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Submission: Air Force

The previous governments decision to bypass the AIR 6000 selection process and sign up for the F-35 is I believe a mistake for a number of reasons. The public's misguided view of the F-35 is of a stealth fighter that cannot be seen. This is not true there has never been a "true stealth plane" and the F-35 is not as stealthy as others such as the B-2 or F-22. All stealth aircraft are a compromise between aerodynamics and stealth. The principle means of stealth defeating radar is achieved through deflecting the radar waves away from the receiver (usually in the same place as the transmitter). However this cannot be achieved through all directions or through all frequencies. And the F-35 hasn't even bothered to try to design all aspect stealth either (like the B-2 or F-22), its rear quadrant being particularly poor.

The F-35 is designed primarily for battlefield strike and close air support of ground troops (like the current F-18 Hornet), but it is not designed to perform air superiority roles or the long range strike role now filled by the F-111. Because of the rearmament programs currently taking place within the region the lack of a capable air-superiority aircraft could have disastrous consequences. With Sukhoi fighters delivered to or ordered by China, India, Indonesia, Malaysia and Vietnam. These aircraft are or could easily be upgraded to be capable of defeating the F-35 in one on one fight let alone the large number being purchased. Using advanced technologies to counter the stealth such as IRST (Infra Red Search and Track) sensors, electronic jamming aimed at both the radar of the F-35, it's the critical data link and at the missiles and electronic sensors to detect not only the radar transmission of but the data link signal of the F-35. The more advanced IRST's being currently offered are already capable of detecting aircraft like the F-35 (in good weather) at ranges beyond the launch range or the current or projected internal carriage versions of the F-35 only BVR (Beyond Visual Range) the AIM-120 AMRAAM. The only way around this would be to carry the METEOR (still in development long range missile externally. But doing so would mean to lose the advantage of stealth and bring the Flankers larger radar and longer range missiles into play. If worst came to worst and a dogfight ensued against an advanced Flanker the F-35 would have to have a much better pilot to have any real chance of winning with even the basic flanker being superior in all areas of this type of fighting such as manoeuvrability and speed. Meaning that once the fight is on the F-35 cannot out turn or out run the Flanker.

I do not think that even Lockheed Martin truly believe that the F-35 has the air to air capability that would be required in the event of conflict in our region. Combat Aircraft Volume 9 Number 2 reported that in a February 2008 document that lists Lockheed Martin's Official responses to some detailed inquiries about the JSF program, the response to the suggestion that the F-35 air combat capabilities might already be overmatched by current let alone future fighter being deployed in the Pacific region Lockheed Martin said "The F-35 will never be overmatched by any aircraft currently envisioned in the region. Investment dollars in advanced technology is the dominant criteria and clearly there are no peers to the US government investment portfolio. The most advanced technology is being incorporated in the F-35". This statement not only doesn't directly answer the question but ignores the fact that the primary role of most Flankers is air to air combat, nor does it take into account the lower wages that Russian, Chinese and Indian researchers get compared to US counterparts. Advanced S-200/300/400 series SAM's (Surface to Air Missile) becoming available potentially with advanced specialist anti stealth radars such as Nebo, the region is considerably becoming more high tech. The ability of the F-35 to win a survive remains questionable, especially given that the two main customers (the US and the UK) will have aircraft such as the F-22 and Euro fighter Typhoon to clear the area of fighters and high tech SAM's before the JSF is deployed. For the JSF to be operable for Australia needs it needs to be supported by a better air to air fighter such as the Euro fighter of F-22 and by advanced jammers like the F/A-18G Growler Electronic warfare aircraft and a fleet of around 12 tankers, and 8

AEWACs aircraft.

Another advantage of operating two types of combat aircraft is that if one type gets grounded the chances are that the other will still be serviceable.

I would also like to ask that in future acquisition projects (apart from urgent capability requests) the public have some form of input either in a process like has been used for the white paper or even some form of voluntary vote between finalist for a contract (such a process was used in 1993 successfully, resulting in purchase of F-18s).

I think this quote from a former RAF serviceman in Combat Aircraft Volume 9 Number 2 summarises the F-35 quite well "With JSF you might be stealthy on the way in but you sure as hell won't be stealthy on the way out. Quite apart from your huge IR signature, the back end of the jet is not as stealthy as the front and more to the point it just doesn't go very fast. If you are being chased by a Flanker going full chat you will be over hauled pretty quickly. You will be run down and if you happen to have fired your handful of missile already then the chances are it's going to end very badly for you"

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