UNITED STATES

SPACE FORCE

Artificial Intelligence Across The Force

Mehmed Ali, PhD
Space Delta XIII
April 2025

Space Force Professionals Have Expertise In:

Acquisition	Engineering	Cyberspace	Intelligence	Space Operations	Digital Software

SPACE WARFIGHTING
A Framework for Planners

UNITED STATES
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Space Force Doctrine Document 1
THE SPACE FORCE

UNITED STATES
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Space Capabilities
Strengthen Operations
Across All Warfighting Domains And
Reinforce Every Joint Function

Unfettered Access To And
Freedom To Operate In And From
Space Are Vital National Interests

As Space Intersects with All Domains, Education and Training Intersect with All Professional Fields
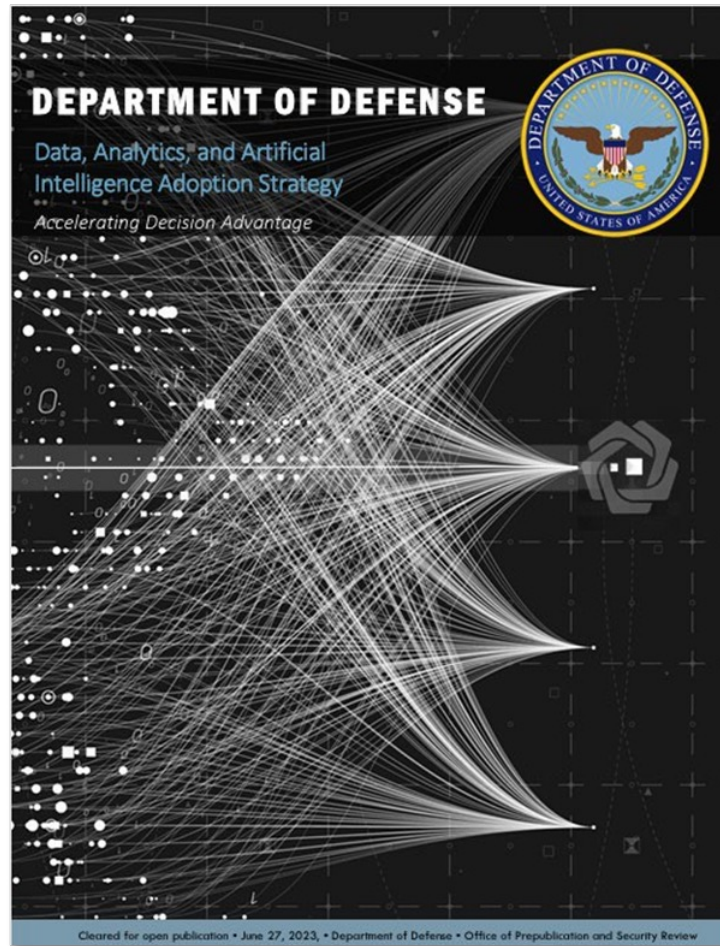
Cavalier

New Boston

MIT LL

Clear

Wright-Patterson

Cape Cod

Buckley

HQ Space Force

Schriever

Cheyenne Mountain

Nellis

Beale

Andrews

Edwards

Peterson

Vandenberg

Los Angeles

Maxwell

Maui

Kirtland

Kaena Point

Cape Canaveral SFS

Space Force Locations

Air Force Installations with Significant Space Missions
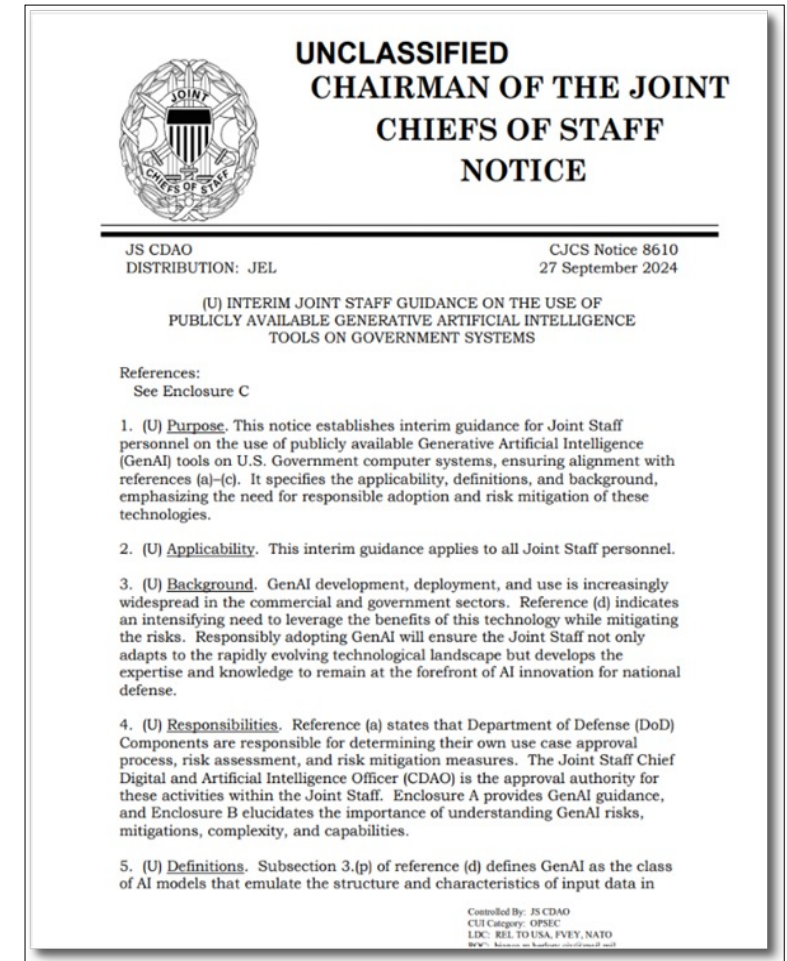
Eglin

Patrick SFB

Three Field Commands: Space Operations Command (SpOC) @Peterson, Space Systems Command (SSC) @Los Angeles, and Space Training and Readiness Command (STARCOM) @Peterson. Space Delta XIII HQ at JB Andrews, units at Peterson, Maxwell, and MIT Lincoln Labs

DoD and Joint Chiefs Guidance

"Responsibly and rapidly realizing the full promise of data, analytics, and AI is not the sole job of a single organization or program; _it's on all of us._ Providing DoD data as an enterprise resource, for instance, requires more sharing and collaboration, not less. We seek an agile strategic approach that **guides decentralized action** across DoD, **inspires campaigns of learning**, and **leverages all our people, processes, and enabling technologies**." – 2023 Adoption Strategy Foreword
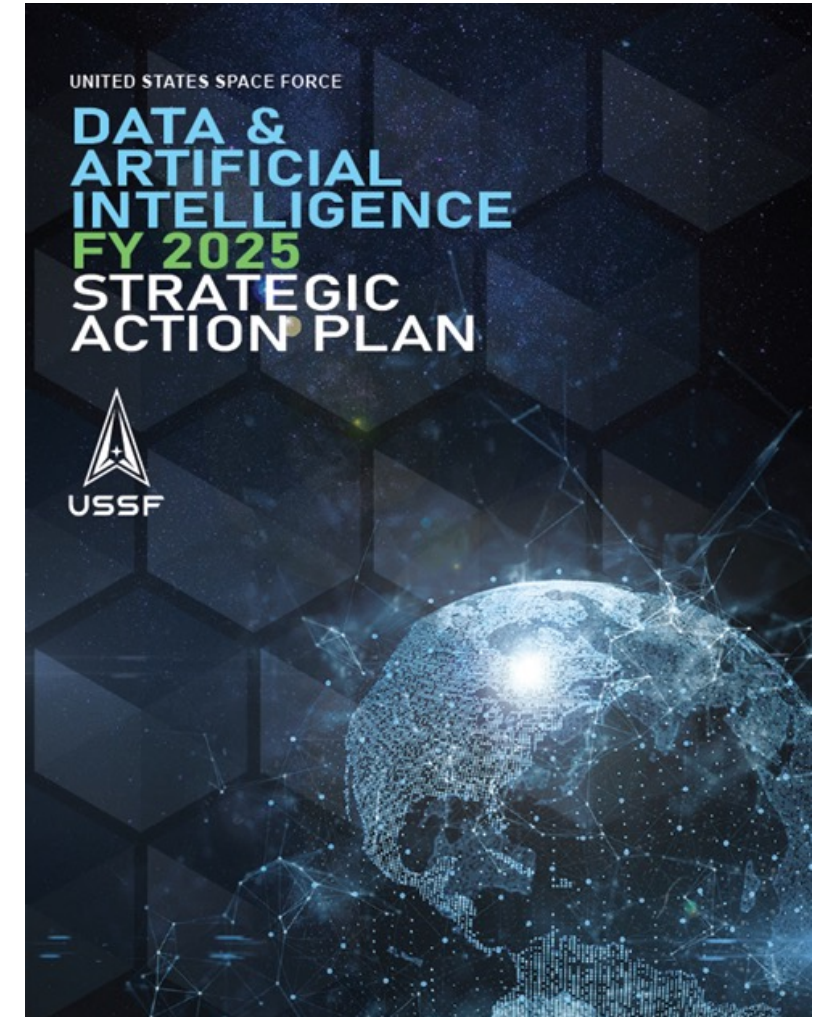
Space Force Initiatives

- **USSF Data and AI Strategic Action Plan**
- **USSF AI Innovation and Adoption WG**

- Develop roadmap for deploying enterprise AI capabilities

-Review and validate all USSF use cases in CLARA

-Host USSF AI innovation Challenge

-Identify issues related to AI adoption

-Identify and develop plan to scale AI readiness through workforce programs that Prioritize skill development

- **USSF Gen AI Hackathon**
- **Chief Data and AI Officers at HQSF and at Field Command Levels**
  - **Chandra Donelson (HQSF)**
  - **Michael Ficken (SpOC)**
  - **Tracy Rousseau (STARCOM)**
  - **Bart Stewart (SSC)**

Space Force Education Initiatives

Defense Innovation Unit Bootcamp

Guardian AI Bootcamp
Virtual 1 Week Course
May 2025

Training Objectives:

(1) Foundational knowledge of AI and its Space Force applications.

(2) Proficiency in prompt engineering for generative AI systems.

(3) Practical experience using a human-centered design approach for AI solutions.

(4) Opportunity to apply learned skills to a capstone project addressing real-world Space Force challenges.

"Semper Supra"

Space Force Education Initiatives

- **In collaboration with USSF Chief Data Officer and USSF Chief Scientist, Space Delta XIII working on potential AI Familiarization Course for civilian Guardian cohort**
- **In collaboration with AFRL, Space Force received 15 licenses to Pryon where Guardians are test driving the platform to explore functionality**
- **Undertaking pilot projects utilizing Small Language Models and Retrieval-Augmented Generation to allow discernment and discretion:**
  - **Education policies and documents – OPMEP, Delta XIII Education Vision and Roadmap, Education With Industry Capstones, etc.**
  - **Upcoming initiative where USSF will be gaining 2000 licenses to AskSage**

MATURE · ADVANCE · REOPTIMIZE · STRENGTHEN

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UNCERTAINTY QUANTIFICATION FOR AI

COMMERCIAL SPACE SITUATIONAL AWARENESS

UNITED STATES SPACE FORCE

U.S. SPACE FORCE DATA, ANALYTICS, & AI PUBLICATION

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Places to Get Smart

DAU Course CENG 003: AI Foundations for the DoD Credential

Digital University: MIT Horizon

Google: Machine Learning Crash Course

Microsoft: AI For Beginners

IBM: AI For Everyone

Stanford: Machine Learning Specialization

Harvard: Intro to Artificial Intelligence

Vanderbilt: Prompt Engineering Specialization

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Do Aliens Exist?