

Letter to the President

From the Air Force Daily Report of 8 March 2017 on a symposium composed of operators of the nation's best fighters: "For far too long we have measured our capability against their capability in linear fashions, such as the speed or agility of the aircraft. That is an ancient way of thinking that is not relevant anymore."

I adamantly disagree as expressed in the following letter I mailed earlier to the White House on 27 February, knowing full well that its chances to make it beyond the 25 year old Harvard graduate staffer that reads it are remote at best.

Dear President Trump,

I am Phil Handley, a proud citizen of the United States of America and a retired USAF Colonel. I ended my military career in 1984 with 26 years of service. I am writing to you directly on the slim chance that my personal letter might somehow make it through the obviously necessary screening process of the thousands of letters such as mine that daily flood your office.

The subject of my letter is the F-35 fighter, which I believe to be deeply flawed and a detriment to our nation's goal to establish and maintain Air Superiority in future armed conflicts. While I applaud your recent negotiations with Lockheed Martin to lower the outrageous cost for this fighter, I fear that you are not getting a realistic picture of its egregious shortcomings when placed in actual aerial combat. Even were the cost of the F-35 lowered to \$125 per copy, in my opinion it would be a disservice to those fighter pilots who would be relegated to employ it in an unconstrained "no holds barred" air-to-air battle for dominance of the airspace above the battlefield. So who am I as an old 82 year old retired fighter pilot to make such an assertion in the face of the multi-million dollar public relations efforts of a giant corporation such as Lockheed Martin? The simple reason is that I have been there, done that, and recognize "BS" when I see it. If your staffer who is reading this has gotten this far, here are my credentials:

- I flew 275 missions in the F-4D and F-4E during two combat tours in SEA.
- I was awarded 21 Air Medals, 3 Distinguished Flying Crosses, and the Silver Star.
- I scored the only supersonic gun kill in the history of aerial combat on 2 June 1972.
- I commanded the largest fighter wing in the Western World.
- I wrote the book, Nickel on the Grass in 2003.
- I was inducted into the Class of 2001 Gathering of Eagles at Maxwell AFB, Alabama.
- I am one of only five other American pilots in the ninety year history of The Honourable Company of Air Pilots, a British Royal Air Force foundation, as a Master Air Pilot, Certificate #1154.
- My web site, www.nickelonthegrass.net contains both video and essay galleries that define who I am.

Speaking at the Center for Strategic and International Studies in Washington, D.C., Air Force Chief of Staff General David Goldfein said fighter combat, one vs. one, doesn't interest him and further stated that the capabilities of an individual platform is really "a 20th century discussion." He further explained that "the combat network is where we need to focus," describing the F-35

as its “quarterback.” In that role, it would control and dominate the “combat network” by gathering and distributing information to the whole force and will never fight by itself. He further stated that he supported buying “as many” F-35s as possible, “as quickly as possible” to beef up anemic fighter squadrons that have been reduced to levels that don’t allow USAF to be everywhere it needs to be. He said that his job is to make sure USAF manages the program well and keeps up the numbers so both other services and allies can afford the jet, and add their aircraft to the joint enterprise.

While I have great admiration for General Goldfein, I respectfully disagree with him on the supposed capabilities of the F-35. When earlier this month you suggested that alternative choices for such as the F-18 Super Hornet be explored, I inferred that you are not yet fully onboard the “F-35 Band Wagon” and could possibly be open to an alternative view, so here is mine for your consideration:

The F-35 Lightning II Joint Task Force Fighter

A Program “Too Big To Fail?”

WHAT LED TO THIS MESS?

- From its Initial Operational Capability [IOC] on 15 December 2005, the Lockheed Martin F-22 Raptor has been the premier jet fighter in the world. It could have insured American Air Superiority for the next quarter century were not its planned production of 381 aircraft reduced to its present inventory of 187 over the unanimous and oft courageous objections of USAF leadership.
- Led by former Sec Def Gates it was deemed too expensive and unnecessary in future conflicts... a totally flawed and short-sighted decision that haunts us to this day.
- As the end of the service life of our 4th generation legacy fighters such as the F-15, F-16, A-10 and F-18 is rapidly approaching, potential adversaries have been building increasingly sophisticated and capable models.
- The F-35 was proposed and funded as a sophisticated and cost effective fighter capable of accomplishing the multiple roles of Offensive and Defensive Counter Air, Interdiction, and Close Air Support for the Air Force, Navy, and Marines (just as the F-111 was supposed to accomplish in the 1960s’).
- A massive PR campaign convinced many of our NATO allies to place future orders and allowed some to share in component production.
- The cold reality of cost overruns, schedule slips, and questionable combat capabilities in the face of numerically superior and increasingly capable enemy fighters is causing justifiable angst among these potential NATO customers.

SO WHAT IS WRONG WITH THE F-35?

- Airframe: In their quest to field a “common airframe” for all three services, the Marines demanded a VTOL (Vertical Takeoff and Landing) capability, which could only be accomplished by the addition of a ducted lift fan in the middle of the fuselage, directly behind the pilot. This accommodation materially increased the width of the fuselage for both the Air Force and Navy versions as well, although they have no such ducted fan.

- Energy: This change in aerodynamic geometry dictated by the wide fuselage effectively negated the “area rule” (sometime known as the coke bottle fuselage effect) developed years earlier in the Century Series fighters such as the F-100, F-101, F-102, F-104, F-106, etc., which dramatically reduced transonic drag and increased the jets maneuvering energy.
- Stealth: The F-35 is only “stealthy” when it carries its small weapons load internally. Once anything is hung externally (such as a bomb), its stealth capabilities are lost.
- Visual Dogfight: Although the “talking point” is that the F-35 sports such sophisticated avionics the pilot enjoys the ultimate in “situational awareness” and will never be drawn into in a close-in visual dogfight. Recorded history of aerial combat absolutely refutes such a naïve’ assumption “in spades.” Once faced with a visual dogfight, the F-35 loses to all 4th generation fighters because of its lack of energy.
- Close Air Support: In its proposed CAS role it would replace the proven and veritable A-10 Warthog that carries a huge and diverse ordnance load, as well as a devastating 30mm Gatling gun with up to 1,350 rounds, and has extended loiter time in the target area. In contrast, the F-35 would bring to the table limited loiter time, limited bombs, and a pathetic 181 rounds of 25mm Gatling gun ammunition.
- Interdiction: In an interdiction role, advocates proclaim that its stealth cloaking allows it to penetrate sophisticated air defense arrays where legacy fighters could never survive. Perhaps so, but unless it carries external ordnance, which absolutely negates its stealth, upon arrival at the target, it does not have a fraction of the ordnance carried by current legacy fighters such as the F-15 and F-16, or for that matter the F-22.

WHAT TO DO?

Mr. President, I respectfully suggest that you ignore slick Power Point briefings and outright propaganda by those who truly believe that the F-35 project is “too far out the gate and too big to fail.” You will doubtlessly be bombarded with supposed favorable results from various independent computer models, and even pronouncements of the F-35’s stellar performance in the recently concluded Red Flag Exercise conducted over the massive ranges of Nellis AFB, Nevada. However, “paper horsepower does not climb hills.” Indeed Red Flag is without doubt the best simulation of aerial combat in the world. I’ve personally participated in numerous Red Flag Exercises and have nothing but respect for the cadre of professionals who strive to make it as realistic as possible. However, try as they may, it still falls short in the replication of the complex and unpredictable environment surrounding the live aerial combat arena. Red Flag’s planned scenarios are necessarily staged to accommodate time and logistic constraints... and the outcomes and conclusions drawn from its outcomes should be viewed with a skeptical eye. I recommend that you demand the following demonstrations then draw your own conclusions:

- Assume the myth that the F-35 will never be drawn onto a visual dogfight at the merge is not valid, then order a series of 1v1 visual engagements, employing only guns and heat seeking missiles, between the F-35 and legacy fighters in similar configurations such as the F-15, F-16, F-18, Typhoon, Eurofighter, MiG-29, etc. Conduct and document all engagements on the ACMI displays at Nellis AFB, NV. I believe the results will be both revealing and embarrassing.

- Commission an independent agency such as The Rand Corporation to plan and conduct a simulated, unconstrained battle for air superiority based upon a scenario involving a showdown with China over the independence of Taiwan, including all logistic support and participation by allies on both sides including our best projected use of the F-35. I believe the results will provide a “wake up call” to those who dismiss the devastating effect of sheer quantity over quality ratios. I have always been an advocate of quality over quantity... but when our “quality” is vested in the F-35... we are in trouble.

I urge you to cut our losses and take the following bold and doubtlessly controversial actions:

- Immediately cancel future production of all versions of the F-35 and apologize to our NATO allies for “leading them down this rabbit hole.”
- Divert existing F-35 program funds and its worthwhile avionics technologies to a revitalized F-22 production line and appropriate 4th generation fighters.
- Redefine the mission of existing F-35s to that of a “stand-off AWACS (Airborne early Warning and Control System)” capable of providing real-time situational awareness to Allied fighters while itself surviving by remaining well clear of potential engagement.

Ditching a program that was “too big to fail” is a far better option than “losing the battle for air superiority when the chips are down and there are no points for second place.”

Most respectfully yours,

Phil “Hands” Handley
Colonel, USAF (Ret.)