• Transition from Lockheed Martin to CAD/PAD Joint Program Office (JPO)
  • Benefits to the Services, Partners & Foreign Military Sales (FMS)
  • Customer Expectations

• CAD/PAD JPO Guidance (Living documents / expect updates)

• Product Support Categories
  • Acquisition Strategy
    • Contracts, Timeline and Deliveries
  • Technical Management (Engineering)
    • Cataloging and Item Changes
  • Life Cycle Management (Logistics)
    • Storage and Stock Points

• Questions?
CAD/PAD Joint Program Office (JPO) becomes the Product Support Provider (PSP) for JSF CAD/PAD

*Lockheed will continue to support all F-35 customers until the CAD/PAD JPO Transition is complete*

**Benefits to the Customer**
- NSWC IHEODTD (CAD/PAD) “Center of Excellence”
- Our Goal: “Lower Life Cycle Sustainment Costs”
- Advantages: using Inherently Governmental Services

**Customer Expectations**
- Business As Usual!
- Partner Ship To Addresses needed.
- Contact CAD/PAD JPO with Questions.
CAD/PAD JPO Guidance

Life Cycle Sustainment Plan & CAD/PAD Support Agreement
GUIDANCE

Life Cycle Sustainment Plan

Provides
Guidance for Life Cycle Sustainment

Describes
In detail how NSWC IHEODTD will execute the Acquisition and Sustainment Strategies

Changes occur
Throughout product development as we strive to meet Milestone Decisions

JSF CAD/PAD Support Agreement

Purpose
Documents what each Country ‘Agrees to’

Signature
Air Commodore
Each Service, Partner & FMS Country

Updates
3yr Review for significant changes
All parties must Agree to Funding Annex
### 3 - Contracts

**Seat Contract** - May 2018 / Delivery starting May 2019


**Fire Protection System (FPS) Cartridge Contract** - May 2019 / Delivery starting May 2020

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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<tbody>
<tr>
<td>Quarter</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
</tr>
</tbody>
</table>

#### Seat Items Contract
- *Seat items delivered in 2019*
- Transition LM to Gov’t Complete

#### TRS/OEM Supplier
- TRS & FPS Transition

#### FPS/OEM Supplier
- FPS/OEM Option Yr 2

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*TRS and FPS Cartridge items delivered in 2020*
<table>
<thead>
<tr>
<th>PARTS REFERENCE LIST</th>
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</thead>
<tbody>
<tr>
<td>CARTRIDGE KIT COMMON KIT - JN75</td>
</tr>
<tr>
<td>LOWER BRIDLE, RELEASE CARTRIDGE - JN67</td>
</tr>
<tr>
<td>DROGUE, DEPLOYMENT CARTRIDGE (DDU) - JN66</td>
</tr>
<tr>
<td>PIRD, CARTRIDGE - JN68</td>
</tr>
<tr>
<td>AUXILIARY, SECONDARY CARTRIDGE - JN72</td>
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<tr>
<td>CARTRIDGE, PRIMARY - JN41</td>
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<tr>
<td>CARTRIDGE KIT CTOL/CV - JN74</td>
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<tr>
<td>ADU CARTRIDGE - JL54</td>
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<tr>
<td>AUTO BACKUP UNIT CARTRIDGE ASSY (ABU) - JN70</td>
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<tr>
<td>CARTRIDGE, INITIATOR - JN65</td>
</tr>
<tr>
<td>PARACHUTE, DEPLOYMENT CARTRIDGE (PDU) - JN71</td>
</tr>
<tr>
<td>CARTRIDGE, STOVL KIT - JN73</td>
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<tr>
<td>ADU CARTRIDGE - JL54</td>
</tr>
<tr>
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<tr>
<td>CARTRIDGE, INITIATOR - JN65</td>
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<tr>
<td>PARACHUTE, DEPLOYMENT CARTRIDGE (PDU) - JN71</td>
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<tr>
<td>AUTO EJECT CARTRIDGE ASSEMBLY - JN76</td>
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<td>BATTERY PACK, THERMAL - CIx - JN77</td>
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<tr>
<td>CARTRIDGE, FIRE BOTTLE - JN63</td>
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<tr>
<td>METRON ACTUATOR - (ALIU) - No DODIC yet</td>
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<tr>
<td>PROTRACTOR (MWARS) - No DODIC yet</td>
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<td>SHAPED CHARGE, FLEXIBLE, 12 GR - JN55</td>
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<td>TRANSFER LINE, RDC, PP TO HE - CTOL - 55.2&quot; - JN56</td>
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<td>TRANSFER LINE, RDC, PP TO HE - 6.2&quot; - JN60</td>
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<td>TRANSFER LINE, RDC, PP TO HE - 61.1&quot; - JN58</td>
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<td>UNDER SEAT ROCKET MOTOR (USRM) - JN42</td>
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<tr>
<td>Item</td>
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<tr>
<td>Primary Cartridge</td>
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<tr>
<td>USRM</td>
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<tr>
<td>STOVL Kit</td>
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<td>CTOL/CV Kit</td>
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<tr>
<td>Common Kit</td>
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<tr>
<td>CIX Battery</td>
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<td>SHAPED CHARGE, FLEXIBLE LINEAR, 12 GR</td>
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<td>HANDLE, INTERNAL</td>
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<tr>
<td>INTERCONNECT, DONOR</td>
</tr>
<tr>
<td>CARTRIDGE, FIRE BOTTLE</td>
</tr>
</tbody>
</table>

6 Parts - FY20
17 Parts - FY21
20 Parts - FY22

FY22 and beyond
- Water Activated Release System (MWARS)
- Auto Life Raft Inflation Unit (ALIU)
- Catapult Set Design: ‘Pending’
FY20 CAD/PAD Buys

Configuration is “Short Term”

JSF STOVL Cartridge Kit

Used on: F-35B
Kit DODIC: JN73
Contents:
2 each Seat Initiator Cartridge – JN72
1 each ADU cartridge – JL54 (new cartridge TBD)
1 each Parachute Deployment Cartridge – JN71
1 each AEU Cartridge – JN76
1 each ABU Cartridge – JN70
FY20 CAD/PAD Buys

Configuration is “Short Term”

JSF CTOL/CV Cartridge Kit

Used on: F-35A F-35C
Kit DODIC: JN74
Contents:
2 each Seat Initiator Cartridge – JN72
1 each ADU cartridge – JL54 (new cartridge TBD)
1 each Parachute Deployment Cartridge – JN71
1 each ABU Cartridge – JN70

FY20 CAD/PAD Buys

Configuration is “Short Term”

JSF Common Cartridge Kit

Used on: F-35A F-35B F-35C
Kit DODIC: JN75
Contents:
2 each Secondary Cartridge – JN69
2 each Bridle Release Cartridge – JN67
1 each Drogue Deployment Cartridge – JN66
1 each PIRD Cartridge – JN68
Transition Efforts

- **Cataloging Items**
  - 28 Items Total  Estimated Completion Date (ECD): 2019 (17 Seat, 10 TRS & 1 FPS)

- **Obsolescence**
  - **Redesign** Auto Deployment Unit (ADU) and Powered Inertial Reel Device (PIRD) Cartridges
  - **Requalify** Metron for Water Activated Release System (MWARS) Auto Life Raft Inflation Unit (ALIU) ECD: 2021

Item Changes

**Primary + Secondary Cartridges = Catapult Cartridge Set**

- **Items Always**: Tested, Packaged, Stored, Shipped, Installed & DEMIL’d *Together*

- **Seat Single Pack Configuration is Pending**
  - Benefits:
    - Eliminates breaking apart kits
    - Allows for *Independent Asset Management*
Seat Items
- Common Kit
- STOVL Kit
- CTOL/CV
- USRM
- Primary Cartridge
- CIX Battery

TRS
- FLSC
- (5x)TRS, RDC Lines
- Initiator, Gas RDC
- Interconnect, Acceptor
- Internal, Handle
- Interconnect, Donor

FPS Cartridge
- Cartridge, Fire Bottle
QUESTIONS?
LOGISTICS PARTS FLOW

NSWC IHEODTD

Hill AFB

**FACOs**
- Italy
- Japan

**FMS**
- Israel
- Japan
- Korea

**Partners**
- Australia
- Canada
- Denmark
- Italy
- Netherlands
- Norway
- Turkey
- U.K.

**Emergency Stock Points**
- 3 – International Sites

*In Development: Shipping & DEMIL Plan*