generations ahead of the aging Bell B47 Sioux it replaces. As well as basic training, it will also perform a variety of light utility roles.

option than purchasing a full spares inventory). 4 pilots, 2 crewman, and 12 maintenance personnel have completed training in Italy and are now developing training schemes for local operations. The next airframe will arrive in June, with the final airframe due by September or October. At the end of the year the first of the new NH-90s will arrive.

### Pilot Training

Pilot training will be light years ahead of the old Sioux programmes. WO A.J. Bailey says "The difference now is in the whole system. On the Sioux you did your ground course and then you went out, jumped in a helicopter and learnt how to fly it. On the A109, you'll do ground school, then you'll hop in the virtual ground procedure trainer to learn all your checks and then you'll jump into the full motion simulator. By the time you come to the actual helicopter for the first time you'll actually be able to fly it already. Another difference is that you will start your training with a crewman in the back, because at the same time that you are learning to fly the aircraft, we are training up the crewman as well."

### New Facilities

A new building has been built to house the full motion simulator, which is currently undergoing acceptance trials before being

shipped out to Ohakea. The addition of the simulator will save a lot of money over the life of the aircraft, by providing at least 50% of training requirements. The simulator has state-of-the-art computer-generated motion and video, which exactly mimics the surroundings of Ohakea, right down to the individual buildings and terrain.

Hangar facilities have been purpose-built for the new helicopter fleet, with individual access for each helicopter. The facility contains classrooms, briefing rooms, and a fully operational mission suite for classified briefing and command. With a total floor area of 10700sqm, the new No.3 Squadron building made up \$40 million of the total program costs, including the new hardstand areas, the simulator building and related support structures. By the time both new helicopters are in service there will be over 180 No.3 Squadron staff working at the new facility.

The Air Force has come a long way in the last year, with the first upgraded C-130H LEP Hercules, P-32K Orions, and AgustaWestland A109 LUH coming online, and the NH-90 arriving later this year. The capabilities of these aircraft will be slowly released over the next few years as each type finishes operational testing and evaluation before entering service. Once completed, this process will ensure the RNZAF will be able to lift, find, evacuate, carry, para drop, torpedo, rescue, assault, attack and escort more effectively, and efficiently, than ever before.



The venerable Bell B47G Sioux has been operated by the RNZAF as a basic trainer since 1965. There is no comparison to the A109.

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