# 61C/61D Scientist Officers: Chemists and Physicists

# **MISSION**

Cost effectively modernize to deliver capability to the warfighter when needed

# VISION

Deliver enduring world class capabilities to assure air, space, and cyberspace dominance for the nation and our allies

#### **USAF ACQUISITION ENTERPRISE**

Air Force Installation and Mission Support Center Air Force Life Cycle Management Center Air Force Materiel Command Air Force Nuclear Weapons Center Air Force Research Laboratory Air Force Sustainment Center Air Force Technical Applications Center Air Force Test Center **Defense Contract Management Agency DoD Agencies Green Door Assignments** National Air and Space Intelligence Center National Reconnaissance Office Non-DoD Agencies Office of the Assistant Secretary of the Air Force for AT&L **Space Operations Command** 

**Space Systems Center** 

#### **FUNDAMENTAL PART OF ACQUISITION COMMUNITY**

Assignment opportunities throughout the lifecycle of Air Force systems, which includes early research and development of new technologies, design, testing, and fielding of new systems, and support for fielded systems engaged in day-to-day operations.



#### **DEVELOPMENT / EDUCATION / CAREER BROADENING OPPORTUNITIES**

**Acquisition Instructor Course** Advanced Academic Degree **CSAF Prestigious PhD Program** Developing Airmen We Need – Education Dr. Heather Wilson STEM PhD Program **Education with Industry** Engineer and Scientist Exchange Program **Faculty Pipeline** Officer Instructor & Recruiting Special Duty **Operational Experience** Special Experience Exchange Duty Programs Test Pilot School T-Prefix Direct Hire **USSOCOM Ghost Program** 180/365-Day Deployments 63A (Program Manager) Assignments

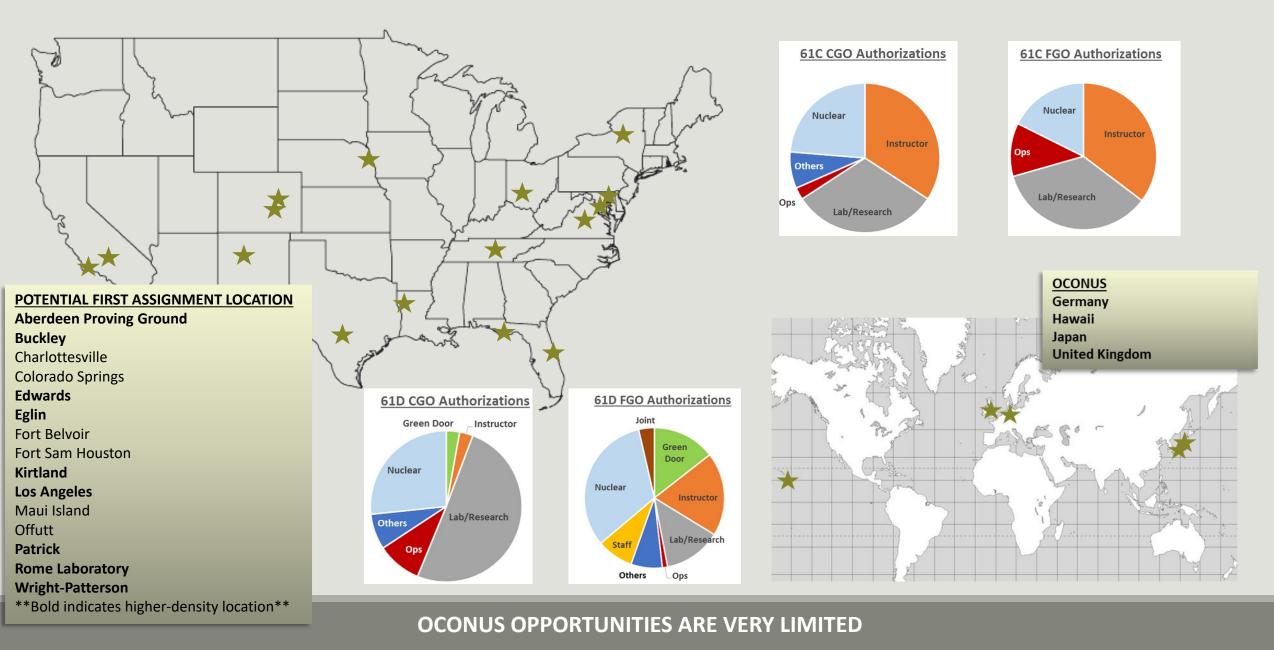
#### **DOMAINS/CAPABILITY AREAS**

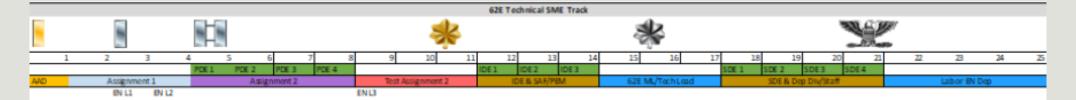
Air Space Cyberspace Weapons Nuclear Software

#### **FUNCTIONAL AREAS**

Program Management
Engineering
Test and Evaluation
Production, Quality, and Manufacturing
Basic Research and Laboratory Operations
Academia

# **61X-Coded Position Locations**





## Assignments 1-3

- At least one lab
- One PO or other acq (e.g., lab, test)
- One academia
  - PhD student
  - Instructor

#### **Experience**

- Technical expertise
- Variety of programs throughout the acq life cycle (concept/requirements development, system development, production, sustainment)
- Strong performance in all jobs

#### \*Plus experience

- · Technical expertise and acknowledged leader in a given field
- Programs of varying sizes and platforms (multi-domain)
- Exec/CAG/Staff

## Education

- PhD in a technical field
- · Masters degree in technical field or systems engineering
- SOS in-residence (Capt)

#### Training & Certifications

- APDP Engineering Level 1 (CGO)
- APDP Engineering Level 2 (CGO)

# Maj & Lt Col Experience

- SAF/HAF/HQ SF/MAJCOM tour(s)
- Exec/CAG/Staff
- Successful ML/tech lead or Sq/CC tour
- Joint experience (OSD, Jt Staff, COCOM, or JPO)
- Strong performance in all jobs

#### Education

- IDE (in-residence preferred)
   (PhD may be able to fulfill IDE in-residence)
- SDE (in-residence preferred)

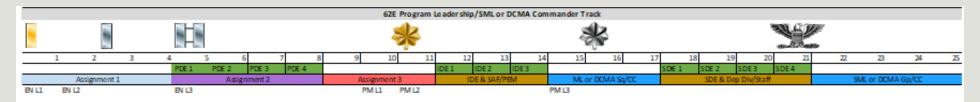
#### **Training & Certifications**

- APDP Engineering Level 3 (Maj or Lt Col)
- APDP certification in another career field

#### Interpersonal Skills

- · Critical thinking, strategic vision
- Effective communication
- Conflict resolution
- Effective negotiating
- Team building
- Management and organization

# **COMMON CAREER TRACK FOR 61X OFFICERS: TECHNICAL SME**



#### Assignments 1-3

- At least one Program Office (PO) with 62E and 63A time
- One other
  - Career broadening (e.g., OPEX, SPEED, EWI)
  - Institutional requirement (e.g., ROTC, recruiting, OTS instructor)
- Another PO or other acq org (e.g., lab, test, DCMA)

#### Experience

- Variety of programs throughout acq life cycle (basic research, requirements development, system development, production, product support)
- · Programs of varying sizes and platforms across domains
- Operational experience and/or deployment
- Technical experience
- · Strong performance in all jobs

#### \*Plus experience

- Competitively-selected for acq programs (e.g., EWI, Ghost)
- Competitively-selected operational experience (e.g., SPEED)
- · Green Door assignment
- Exec/CAG/Staff
- "Innovation" assignment (e.g., AFWERX, Software Factory)

#### Education

- · Masters degree in a technical field
- SOS in-residence (Capt)

#### **Training & Certifications**

APDP Engineering Level 1 (CGO)

#### Maj & Lt Col Experience

- SAF/HAF/HQ SF/MAJCOM tour(s) (PEM preferred)
- Exec/CAG/Staff
- Successful 62S ML, 63S ML, or Sq/CC tour (DCMA or non-acq)
- Joint experience (OSD, Jt Staff, COCOM, or JPO)
- Strong performance in all jobs

#### Education

- IDE (in-residence preferred)
- SDE (in-residence preferred)

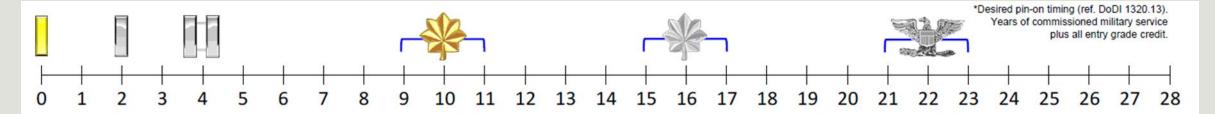
#### **Training & Certifications**

- APDP PM Level 3 (Lt Col)
- PMT 401 (Lt Col)
- PMT 402 (Col)

## Interpersonal Skills

- Business acumen
- Critical thinking, strategic vision
- Effective communication
- Conflict resolution
- Effective negotiating
- · Team building
- · Management and organization

# **COMMON CAREER TRACK FOR 61X OFFICERS: TECHNICAL LEADERSHIP**



## Functional Area Experiences (CGO):

- Air Force Research Labs, Air Force Technical Applications Center, Air Force Drug Testing Laboratory, Defense Threat Reduction Agency
- Lead Scientist, Test Manager, Mission Manager

# Formal Education/Training:

- · Initial/Advanced Skills Training
- APDP STM/EN/Test Level I & II
- O-3 PME (PDE): Squadron Officer School

#### Special Experiences:

- Career Broadening: EWI, OPEX, SPEED
- Innovation: AFWERX, DIU, Kessel Run, Kobayashi Maru/SpaceCAMP, LevelUp
- Instructor: PME, ROTC, OTS, USAFA, AFIT
- Executive Officer
- Traditional Program Office
- Deployment, Air Advisor, ABDAR
- Flight Test Engineer (TPS)

#### Functional Area Experiences (FGO):

- Lab, Center and Agency Staff, Air Staff (SAF/AQ)
- Materiel Leader, Sq/CC, Det/CC, Branch Chief, PEM

#### Formal Education/Training:

- O-4 PME (IDE): ACSC/equiv (DL or residence)
- O-5 PME (SDE): AWC/equiv (DL or residence)
- APDP STM/EN/Test/PM Level II & III.

## Special Experiences:

- Instructor: PME, ROTC, OTS, USAFA, AFIT
- Recruiting & Training/CC
- ❖ AFDTL/CC
- Executive Officer
- Deployment, Air Advisor, ABDAR
- AFPC Assignment Officer

## Functional Area Experiences (O-6):

- HAF(Office of the Chief Scientist), MAJCOM, Agency, Center Chief Scientist Offices, Chief Developmental Tester
- Senior Materiel Leader, Gp/CC, Director, Dep Director, Division Chief, Dep Division Chief

#### Formal Education/Training:

- Advanced Academic Degree (MS or PhD)
- APDP STM/EN/Test/PM Level III.

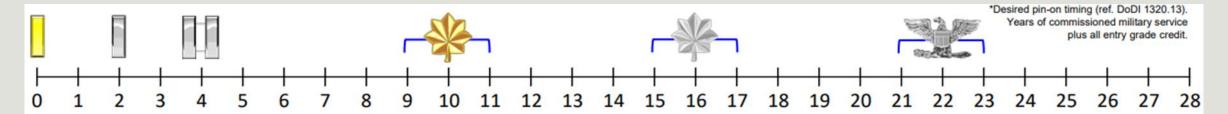
#### Special Experiences:

- USAFA/AFIT Permanent Professor/Dept Head
- Deployment

#### Formal Instructor & Recruiting Duty:

Career broadening tour target is typically the 2<sup>nd</sup> or 3<sup>rd</sup> assignment. Instructor and recruiting tour target is between promotion milestones.

# **OVERALL 61C CAREER PROGRESSION**



## Functional Area Experiences (CGO):

- Program Office, Agency, Lab, Center, Test
- Lead Scientist/Engineer, Test Manager, Mission Manager
- Experience in multiple domains
- Operational Experience

# Formal Education/Training:

- Initial/Advanced Skills Training
- APDP STM/EN/Test Level I & II
- O-3 PME (PDE): Squadron Officer School

#### Special Experiences:

- Career Broadening: EWI, OPEX, SPEED
- Innovation: AFWERX, DIU, Kessel Run, Kobayashi Maru/SpaceCAMP, LevelUp
- Instructor: PME, ROTC, OTS, USAFA, AFIT
- Flight Test Engineer (TPS)
- Executive Officer
- Deployment, Air Advisor, ABDAR

# Functional Area Experiences (FGO):

- · Program Office, Agency, NAF/Center, Lab
- Air Staff, MAJCOM Staff, NAF/Center Staff
- Materiel Leader, Sq/CC, Det/CC, DO, ADO, PEM, Branch Chief
- Experience in multiple domains
- Operational Experience

## Formal Education/Training:

- O-4 PME (IDE): ACSC/equiv (DL or residence)
- O-5 PME (SDE): AWC/equiv (DL or residence)
- APDP STM/EN/Test/PM Level II & III

#### Special Experiences:

- Instructor: PME, ROTC, OTS, USAFA, AFIT
- Recruiting & Training/CC
- AFTAC Sq/CC
- Executive Officer
- Deployment, Air Advisor, ABDAR
- AFPC Assignment Officer

# Functional Area Experiences (O-6):

- HAF(Office of the Chief Scientist), MAJCOM, Agency, Center Chief Scientist
- Senior Materiel Leader, Gp/CC, Director, Dep Director, Division Chief, Dep Division Chief
- Experience in multiple domains
- Operational Experience

# Formal Education/Training:

- Advanced Academic Degree (MS or PhD)
- APDP STM/EN/Test/PM Level III

#### Special Experiences:

Deployment

# Formal Instructor & Recruiting Duty:

Career broadening tour target is typically the 2<sup>nd</sup> or 3<sup>rd</sup> assignment. Instructor and recruiting tour target is between promotion milestones.

# **OVERALL 61D CAREER PROGRESSION**