



ACCORD: Solo Challenge and Analyst Support

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Value of ACCORD



- From Robust Decisions, Inc.
 - Used by special permission
- Analysts use assigned part(s) of BIAC Methodology to estimate behavior of adversary
- Analysts input (weighted) judgment(s) on possible behavior of adversary into ACCORD
- ACCORD uses Bayesian reasoning with weighted inputs to get group estimate(s)
 - Identify holes, deficiencies, further work to be accomplished



Solo Challenge War Game



- Game played in Spring 2008 (April – May)
- Air War College students serve as subject matter experts and analysts
- Apply BIAC methodology to (unclassified) problems
- Use ACCORD decision software to:
 - Infer probable intent and likely behaviors
 - Recommend courses of action to faculty



Analytical Workflow



Use

Values, Beliefs, Worldview;
Operational Behavioral History;
Perceptions;
Motivations (Needs and Objectives);
Current Capabilities;
Situational Factors;
Decision Process;
To Infer: Probable Intent / Likely Behavior.



Analytical Workflow (2)



Use

Probably Intent + likely behaviors;

Vulnerabilities;

Influence Susceptibilities;

Accessibility;

To develop Recommendations.



Sample Problem



In the year 2017, Iran, with technical assistance from India and China, has developed a laser weapon capable of destroying satellites in orbit. Determine the probable intent and likely behavior of the Iran Supreme Council with this new technology. Also, recommend courses of action to U.S. military commanders.



Demo



Possible behaviors of Iran SC:

1. Attack a U. S. Satellite;
2. Tool in negotiations;
3. Sell technology to others;
4. Defensive role only.



Example



Accord V2.5.13 Professional Worksheet

File Edit View Screen Help

Data Stored In: SoloExample.jdl

Issue: Untitled

ViewPoint: Team

Belief Map

Issue

C R I T E R I A

S A T I S F A C T I O N

C E R T A I N T Y - K N O W L E D G E

TOTAL TEAM SATISFACTION

Legend: Satisfaction (blue), Probability (yellow)

Templates:

- Concept Selection
- Job Candidate Selection
- Portfolio Evaluation
- Proposal Selection
- Vendor Selection
- Where to Site Office

Buttons: What to do next..., Report..., Edit Rationale..., Evaluation Management..., Distributed Team Support...

Alternatives:

- Attack a U. S. Satellite
- Tool in Negotiations
- Sell Technology to Others
- Defensive Role Only

Criteria:

Feature Measured	Type	Units		
1 Values, Beliefs, Worldview	Q			
2 Operational Behavior History	Q			
3 Perceptions	Q			
4 Motivations	Q			
5 Current Capabilities	Q			
6 Situational Factors	Q			
7 Decision Process	Q			

Members:

- E. L. Perry
- Team 1
- Team 2

Bar Chart Data:

Alternative	Satisfaction	Probability
Attack a U. S. Satellite	49	49
Tool in Negotiations	56	50
Sell Technology to Others	49	49
Defensive Role Only	52	52



Weighting the Criteria



Criteria Importance Weightings [X]

Sum Independent Rank Team 1

Criteria Weights

Criteria	Slider	Weight	Critical
① Values, Beliefs, Worldview		0.09	<input type="checkbox"/>
② Operational Behavior History		0.14	<input type="checkbox"/>
③ Perceptions		0.14	<input type="checkbox"/>
④ Motivations		0.14	<input type="checkbox"/>
⑤ Current Capabilities		0.19	<input type="checkbox"/>
⑥ Situational Factors		0.14	<input type="checkbox"/>
⑦ Decision Process		0.14	<input type="checkbox"/>

Close



Show All



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Issue Untitled ViewPoint Team

Belief Map

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1 Values, Beliefs, Worldview	Q			
2 Operational Behavior History	Q			
3 Perceptions	Q			
4 Motivations	Q			
5 Current Capabilities	Q			
6 Situational Factors	Q			
7 Decision Process	Q			

Members:

- E. L. Perry
- Team 1
- Team2

Bar Chart Data:

Team	Satisfaction	Probability
Team 2	48	48
Team 1	58	50
E. L. Perry	44	44
Defensive Role Only	47	47



Questions?

