

Scaled back acquisition opening up a space for C-27J gunships?

■ Canberra Bureau Report

The 2009 Defence White Paper (DWP'09) confirmed the Government had decided to further enhance the direct and indirect combat power available to Australian Army combined-arms teams, by advancing project Land 17 and acquiring "new 155mm artillery systems, both self-propelled and towed type, able to fire precision munitions at very long ranges, and high rates of fire."

The subject 155mm artillery systems, said DWP'09, "will comprise a deployable capability of two batteries of self-propelled guns and four batteries of towed guns. The towed guns will be able to be moved by helicopter and transport aircraft." ADBR approached the Department of Defence to formally clarify what was meant by the term 'battery'.

The spokesperson's response was – "A Self Propelled Gun Battery typically consists of six Self Propelled Howitzers. A Towed Artillery Battery typically consists of six Light Weight 155mm Howitzers." If taken through to contract award, this implies 12 self-propelled howitzers (SPH) and 24 towed guns will be funded for entry into service no later than June 2011, for the first six SPHs and first seven towed guns. The remaining SPHs must be delivered by 2012, and the last towed guns through 2013/14.

In the meantime, the ADF has been upgrading the precision fire capabilities of its legacy M-198 towed howitzers, principally by integrating 23 Portable Excalibur Fire Control Systems (PEFCS) and supporting elements: (the Enhanced Portable Inductive Artillery Fuse Setter; DAGR GPS; SINCGARS ASIP radio; a power conditioning unit & ruggedized PDA) and 'Ex-



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Key Points

- **The 2009 Defence White Paper has confirmed** the government will acquire new 155mm artillery systems, albeit in lower numbers than first envisaged in official tender documents.
- **Australia has now despatched a further 450 troops** to Afghanistan (on top of its existing 1,100) to help bolster security in advance of the 20 August presidential elections.
- **DWP'09 also resolved a replacement for the RAAF's** 'Caribou' transports. Ten new light tactical fixed-wing aircraft and seven CH-47F 'Chinook' helicopters, are to be acquired.
- **Development work is proceeding in the US** on a DARPA-led project to integrate a version of the 155mm M777 lightweight howitzer into the light tactical fixed-wing C-27J platform.

calibur 1a' precision guided munition (PGM).

Eighteen M198s (three batteries) will be issued with PEFCS to fire the 'Excalibur' round, with this interim capability spanning ADF requirements until being progressively withdrawn from service as Land 17 units are introduced into service from 2011. The M198s are then anticipated to be totally withdrawn by 2014/15.

The ADF has also been progressively expanding its understanding of the capabilities of contemporary artillery systems and PGMs (including its hazards and limitations) over the past 18 months by way of a series of artillery squad detachments to British and Dutch divisions operating 105mm L118

light howitzers (UK) and the PzH 2000NL self-propelled gun (Dutch) in Afghanistan.

With the United States deciding to support its additional 21,000 troop deployment in Afghanistan with large numbers of helicopters, debate has been reignited over the utility of land-based combat assets (compared with air-deployable units) as roadside bombs and improvised explosive devices (IEDs) continue to take a steady toll on coalition forces, in their daily quest to rout insurgent forces intent on disrupting stabilisation and reconstruction activities. European coalition partners have also recently spoken of deploying the Franco-German 'Tiger' helicopter (also procured by

Australia under project Air 87) into theatre.

The 2009 Defence White Paper's comments are thus instructive. Initial Land 17 tender documents issued by Defence canvassed requirements in terms of 18-24 SPHs and 18-35 towed guns. A US Defense Security Cooperation Agency (DSCA) release on 17 July 2008 moved to advise the US Congress the ADF was seeking up to 57 M777 howitzers – the only practical Land 17 towed gun option. As outlined above, publication of DWP'09 on 2 May (in concert with advice from Defence) suggests the original numbers have been substantially cut back.

When President Obama confirmed 17 February the US would substantially increase its quantum of forces in Afghanistan, a key element of that decision related to boosting the number of helicopters that would accompany its forces, and potentially, would also become available for coalition use.

With production of the air-deployable lightweight M777 passing its 500th unit 17 April 2009, and US forces taking first deliveries of new CH-47F 'Chinook' helicopters in mid-August 2007, new opportunities to leverage rapidly deployable air mobile artillery have not been lost on coalition commanders.

Hence, the significance of the DWP'09 confirmation of the ADF would replace its six existing CH-47D 'Chinook' heavy lift helicopters with seven new US Army configuration CH-47Fs, which are widely regarded as a much more capable platform for a range of counterinsurgency warfighting tasks, including the rapid deployment of M777 howitzers and their accompanying ammunition pallets.

The related Defence White Paper instruction that the RAAF's 'Caribou' light tacti-

cal transport fleet would be replaced – via phase 2 of project Air 8000 – by ten light tactical fixed-wing aircraft in a logistics configuration that would “complement” the current 4 x C-17, and ultimately, 14 x C-130J air transport fleet – may also have some relevance in explaining the paring back of Land 17 artillery platform numbers.

Prime Minister Rudd regretfully acknowledged 29 April that the likely upturn in fighting in Afghanistan through to August, and in the long period of consolidation required afterwards, would likely see more coalition casualties.

The rush to boost combat and logistics helicopter numbers has also raised questions about the future of SPH units, especially if the Dutch honour their commitment to withdraw from Afghanistan after 2010. Instead of exposing self propelled howitzers to frequent insurgent attacks by moving them beyond protected locations (as effected by way of rockets and

mortars), one option is to shift emphasis to air mobile 155mm artillery units (ie: M777s), which can be more flexibly relocated by way of ‘Chinook’ helicopters as part of the anticipated rapidly moving campaign this coming northern summer in valleys leading to the Pakistan border.

The timing of the Air 8000/2 acquisition in the 2009 Defence Capability Plan (DCP) also has importance in determining one further option for air-based artillery support. Up until release of DWP’09, the light tactical fixed-wing platform to replace the ‘Caribou’ was considered almost exclusively in terms of a competition between the EADS C-295M & the L-3 Communications/Alenia North America C-27J. The White Paper couched the replacement capability as a new light tactical fixed-wing aircraft that “will have significantly greater range, speed and payload than the retiring ‘Caribou’ transports.”

Sources close to Defence suggest this specification gener-

ally favours the C-27J, and especially so if common logistics and through life support savings related to growing the C-130J fleet to 14 units are taken into account. Should this be the case, a parallel new capability development in the US may also offer the ADF an opportunity to procure its first-ever fixed-wing gunships.

The Defense Advanced Research Projects Agency (DARPA) and Alenia are reportedly seeking to integrate BAE Systems’ (BAES) M777 lightweight howitzer into the C-27J airframe, as part of a replacement program for existing US units in the form of AC-130H ‘Spectre’ and AC-130U ‘Spooky’ units. Under the Joint Common Aircraft (JCA) program, the US Army & Air Force are contracted to buy 78 C-27Js for use as light cargo transports. The first JCA was delivered to the joint program office on 25 September last year.

In FY2008, US\$32m was set aside by the Pentagon as part of

a \$1.8b re-programming request to buy one C-27J for quick modification as a prototype gunship to augment the US Air Force Special Operations Command’s (AFSOC) existing AC-130 fleet. AFSOC is also exploring using a decommissioned C-27 as a ground-based test bed. AFSOC currently has 17 ‘Spooky’ platforms (flown by the 4th Special Operations Squadron) and eight ‘Spectre’ platforms (flown by 16th Special Operations Squadron, which is presently serving in missions in Iraq and Afghanistan). Lockheed Martin’s C-130J is also being used as the host platform for the USAF’s new HC-MC-130J infiltration/exfiltration aircraft.

First used in combat in South Vietnam and Laos in 1967, the AC-130 encompasses armaments ranging from 20mm Gatling guns to 105mm howitzers. The US Air Force uses the AC-130 gunships for close air support, air interdiction and force protection. Close air support roles include supporting

CAPABILITY REVIEW: Air 5416

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Rotary-wing power finds its place in an increasingly hazardous Afghanistan

Despite a massive injection of American troops and helicopters into southern Afghanistan, Australian and Dutch achievements in stabilisation and reconstruction in Oruzgan Province are likely to be sorely tested by an anticipated summer spike in insurgent violence. Whether coalition troop and local Afghan National Army numbers in the province – one of the lowest ratios in the country in relation to local population size – are up to the task, has been questioned by a former senior defence commander.

■ Nick Merrett/CANBERRA

Presenting a lecture in Canberra 20 May entitled ‘Australia and Afghanistan – Ways, Ends & Means’, MajGen Jim Molan (Retd) warned that the current number of coalition troops in Afghanistan (particularly in the south), needed to be dramatically raised if present efforts to rebuild and secure the country from insurgent influences were to succeed.

Drawing off his experience as a Coalition commander in Iraq, Molan stressed that the quantum of soldiers deployed (in terms of footprints on the ground), was the most important element in the overall strategy for stabilising Afghanistan. He further considered this might also “be the best contribution we can make to Pakistan ... the recent successful US ‘surge’ experience in Iraq should have sent a strong message to

