



5th Gen Experience



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Background

- F/A-18
 - 2 x Carrier, 1 x UDP
 - TOPGUN IP
 - Super Hornet
- F-16
 - USAF TX Course
- FAC in Ramadi 2006 - USMC Air, Army BCT
- Perspectives always shaped by experience
 - Steeped not just in Marine Corps operations



5th Gen Transition

- F-22 TX Course
- Commanded Operational Test at Nellis AFB
- 4th Gen Integration
 - All USAF/USMC/USN TacAir platforms
- AEGIS Integration
 - USN ESG
- LO Stability
- F-35 ConOps Development
- F-35 Squadron Commander



5th Gen Life Cycle

- I love this (about a month)
 - This is cool
- I hate this (about 6 months)
 - I don't know what I am doing anymore
- I love this (about 6 months)
 - You figure it out
- Full circle
 - Understand your impact on the battlespace



A State of Change

- Skepticism is natural state
 - Emotional connection to past/previous TMS
 - Compulsion to use bygone metrics
- What are the measurements of an effective fighter aircraft?
 - Speed/agility vs information and access
 - Caliber/quantity vs ability to integrate
- Innovation takes time and is painful/expensive
 - Is absolutely essential



Thoughts on F-35

- Not a replacement for any aircraft
 - Easy to look at it chronologically
 - Aside from performance and size, there's not much similar
- To realize its potential, need to redefine “TacAir”
 - Not just the role, but the capacity and potential
 - Easier said than done
- This is a platform built to meet future threats
 - Some visualized, some not



Thoughts on F-35

- How will the burden on the pilot change?
 - Legacy: Tactical missions and decisions that may have strategic implications
 - F-35: Removes the traditional definition of “Tactical Aircraft”
 - Platform now can behave tactically/strategically depending on mission requirements.
 - Pilot must be able to know when and how to operate
 - Our training system must adjust
- It facilitates an ecosystem that doesn't yet exist
 - Think iPhone and Apps



Where are we in 15 years?

- What makes a sensor/collaborator/shooter platform relevant?
 - Information development, access, and sharing
 - Ability to integrate securely
 - Ability to share information with unanticipated partners within unanticipated events
 - Plasticity
 - Ability to substitute for other elements as needed
- What does the threat look like
 - Area denial, link degradation, out of band



Air Warfare in the Future

- Is about spectrum dominance
- F-35 is an overwhelming advancement in breadth and depth
 - We can dominate wide spectrum
- Stealth means access, not just reduced detection
 - We dictate access, not the threat
- Integration with 4th Gen and the Joint Force



Innovation

- F-35 certainly is an innovation
- Biggest contribution is what it does beyond the aircraft
- What do other enablers/contributors do to be innovative?
 - iPhone vs the App...what's more important?



Force Multiplier

- How does a small force maximize its contribution
 - Marine Corps model
 - Similarities with Danish Air Force
- What is the biggest “bang for the buck”?
- What does it mean to be a part of a 5th Gen ecosystem?
 - Or to be excluded from it?



Questions?



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