



U.S. ARMY EXPERIMENTAL TEST PILOT PROGRAM

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Purpose

- To brief Pilots and Leaders about the Experimental Test Pilot Program in an effort to **inform** all eligible pilots about the opportunities available, with the ultimate goal of recruiting the best possible **candidates** into the test community.
- Selected personnel will test new and emerging technologies designed to enhance our warfighting capability, ensuring that we maintain the leading edge of that capability over our enemies around the world.

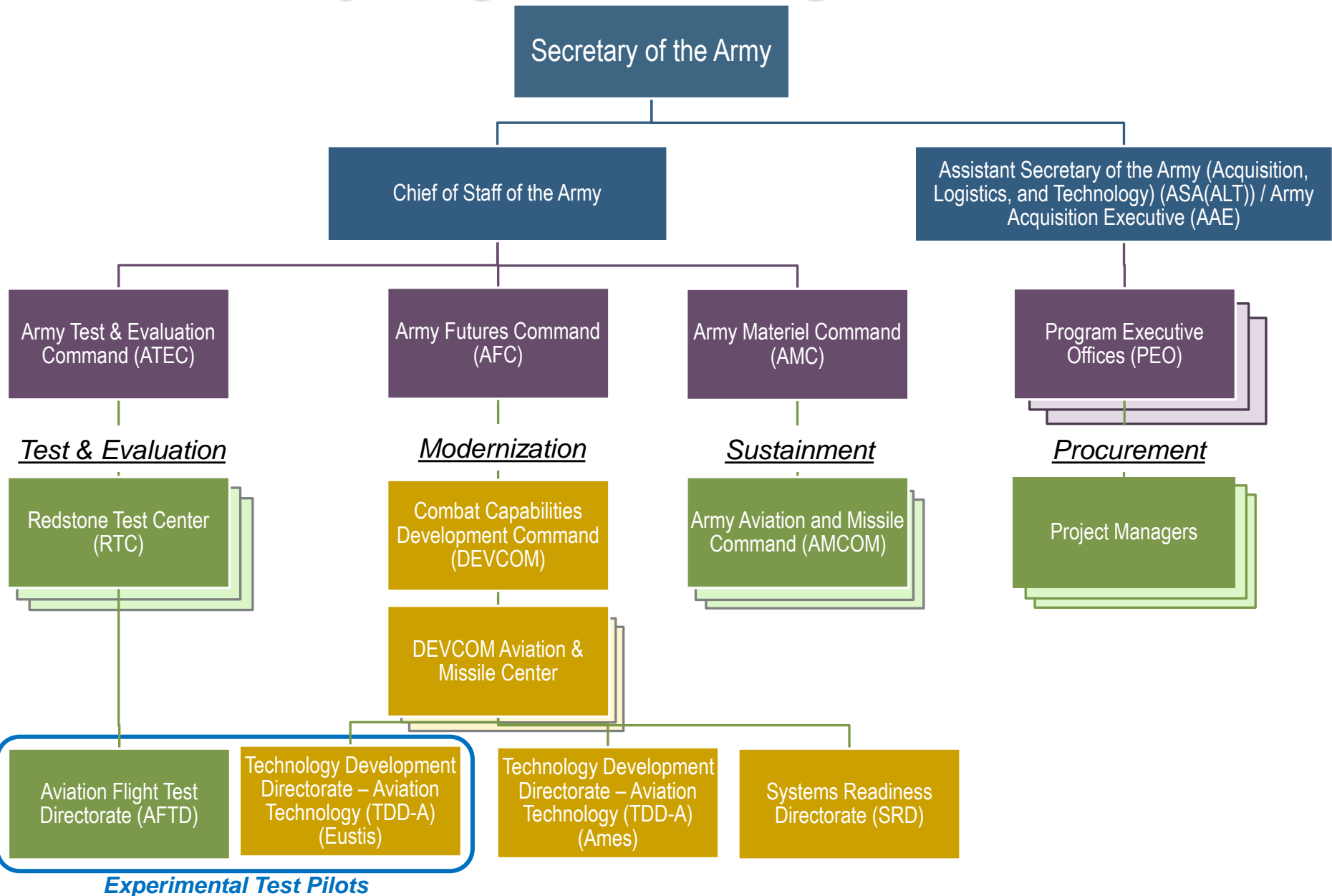


Agenda

- What is an Experimental Test Pilot?
- Army flight test organizations
- Acquisition and the role of the XP
- XP program selection
- USNTPS Overview
- XP career progression
- Frequently asked questions
- How to apply



Army Flight Test Organizations



Experimental Test Pilots

What is an XP? AR 95-1 says...

4-29. Experimental test pilot

The experimental test pilots (XP) are graduates of the U.S. Naval Test Pilot School or other accredited test pilot schools and are designated by the commander to perform experimental and engineering flight tests.

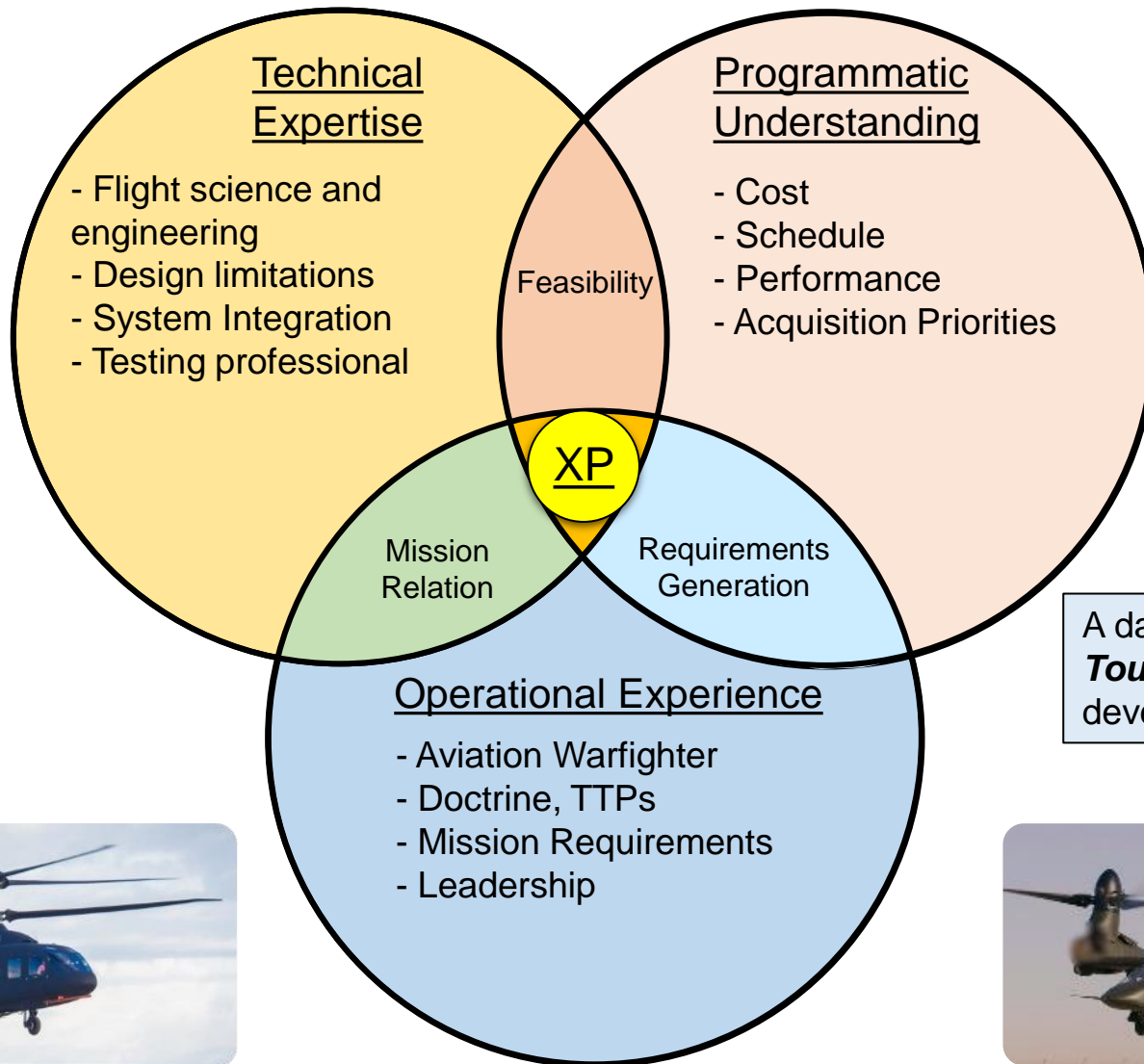
(AR 95-1 dated March 2018)



What is an XP?

An experienced operational aviator trained in a highly specialized skill set

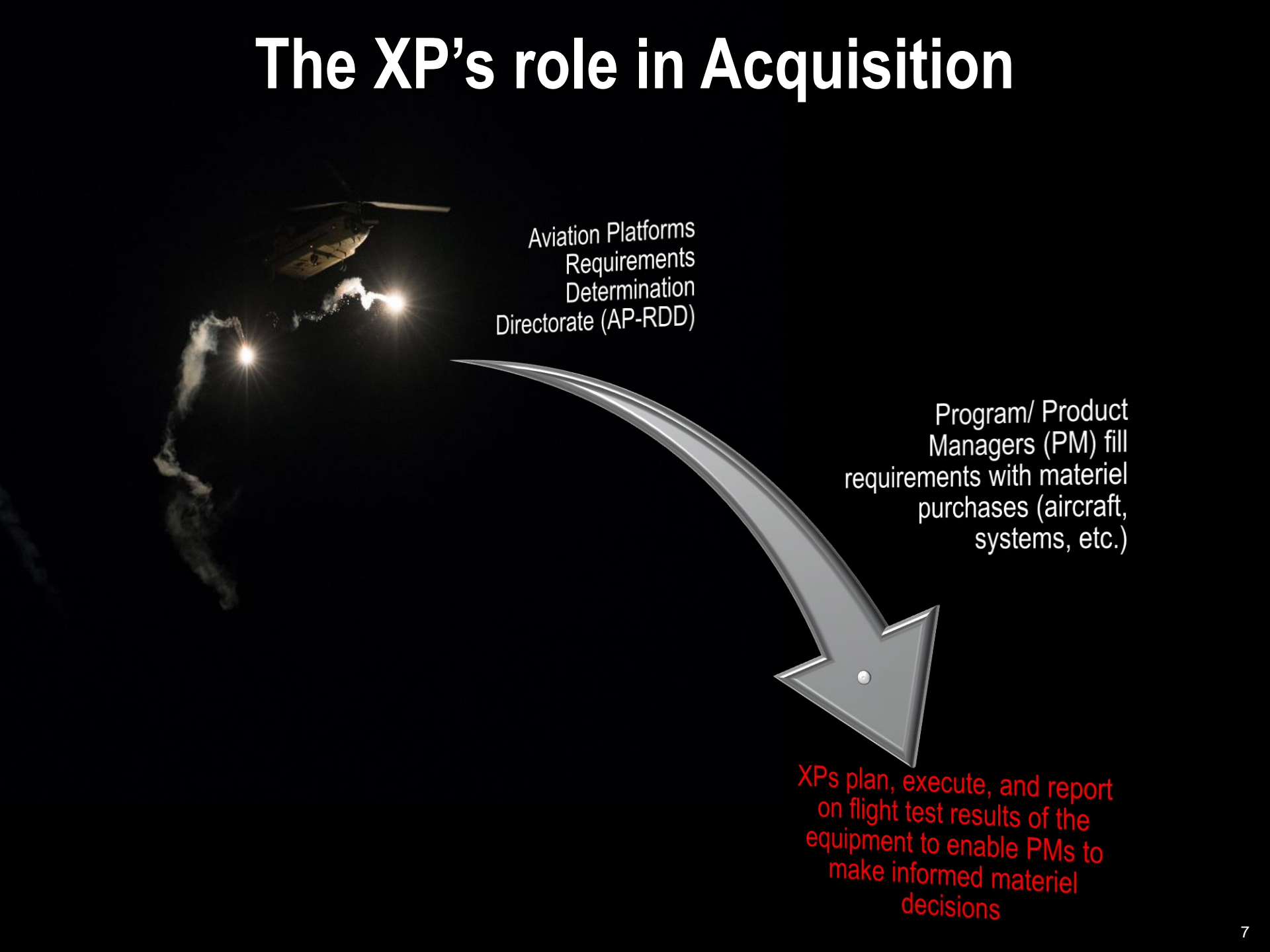
An officer fluent in operations, programmatics and engineering



A daily **Soldier Touchpoint** throughout developmental test



The XP's role in Acquisition



Aviation Platforms
Requirements
Determination
Directorate (AP-RDD)

Program/ Product
Managers (PM) fill
requirements with materiel
purchases (aircraft,
systems, etc.)

XP's plan, execute, and report
on flight test results of the
equipment to enable PMs to
make informed materiel
decisions

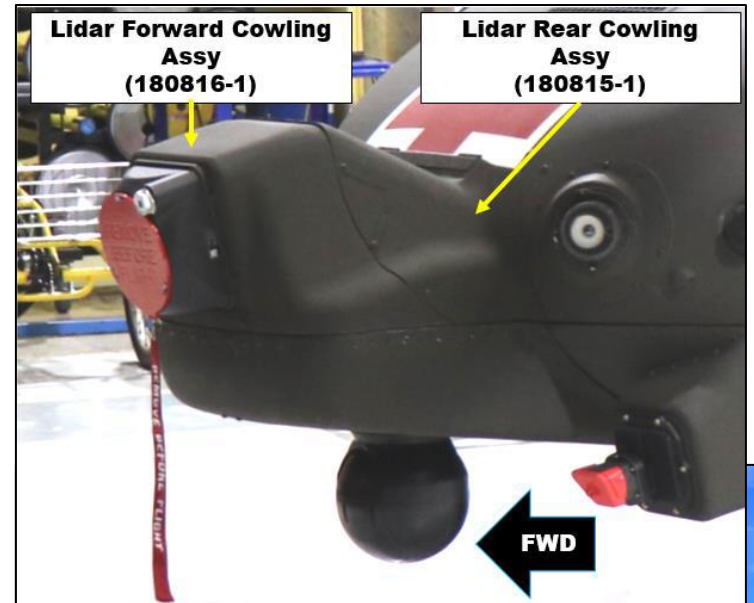
Acquisitions Process in Action

Aviation Platforms Requirements Determination Directorate (AP-RDD)

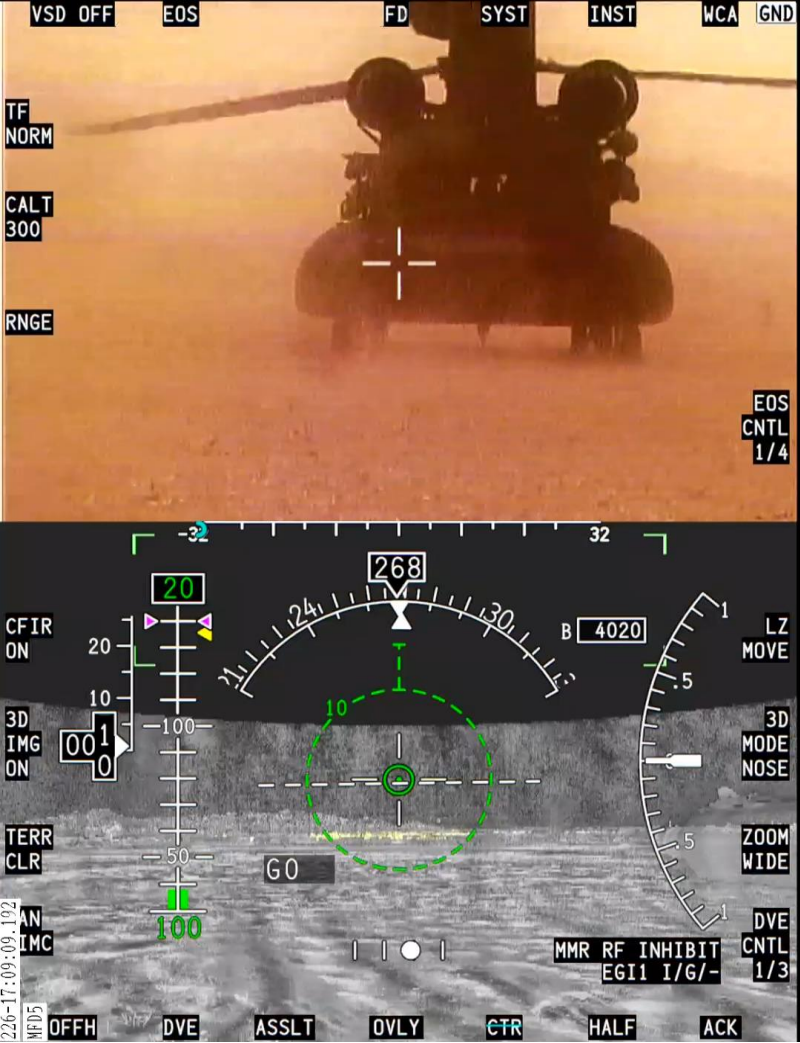


Acquisitions Process in Action

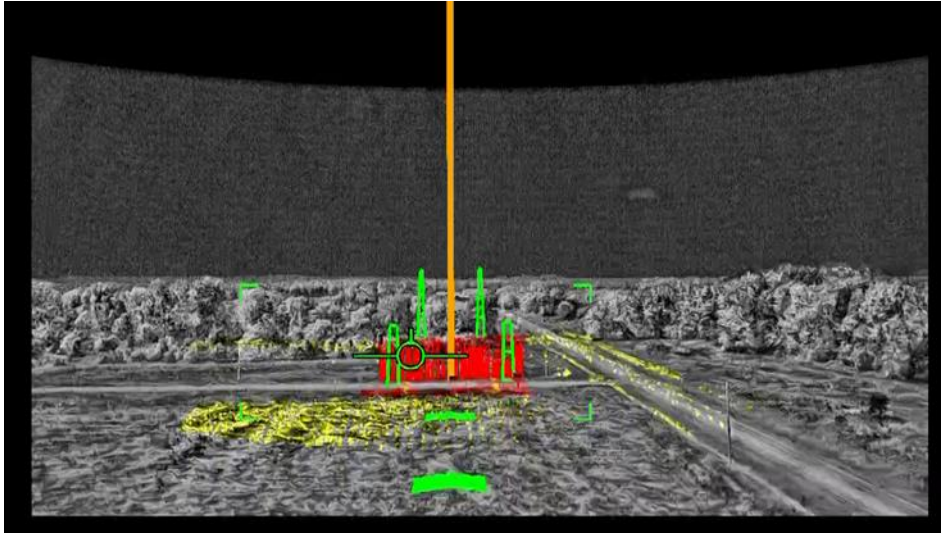
Program/ Product Managers (PM) fill requirements with materiel purchases (aircraft, systems, etc.)



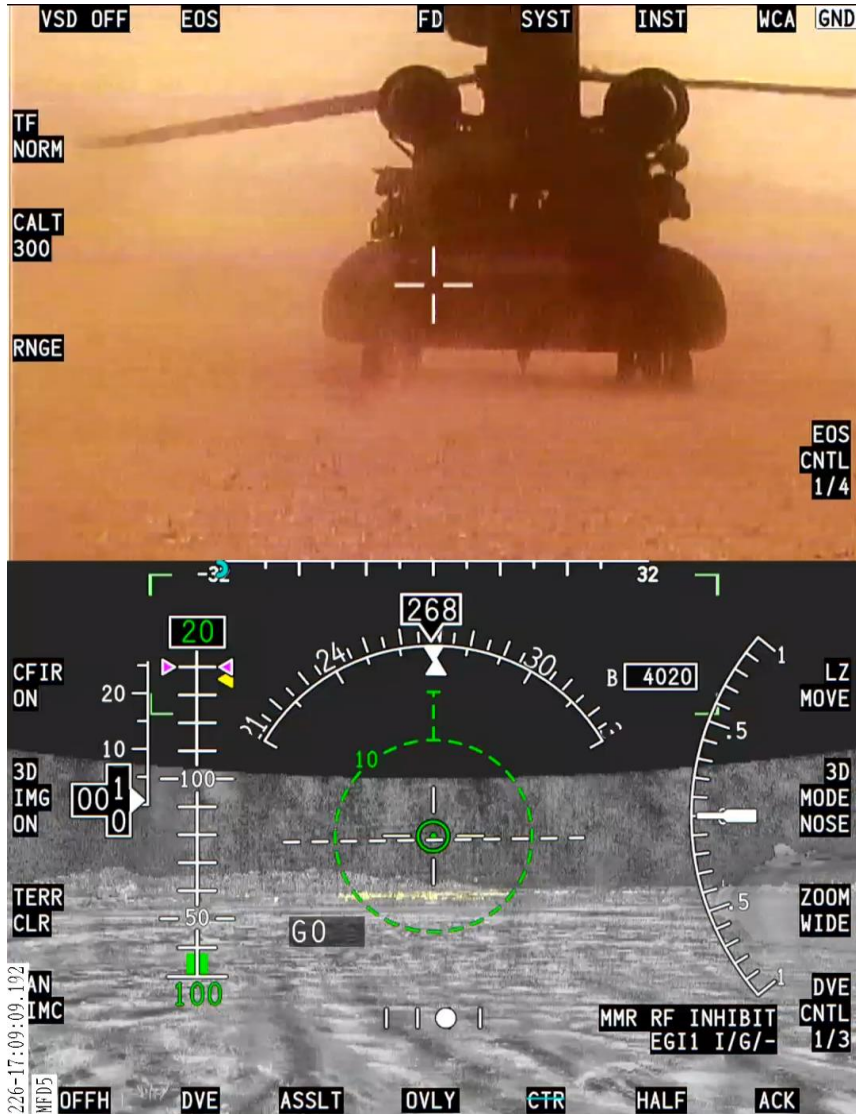
Acquisitions Process in Action



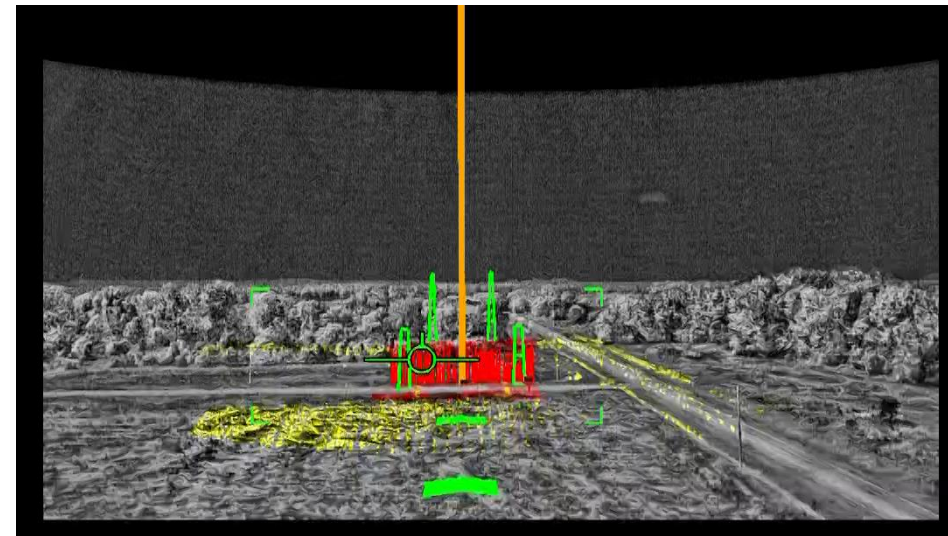
XP's plan, execute, and report on flight test results of the equipment to enable PM's to make informed materiel decisions



Acquisitions Process in Action



XP's plan, execute, and report on flight test results of the equipment to enable PM's to make informed materiel decisions



XP General Selection Criteria

- HRC Announcement (last message: MILPER 24-017)
 - Annual release late-Fall/early Winter (expect DEC to JAN)
 - Spring Packets due 23 Feb 2024 and Board convenes 29 Mar 24
 - Phase II May-July 24
 - Results end-Fall
- General Criteria
 - Have demonstrated performance indicative of continued selection for promotion.
 - Meet medical fitness standards per AR 40-501
 - Ability to pass naval swim test and flight physical
 - Have 500 military aircraft flight hours, not including Simulator Flight Time (SFT), and be a Pilot In Command (PIC).
 - 4 year ADSO regardless of completion
 - 5 year ADSO for attending FWQC



XP Selection Criteria

Commissioned Officers

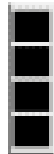
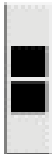
- Active duty competitive category Aviator in career status
- Year group considerations
- May forfeit or have restrictions imposed on GRADSO
- Have completed, currently in, or scheduled for one of the key developmental operational assignments specified as goals in DA PAM 600-3 [company command or equivalent], dated 14 Apr 23



XP Selection Criteria

Warrant Officers

- Grade W2 or higher
- Active Duty or
- National Guard / Reserve
 - Must have conditional release from State Aviation Officer (COMPO 2)/HRC Branch Chief (COMPO 3) as applicable
 - Call to Active Duty (CAD) utilized to bring WO into COMPO 1 to attend USNTPS
 - Must meet eligibility for CAD program
- Sufficient time remaining on active duty to complete a 4 year ADSO after USNTPS



XP Desirable Selection Criteria

Highly Desirable:

- Degree in an engineering, mathematical, or science discipline
 - Desirable Courses: calculus, statistics, differential equations, aircraft stability & control, thermodynamics, statics, dynamics, strength of materials, fluid mechanics, propulsion, vibration analysis, aerodynamics & performance
 - Experience with MS Excel or MATLAB
- Experience in complex aircraft such as:
 - CH-47F, UH-60M, AH-64D/E, SOAR, FW
- 200 hours PC and 1000 hours total time
- Robust operations background

Selections are made on a *best-qualified* basis – IF YOU DON'T APPLY, YOU WON'T BE SELECTED!

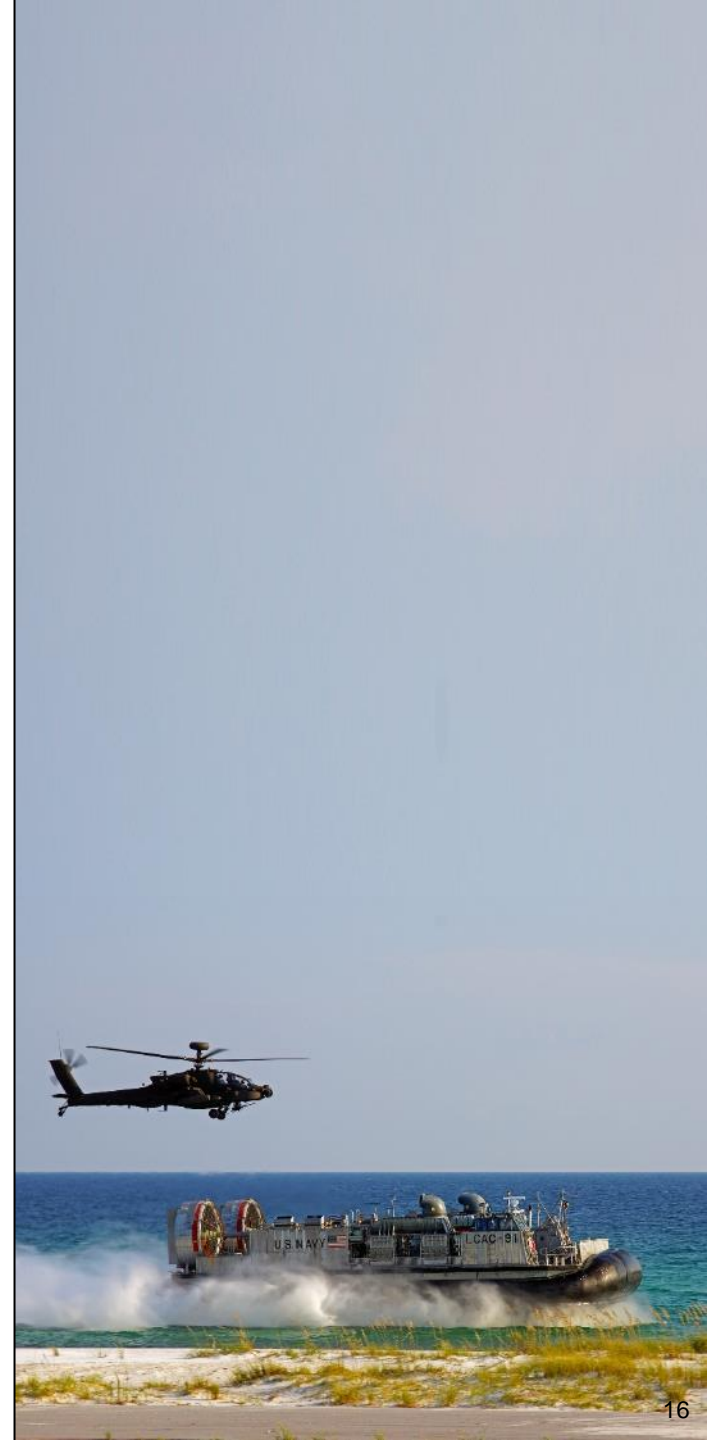


XP Program Selection

Two-phase selection process:

- **PHASE I:** DA selection panel determines candidates best suited for Phase II
- ***PHASE II:** Approximately one week long; conducted at Redstone Arsenal, AL
 - Math assessment
 - Academics
 - Technical writing and data reduction assignments
 - Hands-on flight test (both FW & RW)
 - Board interview

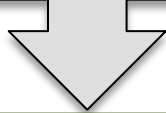
***Two-Way Look**



XP Program Post Selection

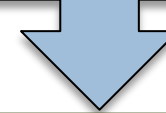
Officers are career field designated into FA51, Acquisition Corps (Force Sustainment)

- Managed by Acquisition Branch (Acq. KD)



Warrant officers remain in Aviation Branch

- Managed by XP career manager's office



(O) Advanced Civil Schooling (timeline and availability dependent)



FW AQC (C-12) course (10 weeks, Dothan, AL)



United States Test Pilot School (12 months, NAS Patuxent River)



USNTPS Overview (1 of 5)

- U.S. Naval Test Pilot Course conducted at NAS Patuxent River, MD
- 12 Months duration, with two class starts per year
- USNTPS is like nothing else you've ever done, and will test your limitations
 - Outstanding Technical Program
(not fondly remembered by some)
 - Not a course of attrition



USNTPS Overview (2 of 5)

- Classes comprised of 30+ USA, USMC, USN, USAF, USCG, and international pilots and engineers
- Curriculum divided into Rotary Wing & Fixed Wing programs
- Daily work breakdown:
 - + 50% academic instruction*
 - + 50% flying*
 - + 50% report writing/classwork**

150%



- * Rotary wing program includes the same hours of academic instruction, but more flying (+25%) than the fixed wing program
- ** Night and weekend work

USNTPS Overview (3 of 5)

- UH-72A and UH-60A/L training at Western ARNG Aviation Training Site (WAATS) in Marana, AZ. Two weeks of training for each airframe. Approximately 6 simulator hours and 8 flight hours each.
- Rotary wing syllabus includes flights 3-4 days per week
 - Five primary aircraft (UH-60A/L*, UH-72A*, OH-58C, C-12, UH-60 VSS)
 - Additional aircraft (Learjet VS, U-1 Otter, U-6 Beaver, X-26 Glider, T-38 Jet Trainer, T-6 Texan II, F/A-18 Hornet)
 - Qualitative evaluations (i.e. AH-1Z, MD-530F, S-55T, OH-6, H-3, NOTAR)



* **BIG BOY/GIRL RULES:** You are PC/single pilot (with FTE) after only 10 hours of training and evaluation. At 20 hours you will strap on a parachute and oxygen, and will take the aircraft to 18,000' MSL.

USNTPS Overview (4 of 5)

Rotary Wing Syllabus

- Pre-Arrival
 - Math & mechanics test
 - Navy “all-qual” (egress, water survival, ejection seat)
 - WAATS
- First Half: Performance, Handling Qualities, Flying Qualities
- Second Half: Flying Qualities cont., Advance Flying Qualities, and Systems (FLIR / EO, radar, digital communication)
- Cycled in:
 - UAV testing
 - Supersonic flight demo
 - Human factors, pilot-vehicle interface
 - Variable stability labs and flights (4x Calspan Learjet, 2x UH-60 VSS)
 - Autorotation and H-V diagram assessments (OH-58C)
 - High lift/drag (X-26 glider)
 - Qualitative evaluations



USNTPS Overview (5 of 5)

Preview Capstone Exercise (approximately 1 month)

- Consists of a tailored, comprehensive plan, test, and report on an unfamiliar aircraft at an unfamiliar location (i.e. France, Brazil, Germany, Sweden, England, Italy)



V-22 Osprey



AW-101 Merlin



EC-665 Tiger



SA330 Puma



MD Explorer



AW-159 Wildcat



HH-65 Dolphin



CH-53 Sea
Stallion

XP Program Post USNTPS



United States Test Pilot School (12 months, NAS Patuxent River)



Army Acquisition Professionals Course
(9 weeks; Huntsville, AL)



CGSC (ILE) Satellite Course
(15 weeks, Redstone Arsenal, AL)



XP Utilization at Redstone Test Center



Additional Aircraft Qualification Courses
(as required)



Professional Military Education
(as required)



XP Program Post USNTPS

Officers (2-3 years)

AFTD Leadership/Test Director/Project Pilot



Warrant officers (3-4 years)

Test Director/Project Pilot/SP/IE/MP/System SME



Assigned to Redstone Arsenal, AL or Fort Eustis, VA



Daily lifestyle similar to USNTPS

Test Director/System SME: Plan, Test, and Report on Aircraft or Aircraft Systems testing

Autonomous work environment

Expect TDY to other test sites: Eglin, AFB, Aberdeen Proving Ground, MD, Yuma Proving Ground, AZ, etc.

Graduate School, Multiple Aircraft Transitions, other Special Projects

Assistant Program Manager (2 years)

O-4 Key Developmental Assignment



Return to Test

2nd XP Tour



Remain Acq.

Nominative Assignment



CSL

AFTD/TDD-A CMD



Acquisition

O-5 KD



2nd XP Tour (2-3 years)

AFTD, TDD-A, SIMO,
USNTPS, RWTES

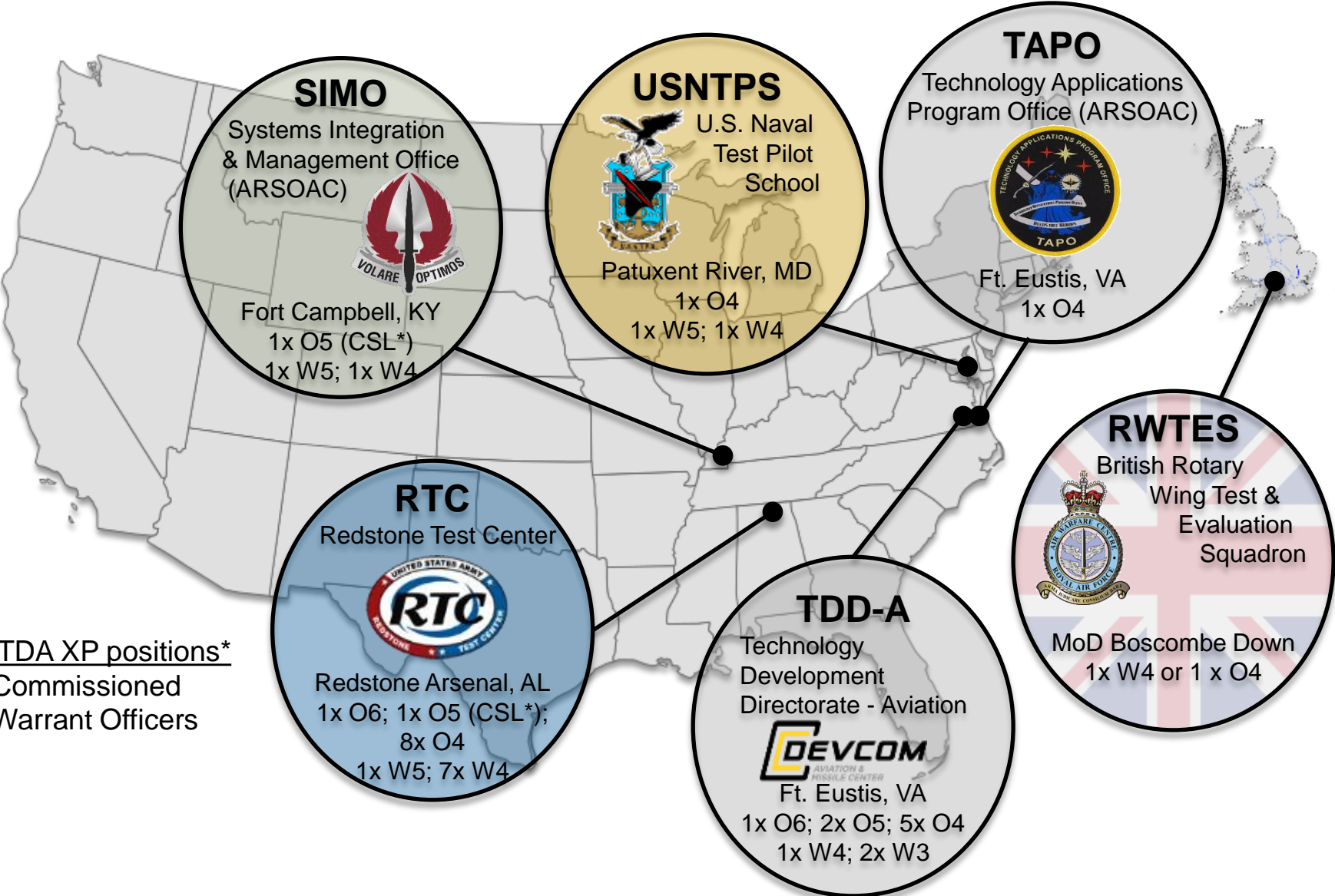


**Regreening /
Developmental (1-2 years)**

AP-RDD, PEO Aviation, WIAS,
BDE Staff, Other T&E, or HRC
assignments



Army XP Duty Locations



Total TDA XP positions*
 22 x Commissioned
 15 x Warrant Officers

* CSL Positions are "XP Desired" not "XP Required"

Frequently Asked Questions

- What is the recommended timeline to pursue “competing” career opportunities (160th SOAR, grad school, etc.)?

It depends...

- Can NG/USAR apply?

Current MILPER - YES

- Do UAS Operators qualify?

Must be or have been a rated aviator to apply;
UAS testing is covered by RCMs

- Will I remain airframe pure?

Testing typically stays within
experience/background but will carry multiple
categories and series for test support



Frequently Asked Questions (cont.)

- What if I'm "Fixed Wing for Life"?

Apply.

- What if I'm a 67J?

Depends on the needs of your branch and if the Medical Services Corps will release you upon selection. Engage your branch manager, if interested.

- What if I'm outside the Commissioned Officer year-group window?

Apply. The YGs in the MILPER are not intended to immediately disqualify officers, however those YGs specified provide sufficient time to meet mandatory career assignments.



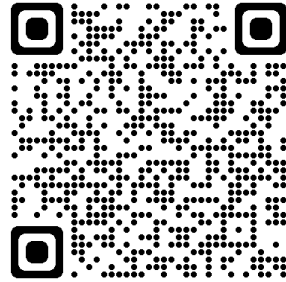
Frequently Asked Questions (cont.)

- What Graduate Civilian Education Opportunities are available?
 - ACS – Possible for Commission Officers; recommendations from USNTPS
 - Naval Post Graduate School – structured partnership with USNTPS for both Warrant and Commissioned Officers (MS in SE/ES)
 - No ADSO; does not count as TA or other military benefits
 - No out of pocket expense (just books for WO) WO funded by AFTD; commissioned officers funded by AMB
 - 8 classes, 2 years
 - Credits granted and DTII accepted as master's thesis
 - Additional cooperative relationships have been established with various master's programs at several universities including: Georgia Tech, Johns Hopkins, Florida Tech, Embry-Riddle, & National Test Pilot School



How to Apply

Read the MILPER message:
<https://www.hrc.army.mil/Milper/24-017>



- Continue to do great things at your unit
- Attend professional military education commensurate with grade
- Pursue civilian education if necessary (i.e. degree completion or brushing up old skills; math & physics)
- **Submit a packet!**



Web Links

XP MILSUITE WEBSITE:

<https://www.milsuite.mil/book/groups/experimental-test-pilot-xp-recruiting/>

MILPER 24-017

<https://www.hrc.army.mil/Milper/24-017>

USNTPS

<http://www.navair.navy.mil/nawcad/usntps>

Society of Experimental Test Pilots

<https://www.setp.org/>

Redstone Test Center

www.rtc.army.mil/

USNTPS Videos

<https://www.youtube.com/watch?v=f3vmAuK8u7g>

https://www.youtube.com/watch?v=LP_0ZIEY8T4

<https://www.youtube.com/watch?v=WFkyYYH6Zgc>



Contact Information

XP Recruiting POCs

Recruiting Group Email Inbox

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XP Assessment Program Lead

Mr. Alan Davis

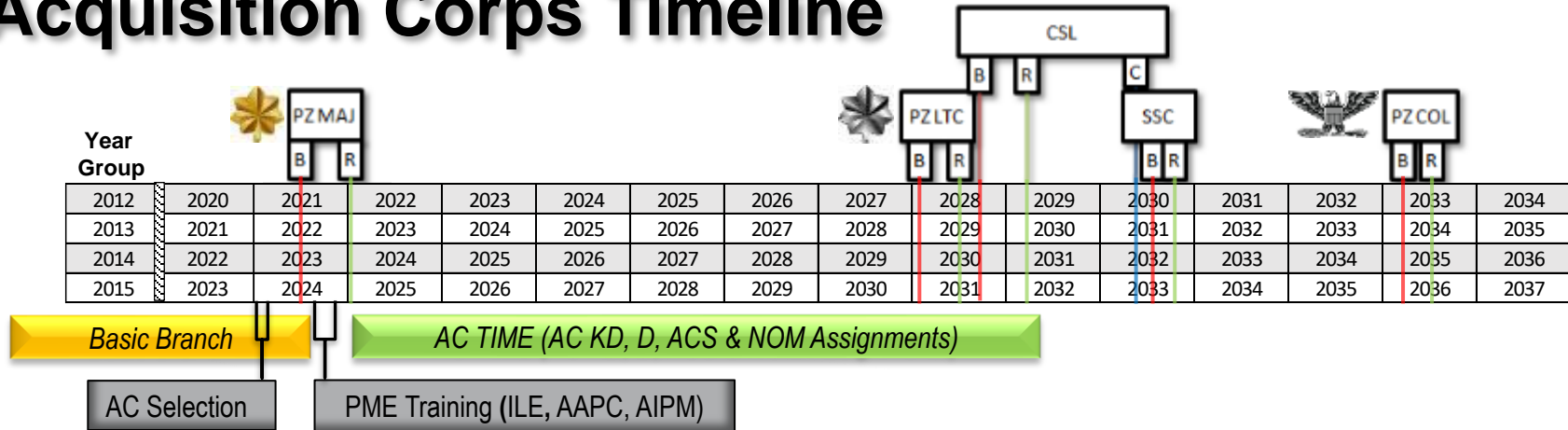
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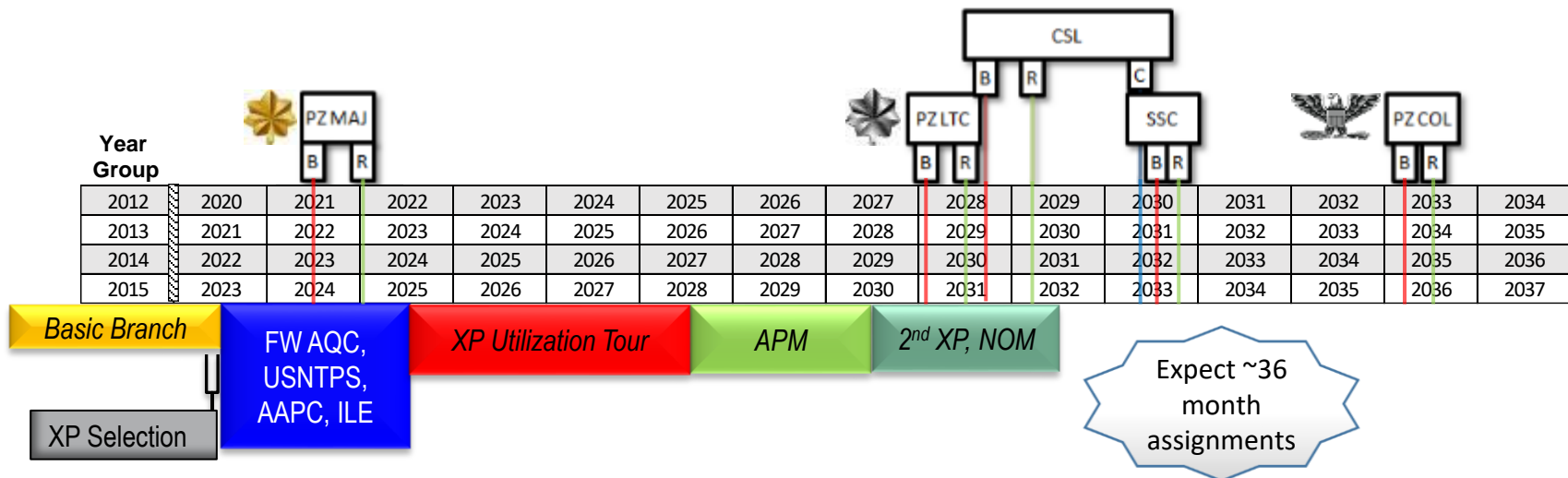


XP Career Progression - Officer

Acquisition Corps Timeline



XP Timeline



XP Career Progression - Warrant



Standard WO Timeline



XP WO Career Path



**Think of XP as a second track
after your primary track**

Opportunities:

- Graduate School
- Multiple Transitions
- Test Director/System SME
- Broadening Assignments (HRC, ACM, PM, USAACE, etc.)

*RTC XP, Test Director, SP/IE/MP,
System SME (36-48 months)*

*2nd XP Tour: RTC, TDD-A,
USNTPS, SIMO (24-36 months)*

*“Regreening” Opportunities BN level and above:
SP/IE, ME, AMSO, Safety, BAMO, Master Gunner,
Staff Positions, AP-RDD, USAACE Positions (12-24
months)*

*“Regreening”
Opportunities BDE level
and above:
SP/IE, ME, AMSO,
Safety, BAMO, Master
Gunner, Staff Positions
(12-24 months)*