
AFLCMC... Providing the Warfighter's Edge



USAF Automatic Test Systems (ATS) Program Office

National Defense Industry Association (NDIA) Update

26 Mar 19

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ATS Agenda



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- Org Structure
- Overview
- ATS Site Picture
- Family of Testers Update
- Initiatives on the Horizon
- Cybersecurity



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Agile Combat Support Directorate



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CMSgt Theodore Angel
Chief Enlisted Manager



Colonel James Moore
Deputy Director



Colonel Brady Hauboldt
PEO/Director



Colonel Bernard Willis
Director's Senior IMA



Mr. Carl Unholz
Chief, AFMETCAL



Mr. Jimmy Bailey
Chief, Auto Test Sys



Colonel James Wilson
Chief, EW & AV



Mr. Emilio Varcarel
Chief, Human Systems



Colonel Philip Carpenter
Chief, Simulators



Colonel Michael Brox
Chief, Spt Equip/Veh



Mr. Thomas Shaffer
Chief, Contracting –
WPAFB



Mr. Marty Ledden
Chief, Contracting –
Robins AFB



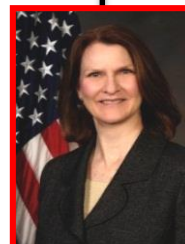
Ms Lynne Leftwich
Chief, Financial
Management



Mr. Alvin "Clay" Mims
Director of Engineering



Mr. Neil Erno
Chief, Logistics



Ms. JoAnn Freburg
Chief, Management
Operations



Mr. Dennis Deitner
Chief, Portfolio
Analysis



Mr. Ron Hannan
Chief, Security



Mr. Steven Peden
Chief, FMS

Revised: 28 January 2019



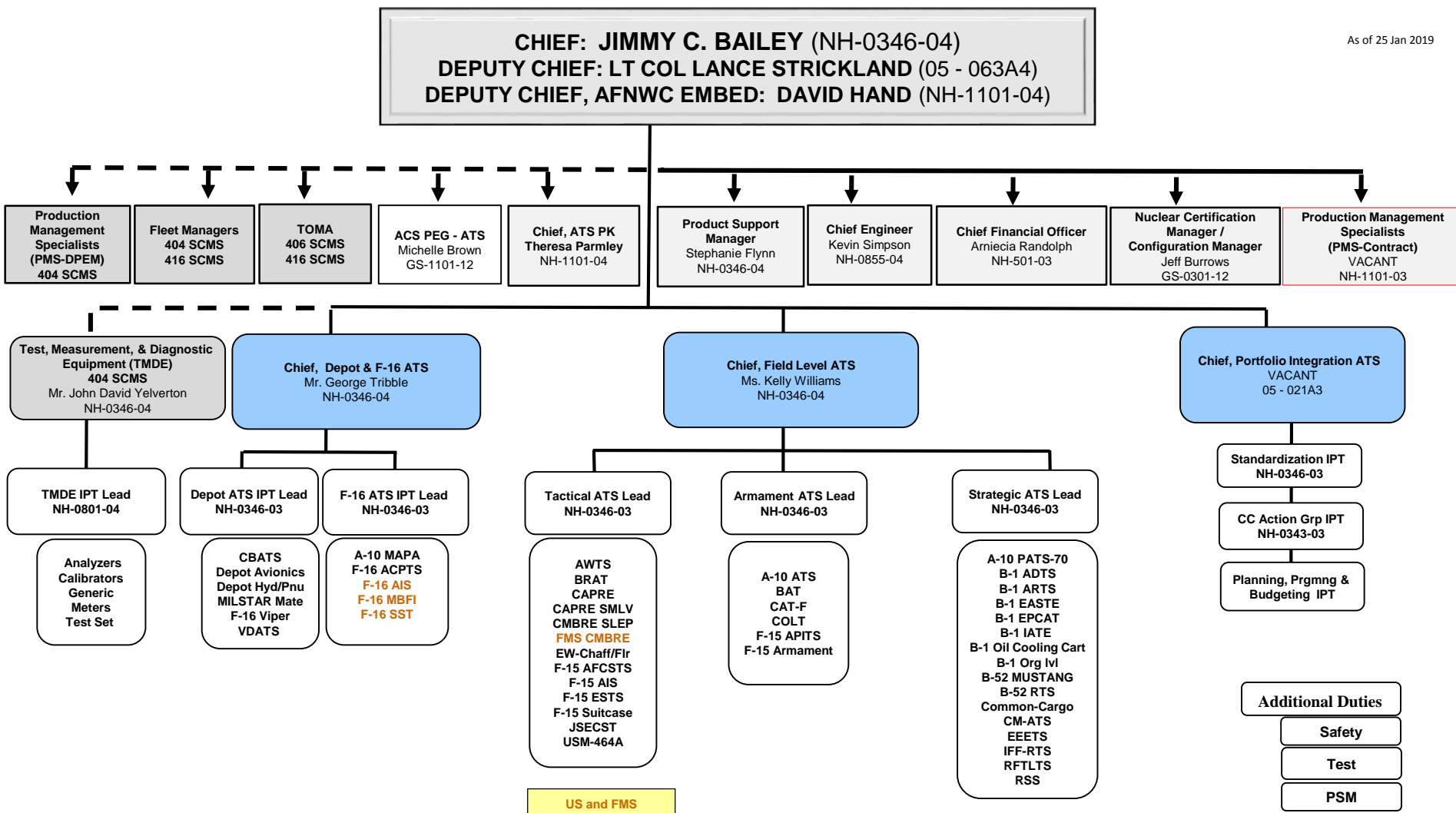
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AFLCMC/WNA Operational Organization Chart

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As of 25 Jan 2019



Integrated Product Teams Supporting 7,775 Configured Items



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ATS Site Picture



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- **Product Group Manager (PGM) for ATS**
- **ATS Program Office executed \$112M in FY18**
Multiple funding sources/funding types
- **By the Numbers**
 - **Personnel** – 130 (Robins & Hill AFBs)
 - **4 Product Lines, 51 Programs/Groups**
(7,775 Configured Items)
 - Organizational Level (Flightline)
 - Intermediate Level (Backshop)
 - Depot Level (ALCs)
 - Test Measurement & Diagnostics Equipment (TMDE)
 - **5 Acquisition Master List (AML) Acquisition Category (ACAT III) Programs**
 - **Tech Orders** – 12K
 - **ATS Selection Requirements Analyses** – 25/year
- **Families of Testers (FoT)**
 - **DoD FoTs**
 - Joint Service Electronic Combat Systems Tester (JSECST)
 - Versatile Diagnostic Automatic Test Station (VDATS)*
 - Common Benchtop Automatic Test Systems (CBATS)
 - **USAF FoTs**
 - Advanced Radar/Electronic Warfare Test Station (ARTS)*
 - Bomber Armament Tester (BAT)*
 - Common Aircraft Portable Reprogramming Equipment Secure Memory Loader Verifier (CAPRE SMLV)*
 - Common Munitions Bit/Reprogramming Equipment (CMBRE)
- **Other Notable Programs**
 - B-2/F-22 Common Organizational Level Tester (COLT)
 - A-10 Portable Automatic Test Set (PAT-70/A)*



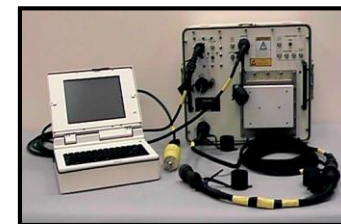
Versatile Diagnostic Automatic Test Station



Benchtop Reconfigurable Automatic Tester



Cruise Missile Radar Altimeter Test Assembly



Common Munitions Bit Reprogramming Equipment



Joint Service Electronic Combat Systems Tester



Common Aircraft Portable Reprogramming Equipment



Identify Friend or Foe



Common Organizational Level Tester

* AML (ACAT III) Programs



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DoD AF Family of Testers



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- **Joint Service Electronic Combat Systems Tester (JSECST) - Textron**
 - **2 Configurations:** AN/USM-670 and AN/USM-670A
 - Initial Fielding: 2001 (AN/USM-670) and 2016 (AN/USM-670A)
 - Assets: 600+ DoD, 200 Air Force
 - Production of 670A testers: 57; Retrofit kits: 170 delivered to date
 - Configuration Control Board approval for retrofit kit installation: Nov 16
 - Warner Robins Air Logistics Complex (WR-ALC) Depot kit installed: 35 retrofits to date
 - Repair contract (2 yrs) awarded 7 May 18
 - *New production contract in work*





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DoD AF Family of Testers



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- **Versatile Diagnostic Automatic Test Station (VDATS®)**

- **VDATS® Core Configurations:** DA-1 and DA-2
- **VDATS® Production Deliveries:**
 - 124 VDATS produced to date; 3 DA stations in manufacturing for upcoming new requirements
- **VDATS® Customers:** AF Depots (Robins ALC, Tinker ALC and Ogden ALC), Tobyhanna Army Depot, BAE, NGC, Harris, USN and currently one intermediate-level location
- Approximately 2,000+ test program sets developed & approved for use on VDATS® to date
- VDATS® currently supports over 30 weapon system workloads for numerous aircraft platforms
- Continuing expansion of VDATS use across all services and all weapon systems, including the development environment as well as repairs at the Depot level and Intermediate level

VDATS

DA-2

RF-1





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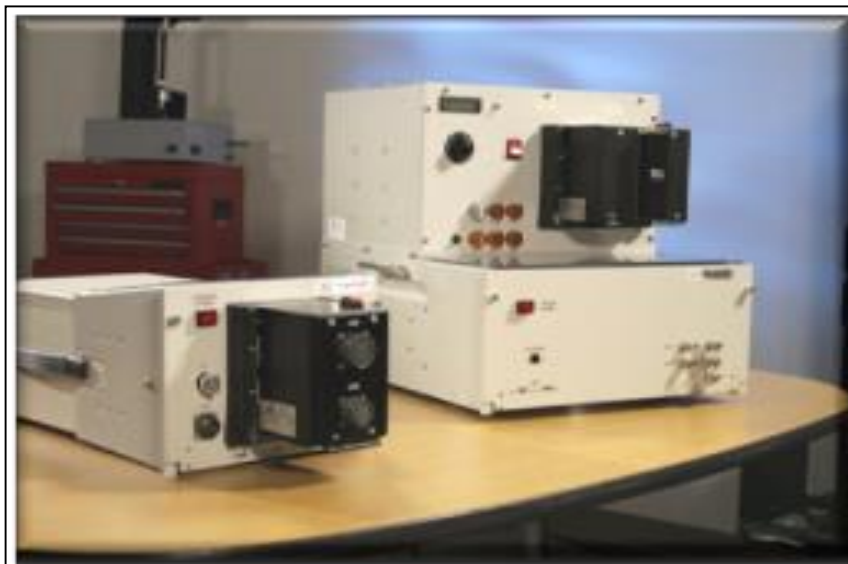
DoD AF Family of Testers



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- **Common Benchtop Automatic Test Systems (CBATS)**
 - PXI-based systems with 2 configurations
 - 101: (70) deployed at Hill AFB and Kadena AFB
 - 201: (66) deployed at Hill AFB, Kadena AFB and Robins AFB
 - CBATS DXR Roll-up – In use at Ogden ALC
 - Currently awaiting decision from AFSC/AFMC on way forward for CBATS manning and sustainment support

CBATS
101



CBATS
201

UNCLASSIFIED



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ATS Portfolio

AF Family of Testers



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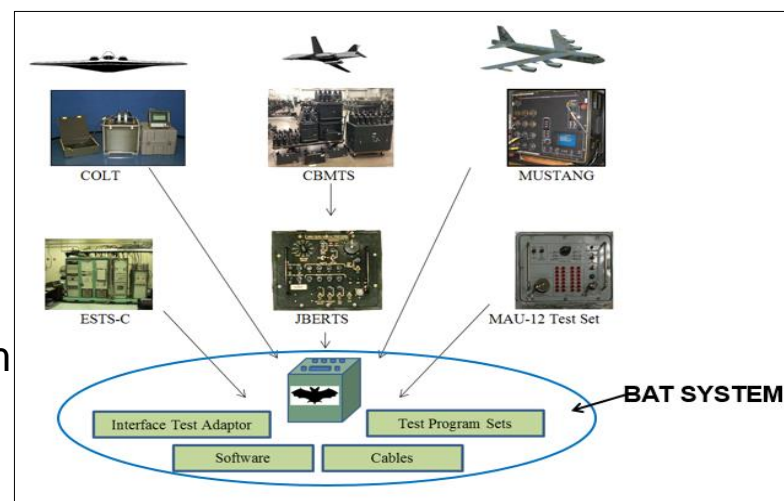
- **Advanced Radar/Electronic Warfare Test Station (ARTS) - Textron**

- ACAT/AML Program: ACAT III
- Product Line: Intermediate (I) level, Depot (D) level
- 5-year interim contract support – slipped to FY19
- 20 of 24 total systems delivered to the field
- Test Program Set (TPS) development ongoing
 - 2 of 24 TPSs fielded



- **Bomber Armament Tester (BAT) – BAE Systems**

- ACAT/AML Program: ACAT III
- Product Line: Organizational (O) level
- Supports: B-52/B-1/B-2
 - Decrease number of testers for each platform
- Initial Date Fielded: TBD
- Contract Awarded: Sep 17





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ATS Portfolio

AF Family of Testers



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- **Common Aircraft Portable Reprogramming Equipment (CAPRE)**

- ACAT/AML Program: N/A, CAPRE SMLV: ACAT III
- Product Line: O-level program loader/verifier
- 30 weapon systems supported
- Potential users: CRH, KC-10, C-130J

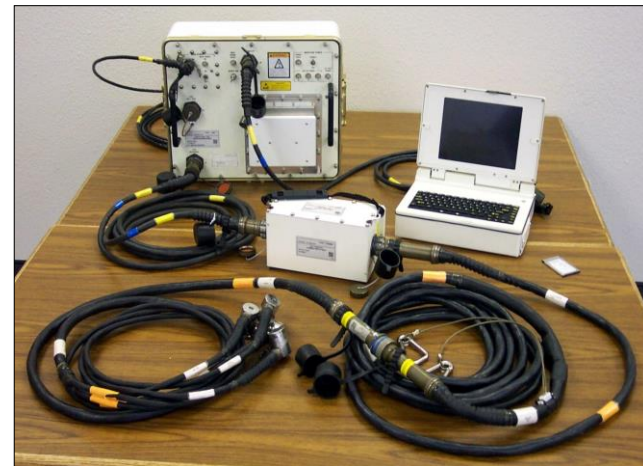
- **CAPRE Secure Memory Loader Verifier (SMLV) - ACAT III**

- Initiated to enhance cybersecurity
- Rehost F-16 Memory Loader Verifier requirements in work
- Field refurbished hardware starting in 2021
- Network Interface Module (NIM) in development



- **Common Munitions BIT Reprogramming Equipment (CMBRE)**

- ACAT/AML Program: N/A
- Product Line: I-level, O-level
- 600+ CMBRE units fielded supporting 18+ weapon systems
- Organic CMBRE Service Life Extension Program (SLEP) - ongoing development to address obsolescence
 - SLEP to field in phased approach starting in 2022





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ATS Future Initiatives

(Requests for Proposal)



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- Analysis for Common Armament Tester - Fighter (CAT-F) - **Competitive**
- JSECST Production - Sole Source, Textron Systems
- Control Test Set Sustainment (A-10) - Sole Source, Command Technical Services Inc. (CTSI)
- B-1B ARTS ICS/ILS – *Potential Sole Source/Competitive*
- Electrical Electronic Equipment Test Station (EEETS) - Competitive
- PLM-4 Strategic Buy/Repair Contract - Sole Source, Harris Corporation
- CMBRE Production Contract - Sole Source, Northrop Grumman
- B-1B Advanced Digital Test Station (ADTS) - **Competitive**
- B-1B Enhanced Power Control Assembly Tester (EPCAT) - Sole Source, **Teradyne**
- ATS Product Support Requirements Contract - Sole Source, **BAE Systems**
- B-1B ARTS CLS - **Competitive**
- Cruise Missile (CM) ATS Sustainment Study - **Competitive**
- VDATS Technology Refreshment - **Competitive**



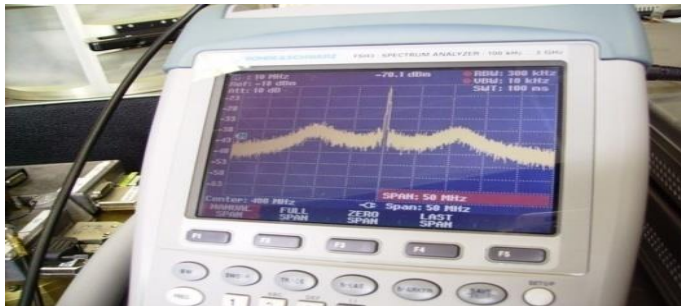
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Cybersecurity



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- Must assure instruments are free of malware
- Need Industry collaboration on “standard” for initial cybersecurity purity guarantee
- Standard will provide users with assurance instruments are malware free at start of operations



Must be VIRUS FREE at the instrument level to ensure purity of ATS



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ATS PGM Updates



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- **Agile Combat Support (ACS) Leadership**
 - PEO: Col Brady Hauboldt
 - Deputy PEO: Col James Moore
 - Incoming Deputy PEO: **Col Lea Kirkwood**

- **ATS Program Office Leadership**
 - Chief: Mr. Jimmy Bailey
 - Deputy Chief: Lt Col Lance Strickland
 - Deputy Chief, Nuclear: Mr. David Hand
 - Product Support Manager: **Ms. Stephanie Flynn**



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NDIA ATC

USAF Liaison Report



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USAF Budget

- Proposed FY20 USAF budget request is approximately \$166B, a 6% increase from FY 2019.^{1,2}
- Largest proposed increase is for RDT&E, specifically for B-21 and Ground-Based Strategic Deterrent (GBSD).^{1,2}
- Backing of 2030 plan for 386 operational squadrons by proposing personnel increase and additional F-15X procurement.^{3,4}
- Desire to share R&D funding between USAF & DARPA to maintain readiness while further developing unmanned/autonomous systems, artificial intelligence, hypersonics, and directed energy.³

¹. <https://foreignpolicy.com/2019/03/11/air-forces-166-billion-budget-would-help-revamp-u-s-nuclear-deterrent/>

². <https://www.militaryaerospace.com/articles/2019/03/dod-budget-military-electronics-trusted-computing.html>

³. <https://breakingdefense.com/2019/03/386-go-on-air-force-say-it-loud-now/>

⁴. <https://www.bloomberg.com/news/articles/2019-03-18/lockheed-f-35-dinged-as-boeing-s-f-15x-wins-in-air-force-s-plan>



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USAF News

Secretary Wilson to Resign

- Air Force Secretary Heather Wilson will resign at the end of May and take a job in academia. Replacement yet to be named.^{5,6}

KC-46 Deliveries Resume

- The Air Force had stopped accepting Boeing's KC-46 tankers as of Feb. 20, saying the issue was not with the aircraft itself but with the process in place for building it.^{7,8}
- Assistant Secretary of the Air Force, Dr. Roper, visited Boeing's facilities and said he's satisfied with the company's FOD containment plan.^{7,8}

Future Light Attack Slows

- Limited foreign interest driving down the likelihood of near-term determination.
- Only \$100M FY19 funds for aircraft procurement and \$35M FY20 funds for project development earmarked.⁹

Space Force Takes Shape

- Space Combatant Command formally organized as a Department of the Air Force; Legislation to propose the formation of the Space Force is anticipated by 2020.^{10,11}
- Space Development Agency (SDA) established March 12th to "define and monitor the Department's future threat-driven space architecture and... accelerate the development and fielding of new military space capabilities..."^{11,12}

5. <https://diverseeducation.com/article/140789/>

6. <https://www.reuters.com/article/us-usa-defense-exclusive/exclusive-us-air-force-secretary-wilson-to-resign-eyes-return-to-academia-idUSKCN1QP1T2>

7. <https://www.reuters.com/article/us-usa-boeing-defense/u-s-air-force-resumes-boeings-kc-46-tanker-delivery-idUSKBN1QT001>

8. <https://www.military.com/daily-news/2019/03/14/air-force-keep-close-eye-boeing-kc-46-deliveries-resume.html>

9. https://www.defensenews.com/smr/federal-budget/2019/03/13/air-force-to-buy-handful-of-light-attack-planes-but-will-a-bigger-program-follow/?utm_source=clavis

10. <https://www.defensenews.com/space/2019/02/19/trump-signs-off-on-organizing-the-space-force-under-the-air-force-for-now/>

11. https://www.defensenews.com/space/2019/03/13/in-memo-air-force-head-hits-space-development-agency-as-not-ready-for-prime-time/?utm_source=clavis

12. <https://www.defensenews.com/space/2019/03/13/pentagon-officially-tands-up-space-development-agency-names-first-director/>



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Questions ???