AFCEA/GMU Symposium
"Critical Issues in C4I"

COALITION AIR OPERATIONS
IN OPERATIONS
ENDURING FREEDOM
AND
IRAQI FREEDOM

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OEF/OIF Timeline

- **OEF Campaign Start:** 7 Oct 2001
- **Initial SOF Entry AFG:** 19 Oct 2001
- **Mazar-e-Sharif Capture:** 9 Nov 2001
- **Kabul Capture:** 13 Nov 2001
- **Taliban Regime End:** 18 Dec 2001
- **Operation Anaconda:** 2 March – 18 March 2002
- **OIF Initiation:** 19 March 2003
- **Major Air Strikes Initiated in Iraq:** 21 March 03
- **Baghdad Capture/Regime Ends:** 9 April 03
- **Major Military Operations End OIF:** 14 April 03
- **Major Combat Operations End OEF:** May 2003
**OEF Coalition Information**

- **Participating Countries:** 50
  - Australia, Belgium, Canada, Czech Republic, Denmark, Germany, France, Greece, Italy, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Romania, Spain, Sweden, Turkey, UK
- **Countries providing aircraft:** 20
  - P-3, F/A-18, C-130, KC 135, A-310, CC-150, CP-140, CC-130, TU-154, F-16, C-60, Mirage, Atlantique, B-707, AN-124, IL-76, KDC-10, MIG-21
- **Aircraft:** 18 Different types; over 100 airframes
- **Number of Coalition Personnel (Over 3000)**

Note: Reflect OEF-AFG and OEF-HOA ops
OEF Challenge: Support Indigenous Forces

- Eliminate Taliban air threat
- Protect coalition special forces and Northern Alliance
- Increase Northern Alliance effectiveness
- Surveillance & Reconnaissance
- Mobility & Logistics
OIF Coalition Information

- Participating Countries: 66
  - 49 public support, 11 private support, 6 non-coalition support

- Number of Personnel: 42,987
  - British, Australian, and others

- Number of Aircraft: 138
  - Fighters, C2, Tankers, ISR, Sp Ops/Rescue, Airlift

- Number of Sorties: 3046

- Number of Weapons released: 803
  - 679 Guided

Note: Numbers reflect Major Combat Ops only
OIF CFACC’s “5 Fights”

- Counter-Air
- Counter-TBM
- Counter-Land
- Regime / Leadership
- SOF Support
Coalition Campaign Planning

- 66 nations participated in/supported OIF... either publicly or privately -- Coalition contributions allowed a quick and successful campaign
- CFACC Host Nation/LNO Construct key to coalition’s integrity -- 10-Man teams deployed to seven different host nations’ C2 centers
- Coalition members held several key CAOC positions
- In-depth planning, exercises and rehearsals set the tone -- CFC Rock Drill, Internal Look 2003, Chair Fly
- Coalition members brought into planning as political support allowed -- RAF and RAAF planners integrated at CENTAF HQ early in process
Systems Integration

- Datalink capabilities enhanced situational awareness across the battlespace
  - Key enabler in attaining and maintaining air superiority
- Lack of an air defense system to aircraft direct interface surfaced a critical liability
- Ground force units had good communication links to the CAOC providing general force locations -- However, most Counterland/CAS assets were not equipped with datalink
- Persistent ISR over the entire battlespace enabled real-time targeting, surveillance and cross-cueing.
- Networking and datalink capabilities allowed for reachback operations and optimum fusion of the coalition’s ISR assets
- Sensors, C2 platforms & CAOC cross-cued inputs to synthesize target data
Operations

- Air Superiority allowed coalition forces essentially unhindered operations – OSW and ONW ensured Air Superiority south of 33N and north of 36N from D-Day on
- Electronic Warfare Coordination Cell integrated coalition EW assets -- chaff, jamming, drones, UAV masked friendly entry corridors
- SEAD/DEAD campaign very successful against SAM threat
- Coalition was able to prosecute time-sensitive (TST) and dynamic targets on a large scale.
- Greatly improved near-precision strike capabilities -- Nearly every coalition aircraft had the ability to employ PGMs
- Dynamic use of killboxes facilitated the air component’s ability to support the ground commander
- Information Operations contributed to widespread capitulation, surrender and desertion of forces; and no employment of WMD
Killbox Grid

48 KM x 48 KM boxes

Each Killbox further separated into nine 16 KM by 16 KM Keypads
Security & Stability Ops

- Effects-based Operations
  - Shift from Kinetic to Non-Kinetic Effects
- F2T2EA--Find, Fix, Track, Target, Engage, Assess
- Intelligence, Surveillance, Reconnaissance (ISR)
- Mobility Operations
- Platform Tailoring
EFFECTS-BASED OPS

Component Focused

OBJECTIVES

Component Tasks

Component Tasks

Effects

Effects

Effects

(Traditional Approach)

Effects Focused

OBJECTIVES

Desired Effects

Desired Effects

Integrated Component Actions

Integrated Component Actions
EFFECTS CHAIN: F2T2EA

FIND, FIX, TRACK, TARGET, ENGAGE, ASSESS
Shift from Order of Battle to Insurgent Detection
Sensor cross-cueing provides synergy (Find & Fix)
Great demand for persistent sensors (Fix & Track)
Non-traditional ISR: Use every sensor available
Mobility Operations

- Defensive Systems
- Coalition Air Support
- Materiel Handling
- Aeromedical Evac
- Every aircraft is a sensor
- Sensor platforms can provide effects
- Linked capabilities provide synergistic effects
Coalition Lessons

- Planning for Coalition Operations
- Information Sharing
- Multinational Integration (Tactical & Operational)
- Command and Control
- Integrated Air Operations
Coalition Planning

- Rules of Engagement
- Fratricide Avoidance
- Communications
- Intelligence Sharing
Coalition Information Sharing

- Classified information sharing
  - Email, web services
  - Shared near-real-time classified data
- Combined tactics and procedures
Multinational Integration

- Tactical Integration
- Operational Integration
CENTAF Forward
Combined Air HQs

Air Comp Coord Elements (ACCE)
CFC, CJTFs, Components

Space Coord Element

IO Coord Element

COMCENTCOM

COMAFFOR/ CFACC

DEPUTY (FWD)

Liaisons

DIRMOBFOR (STRAT/Theater)

CAOC DIRECTOR

CAOC

AOC Wpn Sys Support

ISRD
STRAT
CBT PLANS
CBT OPS
AMD

DI

DO

A-Staff
FWD (AUAB)
REAR (Shaw)

C/J-Staff
(AUAB)

Air Support Ops Ctrs

Control & Reporting Ctrs

BCD
NALE
MARLO
SOLE
COLT
Coalition

Direction

Coordination
Coalition Command & Control

- Combined Air Operations Center
- Systems (Tactical Air Command & Control System)
- Tools and Processes
BASIC CAOC MODEL

CJTFs & Components

CFC (Guidance)

CFACC (Guidance)

Information (Decision Quality)

CAOC

Coordination

Assessment

Air Forces (Effects)

Cmd & Ctrl
ATO/ACO

(Collaboration)

Supporting Agencies (Reachback)
Coalition AOC Systems

Collection Mgmt
Imagery Exploitation
Targeting
Intel Fusion
Analysis
Intel Sharing
Unit Support

ATO/ACO Production
ATO Execution Tools
Air Picture
Theater Missile Defense
Personnel Recovery
Cmd & Ctrl Radio Nets
Air Mobility
Collaboration Tools
Coalition Communications

Collaboration, Coordination, Information Sharing
TOOLS & PROCESSES

TOOLS
- Situational Awareness
- Decision Aids
- Planning
- Collaboration
- Reachback
- Execution

PROCESSES
- Intel Fusion
- Strategy-to-Task
- Effects-based Ops
- Dynamic Targeting
- Weaponeering
- CD Mitigation
Coalition Air Operations

Discussion
Operational Planning

- Detailed analysis of the western Iraqi desert was conducted in preparation for the anticipated counter-TBM fight
- Detailed airfield analysis was accomplished to pinpoint the locations of Iraqi Air Force assets
- Potential enemy asymmetric responses were factored into the plan early and COAs developed
  - Iraqi civil aircraft, TBMs, UAVs, WMD
- Coalition forces were trained and equipped to deploy to and operate from bare-base/forward operating locations