

F-35 Overview Sustainment Industry Day

14 November 2012

CAPT Paul Overstreet, USN

Deputy Weapon System Program Manager



Joint Strike Fighter F-35 Lightning II



3159 Aircraft
15 Services

3 US Services, 8 Partners, 1 Security Cooperative Customer, Foreign Military Sales Customer
1 Global Support Solution



Fighter Aircraft Generations



5th Gen Integration of Stealth and Fighter Evolution = Quantum Leap



Joint Strike Fighter Overview

- **The Next Generation ‘Family’ of Strike Fighters**
 - **3 Variants (F-35A CTOL, F-35B STOVL, F-35C CV)**
 - **F-16/F/A-18C ‘Like’ Aero Performance**
 - **Stealth Signature and Countermeasures**
 - **Advanced Integrated Avionics**
 - **Integrated Logistics and Sustainment**
 - **Performance based – O to D Maintenance**
- **JSF requirement met by Lockheed Martin F-35 Lightning II**

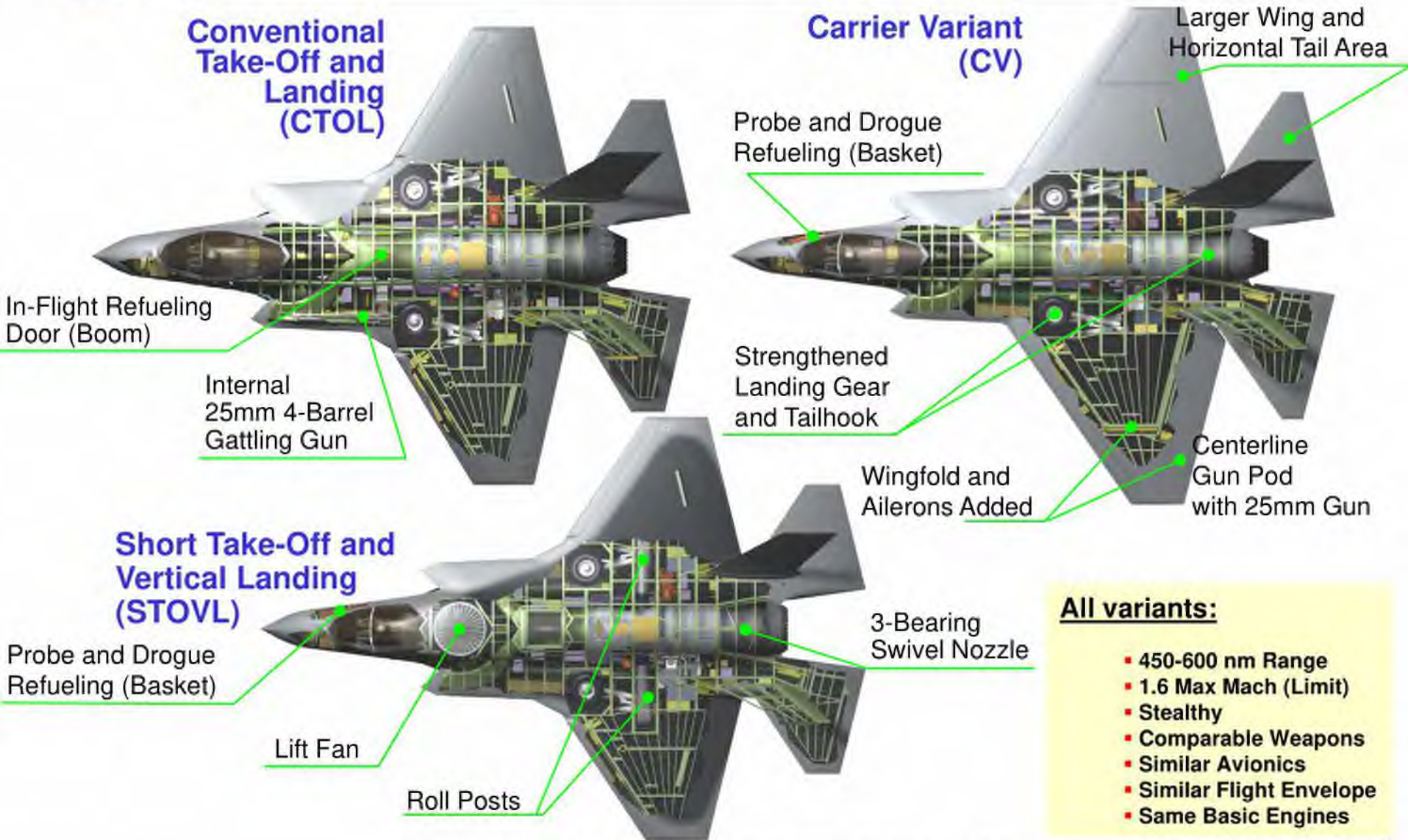


Lethal Survivable Supportable Interoperable



F-35 Family of Aircraft

One Program – Three Variants



- All variants:**
- 450-600 nm Range
 - 1.6 Max Mach (Limit)
 - Stealthy
 - Comparable Weapons
 - Similar Avionics
 - Similar Flight Envelope
 - Same Basic Engines



Fleet Requirements

- **USAF: CTOL**
 - Multi-role (primary air-to-ground) fighter to replace the F-16 and A-10 and to complement F-22
- **DoN: CV/STOVL**
 - USN - Multi-role, stealth strike fighter to complement the F/A-18E/F
 - USMC - Multi-role, short takeoff, vertical landing strike fighter to replace the AV-8B and F/A-18C/D
- **UK (RN and RAF): STOVL**
 - Replacement for the Sea Harrier and GR-7
- **Other Int'l Partners: Italy, Netherlands, Australia, Norway, Denmark, Canada, Turkey**
 - CTOL/STOVL mix
 - Replacing: F-16, F-18, AMX, Tornado, Harrier
- **Foreign Military Sales: Israel, Japan**
 - CTOL





F-35 Acquisition Timeline

1990 1995 2000 2005 2010 2015 2020 2025 2030 2035

- ASTOVL
- MRF
- ATA
- NATF
- AX

JAST JSF CDP



JSF SDD

System Development and Demonstration

FMS/SCP

Eglin AFB ITC Operations

Derivatives and Enhancements

LRIP

Low Rate Initial Production

Full Rate Production

2027 2033

Performance Based Global Sustainment

At Nexus of Planned Concurrency



F-35 Sustainment

Performance-Based Sustainment

- Optimizes F-35 Weapons System Readiness
- Procures Performance
- Capitalizes on Logistics Chains and Partnerships

Smart and Reliable Aircraft

- Highly Reliable
- Streamlined Maintainability
- Enhanced Supportability
- Prognostic and Health Management System

Technology Enabled and Supported Maintainer

- Leading Edge Technology
- Training
- Information
- Tools and Equipment

Intelligent Information Infrastructure

- F-35 Portal for Information Sources between Partners
- Air Vehicle, Government and Training Systems all collaborate

Integrated Training Environment

- Employs Latest Technology and Research
- Comprehensive Integrated Capability
- Joint/International Mission Qualified Pilots and Maintainers





F-35 Logistics & Sustainment System



Logistics and Sustainment is an integral part of the F-35 Air System



JSF Integrated Logistics Infrastructure

Main Operating Bases

USAF / USN / USMC / International



Maintenance/Logistics Enhancements

- Reduced Manpower
- 2 + Level Maintenance
- Reduced Footprint
- Increased R&M
- Direct Access to Contractor Support
- Engineering, Tech Data & Training



Technological Enablers

- PMA
- PHM
- ALIS



Sustainment Management



Management



Customer Support

- Program Management Activities
- Depot Partnering
- Performance Based Contract
- Sustaining Engineering
- Configuration Management
- Total Asset Visibility
- System Security

R&M Data

Best Value Repair Source



Joint Depot Level Maintenance

- Best Value Source of Repair (Gov/OEM)
- Statutory Compliant
- No Scheduled Depot Maintenance
- Direct access to Sustaining Engineering, Tech Data & Training via ALIS
- Total Asset Visibility



Transportation



Forward Operating Locations/Ships

USAF / USN / USMC / International



Network

Regional Warehousing



- Replacement Spares to MOB
- Moves Replacement Spares onto FOL/Ship



- Shipping**
- ↔ - Commercial
 - - Government
 - - Network
- Communication**
- - Contractor
 - - Government

Understanding Characteristics & Interdependencies



Questions?