

# Operational Planning Process Stage 3, Part 3

## Course of Action Comparison War Game



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COMMAND AND STAFF  
COLLEGE

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CANADIENNE



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Direction de l'instruction et de la coopération militaire –  
Canada



## Supporting Staff Work

Staff Analysis  
Staff Checks & Estimates

Outline  
Support Plans

Detailed  
Analysis,  
Staff Checks  
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Review of  
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Analysis Brief

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COA  
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Information  
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COA  
Comparison  
Wargame

CONOPS

Decision  
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Supp Wng O

Synch Matrix  
Draft

DST Draft

HPTL Draft

EGM

### OPP Stage 4 – Plan Development

DST

Plan  
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## Intelligence Preparation of the Battlespace

### IPB Step 1 – Define the Battlespace

AI

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Air Avenue of  
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### OPP Stage 5 – Plan Review

Frag O

CONPLAN

IPB Informs All Stages of the OPP

## Legend

Staff  
Process

Staff  
Product

Data

Comd  
Process

Comd  
Product

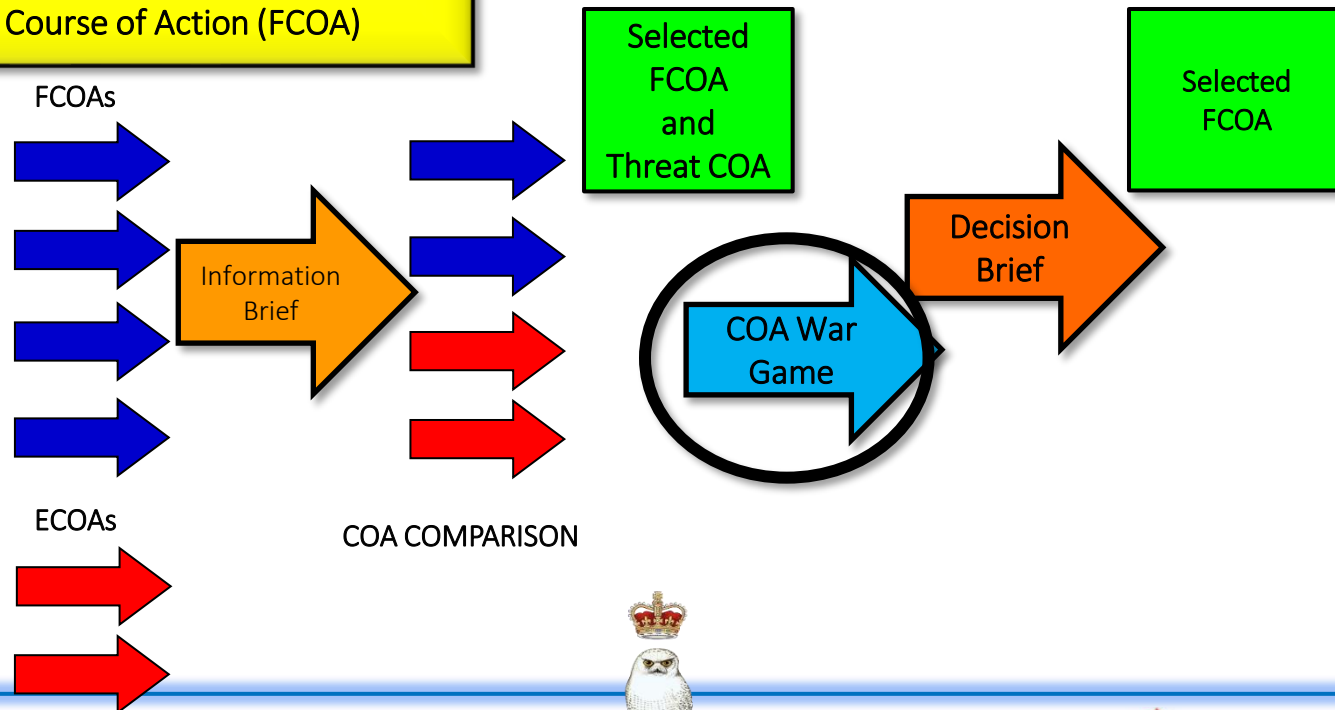
Process  
Flow

Next Task



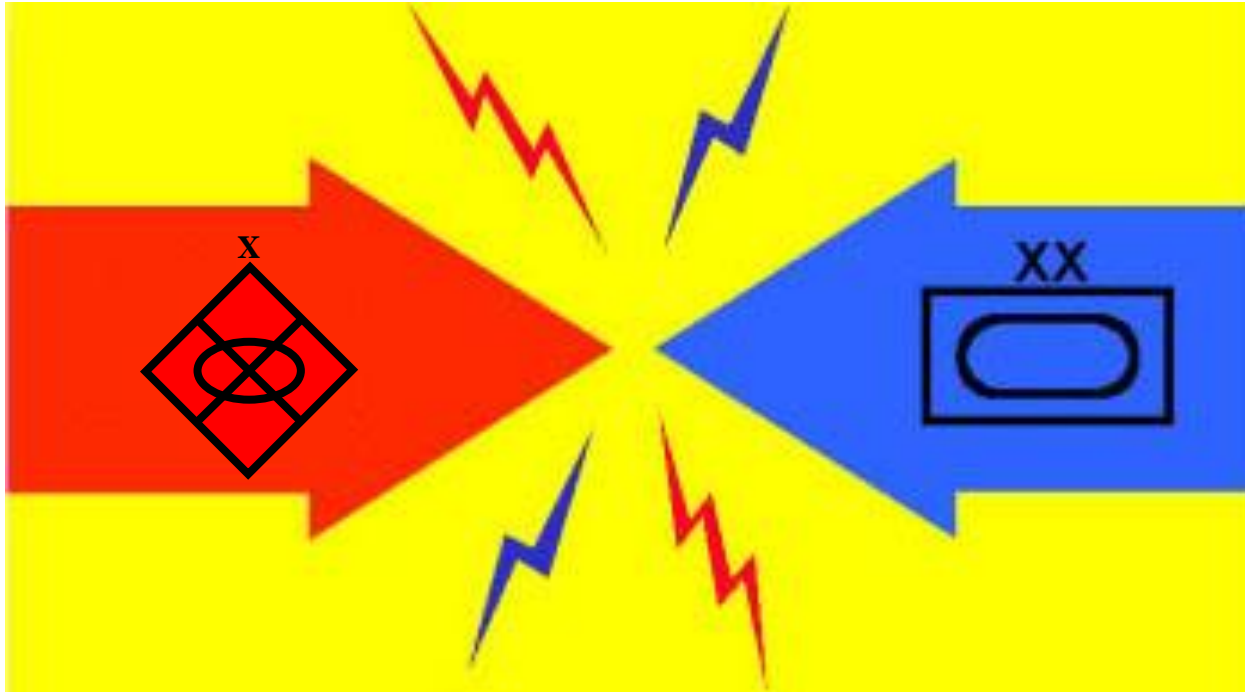


- Review Commander's Planning Guidance (CPG)
- Staff Analysis
- Develop Threat Course of Action (Threat COA)
- Develop Friendly Course of Action (FCOA)





# What is War Gaming?



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# Defining War Gaming

- Definition

- A method of **comparing** COAs.  
War gaming can be done manually, or, if time permits and the resources are available, can be computer assisted using a computer simulation model (CFJP 5.0)
- Is a powerful planning tool for **visualization** and **assessment** of COAs (CAF Operational Planning Process (OPP) Handbook)



- Results of War Game

- Further refinement of each FCOA with the ongoing results of staff analysis, and identification of strengths and weaknesses
- A rank ordering of FCOAs from most recommended to least recommended



# War Gaming Outcomes (1/2)

- Graphically represents the forces, factors and possibilities present in the battlespace
- Breaks down an operation into component phases
- Generates ideas and understanding that reading or discussion alone will overlook
- Points out which tasks are most vital to the operation and identifies key tasks and decision points (DPs) that may have been overlooked
- Identifies previously unseen threats, risks and opportunities, and develops measures to deal with them (potential Branches and Sequels)
- Provides common base knowledge of the operation, particularly for those who were not involved in its conception but must execute a portion of it





# War Gaming Outcomes (2/2)

- Help understand the flow of the battle (scheme of manoeuvre, etc.)
- Identifies the forces, capabilities and activities that must be synchronized throughout the operation, and thus contribute to the development of coordinating instructions and support function plans
- Provides a clear means for comparing options against each other and against various threats and criteria
- If the Commander is available to participate in a War Game, it allows the staff participants (including liaison officers and collaborative planners) to fully understand their intent and concept of operations





# War Gaming Benefits

- **Maximize effects of combat power**
- **Battlespace visualization**
- Anticipate battlespace events
- Determine resources required
- When and where to deploy forces
- Determine the best COA
- Determine Threat and Friendly strength and weakness





# Key Players

- Commander
  - (For Plan War Game Only)
- COS
- War Gaming Team
  - (G2/G3/G5)
- Other primary staff
  - (G1/G4/G9)
- Staff Advisors
  - (Artillery, Engineer, Aviation, etc.)





# Staff Roles

- COS coordinates the overall activities of the War Game
- G2 (primary belligerent faction commander)
- Additional G2 staff will play other belligerent factions
- G5 plays role of referee
- G5 Plans plays role of Friendly forces
- Recorders



**G2 “THINKS RED”**





# War Game Preparation Steps

- Step 1: Display essential elements of CPG/Mission Analysis
- Step 2: Prepare Intelligence Preparation of the Battlespace (IPB) Products and gather threat/belligerent information
- Step 3: Prepare for Friendly Forces, Critical Events and DPs
- Step 4: Prepare Friendly Timeline
- Step 5: Set up War Game room
- Step 6: Establish Data recording system (scribes, etc.)
- Step 7: Deploy threat/belligerent and Friendly forces in Game Battlespace
- Step 8: Review War Game rules





# Step 1: Display Essential Elements of Commander's Planning Guidance/Mission Analysis

Use posters, paper, etc., to display

- Mission statement and intent
- End state and conditions for success
- Assumptions
- Limitations - Constraints/Restrictions
- COA Comparison Criteria (CCC)
- Commander's Critical Information Requirements (CCIR)
- Threat COA \_\_ versus FCOA \_\_ / War Game type, sequence & duration
- War Game rules
- Notes
- Advantages/disadvantages
- Critical Events/DPs





## Step 2: Prepare Intelligence Preparation of the Battlespace Products and Gather threat/Belligerent Information

### G2 and Staff

- FLOCARK
- Weather
- threat/belligerent templates
- threat/belligerent ORBATs, probable combat effectiveness and morale
- Threat COAs
  - Most Likely Threat Course of Action (MLCOA) and
  - Most Dangerous Threat Course of Action (MDCOA))
- Establish probable threat timeline





# Step 3: Prepare for Friendly Forces, Critical Events and Decision Points

## G5 and Staff

- Prepare ORBATs of Friendly Forces
  - Plan two levels down
  - Own (integral) and assigned forces
  - Manoeuvre, combat support, combat service support
  - Flanking forces
  - Groupings and command relationships
  - Operational effectiveness at game start (50%?, etc.)
- Prepare list of Critical Events and DPs
  - Essential tasks
  - Complex activities
  - Triggers for decisions (commit reserve, activate Branch Plan, etc.)



# Step 4: Prepare Friendly Timeline

- G5 and Staff
  - Important for synchronization (Sync Matrix)
  - Synchronize with threat timeline





# Step 5: Set Up War Game Room

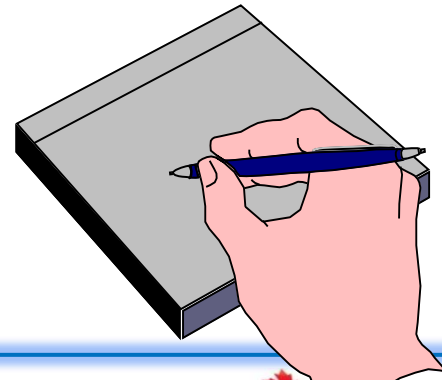
- G5 Staff
  - Game table or digital display of battlespace
  - Maps and imagery
  - Game icons
  - Seating plan (for team members and observers)





# Step 6: Establish Data Recording System (Scribes, Etc.)

- G5 Staff
  - Scribes to have manual or digital records
  - Display game data the team needs to refer to
  - Establish protocols for recording/saving/disseminating War Game results





# Example Synchronization Matrix

FCOA:		FCOA SKETCH			
MISSION:					
CONCEPT OF OPS :					
OP TIMELINE		H-1	H	H+1	H+2
ENEMY ACTIONS					
FRIENDLY ACTIONS					
DECISION POINTS					
ISTAR					
MANOEUVRE	COVERING FORCE				
	MAIN BODY				
	RESERVE				
FIRE SUPPORT	DEEP				
	CLOSE				
INFLUENCE					
AIRSPACE C2					
AIR DEFENCE					
ENGINEERS	MOBILITY				
	COUNTERMOBILITY				
FORCE PROTECTION					
TRAFFIC CONTROL/MP					
SUSTAINMENT					
CIS					





# Step 7: Deploy threat/Belligerent and Friendly Forces in Game Battlespace

- G2
  - Lay down all those threat/belligerent forces having a role or influence in the first turn of the game, based on the Threat COA in play
- G5 Plans
  - Lay down all forces relevant to first turn, based on the FCOA in play





# Step 8: Review War Game Rules and Confirm War Game Method

## COS

- Confirms Methodology (PD) and Clarifies rules, i.e.:
  - Remain objective and unbiased
  - Avoid premature conclusions
  - Play COAs as described, avoid running repairs
  - Avoid comparing FCOAs with one another
- Accurately record all advantages and disadvantages of each COA
- Suitability, Feasibility, Acceptability, Exclusivity and Completeness



# War Game Methods

- Avenue-in-Depth
- Belt Method
- Box Method



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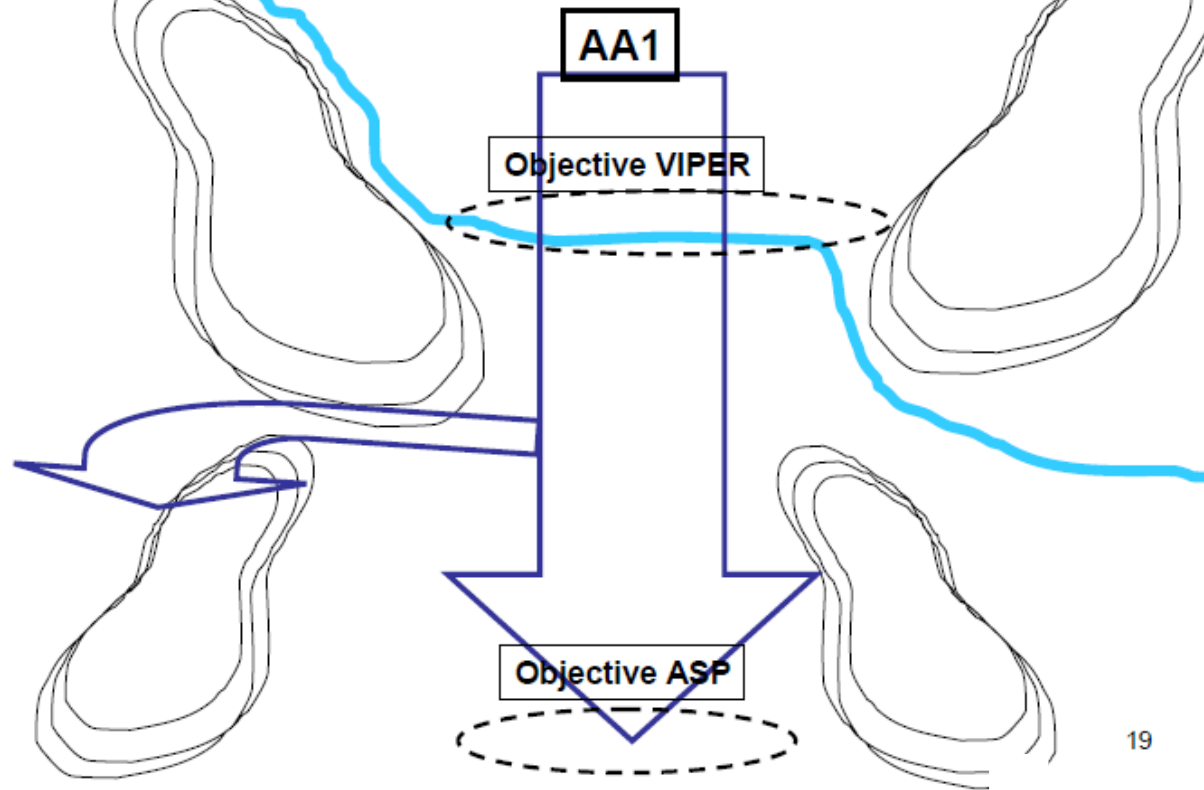
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# AVENUE IN DEPTH



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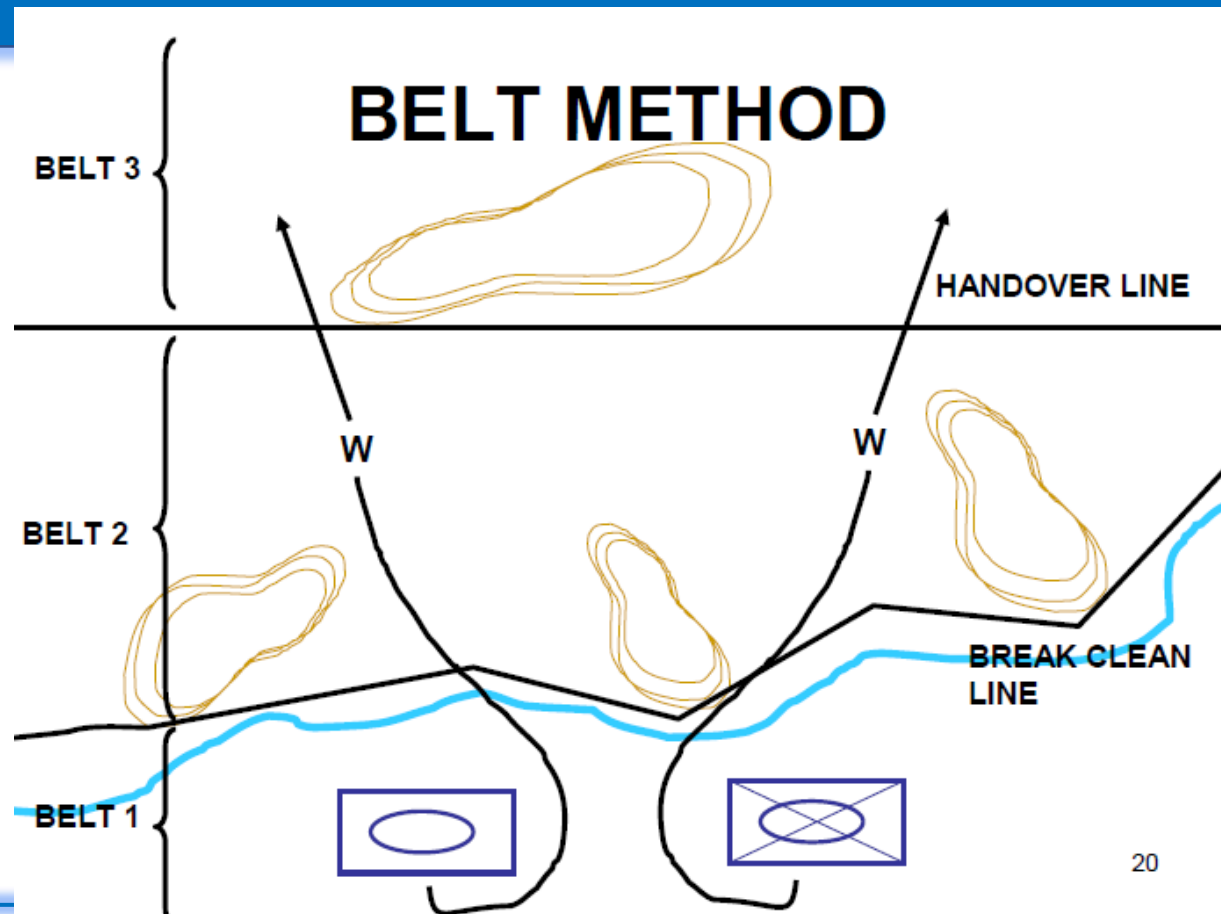
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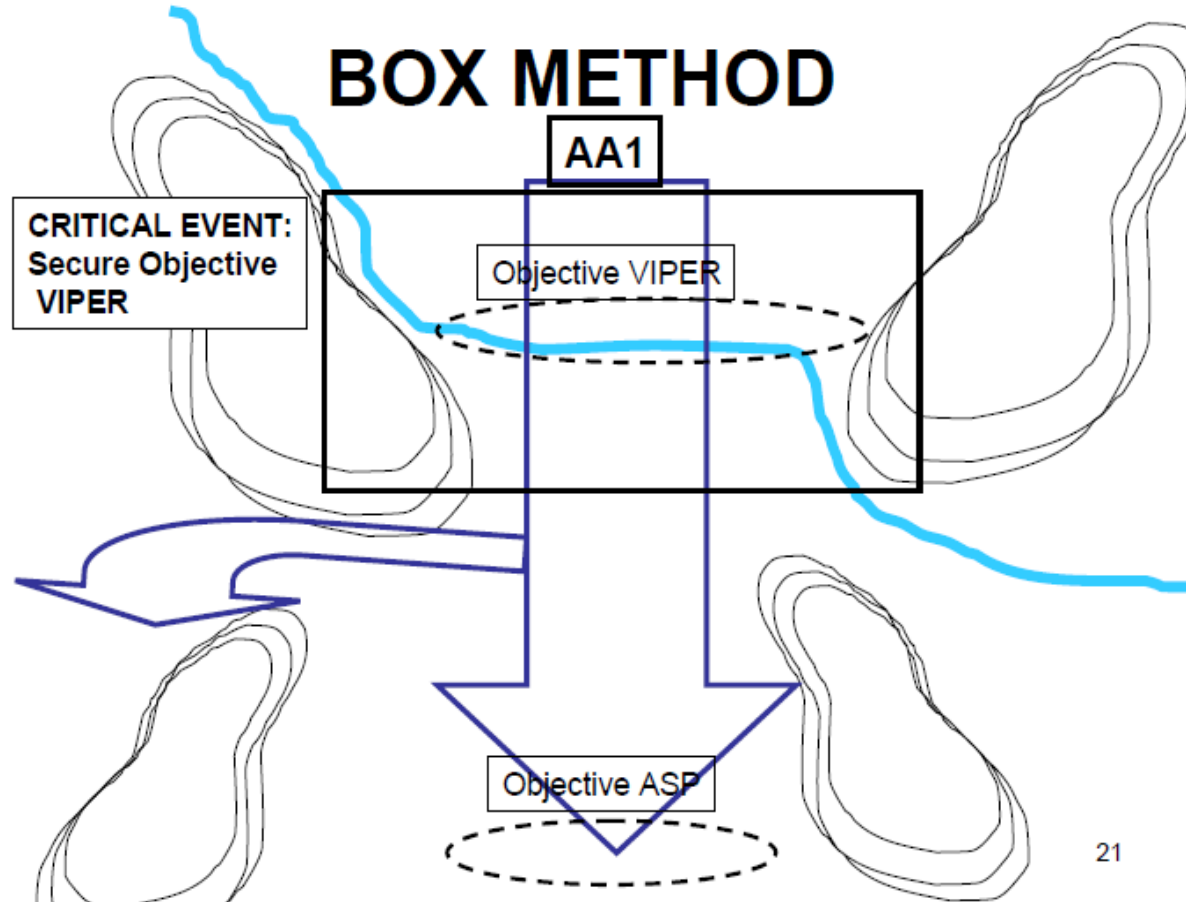
- Divides Battlespace into Belts
- Preferred method
- Sequential



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- Microanalysis of a critical event area
  - River crossing
  - Landing zone
  - Secure of a objective
- Takes less time



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# Conduct of War Game (1/4)

- Opening Brief (COS)
  - Purpose of game and required outputs. Review of COA Criteria and key aspects of CPG. Reiterate War Game rules. Ensure scribes are ready to record
- Threat Situation/ Threat COA (G2)
  - Identify forces engaged or capable of influencing this turn. Outline ECOA. Highlight threat timeline
- Friendly Situation/FCOA (G5 Plans)
  - Identify forces engaged or capable of influencing this turn. Explain grouping. Outline FCOA including phasing, DPs, critical events, timeline

*Note: Focus on the critical part of your plan*





# Conduct of War Game (2/4)

- Turns
  - Action (Side with Initiative)
    - Describe scheme of manoeuvre, main effort, moves own units, and describes end state
  - Reaction (Responding Side)
    - Describe reaction, moves own units, and describes end state
  - Counteraction (Side with Initiative)
    - Describes counteraction, moves own units, and describes end state
- Attrition Assessment (Scribe or G4/G1 Rep)
  - Apply force ratio. Do you have enough soldiers to conduct the tasks?





# Conduct of War Game (3/4)

- Staff Input (Advisors)
  - Comment on turn. Supported or unsupported. Critical issues
- Command and Staff Tools (FCOA Team)
  - Update Synchronization Matrix, timeline, etc.
- Summary (COS)
  - Accepts results of turn. Makes any necessary comment on feasibility of FCOA. Identify branches/sequels for further development





# Conduct of War Game (4/4)

- Initiate Next Turn (G5)
  - Indicate where turn is on timeline (have we jumped ahead?). Ensure FCOA and Threat COA timelines are still synchronized. State which side has initiative (initiative may have passed as a result of previous turn)
- Action (Side with Initiative)
  - As for first turn, introducing any new forces. State changes in operational effectiveness as a result of previous turn attrition
- Reaction (Responding Side)
  - As above
- Counteraction (Side with Initiative)
  - As above

The remainder of the turn (and all subsequent turns) is played out as for the first





# Results of War Game

- Identify Advantages and Disadvantages of each FCOA
- Identify DPs and critical events for each FCOA
- Guides staff towards modifications/refinements to FCOA (especially the one to be recommended) and the products
- Compare FCOA against each other based on COA Comparison Criteria
- Identify chosen COA that will be presented to the Commander for approval during the Decision Brief

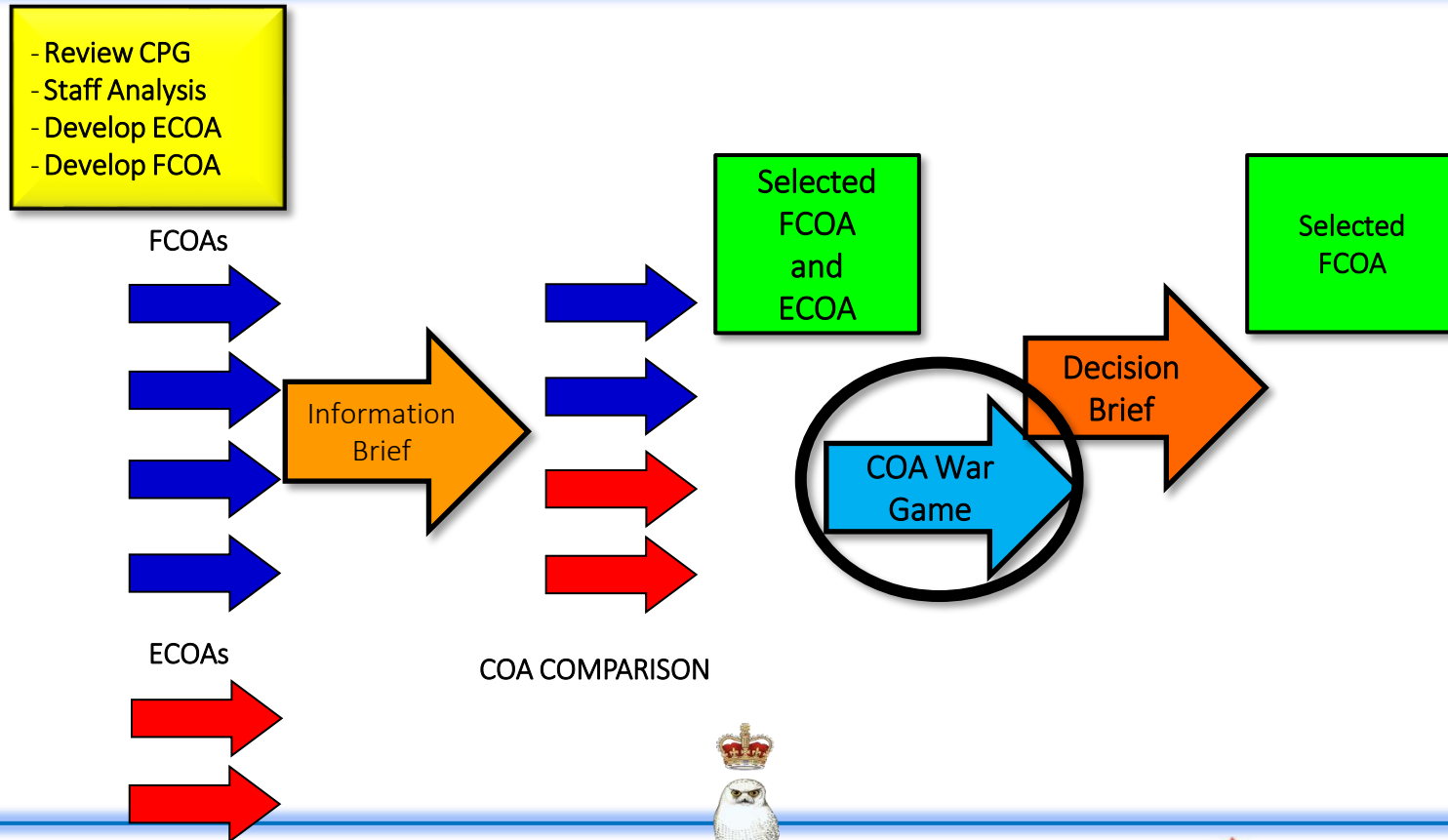




Criteria	COA 1	COA 2	COA 3
Flexibility			
Simplicity	Evaluate each COA separately on how it meets criteria using scale of 1 (least) to 3 (most)		
Security (x2)			
Risk			
<b>TOTAL</b>			
<b><i>Example: In this example, the Commander decided that security was the most important COA Comparison Criteria so the staff decided to give the weight a double value</i></b>			



# Course of Action Development





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Comd  
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Process  
Flow

Next Task





# Visualize the battlespace and Effects of our Actions





# Questions ?

