Royal Australian Air Force Transformation

BY ROBBIN LAIRD

© 2015 FrontLine Defence (Vol 12, No 5)

The Royal Australian Air Force has set in motion a transformation strategy, which they call **Plan Jericho**. This strategy is built around shaping innovative ways to integrate their assets in support of air and joint operations. They have in mind nothing short of the transformation of jointness. A key platform within this overall approach to transformation is clearly the A330MRTT or KC-30A, as it is called by the Aussies.



With five operational tankers and two more on the way, Australia has found the asset to be crucial for the way ahead. The introduction of the tanker created a shift from an Air *Lift* Group to an Air *Mobility* Group. But the broader change is around how they have used the tanker in the battlespace and have operated it with their new air battle management asset, the Wedgetail.

I visited the KC-30 squadron in March 2014, and saw a capability in the making as the squadron was preparing to put their five tankers into operations, which they now have done in the Middle East. The Aussies were demonstrating to others that getting the platform to the warfighters rather than going through endless bureaucratic delays to "test" the platform before using it led to a capability upsurge.

As the recently retired Air Marshal Geoff Brown put it: "The advantage of basically giving the aircraft to the operators was, what the test community and the engineers thought were real limitations, the operators did not. Sometimes it took the operators two days to figure a work around. And the real advantage of the development was that they would prioritize what really needed to be fixed from the operational point of view, not the testing point of view."

During my most recent visit to Australia in August 2015, I talked with a number of senior officers about the KC-30A experience and how that helped drive their approach towards transformation.

The initial perspective was provided by Air Marshal Davies who linked the Middle East deployment with the ongoing impact on reshaping how the tanker has been used. Commenting with regard to the RAAF engagement in current Middle East Operations, the new head of the RAAF put it clearly: "This is the first time we have taken an integrated air package to an operation. It is the first operational experience for both the KC-30A and the Wedgetail, and the first time the Super Hornets operated (outside of *Red Flag*) with F-22s. The Wedgetail operating with the tanker affected the scope of operation of each," he said.

"Historically, we operate tankers in assigned tanker tracks. With the communications and other links inside the tanker, and with the ability of the Wedgetail to clear the way for the flexible operations, the tanker could move closer to where fighters in operation were most likely to move for refueling.

"This means that you move yourself 60 nautical miles further north because the fighters you're about to get next, need to travel 100 miles to get to you. You could make it 40 miles and stay on station for another 10 minutes. This meant getting the job done more rapidly; and reduced the fuel burn on the fighters as well.

"This operational shift was facilitated by the tanker not simply acting as a flying gas can in a pre-positioned location, but able to operate as a mobile combat asset to support the strike force. Something as simple as air-to-air refueling has been simple because it's a track at a time at an altitude, with a frequency and an upload. We're saying we can make it more complicated with the right information, and be much more effective in the battle space because of situational awareness."



The Aussies have kept one KC-30A on station during the operations. It has had an outstanding 95% reliability rate, and has been rapidly certified to do tanking operations on a variety of coalition aircraft, including Canadian ones.

As the Commander of the Air Combat Group, Air Commodore Roberton, who was deployed to the Middle East at the start of what the Aussies call Operation Okra, put it: "When we came into theater, we were cleared only to tank our Hornets and Super Hornets. But rapidly we were cleared to tank 12 different aircraft from 7 different nations, and certainly the USMC and USN became major users." The performance of the aircraft has demonstrated an ability to deliver an extraordinary amount of fuel in an integrated manner with a very good logistics footprint.

The first commander of the new Air Mobility Group is now the Deputy Chief of Staff of the RAAF, and Air Vice Marshal Warren McDonald pointed out that "the RAAF has deployed a single KC-30A to the Middle East operation but that single aircraft has delivered close to 30 million pounds of fuel since its arrival in late Fall 2014 [as of August 2015]. The aircraft has only needed a small technical footprint, some 10 technicians to deliver a mission success rate of around 95 percent."

He noted that the performance of the aircraft was a significant input into the thinking of Singapore and others with regard to their own tanker selection process.

"The Singaporeans talked with us at length about the aircraft and we provided them with our experiences associated with the program and aircraft. I am aware that the success of the Australian program fed into their own decision as it did in South Korea. The thing that's sometimes missed with being a lead customer on the KC30 means you must also forge a path for air-to-air refueling clearances. Without them, it is just a transport aircraft and useless to the fight," he asserted.

"Clearances are about enabling the tanker fleet to operate in a global context, and thereby contributing meaningfully to coalition operations. We are well underway with clearances, which then other global users can simply draw upon.

"For example, Singapore is obviously watching us closely as we move into F-35 clearances the latter part of this year, because for Singapore, when their tanker is delivered, there will be a JSF clearance already taken care of. We are working very hard to get as many clearances for the KC-30A as possible, as such we're working towards at the C-17 in the second quarter of 2016." A major advantage of the KC-30A is that it carries the fuel in the wings, which means the cargo area can be configured to carry passengers, cargo, or be used for more innovative purposes – and clearly the RAAF, with its transformation approach, is thinking about how best to leverage further modernization of the KC-30A to support its transformation process and the introduction of the F-35.

Ways to think about the future evolution of the aircraft came up in all of the interviews, but was best articulated by Australia's Air Commander, Air Vice Marshal Turnbull, who explained that "the KC-30A will be a key contributor to our transformation approach. We are thinking outside of the box with regard to the tanker, for there is a lot of unused real estate on the aircraft and we will work on what should be on the plane and what can be off-boarded via links to extend the operational capabilities of the platform."



The current head of the Air Mobility Group, Air Commodore Lennon linked the RAAF approach to transformation with the tanker in another way. "There is a lot of real estate inside and outside of the KC-30A. How we use that real estate needs to be determined by evolving concept of operations, not simply applying a technology solution set offered by a prime contractor. From a support perspective, softwareenabled systems of the sort prevalent in today's C2 and ISR systems, are almost throw away systems within five years. We need to build in cost effective systems, which do not go on forever and are not expected to be repaired beyond a certain period but simply replaced by new, better and cost effective technologies."

The boom has been a work in progress for the KC-30A, but obviously crucial since the vast majority of the world's combat planes use the boom refueling approach.

On a visit to the KC-30A squadron last March, I was told that the boom was a work in progress but would be operational by mid-2015, which it is close to doing.

Recently, the RAAF tanked one tanker with another via the boom method, which is important for a large tanker like KC-30A which can be refueled in flight and, with crew rest areas, can stay up for a considerable period of time dependent on demand. The RAAF has also now tanked USAF F-35s in the United States.

In short, the KC-30A has already proven its mettle in RAAF operations. While the USAF is waiting for its first new tanker, the Aussies have five, are adding two more, and are moving on to *Tanker 2.0*, namely, how to move beyond the classic "tanker as a flying gas can" paradigm.

And the need to do so is driven by the harsh reality of global events. As Air Marshal Turnbull bluntly stated: "Lethal is the world we live in and people need to keep their eye on that fact. We don't play games and we're here for a reason."

Robbin Laird is an international defence analyst based in Virginia, USA, and a regular FrontLine Defence contributor.

© FrontLine Defence 2015

http://defence.frontline.online/article/2015/5/3125-Royal-Australian-Air-Force-Transformation