



# Lightning Technician Program (BOLT & LIT Concepts)

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# Program Background





- Nose-to-tail maintenance concept
- Maximize manpower utilization
  - Eliminate NMCM time during each job
  - Base level mx activities (Egress, Fuels, LO) better employed and/or utilized across the Air Force
- 8 personnel per aircraft
  - Enables efficient way of operating
  - "Train how you Fight"
  - Cross-specialty teams assigned to each aircraft
- AFSC consolidation
  - TAMS, Avionics, Weapons, and LO are currently in both programs
  - F-35 designed for reduced manpower with AFSCs already combined (TAMS/Engines and Avionics/E&E)
- Aircraft ownership and continuity
  - Team Leader/DCC
  - Promotes mission ownership and autonomy at the lowest level



## Test Results



- BOLT/LIT Very Successful Over 1.5 Years
  - Improved readiness within logistics workforce
  - Both programs fully support ACE concept
  - Continuous evaluation of current programs
  - Proven to reduce sustainment footprint
  - Evaluated during USAFE Theater Security Package

But where do we go from here...



## Impetus for Change



## Lots of on-going efforts

- HAF A4LM/Deloitte Task Analysis Study
  - Directed by HAF/A4 as #1 priority in F35 O&S cost reduction effort
  - Explore consolidated/reorganized F-35 Mx tasks
    - Redistribute mx responsibilities for F-35 across career fields
- RAND Study
  - Evaluate cost & readiness implications of alternative approaches for training & organizing F-35 mx personnel
- Blended Operational Lightning Technician (BOLT)
- Lightning Integrated Technician (LIT)



## **Agreed Conditions**



- Follow LIT's AMU structure
  - Recognized need for expeditors
  - DCC/Team Leader is an earned position regardless of AFSC
    - Role carries increased supervisory responsibilities (e.g., responsible for their tail team's development & training)
  - Less thrash needed to implement into a new AMU (production section reflects conventional AMU)
- Adopt BOLTs AFSC breakdown
  - Split into Mission Systems and Air Vehicle AFSC tracks
    - Reduces training burden / increased maintainer availability
    - Carries benefits of specialized maintainer w/broader task exposure
- Bring Egress and Fuels into the construct
  - Prepares for a more universal construct (i.e., expeditionary force)
- All AMU personnel will have daily core tasks as part of CFETP
  - 30-60 tasks that include servicing, launch & recovery, and inspections
- Weapons remains in AMU as independent section
  - Needs to be its own section but production would have OPCON
  - Primary job is loading but will be utilized for daily core tasks



## **Transition Timeline**



## • 1 -15 Sept

- Finalize Mission and Vehicle sys CFETPs
- Posture training to meet requirements of new prgm/timeline
- Narrow down core tasks that entire AMU will have (Top 60-80 tasks)

## • 15 - 30 Sept

- Finalize AMU structure and manning needs
- Work with MTF on new basics classes
- Input new CFETPs into TBA
- Align individuals in their new track

## 1 - 30 Oct

- · Re-level manning to meet requirements of the new way forward
  - Receive first Fuels and Egress personnel (2ea AFSC)
  - First round of CC and AVI personnel from AMXS

## Oct - Dec

- Transition AMU from current construct to new prgm
- Receive rest of manning to meet target of 8-man per acft
- Weapons individuals slowly transition to 3<sup>rd</sup> section

## 1 Jan 2020

Begin evaluation period



# **Questions**









# Back Ups











## Blended Operational Lightning Technician (BOLT) Program





## Why Now / Why Here

- F-35 design and ease of Mx
  - 95% single-tiered components
  - Modular design
- COMACC Priority
  - Adaptive Basing / small teams
- Cost savings
- Innovate flight line operations
- Train like we fight

#### **Structure**

- Two new AFSCs:
  - Air Vehicle: TAMS, LO, Fuels
  - Mission Systems: Avionics, Egress, Weapons
- Team concept (Cell)
  - Team Leads / Team Members
  - 32 personnel / 4 Aircraft (8 SPA)





#### Utilization

- 4X MRTs
- 3X Exercises: Wendover, Gulf Row, Nellis AFB WSINT
- Spain TLP F-35 Integration
- Amendola, Italy Interoperability (8 prsnl, 4 A/C)
- Rapid Forge 2019

#### **Measures of Success**

- Average 9 hr Work days
- 96% Autonomous
- Competitive Metrics/performance to AMU

Cumulative (Jun '18 – Aug '19)





# Lightning Integrated Technician

## (LIT) Program



## Why Now / Why Here

- F-35 design and ease of Mx
  - 95% single-tiered components
  - Modular design
  - LO maintainability
- Increase efficiency w/o losing capability
- Increase aircraft availability for pilot training
- Potential for cost savings
- Train like we fight

#### **Structure**

- Traditional AMU structure
  - Aircraft split between 2 flights
- One consolidated AFSC
  - LO, TAMS, Avionics & Weapons
  - Focus on 20% of tasks performed 80% of the time (Pareto)
- Team concept
  - DCC/ADCC and LIT members
  - 120 personnel / 15 Aircraft (8 SPA)
  - Entire AMU is NTTM construct, Jan 2019

#### Utilization

- Superior Manpower utilization
  - Workload evenly distributed across all specialties
  - Reduced manpower constraints
- Proven Autonomy (2 Jan 19 31 July 19)
  - For 11000+ total work orders...
    - · No LO back shop utilized
    - 104 jobs performed by back shops (Egress & Fuels)
    - Only 10 Unscheduled mx events

#### **Measures of Success**

- Red Flag 03-19, flew 72/72 sorties
  - Split ops (4X4 while 8x6 at home) zero missed lines
- Surge ops, 14x12x10
  - 100% sched sorties flown/156 in 1 week
- No appreciable difference between like AMU:

| Cumulative (Jan '19 -to-Jul ) |       |       |       |
|-------------------------------|-------|-------|-------|
|                               |       |       |       |
| Sorties                       | -     | 1161  | 1286  |
| MC Rate                       | 76%   | 52.9% | 57.2% |
| FMC                           | -     | 41.6% | 50.3% |
| Break Rate                    | 5.0%  | 3.4%  | 5.2%  |
| 8 Hr. Fix Rate                | 50.0% | 38.5% | 46.2% |
| Abort Rate                    | 4.0%  | 3.2%  | 2.5%  |
| CANN Rate                     | 4.0%  | 2.8%  | 1.5%  |
| Reneat/Recur Rate             | 3.0%  | 3.0%  | 2.8%  |