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 re place the F-111 is strategically unsound and will prove very expensive if warstocks are acquired.

Defence Minister Robert Hill last week in two press in ter views said that “[new weap ons for the F/A-18A] ... will sig nifi cantly in crease the air force’s ca pa bil ity” and “Sur face-to-air threats have in creased the im por tance of a stand-off missile ca pa bil ity for mod ern air forces to better en sure the survivabil ity of air craft.”

The most likely can di date weapon is the stealthy AGM-158 JASSM, pre vi ously 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 ac cu rate, and has half the war head size. The dam age ef fect of an F-111 pay load of four 2000lb Paveways or JDAMs re quires shoot ing no less than eight JASSMs, cost ing 40 times as much.

The US plans to use JASSM as a niche weapon for de stroying small, high-value heavily de fended tar gets. It is not in tended to be cheap, heavy guided bombs. As ser tions that the ad di tional 200 nau ti cal mile range pro vided by JASSMs will off set the loss of the F-111 are non sense. Cruise mis siles fly in di rect paths to the tar get to by pass defences and ex ploit terrain cover. A JASSM may pro vide as lit tle as 100nm of stand-off range, once tac ti cal flightpath rout ing is fac tored in.

Using a JASSM as a “range extender” mis rep re sents the design aims of a weapon, in tended to al low air craft to at tack from out side the 100nm ra dius foot print of Rus sian S-300PMU-2 /S-400/S-300V mo bile SAM sys tems.

The ar gu ment that the F-111’s survivabil ity is in ade quate is also non sense. The F-111 can pen et rate low and faster and use ter rain-fo llow ing ra dar, if low er than the ra dar ho ri zon of a SAM sys tem.

Sur vivabil ity against SAMs is not an is sue for the F-111.

The big gest risk to RAAF strike air craft is the Sukhoi Su-27/30. With about three hours on sta tion en dur ance 100nm out and a big N011/N011M ra dar, the Sukhois can de tect a JASSM shooter at ranges sim i lar to that of the JASSM it self. The is sue then is whether the Sukhoi can suc cess fully pro ce de an en gage ment and de stroy the strike air craft.

The pro posed JASSM armed AP-3C so lu tion is non-viable. The in ter est ing com par i son is

RAAF threat to plane spotters

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

The “RAAF Brand Manager”, re port edly with the rank of Group Cap tain, has told them all images of RAAF aircraft are copyright and must be taken down from Web sites. The stern let ter gave the an o raks the im pres sion the RAAF was in voking national security.

“I have no idea if they were spouting garbage or not, and am seek ing better and fur ther par tic u lars on this,” one spot ter posted on a news site. “Strange re ally, con sid er ing the good rela tion ship our upload ers have.”

In a state ment, the RAAF said: “Section 83 of the De fense Act 1903 prohibits the use of copy righted im age ry for com mer cial gain by any per son or per sons.

“When images are per mit ted to be taken by Defence employees or private citi zens while on a RAAF Base, mil it ary es tab lish ment or sur rounds, the copy right [is] the prop erty of the Com mon wealth, not the pho tographer.”

But, the spot ters plead, they take their happy snaps on civil i an ground or at shows such as Avalon, which is held on a pri vate air port.

The “RAAF Brand Manager” pro du ces the Air Force Style Guide; de signs sup port ma terial and mer chandise to pro mote Air Force im age and iden ty; also “Values and Vi sion” and other du ties such as an input into recruiting.
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 uncertainty 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 spokes man said.

**Indos not happy, Alex**

**From previous page**

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 at a range 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-supported F/A-18A escorts would be flown to keep the Sukhois off the strike aircraft. If the F/A-18A’s are to fire the JASSMs, the tankers would have to be shared between escort 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 outcomes that are not an enhancement of capability” Defence has delivered the opposite – a dramatic reduction in overall RAAF capability and flexibility.

The centre piece of the Defence argument against the F-111 is its weakest point – guesswork around future operating costs that result 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.

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Depending on whether any more big stories break, this is – probably – the last HeadsUp for the year.

It’s a pleasure to thank the many appreciative emails I’ve received and the constructive comments.

*Also a pox on the odd, white knights who ask for HeadsUp to be sent to them, then block it as spam! And complain! What do you expect for free?*

*If not before, see you in the new year.*

Best wishes to all for the season.

**John Stackhouse, Killara**

**December 2003**