24th Air Force

Cyber Proving Ground

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What is the CPG?

The Cyber Proving Ground (CPG) *Identifies*, *enables*, **and** *accelerates* **the fielding of innovative, operationally-relevant concepts and technologies found within commercial industry, academic institutions, and government organizations in order to advance Air Force, joint, and coalition cyberspace operations capabilities.**
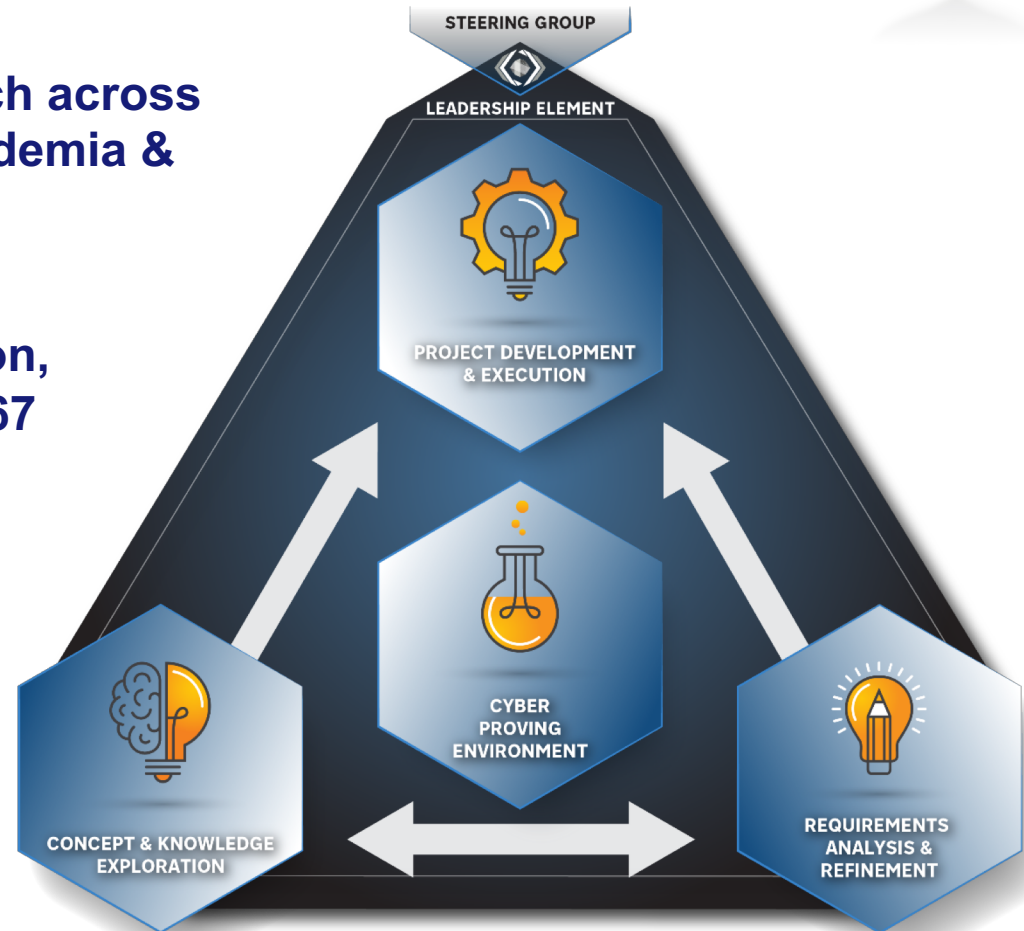
CPG Lines of Effort

- **Identify**
  - Innovation & Emerging Tech across Industry, Commercial, Academia & Government entities
  - Discovery Library
  - 24 AF processes: Innovation, Emerging Tech & CNFs/1067
- **Enable**
  - Vendor Demonstrations
  - User Training Sprints
  - Unclas Environment for creative exchange of info/ technology / capabilities
- **Accelerate**
  - Deliver Quick, Innovative Solutions

STEERING GROUP

LEADERSHIP ELEMENT

PROJECT DEVELOPMENT & EXECUTION

CYBER PROVING ENVIRONMENT

CONCEPT & KNOWLEDGE EXPLORATION

REQUIREMENTS ANALYSIS & REFINEMENT

CPG Scenario

♦ **Capability/Info sent to 24 AF Technology Office**

 – **White Paper, BBP, Technology Brief**

♦ **TO Team Review**

 – **Team vectors and catalogues your info**

♦ **Innovation / Emerging Tech / Core CNF/1067**

 – **Based on vector – capability meets CPG Steering Group**

 – **Confirmation to engage in CPG effort**

 – **Vendor Demo/Assessment scheduled with operator**

♦ **24 AF/A8/9 & AFLCMC Processes**

 – **AAR accomplished with way ahead recommendation**

 – **A8/9 & LCMC process engage to move effort to sustainability**

CPG Timelines/Prioritization

♦ **Timelines for CPG efforts are driven by a quick assessment/evaluation of a capability**

   – **Efforts align to three areas:**

   • **Innovation**

   • **Emerging Technology**

   • **Standard 24 AF Cyber Needs Form (CNF) & ACC 1067 process**

   – **CPG efforts aligned to 24 AF/CC prioritizations**

   • **Formalized Steering Group Process – concurrence from key members within the NAF (67 CW, 688 CW, 24 A8/9 and partner AFLCMC)**

Range of CPG Activities

Problem Analysis

Technical Evaluations

Military Utility Assessments

Capability Demonstrations

Technology Challenges

Operational Assessments

Grass-Roots Innovation & Integration

Current Projects

DISCOVERY

- Breach Detection Systems
- Commercial Threat Intelligence
- Data Loss Prevention

REQUIREMENTS →

RQTS DRIVEN

- Realistic Traffic Generation
- Cyber Replay

RECOMMENDATION →

- 24 AF A8/9
- SPO/PMO

Innovation occurs across the range of CPG activities, whether through the exploration of new technologies and capabilities, or via identifying the "art of the possible" with existing capabilities

Where We Are Today…
Foundry Floor / Cyber Proving Environment

Foundry Floor

- Large, unclassified, reconfigurable space
- Outside the confines of a military installation
- Access to commercial internet
- Close proximity to many of our weapon system SPOs
- Access to operators

Cyber Proving Environment

- Robust vendor integration environment as well as the ability to emulate tactical USAF enclaves and services for demonstrations and adjudication activities

Wrap-up

- ◆ **CPG is constantly…**
  - – **Identifying new technology/capabilities**
  - – **Focus on 24 AF/CC prioritizations – op capabilities**
  - – **Communicating/Collaborating with you…partnerships**

- ◆ **Why of interest to you?**
  - – **CPG is a resource to leverage today**
  - – **Provides broad SA of innovation efforts across academia, government, commercial and industry**
  - – **Lessons we learn serve as a model for similar efforts within other Services**

- ◆ **Contact 24 AF: 24AF.TO.Technologyoffice@us.af.mil**

CPG provides...

- **The ability to assess and evaluate relevant capabilities**
  - Staying ahead of our adversaries and rapid techology changes
  - Maintain SA on innovation across industry, academia, govt
- **The ability to better capitalize on opportunities**
  - Tapping into pools of innovators that already exist
  - Pivots the acquisition processes to address emerging threats
- **The ability to field opportunities quickly**
  - Meeting operational demand signals via collaborative partnerships
  - Tighter integration of operator and ops commander early on
  - Efforts are not long term – streamlines acq processes

Rapid assessment and evaluation of relevant capabilities focused at meeting operational needs/requirements

Questions?