

By Dr Carlo Kopp

MELBOURNE – The Defence Department's plan to equip the F/A-18A with joint air-to-surface stand off missiles (JASSMs) or similar small cruise missiles as a gap-filler to replace the F-111 is strategically unsound and will prove very expensive if warstocks are acquired.

Defence Minister Robert Hill last week in two press interviews said that "[new weapons for the F/A-18A] ... will significantly increase the air force's capability" and "Surface-to-air threats have increased the importance of a stand-off missile capability for modern air forces to better ensure the survivability of air craft."

The most likely candidate weapon is the stealthy AGM-158 JASSM, previously planned for the F-111. At a unit cost about US\$400,000 each, the weapon is about 20 times the cost of a GBU-10 Paveway or GBU-31 JDAM smart bomb, is no more accurate, and has half the war head size. The damage effect of an F-111 payload of four 2000lb Paveways or JDAMs requires shooting no less than eight JASSMs, costing 40 times as much.

## Defence's cruise missile wet dream



The US plans to use JASSM as a niche weapon for destroying small, high-value heavily defended targets. It is not intended to cheap, heavy guided bombs.

Assertions that the additional 200 nautical mile range provided by JASSMs will offset the loss of the F-111 are non sense. Cruise missiles fly in direct paths to the target to bypass defences and exploit terrain cover. A JASSM may provide as little as 100nm of stand-off range, once tactical flight path routing is factored in.

Using a JASSM as a "range

extender" misrepresents the design aims of a weapon, intended to allow air craft to attack from outside the 100nm radius footprint of Russian S-300/PMU-2 /S-400/S-300V mobile SAM systems.

The argument that the F-111's survivability is inadequate is also non sense. The F-111 can penetrate low and faster and use terrain-following radar at low to toss a JDAM or JDAM-ER from below the radar horizon of a SAM system.

Survivability against SAMs is not an issue for the F-111.

The biggest risk to RAAF strike air craft is the Sukhoi Su-27/30. With about three hours on station endurance 100nm out and a big N011/N011M radar, the Sukhois can detect a JASSM shooter at ranges similar to that of the JASSM itself. The issue then is whether the Sukhoi can successfully prosecute an engagement and destroy the strike air craft.

The proposed JASSM armed AP-3C solution is non-viable.

The interesting comparison is

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Leobhaed Martin image

## RAAF threat to plane spotters

SYDNEY – The RAAF is monitoring aircraft spotters, the fans who photograph air craft mainly at civil airports and now publish their images on Web sites, such as the one sponsored by Sydney Airport.

The "RAAF Brand Manager", reportedly with the rank of Group Captain, has told them all images of RAAF aircraft are copyright and must be taken down from Web sites. The stern letter gave the anoraks the

impression the RAAF was invoking national security.

"I have no idea if they were spouting garbage or not, and am seeking better and further particulars on this," one spotter posted on a news site. "Strange really, considering the good relationship our uploaders have."

In a statement, the RAAF said: "Section 83 of the Defence Act 1903 prohibits the use of copyrighted imagery for commercial gain by any person or persons."

"When images are permitted to be taken by Defence employees or

private citizens while on a RAAF Base, military establishment or surrounds, the copyright [is] the property of the Commonwealth, not the photographer."

But, the spotters plead, they take their happy snaps on civilian ground or at shows such as Avalon, which is held on a private air port.

The "RAAF Brand Manager" produces the Air Force Style Guide; designs support material and merchandise to promote Air Force image and identity; also "Values and Vision" and other duties such as an input into recruiting.



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## JASSMs won't help RAAF much, part 2

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that of a JASSM-armed F-111 vs the F/A-18A. On a long-range mission, the F/A-18A will not have the fuel to mix it with a Sukhoi – in any event the BVR shot advantage lies with the Sukhoi. So the best game plan is to exit once the JASSMs are fired.

Against an F/A-18A, the Sukhoi has the internal gas and speed advantage to run it down. Against the F-111 the opposite is true, as it can sustain a much higher speed longer to run the Sukhoi out of gas – in this game the F-111 is more survivable than the F/A-18A.

The reality is that tanker-sup-

ported F/A-18As would be flown to keep the Sukhois off the strike aircraft. If the F/A-18As are to fire the JASSMs, the tankers have to be shared between escorts and shooters, drastically cutting achievable weight of fire.

The technological, budgetary, strategic and tactical arguments put against the F-111 have more holes than a Swiss cheese. Hill claimed last week: "I said to Defence that through the whole of that [DCP] process I was not going to come out of it with out comes that are not an enhancement of capability" Defence has delivered the opposite – a drastic reduction in

overall RAAF capability and flexibility.

The centre piece of the Defence argument against the F-111 is its weakest point – guess work around future operating cost increases and "loss of capability" resulting from structural problems. With 200 mothballed F-111s in the US, the cost of filling a hangar with structural spares is cheap.

The cost to Federal Cabinet of retaining the F-111 to 2020 is a small price to pay against the clear strategic risks arising from an effective halving of the RAAF's punch.

## Indos not happy, Alex

JAKARTA – Australia's decision to take part in the US program missile defence shield could create uncertainty in the region, Indonesia's

foreign ministry said. Spokesman Marty Natalegawa said "these things offer more uncertainties and potential complications rather than solutions".

Hill said there are no plans to host part of a ground-based missile defence system on Australian territory.

Downer was due to hold talks with Foreign Minister Hassan Wirayuda on Sunday evening and meet President Megawati Sukarnoputri, top security minister Susilo Bambang Yudhoyono and the police and intelligence chiefs, the spokesman said.

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