Squadron Officer College

Developing Aerospace Leaders, Shaping the Air Force Future

THEATER AIRPOWER
VISUALIZATION

U.S. AIR FORCE

Today’s Young Warriors – Tomorrow’s Warrior Leaders
Theater Airpower Visualization

U.S. Air Force

Approved for public release, distribution unlimited

A1230 Force Packaging  
(TAV Package Q Replay)
A1250 AFEX
AIR FORCE EMPLOYMENT EXERCISE
A1250 AFEX

• Primary emphasis: students learn to use TAV user interface to plan and control air missions

• Students explore and apply academic lesson material taught in first week: A1210 Air and Space Systems and Capabilities, A1220 Air and Space Power Functions, A1230 Force Packaging

• Orients students to AOR (prep for A1380 AIRGAP) through combat execution

• Experiential learning and decisionmaking

• Stimulates student questions and discussion about initial academics – use the opportunities to TEACH
• Classroom is divided into four WOC teams plus a central AOC cell to plan and coordinate operations
• Each WOC is assigned a combat wing with flights of F-15/F-16 aircraft loaded to perform various roles
• AOC develops an informal mission plan and WOCs command force packages to achieve air dominance through SWEEP/SEAD/STRIKE
• Two WOCs on each coast work as a team against an assigned coastal target area
• Team East attacks 3 enemy airbases on east coast
  Team West attacks 3 enemy airbases on west coast
A1370 Team Forces

• Each student WOC team commands a Coalition F-15 or F-16 wing at an airbase:
  • Primary mission aircraft loaded with bombs: BSU-50 2,000# and BSU-49 500#
  • Sweep/Escort aircraft loaded with counterair and SEAD loads
Detached Support

- Each WOC has a dedicated tanker track and tankers. Tankers fly to the tracks but may be retasked anywhere.
- Each WOC owns either an E-3 AWACS or RC-135 Rivet Joint. Assets fly to their track but may be retasked.
  - AWACS detects airborne enemy aircraft but doesn’t identify types.
  - Rivet Joint identifies airborne enemy aircraft as well as enemy search radars.
A1250 AFEX

- Only six airbases with MiGs are displayed on AOR map
- Three target airbases on each coast
- JIPTL prioritizes targets based on aircraft type at enemy airbase
A1250 Teaching Tips

• Take time to play the scenario yourself so you know it well

• Focus your students on winning air superiority and attacking their target airbases with fighter-bombers

• Point out weapon differences (missile types and bomb types) to better prepare for AIRGAP

• Let students have fun playing TAV and learning the interface

• The more students play, the more they learn about airpower!
A1380 AIRGAP
DISTINCTIVE CAPABILITIES EXERCISE
• Primary emphasis of block is exploring and reinforcing the six USAF Distinctive Capabilities
• Exercise also highlights many of the USAF Air and Space Power Functions
• Emphasizes teamwork between 4 discrete forces and integration/synchronization of diverse operations. Builds on AFEX basic teamwork
• Prepares students for Joint Air Estimate Process (JAEP) module of lessons
• Prepares students for Blue Thunder III capstone wargame
Objectives for each AIRGAP team:

- **Information Superiority**
  Maintain situational awareness over AOR
  Find strategic targets for Global Attack team

- **Air Superiority**
  Neutralize enemy MiG and SAM forces
  Protect forces from other teams

- **Rapid Global Mobility & Agile Combat Support**
  NEO US civilians, deliver Patriot battery, and sustain Coalition air operations

- **Global Attack & Precision Engagement**
  Neutralize enemy C3 and WMD

- **Counterland (Artificial Intelligence Player)**
  Repel enemy ground invasion
Threat Environment

- Threats cued by early warning search radars, and controlled by command nodes for effects-based targeting
- MiGs with radar and IR air-to-air missiles are aggressively patrolling enemy airspace:
  - Su-30 Flanker (AA-12 Adder) AIRGAP ONLY
  - MiG-29A Fulcrum (AA-10 Alamo)
  - MiG-23ML Flogger (AA-7 Apex)
  - MiG-21MF Fishbed (AA-2 Atoll)
- Airspace is defended by dense IADS surface-to-air missile (SAM) network of SA-2, SA-3, and SA-5 (no SA-5 in A1370) plus MiG interceptors, and anti-aircraft artillery (AAA)
- Threats are similar to those seen in Blue Thunder III
A1380 AIRGAP Debrief

Today’s Young Warriors – Tomorrow’s Warrior Leaders
Debriefing Resources

- To the extent TAV software permits, AIRGAP is scored to match EXORD objectives (Centralized Control, Decentralized Execution).
- Right-click in the second box from the lower left on the interface for the debrief menu.
Victory Conditions
Crashed Flights
Target Status
# Prioritized Target List

## Prioritized Target Dialog

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[Image of Prioritized Target List]
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Questions?

SQUADRON OFFICER COLLEGE

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SUMMARY

• Overview
• Air and Space Basic Course Background
• Expeditionary Airbase Simulation
• Theater Airpower Visualization
• Summary