



International Civil Aviation Organization

## **MID Civil/Military Cooperation Seminar**

# **Circular 330-AN/189 Civil/Military Cooperation in Air Traffic Management**

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ICAO- Montreal**

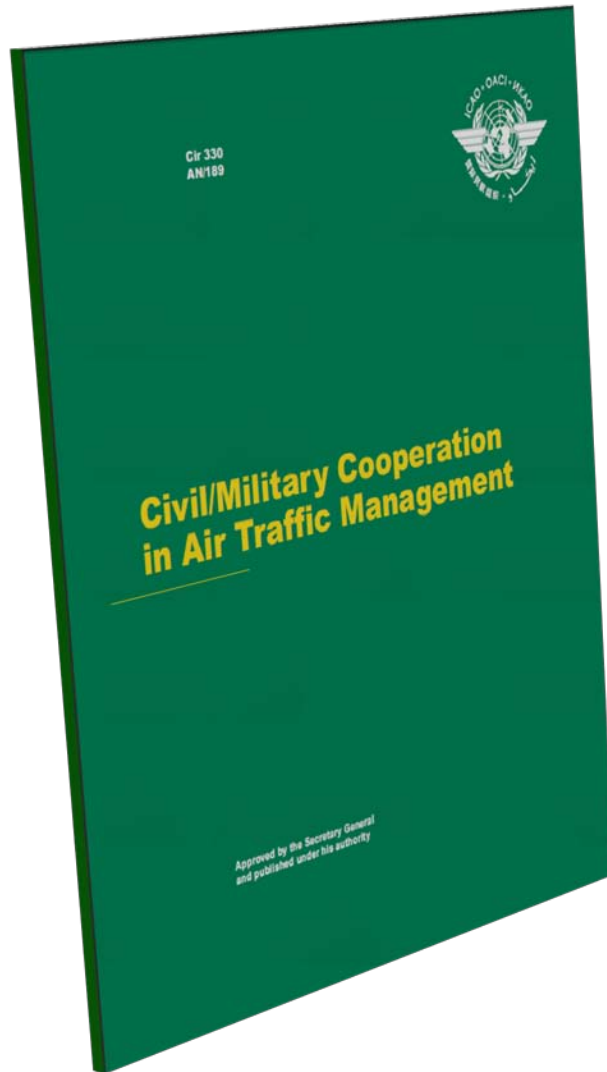
**Jeddah, Saudi Arabia  
16 to 19 September 2012**

# Guidance Material Rationale



- Growing demand x finite capacity
- State responsibility
  - Civil aviation impact on the global economy and environment
  - Obligations to national/international security and defense
- Enhance civil-military cooperation and coordination





-  **Institutional and regulatory framework**
-  **Civil/Military Interoperability**
-  **Airspace organization and management**
-  **ATM Security and ATM in crisis situation**
-  **State aircraft operations**
-  **Summary - Civil-military Collaboration a global challenge**
-  **Appendices: Best Practices of Civil-military cooperation**

# ICAO Institutional and Regulatory Framework



- ICAO provisions for a regulatory framework on Civil/Military cooperation/coordination matters:
  - *Convention on International Civil Aviation*. (Doc 7300)
  - *Assembly Resolution— 37<sup>th</sup> Session*.
  - Annexes 2 and 11
  - *PANS-ATM (Doc 4444) and SUPPs (Doc 7030)*
  - *Manual concerning Interception of Civil Aircraft* (Doc 9433)
  - *Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations* (Doc 9554)
  - *The Air Traffic Services Planning Manual* (Doc 9426)
  - *Global Air Navigation Plan* (Doc 9750)
  - *Global Air Traffic Management Operational Concept* (Doc 9854)
  - Regional Air Navigation plans and Regional Planning Groups (PIRGs)

# Civil/Military Interoperability

- Interoperability can be considered as the ability of “systems” (not exclusively technical systems) to provide information and services to, and accept information and services from, other systems and to use the information and services so exchanged.
  - Strategic and/or Political Interoperability
  - Operational and Technical Interoperability
  - Regulation and Standardization

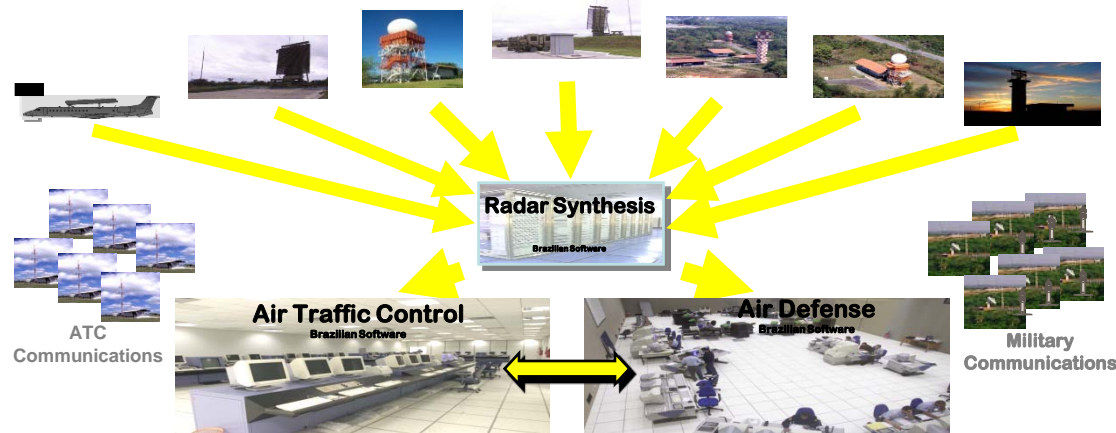
# Interoperability

- Strategic and/or Political Interoperability



Source: Cuban presentation to the Global Forum

- Operational and Technical Interoperability



Source: Brazilian presentation to the Global Forum

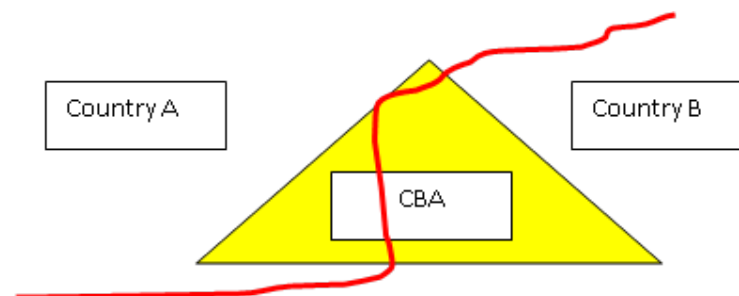
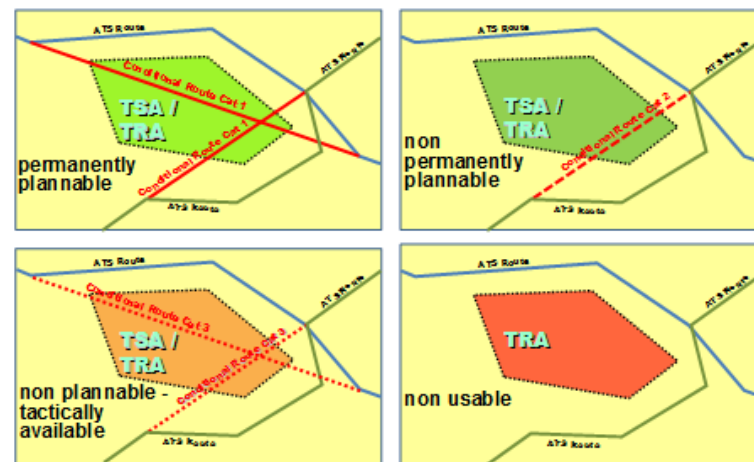
# Airspace Organization and Management



- Flexible use of airspace (FUA) is an airspace management concept based on the principle that **airspace should not be designated as purely civil or military**, but rather as **a continuum in which all user requirements are accommodated** to the greatest possible extent.

# Airspace Organization and Management

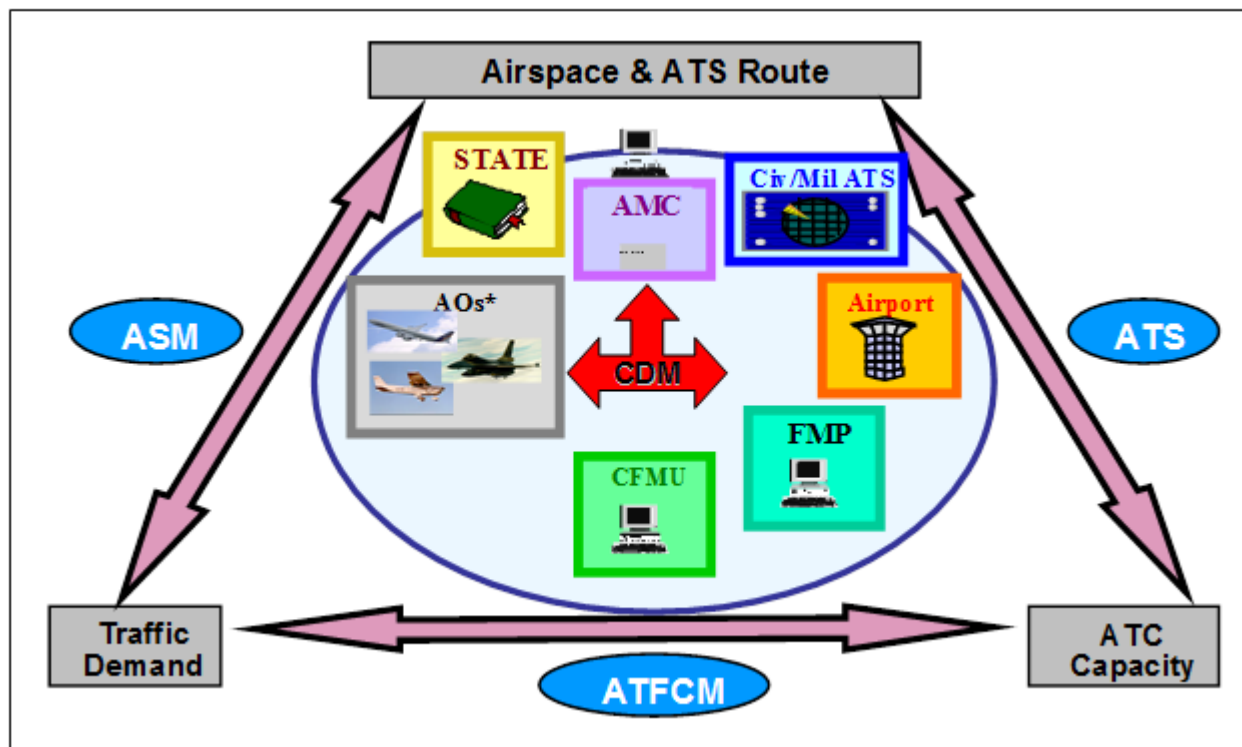
- FUA concept - flexible and adaptable airspace structures
  - Conditional routes
  - Temporary reserved area (TRA)
  - Temporary segregated airspace (TSA) and
  - Cross-border area (CBA).





# Airspace Organization and Management

- Collaborative Decision Making (CDM) could be defined as the process whereby all ATM decisions, except tactical ATC decisions, are based on sharing of all information relevant to air traffic operations between all civil and military partners.



# ATM Security and ATM in crisis situation



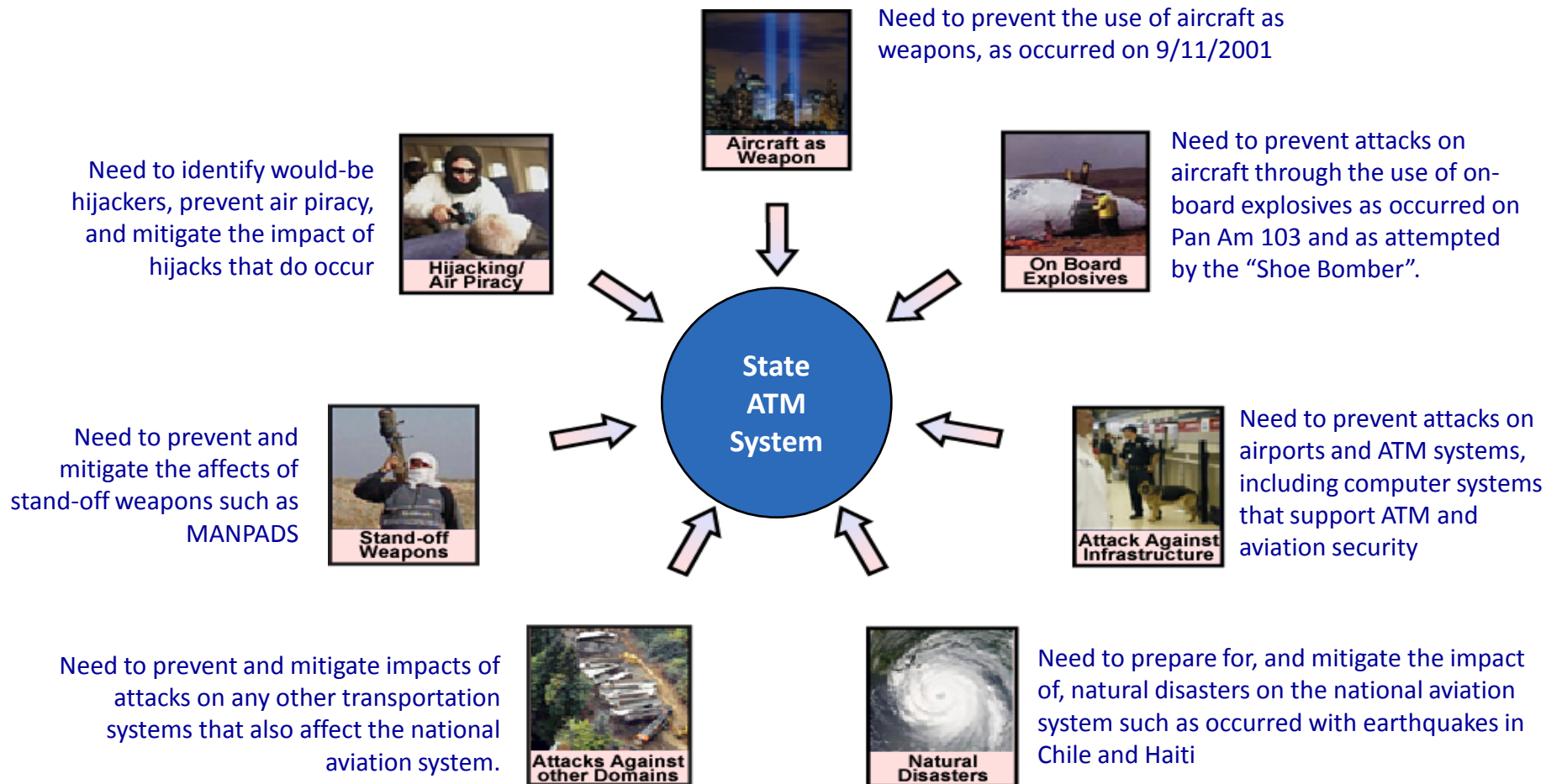
- ***ATM security***

- Safeguarding of the ATM system from security threats and vulnerabilities
- Contribution of the ATM system to civil aviation security, national security and defence, and law enforcement.

- ***ATM in crisis situation***

- Unforeseen or short-notice situations that occur outside the steady state of the routine global ATM system (for example: earthquakes, hurricanes, conflicts).

# ATM Security and ATM in crisis situation



# State Aircraft Operations

- **State Aircraft**

- In accordance with the Chicago Convention, Article 3 (b),  
“Aircraft used in military, customs and police services shall  
be deemed to be State aircraft”

- **State Aircraft Roles**

## Common Interests

**Safety**

No duplication or unnecessary equipage

User preferred routing

On time departure/arrival

Constant descent to landing

**Efficiency**

**Security**



# State Aircraft Operations

...but they are different



FULLY-COMPLIANT OPERATIONS

PARTIALLY-COMPLIANT OPERATIONS

- Appendices: Example of best practices in Civil/Military Cooperation:
- Civil/Military Cooperation in the United States
- Civil/Military Cooperation in Germany
- Civil/Military CNS/ATM Interoperability Roadmap- EUROCONTROL

# Summary



- This circular was prepared by civil and military experts and offers guidance on and examples of successful practices for civil and military cooperation.





# Summary



Thanks for your attention