

**By Dr Carlo Kopp**

In a recent piece in the Fairfax broadsheets, ASPIDirector Hugh White pointed out that while Defence remains on track to buy four Wedgetail AEW&C air craft and two additional mission packages for \$3.6 billion, it has not yet taken up the option to add two air frames at an additional 7 per cent cost to get six complete systems (see Hill report, page 1). As White observed, a 50 per cent increase in capability for a 7 per cent increase in price is hard to argue with.

Is such irrational resource management is becoming well established in Defence? Readers might contemplate other bargains ignored, rejected or actively demolished.

**Aerial Refuelling:** Defence plans to acquire four or five shiny new, or nearly new, twin-engine tanker air craft, with the Boeing 767 and EADS A330 bids the defacto shortlist, at well over a billion.

Yet we are to day in the midst of the biggest glut of used air liners in known history. There are hundreds

of moth balled air craft to choose from, as well as blocks of operational air craft which their owners would dearly love to shed.

Prices for used air liners are the lowest on record – used 747-400s to day come in at 50 per cent to 60 per cent of their price in late 1999. A survey in November indicated three A330s, 57 767-200s, 12 767-300s and 28 747-400s are in storage. Troubled United Airlines has no less than 34 747-400s and 37 767-300s in its fleet.

A used 747-400 with the full freighter package retrofitted is now marketed at US\$50 million to \$60 million. With tested tanker conversions flown on the 747, and in development for the 767 and A330, all three types are viable for retrofits.

Military tanker-transport fly a fraction of the hours flown by commercial air craft and 10-year-old airliners often retain 20 to 30 years of viable service life. Given that the original AIR 5402 envis-

aged the use of ex-airline airframes, one can only wonder – given it could now be much cheaper than in 1999.

**Caribou:** the venerable DHC-4 remains the best STOL airlifter in its size-class, a simple, rugged and durable air frame. None of the replacements proposed over the years can match its short/rough soft field performance. With a flight test proven dual certified (FAA, Canada) and very recent PT6 turbo prop conversion and an abundant pool of used air frames over seas, why has Defence invested heavily in spare piston engines and rejected industry proposals to retrofit turbo props – a low-cost, low-maintenance, high-reliability, high-performance solution which frees the RAAF from maintaining an Avgas fuel supply infrastructure?

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## Common ammo for artillery

MINNEAPOLIS – United Defence Industries has fired a number of 105mm rounds from a variable volume cannon that uses 155mm modular propellant charges.

This 105mm V2 C2 (for Variable Volume Chamber Cannon) offers the US Army an innovative option for a possible new 105mm system.

United Defence built the cannon, which can be integrated with a 20t class combat vehicle – complete with automated ammunition handling – or configured as a towed weapon.

Jim Unterseher, United's army programs director says the system could provide dramatic acquisition savings and reduce the logistical burden of maintaining more than one family of propellant for artillery.

With its variable volume chamber, the 105mm V2 C2 can use M231 and M232 modular artillery charge system (MACS) propellant and need only one family of propellant for both 105mm and 155mm artillery systems.

## Problems delay choppers

WASHINGTON – The US military has put off accepting new Black Hawk and MH-60S helicopters built by Sikorsky, until the company fixes a "systemic manufacturing problem" on its production line, a US Navy report said.

The types are entries in the Australian competition.

The report, came a day after the Pentagon announced it was scrapping the \$39 billion Comanche helicopter

built by Sikorsky and Boeing.

Stripped bolts, leaking gearboxes, bolts insufficiently tightened and parts mix-ups between Navy and Army models of the MH-60 helicopter are among the problems listed.

"In the past few weeks, several serious manufacturing issues have arisen on the production line," the report claimed.

Sikorsky has already delivered 50 of the transport version of the MH-60S Knighthawks to the Navy and is building a variant that will be used for mine detection.

The MH-60S (quoted as the "Sierra") is an amalgam of the Sikorsky UH-60L Black Hawk Army helicopter and its Navy variant, the SH-60B Seahawk.

Acceptance by the Army and Navy is expected to resume in the next few weeks.

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*F-111: the USAF plans to fly its 1963 build B-52H fleet until 2040, the B-1Bs until 2040, and odds are that many KC-135Rs and C-5s of 1960s vintage will also remain until 2040. The reasoning behind this is simple – investment in engine, avionic and structural upgrades is much lower than the cost of buying new – and the expense is spread over decades, in small increments.*

*Defence plans death for the F-111 by 2010 to 2012 despite DSTO advice that the aircraft can be managed with minimal effort through to 2020. And, with modest investment, well beyond that.*

*The taxpayer has an enormous*

*material and intellectual investment in infrastructure, upgrades and the DSTO Sole Operator Program.*

*What is accomplished by early retirement? Some not very expensive avionic upgrades post 2005 disappear, some expenses are duplicated on the F/A-18A, a lot of expensive investment wasted, and the RAAF is downsized, increasing pressure for earlier deployment of the JSF.*

*Buying JSFs earlier means buying them more expensive, and less mature with all of the ensuing headaches.*

*Given that there are 200 or so mothballed F-111s in the US, of which 70 or so are F-111Fs similar in avionic configuration to our F-111Cs, the investment required to*

*extend or even expand the existing F-111 fleet is trivial against the cost of buying new replacement aircraft.*

*Were the F-111 kept in service well past 2020, new replacements could be pushed back at least a decade, avoiding a post-2015 budget spike. If these are to be JSFs, better and cheaper JSFs these would be.*

*These case studies point to a recurring pattern in the Defence bureaucracy – an inability to recognise and exploit bargains when they arise. The latter three also show a preference to buy shiny new over seas rather than invest in rebuilding older platforms and exploiting the domestic industry base.*

## US hangs on to landmines

WASHINGTON – The US military will continue using land mines but, after 2010, will ensure they deactivate after a set period, claiming this will save civilian lives.

The State Department makes the astounding claim that “the US will become “the first major military power to adopt a policy ending use of all persistent landmines and maintaining the international standard of detectability for land mines of any kind.” Which all depends what you mean by “major”.

Australia, Canada and other countries signed the total landmine ban some time ago.

Future American landmines will be engineered to self-deactivate after a specific time to “save civilian lives without taking away a key defensive weapon”.

A spokesman said the new policy does not ban contact landmines used on the Korean Peninsula to deter possible North Korean aggression against South Korea.

The new policy requires DoD to develop and use more sophisticated

landmines in the future but landmines will remain a component of the US military inventory.

## Raptor bomber plan in 2006

WASHINGTON – The US Air Force is considering modifying Lockheed Martin's F/A-22 fighter into an interdiction bomber.

Air Force Secretary James Roche and his chief of staff General John Jumper told the House Armed Services Committee the plans are to increase the size of the F/A-22, equipping it to drop precision small-diameter bombs, persist behind enemy lines and maintain some supercruise capability.

“That is one of the distinct possibilities,” Jumper told the panel, noting that such a decision would take advantage of billions of dollars already spent to develop the plane.

The Air Force plans to buy a total of 275 F/A-22s at a cost of about US\$250 million each, with the first squadron of F/A-22s to be operations in December 2005.

Air Force planning for the fiscal

year 2006 budget, now underway, will include initial decisions on how to achieve long-range strike capability.

## BAES holds head up

LONDON – BAE Systems reported a 2.2 percent fall in year operating profits and a deep cut in debt. Operating profit before goodwill amortisation, impairment costs and exceptional items tallied £980 million last year.

Performance was helped by higher income from its role as primary contractor in Britain's longstanding Al Yamamah military supply and support deal with Saudi Arabia, which is paid for with oil.

Chief Executive Mike Turner says BAES is determined to avoid any repeat of the Asute attack class submarine and Nimrod MRA4 maritime patrol aircraft program cost disasters.

BAES posted a better-than-expected 3.5 percent rise in sales to £12.57 billion and net debt stood at £870 million at December 31, down 33 percent.