

**From:** Peter Goon [the.firm@internode.on.net]  
**Sent:** 16 March 2012 09:57  
**To:** 'Senator Mark Furner, Chair'; 'Dr Dennis Jensen MP'; 'Little, Robert (REPS)'  
**Cc:** APA\_Peer\_Review\_Group  
**Subject:** There is Nothing Normal nor Usual let alone Standard about the JSF . . .  
**Attachments:** Program Comparison\_JSF vs F-111\_2009.pdf; DAR-Review\_2010-11\_APA Sub3\_16Mar12\_A.pdf

Dear Senator Furner and Members of the JSCFADT:

***[Five-year wait for new fighter jets](http://www.adelaidenow.com.au/news/national/five-year-wait-for-new-fighter-jets/story-e6frea8c-1226300951193)***

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**Subject:       **THERE IS NOTHING NORMAL NOR USUAL LET ALONE STANDARD ABOUT THE JSF****

This submission is provided in support of the JSCFADT Public Hearing, today.

In his article, Mr Ian McPhedran reports on what, inter alia, was predicted years ago as the likely next stage/phase of the Lockheed Martin/Ft Worth Division marketing strategy for the JSF – euphemistically called the “*Don’t You Worry About That; All is Normal; Nothing to See Here - So Let’s Move Along*” Phase.

The contractor and the JSF Project Office are both saying things like:

*“The JSF’s problems published in the media are normal for a brand new strike fighter project . . .”*

*“These are just normal teething problems that you always fight in fighter aircraft development . . .”*

Nothing could be further from the truth but there is a better than even chance that similar claims will be made before you today by senior Defence Portfolio officials.

As advised in submissions to these same senior Defence Portfolio officials, successive Defence Ministers and Governments, and Parliamentary Oversight Committees since circa 2001, there is little if anything that is normal or usual about the JSF Program or the JSF aircraft variants.

This program and the aircraft it is producing are "outliers" of enormous disproportions, in pretty much every sense of the word.

For example, compare the JSF Program with, say, the F-16 Program. This can be easily done by looking at the data and the facts, then testing the evidence contained in the US Comptroller Reports on the F-16 Program at the time (circa 1980s).

In the F-16 program, schedule delays were measured in months, not years let alone the decade plus (that was predicted by independent domain experts) and is now currently "*planned*" for the JSF Program.

Cost overruns were measured in Tens to Hundreds of Millions of Dollars, not Billions let

alone the Tens of Billions of Dollars (which, again, were predicted by independent experts) and have now been spent and, worse, with even more "*planned*" to be spent.

For economic factors to be the cause for these much greater budgetary blowouts, the inflation rate would have had to have been running well in excess of 15% per annum, compounding each year for the intervening 30+ years, for this to be anywhere near correct. So don't fall for that hoary old piece of "*a total indifference to what is real*".

There were problems and issues with the F-16 designs but the fixes took in the order of months to effect. These didn't take over a year let alone the multiple years that are now panning out in the JSF Program.

Fixes in the F-16 Program were usually achieved in the first attempt. They did not take the 3 or 4 or more attempts that are common in the JSF Program nor did they generate further issues/problems in other parts of the aircraft designs nor require the specifications to be dumbed down in order to get the aircraft to "*meet spec*".

Speaking of which, the specifications were "Target Objective" specifications which the F-16 aircraft met and, in some cases, exceeded. They weren't the "*bare minimum acceptable*" Threshold Specifications that we see today as the "*JSF contractual obligations*" on Lockheed Martin, quite a number if not many of which the contractor almost certainly won't meet and, moreover, has clearly known this would be the case, for years. Refer JSF Selected Acquisition Reports, in particular the JSF SAR dated December 2003.

As advised all those years ago, the word is "*outlier*" and the JSF is the biggest and ugliest, by far, of all time.

Trying to "*normalise such deviance*", as this latest phase of the marketing strategy is endeavouring to encourage people to do, is just more of what has come to be expected as the normal approach, based on "*a total indifference to what is real*", employed by those responsible for JSF Program. So, one could say there is something that is "*normal*" or "*standard*" for the JSF Program, however this is certainly not something of which one could or should be proud.

The JSF even makes the much maligned development of the F-111 look like a model acquisition program, which, for its time, was a far more complex set of design tasks than those being attempted under the overly self complicated JSF Program. Once again, this is proven (and becomes obvious) by looking at the data and the facts, then testing the evidence. See Table below.

On the matter of complex systems, in the development and the management of same, one of the ways Engineers (and Scientists) measure the complexity in the development of systems and the systems themselves is on the basis of the tools and knowledge that are available to do the job.

In the main, the leading edge aircraft designs and systems being developed and integrated into aircraft, today, are far less complex than those of 15 years ago, let alone 20 and 30 years ago, back in the age when Slide Rules "*ruled*".

What is apparent is that the development and management of complex systems today, though, have been allowed to become far more complicated; unnecessarily, expensively, with more and much higher levels of risk, and, thus, dangerously so.

If you or other members of the Committee have any questions about the information provided in this submission, we would be more than happy to answer them. A PDF copy of the following table and this submission have been attached for your convenience.

**F-111 AND JSF PROGRAMS OF RECORD:  
COMPARISON OF SOME CARDINAL PROGRAMMATIC METRICS**

(1) PY : Year of Program (Contract Award = Baseline Zero)

Cardinal Metric	F-111 Program	PY <sup>(1)</sup>	JSF Program	PY <sup>(1)</sup>
Dem/Val Contracts Award Date	No Dem/Val		1996 (16Nov96)	-5
Specification	SOR-183		JSF-JORD	
Issue Date	1960 (14Jun60)	-2	2000 (14Mar00)	-1.6
Contract Award Date	1962 24Nov62	0	2001(26Oct01)	0
Prime/Principal Contractor	GD/FWD		LMC/FWD	
Nos of Variants	3 (Initially)		3	
First Flight	1964 (21Dec64)	+2	2006 (15Dec06)	+5.1
No of RDT&E Flight Test Aircraft	18		14	
Delivery of First Production Aircraft	1967 (17Jul67)	+4.6	2010 (Est)	+9 (Est)
End of DT&E	-		2018 (Est) (Degraded 2002 Block 3)	+17 (Est)
End of IOT&E	-		2020 (Est) (Degraded 2002 Block 3)	+19 (Est)
IOC Declared	1967 (31Oct1967) @ Monthly Average of 56.7 FlyHrs/Acft	+4.9	2020 (Est) (Degraded 2002 Block 3)	+19 (Est)
First Operational Deployment	1968 (17Mar68)	+5.3	TBD	
Post IOC * Manufacturing Issues & Problems * Design Issues & Problems * Production Issues & Problems	4 years (1969 to 1973) delayed delivery to Aust.  Sub-contractor build defects in D6ac steel primary structure.  Innovative, acorn lease of F-4Es as interim.	+9.3	BACC (Super Hornets) already in buy – Cost: over \$6Bn  Compromise ^3 Design = Defects/Deficiencies, already being discovered.  Build/Manufacturing Defects Almost Certain	+25+ (Est)
Contract Unit Price (No ECPs/ECOs)	US\$5.95 M (Fixed Price)		UNKNOWN	
Australian Acquisition Budget Expenditure and Costs to Australia	AUD\$310 M (Hansard, the Hon Jim Killen, 1980)		Planned: A\$16 Bn Probable: A\$22 Bn plus * BACC @ A\$ 6.5 Bn * 20+ years PO Costs * 20 yrs Opportunity Costs * Loss of Air Superiority	

For Further Data and Information, see:

1. "From Controversy to Cutting Edge" by Mark Lax
2. F-111 Type Record, AAP 7214.001 (currently held in DMO Archives).

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Yours Sincerely,

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*"Our role is to be so capable and so well prepared that the other guy doesn't even think about taking us on."*

Australian Defence Force Leadership prior to 2000