VIRTUAL FLAG Series

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This presentation is UNCLASSIFIED
AGENDA

- What’s about: the AIR C2
- AIR C2 Training
- Why "VIRTUAL" FLAG
- Computer Assisted Exercise (CAX)
- Key Players in a CAX
- What’s next: JOINT STARS-VIRTUAL FLAG

17
The AIR C2 Pillars

- PROCESSES
- PRODUCTS
- MANNING
"EXERCISE" AIR C2 during EXERCISES

1994 – 2008

SPRING FLAG

LIVE EXERCISE
“EXERCISE” AIR C2 during EXERCISES

A LIVEX doesn’t allow to:

- Easily apply all the JFAC internal processes;
- Change the scenario IAW Training Audience (TA) decision/reaction because it is based on a Serialized Field Training Program (SFTP);
- Record everything (i.e. effective PXR);
- Reduce costs;
- “Get it wrong” (exposure to risks).
2009 VIRTUAL FLAG (SYNTHETIC EXERCISE)

WHY “VIRTUAL” FLAG?

To get above, or if not possible, to mitigate the limitations of a LIVEX and take maximum advantage of the possibilities offered by a synthetic environment.
What is "VIRTUAL" FLAG

- So Virtual Flag represents the Italian Air Force’s main tool to develop, to consolidate and to test a Command & Control capability of an AIR C2 “entity” (i.e. JFAC), with the chance of efficiently train all the involved personnel.

To do what

- To plan, to conduct and to assess an Air Campaign, covering all processes and aspects.
**Computer Assisted Exercise (CAX)**

*X = Exercise = the highest and complex form training activity*

*Exercise Forms: LIVEX, TTX & CPX*

*up to 3 levels (Strategic, Operational, Tactical)*

VIRTUAL FLAG

A CAX is an exercise where computer based simulation is used:

- To generate forces and employ them in a simulated environment, IOT perform decision-making processes and practice staff procedures;
- To immerse TA (Commanders, staff...) and their C2 systems in an environment as realistic as possible;
- To Help Exercise Control Staff in controlling the exercise process so that it achieves effectively the planned objectives.
Key Figures in an Exercise

OSE – Officer Scheduling the Exercise
"il Produttore"

OCE – Officer Conducting the Exercise
"il responsabile dello Studio di produzione"

ODE – Officer Directing the Exercise
"la Regia e/o protagonista principale"

EXDIR – Exercise Director
"L’aiuto Regista – responsabile della sceneggiatura"

TRAINING AUDIENCE
"Gli Attori"
EXCON - the TROUPE

- EXDIR “L’aiuto Regista”
- SITCEN “I coordinatori della produzione e della TROUPE”
- MEL/MIL “Gli Sceneggiatori”
- SME “I Consulenti di produzione”
- RESPONSE CELLS & SITFOR “Gli attori non protagonisti ed i Cattivi”
EXCON

**SCENARIO**
- i.e. Air Heavy
- Types of Threats
- Type of Network (CIS requirements)

**Ideal ratio**
**TA - EXCON**
2 to 1
- Dependent on **TRAINING OBJECTIVES & BUDGET**
- Manning issue

**MEL/ MIL**
**preparation**
- MAIN EVENTS LIST/ MAIN INCIDENTS LIST
- Experienced screenwriters

**CAX TOOLS**
**management**
- Trained Operators/ updated database
- Integrated Training Capability (ITC) – Joint Exercise Management Module (JEMM) ........
Air C2 Functional Area Services (FAS)

- **Mission LAN/WAN**
- **RAP** *(Recognised Air Picture)*
- **ICC** *(Integrated Command and Control)* including:
  - **NIRIS** *(RAP Display)*
  - **JTS** *(Joint Targeting System)*
  - **FAST** *(Flexible Advanced Services for TST)*
  - **JPECT** *(Joint Planning and Execution Coordination Tool)*
- **JCHAT** *(Joint Tactical Chat)*
- **WISE** *(Web Information Services Environment)*
- **VOIP Phone** *(Voice Over IP)*
- **JEMM** *(Joint Exercise Management Module)*
C2 Info-Structure
Joint Stars / Virtual Flag 2017

Period: 5 - 16 GIUGNO 2017

OSE: COMCOI
OCE: COMCOA
ODE: COMRPO
Exercise Objectives JS 17 part 1

- Conduct Small Joint Ops-, Air Heavy, from a JTF(F) based on ITA-JFAC
- Verify Joint National TBMD connectivity
- Plan and execute Air Ops integrating 4\textdegree{} and 5\textdegree{} generation aircraft
- Plan and execute PA and CIMIC
- Verify the Joint TARGETING TTP
- Increase the pool of airmen trained to operate in a NFS JFAC
SCENARIO

- HOSTILE ACTION
- HVAA ATTACK
- MEDEVAC
- NEO
- TBMD
- SUPPORT TO SOF
- DEFENSIVE OPERATIONS
- PR
- TST
- OCA
- UM
- JTF (F)
JS 17 CIS set-up

A basic example of:

FEDERATED: different levels of Command

DISTRIBUTED: Units operating from their home-base
CAX - Challenges for the future

• Technology update of CIS and TOOLS:
  - Stay informed on technological progress
  - Funding

• Manning requirements:
  - Availability of trainees
  - Availability of trained/skilled personnel
    (tracking issue)
QUESTIONS?