ANNEXES

PARTNERSHIPS

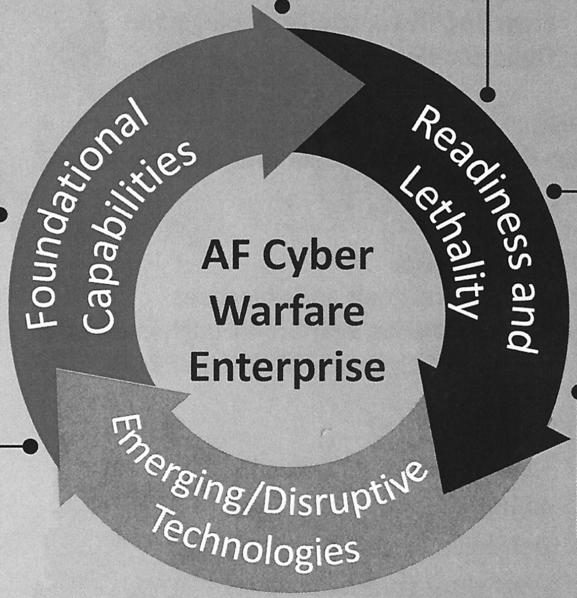
Bolstering our intra-agency, interagency, national and service labs, commercial, academia, and international partnerships will bring a unified, multilateral community of interest to counter adversaries in the cyberspace domain and electromagnetic spectrum.

ISR FOR AND FROM CYBER OPERATIONS

When the Air Force adopts new technologies, it introduces new avenues to collect intelligence, drive operations, and achieve objectives. Leveraging this intelligence will provide indications and warning, threat intelligence, collection, targeting, and force protection support for and from cyberspace operations.

HUMAN CAPITAL

Our enterprise requires skilled, experienced Airmen who can understand and shape cyber operations from the tactical through strategic levels. We must continue to develop Airmen who possess the ability to fuse actions across cyber, ISR, electromagnetic warfare and information operations in order to deter and compete with peer adversaries.


AF Cyber Warfare Enterprise
Foundational Capabilities
Readiness and Lethality
Emerging/Disruptive Technologies

EMERGING TECHNOLOGIES

Success in the cyber domain requires the Air Force to innovate faster than its adversaries. Technology underpins every mission within the Air Force. Therefore, it is imperative that we accelerate the development and roll-out of next generation infrastructures and platforms, eliminate stove-piped capabilities, establish a data strategy, and unleash the power of Artificial Intelligence.

OFFENSIVE CYBER OPERATIONS

Adversaries with less restrictive bureaucracies, seamless whole-of-nation control, and fewer scruples will continue to threaten the United States. As a result, there is a need to expand offensive cyber operations capabilities, develop an offense-focused workforce, and integrate with partners to counter these threats.

DEFENSIVE CYBER OPERATIONS

Rapid technology development and low cost solutions enable our adversaries to acquire technology with minimal investment, giving them increased capabilities to threaten Air Force power projection weapon systems. Investing in new, innovative, and disruptive defensive capabilities will enable the Air Force to counter these threats to operational dominance in cyberspace and across all domains.

WARFIGHTER COMMUNICATIONS

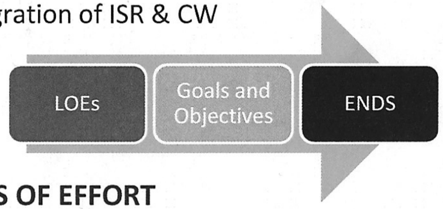
Adversaries will limit the Air Component Commander's freedom of movement in, through, and from the electromagnetic spectrum and cyber domain, thereby degrading the ability to command and control forces. Providing globally assured resilient communications ensures that the Air Component Commander can compete, deter, and win in a military conflict.

Poised to project power, defend our power projection, and provide secure, global, and resilient communications

HIGHLIGHTS

OPPORTUNITY

Transform our thinking, planning, concept development, and capability employment to deliver synergistic effects through the integration of ISR & CW



LINES OF EFFORT

LOE 1: FOUNDATIONAL CAPABILITIES

- Create Cradle-to-Grave Talent Management
- Field Agile, Scalable, Modular Cyber Warfare Training

LOE 2: READINESS AND LETHALITY

- Grow OCO & DCO Capabilities
- Modernize Warfighter Capabilities: Develop Enterprise HF Architecture
- Field & Standardize Mission Defense Teams

LOE 3: EMERGING/DISRUPTIVE TECHNOLOGIES AND OPPORTUNITIES

- Field Open Architecture Infrastructure & Platform(s) for Data
- Accelerate Development to Bring New Capabilities to the Fight

"We are in competition today, we prepare to fight and win tomorrow, and our proven capabilities in ISR & Cyber Warfare are critical aspects of deterrence."

- Lt Gen Dash Jamieson
Deputy Chief of Staff, Intelligence, Surveillance,
Reconnaissance, and Cyber Effects Operations

FLIGHT PLAN FRAMEWORK

ENDS

The Air Force Cyber Warfare (CW) Enterprise is poised to project power, defend our power projection capabilities, and provide secure, global, and resilient communications through the Collaborative Sensing Grid

WAYS: 3 LINES OF EFFORT

1. Foundational Capabilities
2. Readiness and Lethality
3. Emerging/Disruptive Technologies & Opportunities

MEANS

Balance risk of trade-offs to inform strategy-driven resource allocation

FUTURE PATHWAYS

- Prioritize critical goals and objectives
- Pivot to Information Warfare through integration of individual disciplines...ISR, CW, EW & IO

ANNEXES

A. Human Capital
B. Offensive Cyber Operations
C. Defensive Cyber Operations
D. Warfighter Communications
E. Emerging Technology
F. ISR for & from Cyber Ops
G. Partnerships

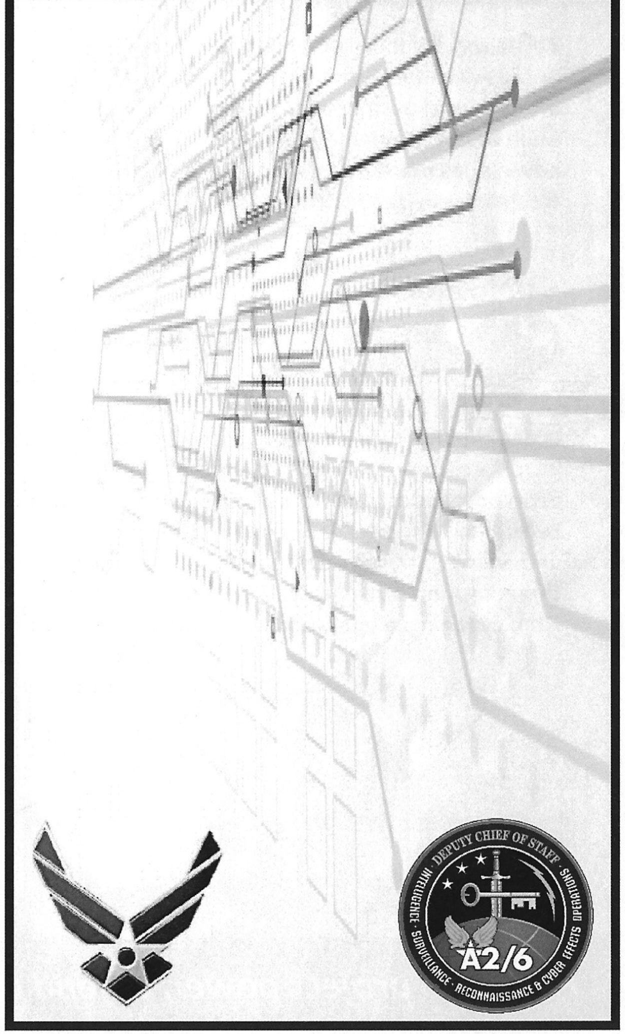
☆ ☆ ☆

Lt Gen Dash Jamieson
Deputy Chief of Staff, Intelligence, Surveillance,
Reconnaissance, and Cyber Effects Operations

HQ AF/A2/6
1700 Pentagon Air Force
Washington, DC 20330-1700

Air Force Cyber Warfare Flight Plan

2020 - 2030


DEPUTY CHIEF OF STAFF · INTELLIGENCE · SURVEILLANCE · RECONNAISSANCE & CYBER EFFECTS OPERATIONS
A2/6