

U.S. Army Experimental Test Pilot Program

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U.S. Army Test and Evaluation Command
Redstone Test Center





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
- How to apply





Flight Test Video

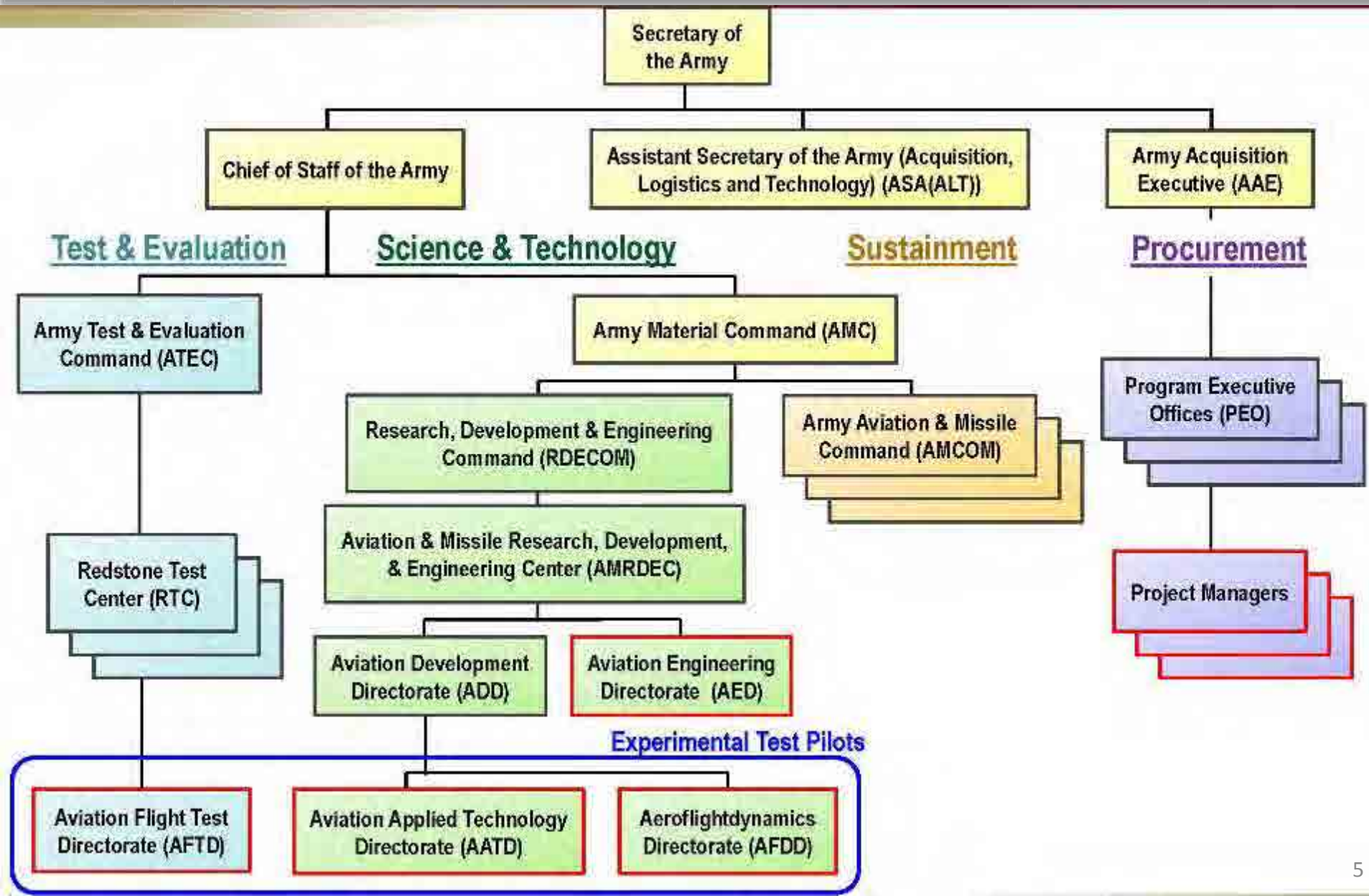


RTC Flight Test video can be viewed at the following link:

<https://www.milsuite.mil/video/15252>

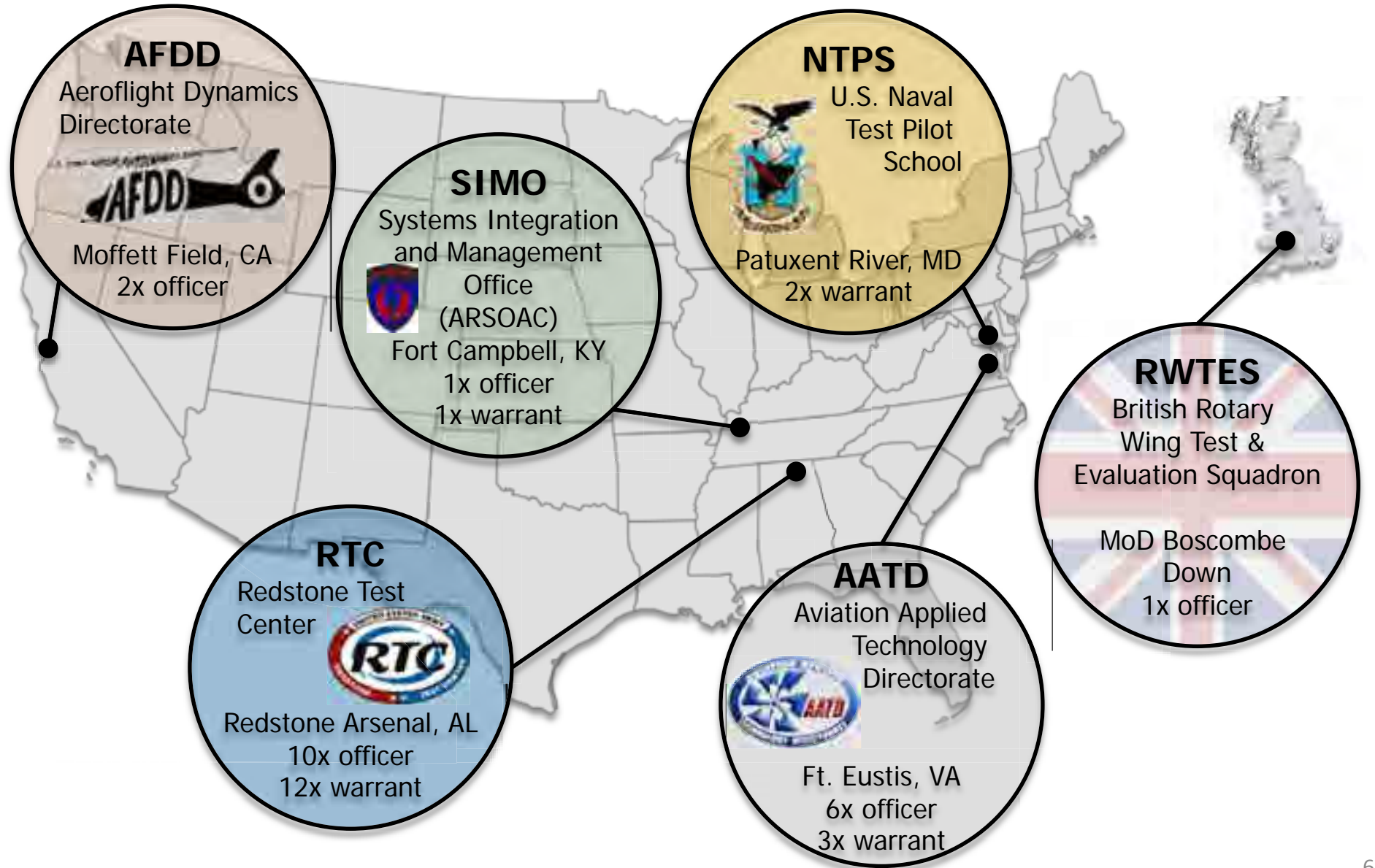


Army Flight Test Organizations





Army XP Duty Locations





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 11 March 2014)





What is an XP?



An Experimental Test Pilot is:

- An experienced officer
- A proficient aviator
- A technical writer
- An articulate briefer

The delivery to the field of a useful piece of aviation equipment depends on the XP's ability to relate its performance in test to the mission of the aircraft.





The XP's role in Acquisition





XP General Selection Criteria



- HRC Announcement (latest message: MILPER 16-055)
- General Criteria
 - Active Duty Aviation officer in career status
 - Ability to pass Naval Swim Test and Flight Physical





XP Selection Criteria – Officer



- Commissioned Officers
 - Year group specific (per MILPER message)
 - Have completed, or currently in one of the key developmental operational assignments specified as goals in DA PAM 600-3 paragraph 11-3C.(2) [company command or equivalent]
 - 500 flight hours excluding SFTS, and be a Pilot in Command





XP Selection Criteria – Warrant



- Warrant Officers
 - Grade W2 or higher
 - Military Education Level appropriate for grade
 - Sufficient time remaining on active duty after training to complete 4 year ADSO
 - 500 flight hours excluding SFTS, and be a Pilot in Command





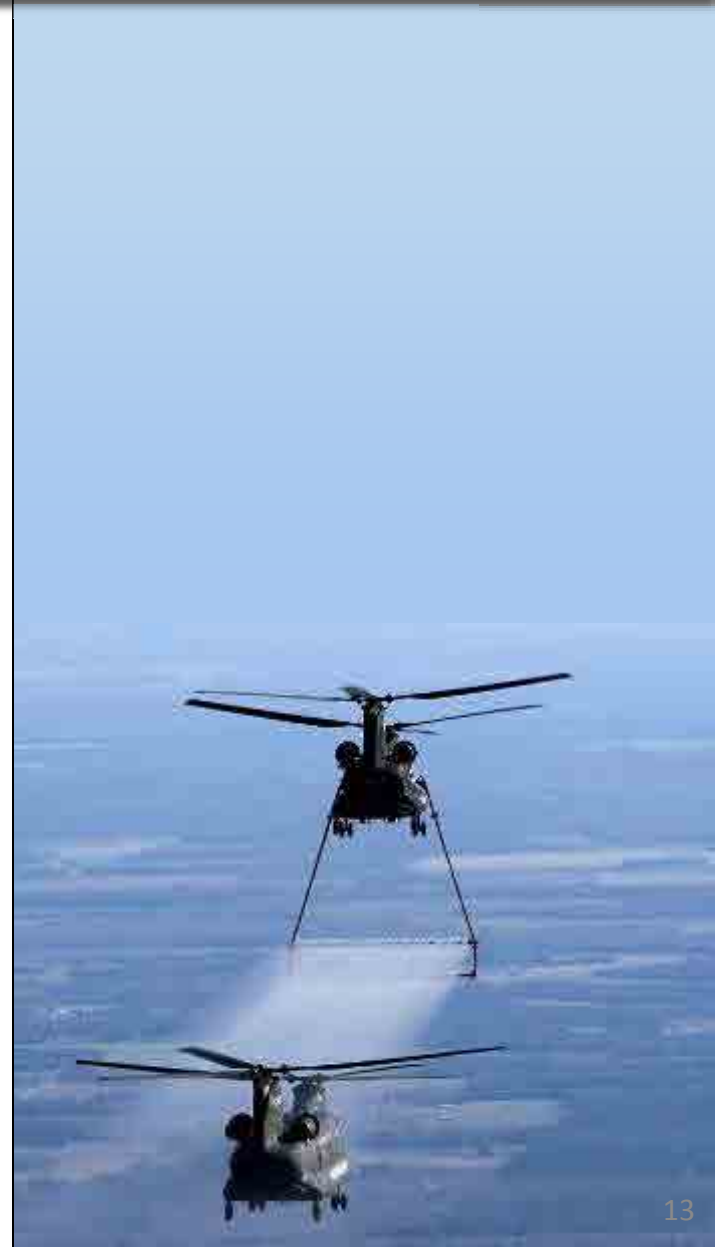
XP Desirable Selection Criteria



Highly Desirable:

- College background with above average grades in engineering, math, or science discipline:
 - Calculus, Statistics, Differential Equations, Thermodynamics
 - Experience with MS Excel or Matlab
- IP, IE, MP, ME
- 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 Process



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
 - Academics
 - Hands-on flight test
 - Board interview





XP Program Selection Process



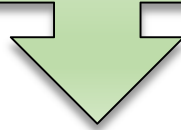
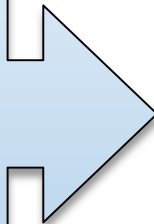
If selected, following Phase II:

Commissioned officers are career field designated into FA51, Acquisition Corps (Force Sustainment Division)

- Managed by Acquisition Branch
- Attend Army Acquisition Foundation Course and Army Intermediate Program Management Course (6 weeks total)
- Key developmental assignments are in Acquisition Branch

Warrant officers remain in Aviation Branch

- Managed by XP career manager's office

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- **FWMEQC** (C-12) course (10 weeks, Dothan, AL)
 - **Additional aircraft qualifications** (timeline dependent)
 - **Advanced Civil Schooling (ACS)** opportunities (timeline and availability dependent)
 - **USN Dunker** (1 week, typically NAS Patuxent River)
 - **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
- NTPS is like nothing else you've ever done, and will test your limitations





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, and Systems programs
- Daily work breakdown:
 - 50% academic instruction* 50%
 - 50% flying* 50%
 - 50% report writing/classwork** +50%
150%



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- * Rotary wing program includes more academic instruction and flying (+25%) than the fixed wing or systems programs
 - ** Night and weekend work



USNTPS Overview (3 of 5)



- Factory UH-72A course at Airbus Helicopters (Ft. Worth, TX) and UH-60L simulation at EAATS (Ft. Indiantown Gap, PA) prior to starting TPS
- Rotary wing syllabus includes flights 4-5 days per week
 - Four primary aircraft (UH-60L*, UH-72A*, OH-58C, C-12)
 - Additional aircraft (variable stability Learjet, 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. MD-500C, MD-530F, S-55T, variable stability UH-1)



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- * BIG BOY RULES: You will be a PC in both aircraft after only 10 hours of training and evaluation (single pilot PC when flying with an engineer). At 20 hours you will strap on a parachute and oxygen mask, and will take the aircraft to 20,000' MSL.



USNTPS Overview (4 of 5)



- Rotary Wing Syllabus

- Rotary wing performance
- Fixed wing performance
- Systems (FLIR, radar, digital communication, etc.)
- Flying qualities, stability and control
- Human factors, pilot-vehicle interface
- Variable stability labs and flights (4x Calspan Learjet, 1x Canada NRC UH-1)
- Flight control systems
- Autorotation and H-V diagram assessments (OH-58C)
- High lift/drag (X-26 glider)
- Qualitative evaluations





USNTPS Overview (5 of 5)



- DT-IIA Capstone Exercise (approximately 1 month)
 - Consists of a comprehensive plan, test, and report on an unfamiliar aircraft at an unfamiliar location (i.e. France, Brazil, Germany, Sweden, England)

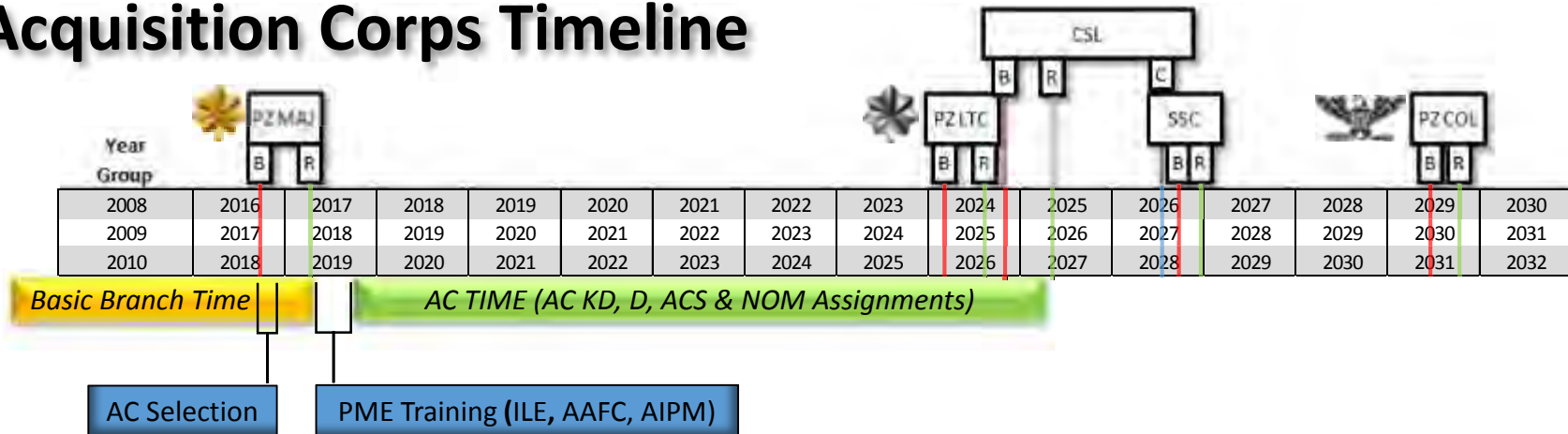




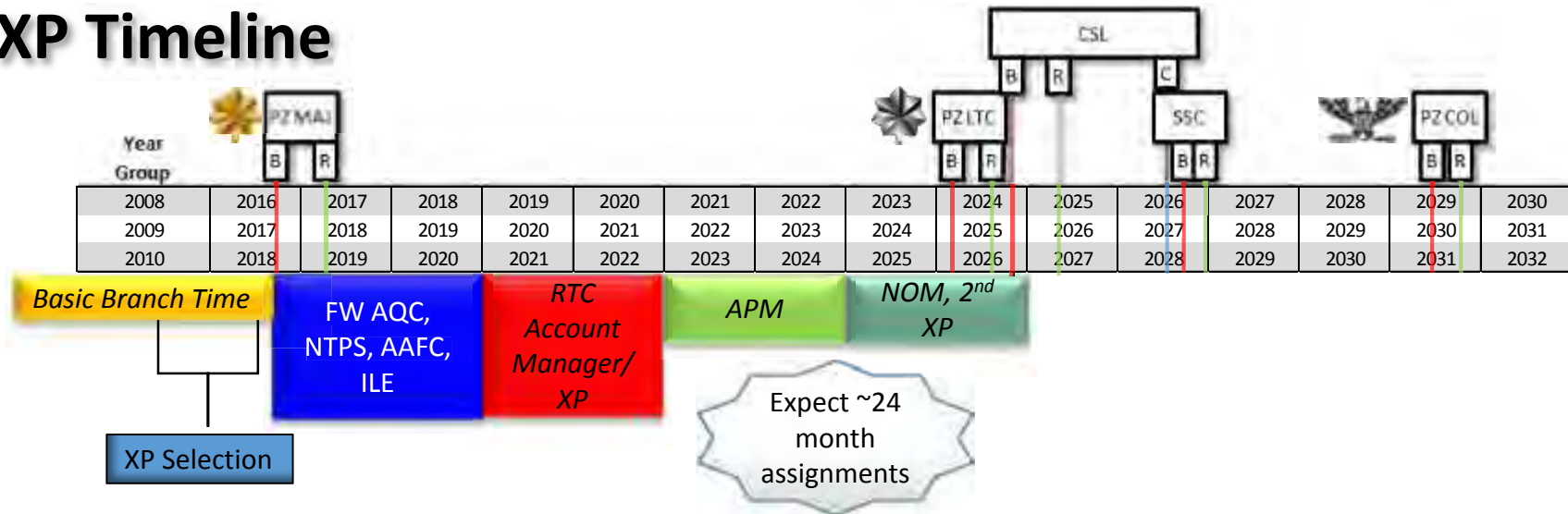
XP Career Progression - Officer



Acquisition Corps Timeline

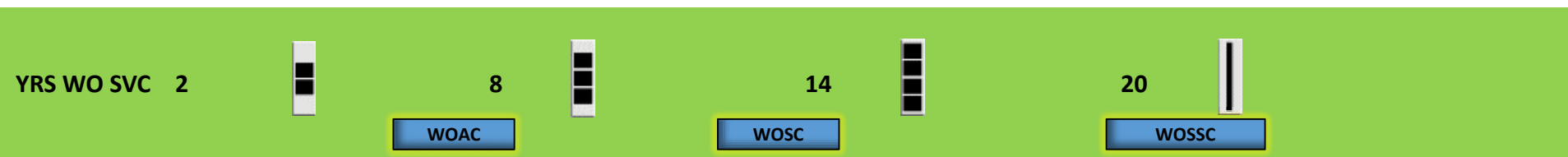


XP Timeline





XP Career Progression - Warrant



Standard WO Timeline

IP, MP, TACOPS, Safety

*CO level and above:
SP/IE, MP, TACOPS, Safety*

*BN level and above:
SP/IE, ME, TACOPS, Safety, BAMO, Master Gunner, Staff Positions*

*BDE level and above:
CWOB, SP/IE, ME, TACOPS, Safety, BAMO, Master Gunner, Staff Positions*

XP WO Career Path

Think of XP as a second track after your primary track

IP, MP, TACOPS, Safety

XP Selection

C-12 AQC, NTPS

Opportunities:

- Graduate School
- Multiple Transitions
- Broadening Assignments (HRC, TCM, PM, USAACE, etc.)

RTC XP, Test Director, SP/IE/MP, System SME (24-36 months)

*"Regreening" Opportunities CO/BN level and above:
SP/IE, ME, TACOPS, Safety, BAMO, Master Gunner, Staff Positions, TCM, USAACE Positions (12-24 months)*

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

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



Frequently Asked Questions



- What is the recommended timeline to pursue “competing” career opportunities (160th SOAR, grad school, etc.)? It depends...
- Can Medical Service officers apply? Yes
- I am an OH-58D Aviator, what aircraft would I fly?
Whatever platform we need pilots to fly, subject to transition course availability.





How to Apply



- Read the MILPER message:
<https://www.hrc.army.mil/MILPER/17-016>
- 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)
- Submit a packet!



Web Links



- MILPER 17-016
<https://www.hrc.army.mil/MILPER/17-016>
- 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=LP_0ZIEY8T4
<https://www.youtube.com/watch?v=WFkyYYH6Zgc>



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