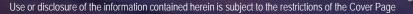
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Lessons Learned in Planning and Executing F-35 Full Weapon Systems Testing

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Planning For Success

- Briefed WDA range demand signal to Point Mugu/China Lake leadership Jan 16 resulted in Ear Marking Surge schedule (21 Jul – 16 Aug 2016) -JSF owned the water
- Developed Weapon Delivery Accuracy events to Capabilities
- Ensured must fix problems addressed by development team
- Coordinated extra Range Clearing and Drone Air Launch Aircraft
- Assured back-up Range Clearing Aircraft for Point Mugu and doubled number of presentations/drone
- Pre-positioned inert munitions at EDW ITF and live munitions at EDW Ammo
- AMRAAM Eglin Weapon build shop priority Immediate response
- Critical Aircraft Spares Were Delivered Before Surge
- All spares moved to EDW
- Trained/Certified additional manpower resulted in 6 Integrated Weapon Loading Teams

Range Statistics



• Total Range Availability – Weapons Related Missions Only

- 98 % Available Only 1 of 47 Weapons Missions Scheduled During Surge Were Not Executed Due to Range (Drone Issues)
- 47 % of Range Requested was Used 22 of 47 Mission Scheduled Were Used
- Reason for Not Using 25 Range Scheduled Missions
 - 11 Were Backups and No Longer Required
 - 5 Cancelled for Aircraft Maintenance Issues (Instrumented EHA R/R)
 - 3 Cancelled for Late Eglin Weapon Certs to the Range
 - 2 Cancelled Due to Chase Aircraft Problems
 - 2 Cancelled for Weapons Telemetry (TM) Issues
 - 1 Cancelled for Instrumentation Issues
 - 1 Other

• Surge Conops Changes that Contributed to Success

- Allowed to Schedule Multiple Backups for Each Primary
- Allowed to Flex to Different Mission if Primary was Successful
- Range Support Assets (Clearing Aircraft, Drones, Control Rooms) Were Precoordinated Weeks Prior to Surge
- Day of Range Flexibility

Data Shows That Dedicated Range Allocation Contributed Significantly to Success

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Lessons Learned



- 1st Quick Release s/w drop executed non airworthiness changes
- Received s/w in 2 weeks 6 Critical Deficiency Reports fixed opened 7 WDA's
- Weapon Ground checks verified correct configuration prior to msn
- Delivered Weapon Configuration different from request (Conflicting FTS tones)
- Pulled missions left when Primary mission was successful
- Reached max capacity of Eglin missile build shop
- Certification FTS paperwork trailed missiles
- Weapons FTS Recertified twice on Site by PMSR Personnel
- Saved ~ 5 days each time vs routing weapon back to Eglin

Lessons Applied

- Range Coordination
 - Brief WDA Demand Signal to Ranges
 - Request Flex scheduling transitions (back-up to primary)
 - Pay for RCA and Drone Redundancy
 - Hard Schedule back up ranges dates at risk
- Continue WDA/Capability Mapping with JPO/FW/ITF
- Continue utilizing Quick Release Capability process when able
- Spare parts priority
- Ground check weapon configuration prior to mission day
- Minimize alternate sources of priorities influencing ITF execution

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Questions?





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