

Ogden Air Logistics Center



A-10 Maintenance Management

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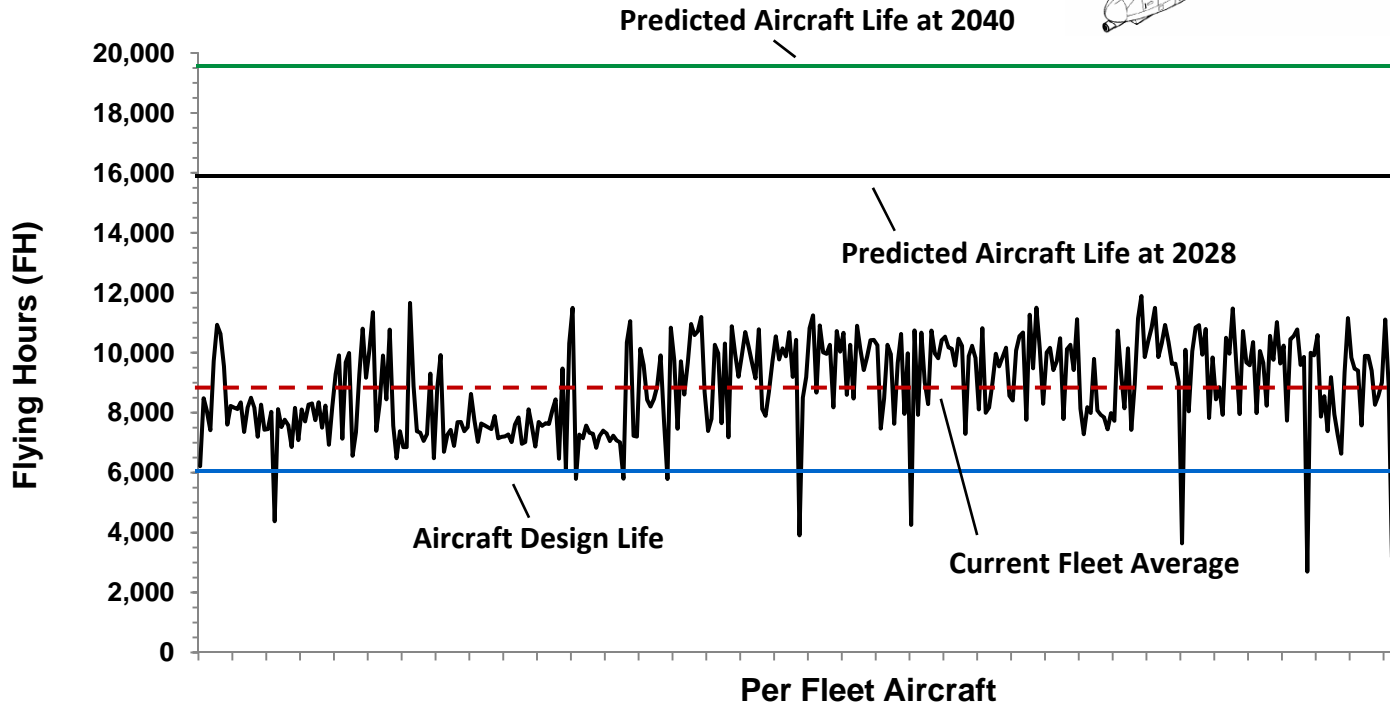
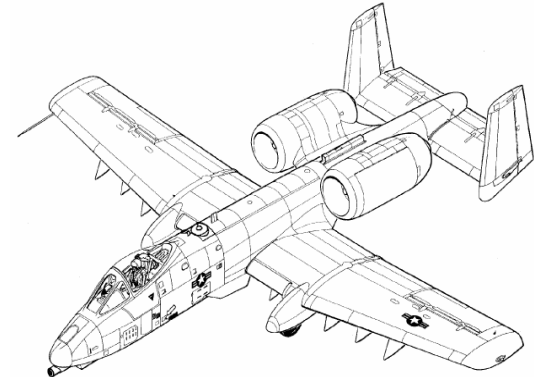


Service Life



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- 356 Aircraft in Service
- Design Service Life: 6,000 Hrs
- Certified Service Life: 12,000 Hrs
- Required Service Life: 16,000 Hrs





Major Inspection Programs



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Service Life Extension Program (SLEP)

- Initiated in 2002 -- First Significant Effort to Extend Service Life
 - Focused on Strengthening Wing Based on Fatigue Testing/Analysis
 - Extends Service Life to 12,000 Hrs
- Key Facts
 - Average Flow Days: 135
 - Manhours/Aircraft: 6,368
 - Cost/Aircraft: \$3.4M
 - Scheduled Completion: FY14
 - Locations: Hill, AMARG, SABCA (USAFE), KAL (PACAF)

Scheduled Structural Inspection (SSI)

- Initiated in 2007
 - Focused on Wing and Limited Fuselage Inspections/Repairs
 - Bridge toward 16,000-Hr Service Life
- Key Facts
 - Average Flow Days: 155
 - Manhours/Aircraft: 6,989
 - Cost/Aircraft: \$3.8M
 - Requirement: Every 2,000 Hrs, 1,600 Landings or 8 Yrs Until Retirement

SLEP II (Fuselage)

- Estimated Start in FY12 as part of SSI
 - Based on Full-scale Fuselage/ Empennage Fatigue Test Results
 - Adds 1,700 MHs/\$900,000 per Acft
 - Extends Service Life to 16,000 Hrs



Field-level Maintenance



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Impacts

- Scheduled Mx Burden Increasing with Age
- USM Increasing as Reliability Decreases
- Field Engineering Requests up 36% in FY09
- Reliability/Safety Driving Record TCTOs
 - Ex: TF34 LLPs Driving O-/I-level Workload
 - Some Exceed 25-MH or Field Augments Depot



Proactive Efforts

- Improved Field-level Diagnostics
 - New: Wiring Tester
 - Consolidate: Common Armament Tester
- MECSIP (via RCM/RMS&S) (\$10M/Yr)
 - 1M FHs Assessed, Broad Field Investigations
 - Identified 93,000 Hrs in Annual Savings
- Wing Replacement Program R&M Enhancements

**Reliability-Centered Mx and Reliability,
Maintainability Sustainability and
Supportability (RCM/RMS&S) Program**

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	FY08	FY09	FY10	FY11	FY12	FY13
Phase I	Candidate ID	Analysis/Eng	Acquire/Mod	Candidate ID	Analysis/Eng	
Phase II		Candidate ID	Analysis/Eng	Acquire/Mod	Candidate ID	
Phase III			Candidate ID	Analysis/Eng	Acquire/Mod	
Phase I				Candidate ID	Analysis/Eng	

Phase I: Hydraulics, Fuels, Airframe, ECS	Phase II: Flight Controls, Canopy, Fire Detect/Ext. Wiring	Phase III: Oxygen/Misc Utilities, Electrical system, lighting, Eng & APU, INST, CN & ECM, Landing Gear.
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Description

- Established RCM, RMS&S Program Reqs in FY08 - FY15 in SERP Brochure
- SERP funded(s) AAIP, PIWG, and misc. RCM, RMS&S engineering projects
- RCM, RMS&S Contract Awarded to Wyle
- Develop MECSIP Master Plan
- Execute MECSIP Plan
- Conduct Phase I, II & III of RCM, RMS&S & MECSIP
- Phase I & II Complete
- Phase III projected completion
- Start with Phase I again for on going RCM Analysis

ECD

- Sep 06
- FY08 - FY15
- Sep 07
- Aug 08
- Ongoing
- See below
- Sep 09
- Sep 10
- Sep 11



Depot-level Maintenance



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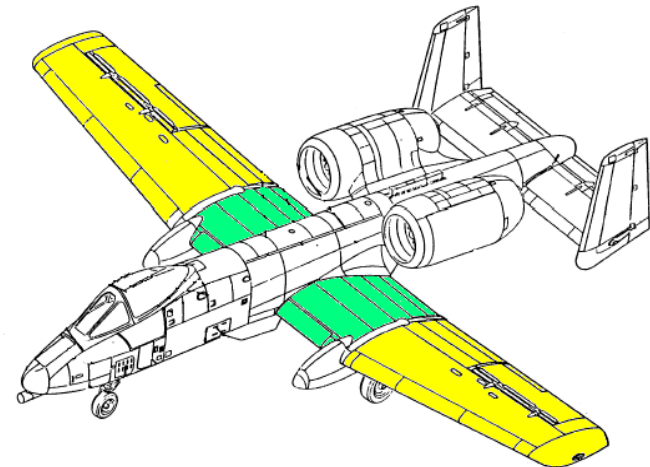
Impacts

- Lack of Pre-2002 Depot-level Inspection Translates to Greater Damage Prior to Repair
- Wings at End of Life Cycle -- Repair Instability
- Depot Engineering Requests up 10% in FY09
- Reliability/Safety Driving Record TCTOs
 - Ex: Wing Cracking Drove Speedline Stand-up at 4 Depots, Robbing SLEP/SSI Capacity



Proactive Efforts

- AFSO21 -- 50+ Processes Identified; Several RIEs Held
- Wing Replacement Program
 - 11 Targeted Structural Improvements; 3D Model
 - Simplified Routings; Wing Quick Disconnect
- Full-scale Fuselage/Empennage Test and Analysis
- Landing Gear Time Change Program





Other Considerations



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- **Turbine Engine Monitoring System/Aircraft Data Reporting (TEMS/ADR)**
 - 38 Aircraft (11% of Fleet) Currently Upgraded
 - Enables Tailored Inspection Program by Aircraft versus Fleet Average
 - \$15M Required to Retrofit Remaining Aircraft
- **Aging Aircraft Drive Increased Manpower and Funding Requirements**
 - Massive Technical Workload at Depots to Document/Implement New and Revised Repairs, and field Enhanced Troubleshooting Aids
 - Escalating Sustainment/Out-of-Cycle Funding Demands
- **Aging Aircraft Demands Versus PBD 720 and Shredless AFSCs**
 - Field Manpower and Experience Dwindling as Aging Drives Increased Scheduled/Unscheduled Mx, TCTOs and Complex, Non-standard Repairs
- **Depot Lacks Flexibility to Rapidly Size Capacity to Demand**
 - Must Trade Scheduled Capacity (SLEP/SSI) to Rapidly Respond to Crises via Speedlines -- Undermines Preventative Mx, Elevates Overall System Risk
- **Loss of CLSS Reduces Repair Flexibility and Velocity**
- **Reliability Council Implementation On-going**



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Back-up Chart



Reliability-Centered Mx and Reliability, Maintainability Sustainability and Supportability (RCM/RMS&S) Program



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