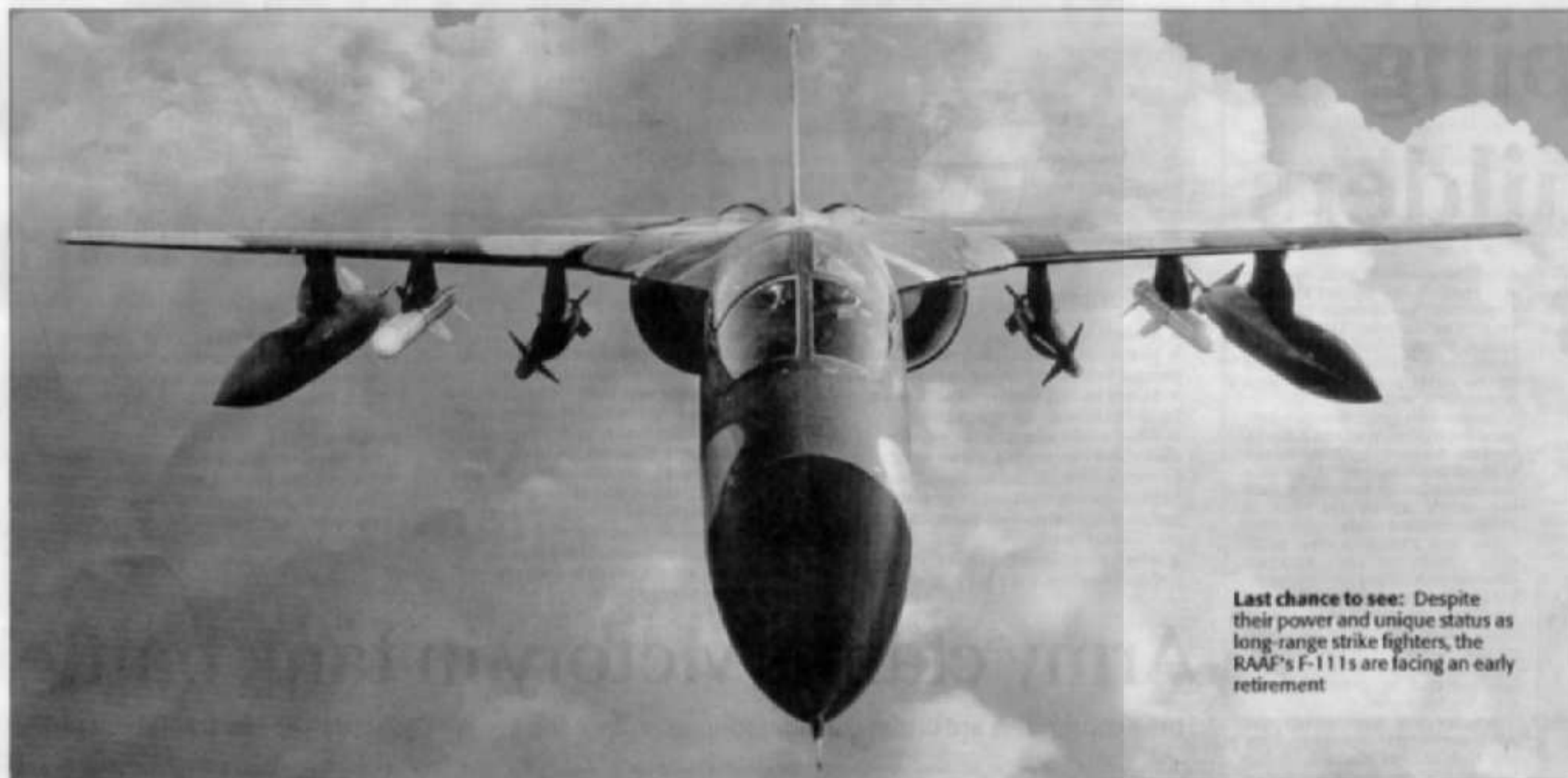


## STRIKE FIGHTERS



**Last chance to see:** Despite their power and unique status as long-range strike fighters, the RAAF's F-111s are facing an early retirement

## Air chief scoffs at concerns of capability gap

Australia's top airman says defence changes will leave us in good hands, writes Patrick Walters

THE RAAF's chief Angus Houston is confident Australia's airborne strike capability will not be affected by the phase-out of the F-111 from 2010.

Air Marshal Houston rejects the notion of a capability gap opening up with the phase-out and the anticipated arrival of the F-35 from 2013-14.

"There will be no gap and I think that is the important message to get across. Essentially, the F-111 will not be withdrawn until such time as we have fully operated the F/A-18," Air Marshal Houston said last week. "We have the much more capable tankers. We have the AEW&C (airborne early warning and control aircraft). We have upgraded our weapons."

"The F/A-18 will be capable of dropping not only laser-guided precision munitions but also satellite-guided precision weapons and will also be capable of delivering follow-on standoff weapons."

Air Marshal Houston said by 2010 the F-111 would be almost 40 years old. "Our studies suggest that beyond 2010 it will be a very high-cost platform to maintain and there's also a risk of losing the capability altogether through aging aircraft factors."

In a recent interview with *The Australian*, Air Marshal Houston said the biggest challenge for the RAAF was the transition into a new generation "systems of systems", of which the Joint Strike Fighter (F-35) would be the combat arm.

"Just as important are the enabling capabilities, AEW&C, the surveillance and control systems and the tankers that will provide the flexibility for the shooters."

Air Marshal Houston emphasised the importance of tankers for the successful deployment of RAAF F/A-18s to Iraq earlier this year, where air-to-air refuelling combat missions frequently lasted up to nine hours and gave pilots the opportunity to undertake different combat tasks on the one operation.

"Tankers give us the ability to go further and give us a lot more flexibility and a lot more tactical options."

Another priority would be the next generation maritime intelligence and surveillance and reconnaissance task, currently performed by a mix of P-3C and AP-3C aircraft.

"Obviously we will have some UAVs (unmanned aerial vehicle), probably something similar to Global Hawk with a much more developed sensor package than the Global Hawk has now. It gives us the ability



**Confident:** Air Marshal Houston

to operate in a maritime or land environment and provides us with a very flexible and adaptable surveillance capability."

Air Marshal Houston said while much of the surveillance task would probably be performed by unmanned aircraft, piloted planes would still be needed in the anti-submarine and anti-surface warfare tasks.

He pointed out that the upgraded AP-3Cs had performed superbly over both land and sea in the Iraq theatre, giving the RAAF a capability well beyond the older P-3C fleet.

"We probably have the best maritime patrol aircraft in the world today and we did it (the upgrade) ourselves."

Air Marshal Houston said the existing plan for four rather than the original seven AEW&C aircraft would still give the RAAF a good capability.

"If you are going to come up with a balanced force you are probably never going to have as many of every capability as you would want."

Reflecting on the RAAF's Iraq deployment, in which the frontline fighter force saw hostile action for the first time since the Korean war, Air Marshal Houston said the air force contingent, which included 30 combat pilots, had performed superbly.

"All of the people who went demonstrated very high levels of professionalism and very high levels of expertise."

"I think it proved that the standards that we have across the RAAF are very, very good."

He said RAAF pilots had demonstrated great flexibility in undertaking a huge variety of missions including combat, special forces tasks and inter-theatre tasks.

Australia's three Hercules aircraft had provided a total of 10 per cent of the Coalition's airlift task — well in excess of the RAAF's proportionate share of the total air transport fleet.

# Warbird deserves reprieve

Last week's announcement of early retirement for the F-111 is seen as folly by many. Dr Carlo Kopp argues the case against it

THE US has flown its B-52H bombers since 1961 and plans to retire them in 2040. Australia has only flown its F-111 fleet since 1973, yet Defence Department bureaucrats are trying hard to get rid of them at the earliest opportunity.

In raw performance the F-111 continues to rank well ahead of all production strike fighters, and its proposed replacement Joint Strike Fighter.

This astonishing incongruity in thinking exists despite 200 mothballed F-111s in the US available for structural spare parts. The F-111 could fly for many more decades, thus deferring multi-billion-dollar expenses in new replacements.

The F-111 is the jewel in the crown of ADF military capabilities. It provides around 50 per cent of the RAAF's striking power, at around 3 per cent of the annual defence budget.

Loaded with 250kg bombs, the F-111 carries half the payload of the much bigger B-52.

The F-111 remains the fastest and longest-ranging strike fighter in service worldwide. Refitted with new avionics during the 1990s, and upgraded since, it is a world-class system.

The F-111 remains one of the most accurate precision bombers in service today, using advanced navigation software, GPS satellites and the Pavé Tack laser targeting system.

The upgrade currently in test will

permit the F-111 to fire AGM-142 television-guided standoff missiles, and also drop the highly accurate all-weather satellite-aided JDAM smart bomb — the weapon that broke the Taliban, and the Republican Guard.

This upgrade also permits future addition at low cost of the stealthy JASSM cruise missile, up to 48 of the new "small diameter bombs" and the hypersonic ASRAAM missile carried now by the F/A-18A.

The F-111 is already capable of delivering a range of basic and bunker-busting laser-guided smart bombs, the potent Harpoon anti-shiping missile, as well as prodigious payloads of dumb bombs, still useful for battlefield strikes on entrenched troops.

A single F-111 delivers the firepower of two F/A-18 Hornets supported by an aerial tanker, or two of the new JSPs, which defence planners would like to replace the F-111s with.

Current defence planning does not include sufficient tanker aircraft to replace the F-111s with smaller aircraft.

In raw economics, the F-111 is a cheap way of delivering firepower — defence and overseas figures indicate that using smaller fighters like F/A-18s or the JSPs and aerial tankers as substitutes for the F-111 costs around 70 per cent more than using F-111s.

Incoherences abound in the case put against the F-111.

In strategic terms Australia would be emasculating its strike capabilities, while Indonesia, Malaysia, China and

India operate or are purchasing long-range Russian Su-27/30 strike fighters. Armed with standoff missiles the Sukhois can strike across Australia's "sea-air gap".

Growth in LNG facilities in the Pilbara and Timor Sea presents Australia with a major strategic vulnerability under the footprint of growing regional strike forces.

Since 2001 the strategic value of the F-111 has further grown, as innovative "persistent bombing" techniques were

### The F-111 remains the fastest and longest-ranging strike fighter in service worldwide

developed to break the Taliban, and Saddam's armies.

Carrying twice the internal fuel of most fighters, F-111s can orbit over the battlefield much longer than the smaller F/A-18 or JSP.

With little tanker aircraft support needed F-111s are ideal for supporting ADF ground forces in expeditionary wars or operations against regional terrorists.

Opponents of the F-111 have built a guesswork case around future operating costs, and complain about its age.

Observers without intimate knowledge of the F-111 or exposure to the B-52 and B-1B programs should be

very sceptical. At last year's Red Flag exercise in the US the F-111s flew flawlessly, demonstrated better uptime than all of the newer fighters present.

Since Boeing took over operation of the Amberley F-111 depot 18 months ago, the F-111's reliability has soared, as a large backlog of previous maintenance problems have been systematically fixed.

The current trend is to lower maintenance costs as old hardware in the F-111 is replaced with new, a reality lost on Defence bureaucrats.

Age is the other favourite criticism of the F-111, often an excuse for planning mistakes.

The Defence Science and Technology Organisation has stated the F-111 can be managed without difficulty until 2020.

The biggest fatigue-life issue in the F-111 is its "swing wing". The fleet was retrofitted over the last two years with younger wings removed from mothballed US F-111s. Wing swaps could be done repeatedly to extend F-111 fatigue life for many decades.

With most of the avionics and wiring in the F-111s replaced since the 1990s, emotive complaints about F-111 age lack substance.

Why are Defence bureaucrats so intent on killing off the F-111 early?

The F-111 is the only combat aircraft independently supported by Australia, including the development of its weapon system software.

All of the many embarrassing prob-

lems surrounding the F-111 were a direct result of planning and management blunders in the troubled Defence bureaucracy. The widely reported problems with the support of the F-111 have since been solved by industry, RAAF and DSTO, but fear of embarrassment appears to persist.

The massive Amberley support facility for the F-111 employs several hundred engineers, technicians and airframe maintenance workers.

It is the only facility in Australia that performs complete system integration and software development for a combat aircraft — a hi-tech industrial capability otherwise unique to leading industrial nations.

Early retirement of the F-111 will see the collapse of this critical industry capability, destroying a key national asset built up at considerable cost over two decades, and denying the taxpayer a return on this investment.

Australia has an enormous and valuable investment in the F-111 fleet, and compelling strategic and budgetary reasons to keep operating this vital asset to 2020 or beyond.

Any earlier retirement date will see vital upgrades cancelled, a death knell for the aircraft. There is nothing to be gained and much to be lost by early F-111 retirement.

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