Annex H – AF2T2EA: ILLUSTRATIVE EXAMPLE

1. MAPPING CONCEPTUAL MODEL VARIABLES TO THE AF2T2EA "KILL-CHAIN" PROCESS (PROCESS VIEW)

1.1 "Anticipate" Event

Table H-1: "Anticipate" Event

Cognitive Pyramid	Conceptual Model Variable	
Environment	Atmospheric Weather	Sensor Coverage (Spatial)
	Space Weather	Sensor Coverage (Medium)
	Sensor Persistence	Sensor Coverage (Spectrum)
Information	Accuracy	Information about Forces
	Completeness of Information	Information about Environment
	Completeness of Individual Information	Information about Intentions
	Completeness of Shared Information	Information Uncertainty
	Correctness of Information	Network Reach
	Correctness of Individual Information	Precision of Information
	Correctness of Shared Information	Precision of Individual Information
	Currency of Information	Precision of Shared Information
	Currency of Individual Information	Relevance of Shared Information
	Currency of Shared Information	Richness of Collaborative Environment
	Consistency of Information	Share Information
	Consistency of Individual Information	Timeliness of Information
	Consistency of Shared Information	Timeliness of Individual Information
	Data Interoperability	Timeliness of Shared Information
	Distribution of Information	Trust in Information
	Extent of Shared Information	Uncertainty
	Fusion	Uncertainty of Shared Information
	Information Quality	

Cognitive Pyramid	Conceptual Model Variable	
Awareness	Accuracy of Individual Awareness	Collaboration about Intentions
	Accuracy of Shared Information	Command Approach
	Awareness about Environment	Experience of Personnel
	Awareness about Forces	Frequency of Command Interactions
	Awareness about Intentions	Frequency of Peer-to-Peer Interactions
	Awareness about Mission	History
	Collaboration about Environment	Quality of Interactions
	Collaboration about Forces	Quality of Peer-to-Peer Interactions
Understanding	Understanding about Environment	Understanding about Intentions
Decision or Action	Accuracy of Individual Decisions	Relevance of Individual Decisions
	Consistency of Individual Decisions	Speed of Command
	Completeness of Individual Decisions	Speed of Decision
	Correctness of Individual Decisions	Speed of Planning
	Currency of Individual Decisions	Synchronization of Actions
	Force Effectiveness	Task Speed
	Mode of Decision Making of Individual Decisions	Timeliness of Planning
	Responsiveness	Timeliness of Individual Decisions
	Precision of Individual Decisions	Uncertainty of Individual Decisions
	Quality of Decisions	

1.2 "Find" Event

Table H-2: "Find" Event

Cognitive Pyramid	Conceptual Model Variable	
Environment	Atmospheric Weather	Sensor Coverage (Spatial)
	Space Weather	Sensor Coverage (Medium)
	Sensor Persistence	Sensor Coverage (Spectrum)
Information	Accuracy	Information about Forces
	Completeness of Information	Information about Environment
	Completeness of Individual Information	Information about Intentions
	Completeness of Shared Information	Information Uncertainty
	Consistency of Information	Network Reach
	Consistency of Individual Information	Precision of Information
	Consistency of Shared Information	Precision of Individual Information
	Correctness of Information	Precision of Shared Information
	Correctness of Individual Information	
	Correctness of Shared Information	Relevance of Shared Information
	Currency of Information	Richness of Collaborative Environment
	Currency of Individual Information	Share Information
	Currency of Shared Information	Timeliness of Information
	Data Interoperability	Timeliness of Individual Information
	Distribution of Information	Timeliness of Shared Information
	Extent of Shared Information	Trust in Information
	Fusion	Uncertainty
	Information Quality	Uncertainty of Shared Information
Awareness	Accuracy of Individual Awareness	Collaboration about Intentions
	Accuracy of Shared Information	Command Approach
	Awareness about Environment	Experience of Personnel

Cognitive Pyramid	Conceptual Model Variable	
	Awareness about Forces	Frequency of Command Interactions
	Awareness about Intentions	Frequency of Peer-to-Peer Interactions
	Awareness about Mission	History
	Collaboration about Environment	Quality of Interactions
	Collaboration about Forces	Quality of Peer-to-Peer Interactions
Understanding	Understanding about Environment	Understanding about Intentions
Decision or Action	Accuracy of Individual Decisions	Speed of Decision
	Consistency of Individual Decisions	Force Effectiveness
	Completeness of Individual Decisions	Mode of Decision Making of Individual Decisions
	Correctness of Individual Decisions	Responsiveness
	Currency of Individual Decisions	Precision of Individual Decisions
	Quality of Decisions	Task Speed
	Relevance of Individual Decisions	Timeliness of Planning
	Speed of Planning	Timeliness of Individual Decisions
	Synchronization of Actions	Uncertainty of Individual Decisions
	Speed of Command	

1.3 "Fix" Event

Table H-3: "Fix" Event

Cognitive Pyramid	Conceptual Model Variable	
Environment	Analyze	Quality of Computing Equipment
	Network Availability	Sensor Coverage (Spatial)
	Network Reach	Sensor Coverage (Medium)
	Network Reliability	Sensor Coverage (Spectrum)
	Quality of Communications Equipment	Sensor Persistence
Information	Accuracy	Information Ambiguity
	Authentication	Information Complexity
	Completeness of Information	Information Quality
	Consistency of Information	Information Uncertainty
	Consistency of Shared Information	Precision of Individual Information
	Correctness of Information	Precision of Information
	Correctness of Shared Information	Precision of Shared Information
	Currency of Shared Information	Relevance of Shared Information
	Distribution of Information	Share Information
	Extend of Shared Information	Timeliness of Shared Information
	Fusion	Timeliness of Individual Information
	Identification	Timeliness of Information
	Information about Capabilities	Uncertainty of Shared Information
Awareness	Accuracy of Individual Awareness	Identification
	Adaptiveness	Level of Confidence
	Awareness about Capabilities	Task Competence
	Awareness about Intentions	

Cognitive Pyramid	Conceptual Model Variable	
Understanding	Accuracy of Collective understanding	Completeness of Collective Understanding
	Accuracy of Individual Understanding	Identification
	Collective Knowledge	Level of Confidence
Decision or Action	Command Approach	Mission Effectiveness
	Completeness of Individual Decisions	Task Competence
	Identification	Task Speed
	Level of Confidence	

1.4 "Track" Event

Table H-4: "Track" Event

Cognitive Pyramid	Conceptual Model Variable	
Environment	Accuracy	Network Reach
	Adaptiveness	Responsiveness
	Analyze	Robustness
	Atmospheric Weather	Sensor Coverage (Medium)
	Dynamics across Time	Sensor Coverage (Spatial)
	History	Sensor Coverage (Spectrum)
	Indirect Sensing	Space Weather
	Mobility	
Information	Accuracy	Flexibility
	Accuracy of Shared Information	Fusion
	Completeness of Individual Information	Information about Environment
	Completeness of Information	Information about Forces
	Completeness of Shared Information	Information about Intentions
	Consistency of Individual Information	Information Quality
	Consistency of Information	Information Uncertainty

Cognitive Pyramid	Conceptual Model Variable	
	Consistency of Shared Information	Precision of Individual Information
	Currency of Shared Information	Precision of Information
	Currency of Individual Information	Precision of Shared Information
	Currency of Information	Relevance of Shared Information
	Correctness of Individual Information	Shared Understanding
	Correctness of Shared Information	Timeliness of Shared Information
	Distribution of Information	Timeliness of Individual Information
	Dynamics across Time	Timeliness of Information
	Extend of Shared Information	Uncertainty of Shared Information
Awareness	Accuracy of Collective Awareness	Correctness of Collective Awareness
	Accuracy of Individual Awareness	Correctness of Individual Awareness
	Accuracy of Intersection Awareness	Correctness of Partial Awareness
	Accuracy of Partial Awareness	Currency of Collective Awareness
	Awareness about Environment	Currency of Individual Awareness
	Awareness about Forces	Precision of Individual Awareness
	Awareness about Intentions	Timeliness of Collective Awareness
	Awareness about Mission	Timeliness of Individual Awareness
	Completeness of Individual Awareness	Uncertainty of Collective Awareness
	Consistency of Individual Awareness	
Understanding	Accuracy of Collective Understanding	Correctness of Collective Understanding
	Accuracy of Individual Understanding	Correctness of Individual Understanding

Cognitive Pyramid	Conceptual Model Variable	
	Accuracy of Intersection Understanding	Correctness of Partial Understanding
	Accuracy of Partial Understanding	Currency of Collective Understanding
	Completeness of Collective Understanding	Currency of Individual Understanding
	Completeness of Individual Understanding	Extent of Collective Understanding
	Completeness of Intersection Understanding	Extent of Partial Understanding
	Completeness of Partial Understanding	Shared Understanding
	Consistency of Individual Understanding	Timeliness of Collective Understanding
	Consistency of Intersection Understanding	Timeliness of Individual Understanding
	Consistency of Partial Understanding	Uncertainty of Collective Understanding
Decision or Action	Adaptiveness	Responsiveness
	Analyze	Risk Propensity
	Collaboration about Environment	Robustness
	Collaboration about Forces	Speed of Command
	Collaboration about Intentions	Speed of Decision
	Collaboration about Mission	Speed of Planning
	Command Approach	Synchronization of Decisions
	Distribution of Information	Synchronization of Actions
	Dynamics across Time	Task Competency
	Experience of Personnel	Task Speed
	Flexibility	Timeliness of Individual Decisions
	History	Training
	Innovation	Trust in Information
	Level of Confidence	Understanding about Environment
	Perception of Cause and Effect	Understanding about Forces

Cognitive Pyramid	Conceptual Model Variable	
	Quality of Decisions	Understanding about Intentions
	Quality of Plan	Understanding about Mission

1.5 "Target" Event

Table H-5: "Target" Event

Cognitive Pyramid	Conceptual Model Variable	
Environment	Atmospheric Weather	Sensor Coverage (Spatial)
	Direct Sensing	Sensor Coverage (Spectrum)
	Indirect Sensing	Sensor Persistence
	Political Situation	Social Situation
	Sensor Coverage (Medium)	Space Weather
Information	Completeness of Information	Information about Mission
	Completeness of Shared Information	Information Quality
	Consistency of Information	Information Uncertainty
	Consistency of Shared Information	Precision of Individual Information
	Correctness of Individual Information	Precision of Information
	Correctness of Shared Information	Precision of Shared Information
	Currency of Individual Information	Relevance of Shared Information
	Currency of Information	Share Information
	Currency of Shared Information	Timeliness of Shared Information
	Data Interoperability	Timeliness of Individual Information
	Distribution of Information	Timeliness of Information
	Extent of Shared Information	Trust in Information
	Information about Environment	Uncertainty of Shared Information
	Information about Forces	
Awareness	Accuracy of Collective Awareness	Awareness about Forces

Cognitive Pyramid	Conceptual Model Variable	
	Accuracy of Intersection Awareness	Awareness about Intentions
	Awareness about Capabilities	Awareness about Mission
	Awareness about Environment	
Understanding	Quality of Understanding	
Decision or Action	Accuracy of Individual Decisions	Political Situation
	Appropriateness of Individual Decisions	Quality of Decisions
	Authentication	Quality of Plan
	C2 Doctrine	Resource Allocation
	Command Approach	Resource Prioritization
	Communication of Intent	Responsiveness
	Constraint Enforcement	Risk Propensity
	Constraint Setting	Robustness
	Control Approach	Role of Authority
	Criticality	Skill
	Decision Participants	Task Speed
	Degree of Decision Concurrence	Social Situation
	Dynamics across Time	Speed of Command
	Experience of Personnel	Synchronization
	Flexibility	Synchronization of Actions
	Force Effectiveness	Task Competence
	Identification	Task Efficiency
	Indirect Sensing	Task Knowledge
	Individual Task Efficiency	Timeliness of Individual Decisions
	Lethal Effectors	Training
	Likelihood of Success	Trust in Information
	Mission Effectiveness	Uncertainty of Individual Decisions

Cognitive Pyramid	Conceptual Model Variable	
	Nature of Rules	Willingness
	Non-Lethal Effectors	

1.6 "Engage" Event

Table H-6: "Engage" Event

Cognitive Pyramid	Conceptual Model Variable	
Environment	Atmospheric Weather	Network Reliability
	Communications Interoperability	Network Richness
	Complicated-ness	Political Situation
	Data Interoperability	Quality of Communications Equipment
	Electivity	Quality of Computing Equipment
	Network Availability	Social Situation
	Network Reach	
Information	Completeness of Individual Information	Information about Intentions
	Completeness of Shared Information	Information about Mission
	Correctness of Information	Information Quality
	Correctness of Shared Information	Precision of Individual Information
	Currency of Individual Information	Precision of Information
	Currency of Information	Relevance of Shared Information
	Currency of Shared Information	Timeliness of Shared Information
	Distribution of Information	Timeliness of Information
	Extent of Shared Information	Trust in Information
	Information about Environment	Uncertainty of Shared Information
	Information about Forces	
Awareness	Awareness about Capabilities	Completeness of Individual Awareness

Cognitive Pyramid	Conceptual Model Variable	
	Awareness about Environment	Correctness of Collective Awareness
	Awareness about Forces	Currency of Collective Awareness
	Awareness about Intentions	Currency of Individual Awareness
	Awareness about Mission	Shared Awareness (intersection)
Understanding	Completeness of Collective Understanding	Quality of Understanding
	Correctness of Collective Understanding	Uncertainty of Individual Understanding
	Currency of Collective Understanding	
Decision or Action	Accuracy	Resource Prioritization
	Adaptiveness	Responsiveness
	Authentication	Role of Authority
	C2 Doctrine	Risk Propensity
	Clarity about Role	Robustness
	Command Approach	Role of Emotion
	Command Arrangements	Selectivity
	Communication of Intent	Skill
	Constraint Enforcement	Sleep Deprivation
	Constraint Setting	Social Situation
	Control Approach	Speed of Command
	Criticality	Speed of Decision
	Dynamics across Time	State of Mental Health
	Experience of Personnel	State of Physical Health
	Extent of Shared Information	Stress Level
	Force Will	Synchronization
	Identification	Synchronization of Actions
	Leadership	Task Competence
	Lethal effectors	Task Efficiency

Cognitive Pyramid	Conceptual Model Variable	
	Level of Confidence	Task Knowledge
	Likelihood of Success	Task Speed
	Mission Effectiveness	Team Culture
	Mobility	Team Decisions
	Nature of Rules	Training
	Non-Lethal Effectors	Trust in Information
	Perception of Cause and Effect	Trust in People
	Political Situation	Willingness
	Resource Allocation	

1.7 "Assess" Event

Table H-7: "Assess" Event

Cognitive Pyramid	Conceptual Model Variable	
Environment	Collective Knowledge	Number of Mental Models
	Constraint Enforcement	Policy Effectiveness
	Constraint Setting	Political Situation
	Experience of Personnel	Social Situation
	History	Stress Level
	Identification	Team Culture
	Lethal Effectors	Team Sensemaking Behaviour
	Non-Lethal Effectors	Uncertainty
Information	Accuracy of Shared Information	Information about Mission
	Completeness of Individual Information	Information Ambiguity
	Completeness of Shared Information	Information Complexity
	Correctness of Individual Information	Information Quality
	Correctness of Information	Information Uncertainty
	Correctness of Shared Information	Precision of Individual Information
	Currency of Information	Precision of Information

Cognitive Pyramid	Conceptual Model Variable	
	Currency of Shared Information	Precision of Shared Information
	Extent of Shared Information	Relevance of Shared Information
	Fusion	Timeliness of Shared Information
	Information about Capabilities	Timeliness of Information
	Information about Environment	Trust in Information
	Information about Forces	Uncertainty of Shared Information
	Information about Intentions	
Awareness	Accuracy of Collective Awareness	Awareness about Mission
	Accuracy of Individual Awareness	Completeness of Individual Awareness
	Accuracy of Intersection Awareness	Correctness of Collective Awareness
	Accuracy of Partial Awareness	Correctness of Individual Awareness
	Awareness about Capabilities	Correctness of Intersection Awareness
	Awareness about Environment	Correctness of Partial Awareness
	Awareness about Forces	Precision of Collective Awareness
	Awareness about Intentions	Precision of Individual Awareness
Understanding	Accuracy of Collective Understanding	Extent of Collective Understanding
	Accuracy of Individual Understanding	Extent of Intersection Understanding
	Accuracy of Intersection Understanding	Extent of Partial Understanding
	Accuracy of Partial Understanding	Precision of Collective Understanding
	Completeness of Collective Understanding	Precision of Individual Understanding
	Completeness of Individual Understanding	Understanding about Capabilities
	Completeness of Partial Understanding	Understanding about Environment

Cognitive Pyramid	Conceptual Model Variable	
	Correctness of Collective Understanding	Understanding about Forces
	Correctness of Individual Understanding	Understanding about Intentions
	Correctness of Intersection Understanding	Understanding about Mission
	Correctness of Partial Understanding	
Decision or Action	Analyze	Mission Effectiveness
	Assessment	Non-Lethal Effectors
	Constraint Enforcement	Persistence
	Constraint Setting	Stress Level
	Discovery	Task Competence
	Identification	Task Efficiency
	Innovation	Task Knowledge
	Level of Confidence	Task Speed
	Likelihood of Success	

2. DETERMINING THE VALUE OF THE CONCEPTUAL MODEL VARIABLES WITHIN THE AF2T2EA "KILL-CHAIN" PROCESS (VALUE VIEW)

Each of the conceptual model variables were assigned a "value" as to contributing towards the stated capability for each of the seven events within the AF2T2EA "Kill Chain" process. Highest value was highlighted in RED, Medium value was in BLUE and low value was in BLACK.

2.1 "Anticipate" Value

Table H-8: "Anticipate" Value

"Anticipate" Event		
High Value	**Medium Value**	**Low Value**
Ability to model, predict and display possible effects, warn, and report CBRNE and TIM threats		
Understanding about Intentions		Atmospheric Weather
Understanding about Environment		Space Weather
		Sensor Persistence
		Sensor Coverage (Spatial)
		Sensor Coverage (Medium)
		Sensor Coverage (Spectrum)
Predict how actions (Red, Blue, Gray) will cascade into direct and indirect effects in support of effects-based operations		
Correctness of Information	Completeness of Individual Information	Accuracy
Correctness of Individual Information	Completeness of Shared Information	Completeness of Information
Correctness of Shared Information	Precision of Information	Currency of Information
Information about Forces	Precision of Individual Information	Currency of Individual Information
Information about Environment	Precision of Shared Information	Currency of Shared Information
Information about Intentions	Relevance of Shared Information	Consistency of Information

"Anticipate" Event		
High Value	**Medium Value**	**Low Value**
Information Uncertainty	Timeliness of Information	Consistency of Individual Information
Uncertainty	Timeliness of Individual Information	Consistency of Shared Information
	Timeliness of Shared Information	Distribution of Information
	Uncertainty of Shared Information	Data Interoperability
		Extent of Shared Information
		Fusion
		Information Quality
		Network Reach
		Richness of Collaborative Environment
		Share Information
		Trust in Information

Anticipate adversary's action(s) in order to streamline and shorten Find, Fix, Track, Target, Engage, and Assess (F2T2EA) cycle		
Awareness about Environment	Task Speed	Accuracy of Individual Awareness
Awareness about Forces	Timeliness of Planning	Accuracy of Individual Decisions
Awareness about Intentions	Force Effectiveness	Accuracy of Shared Information
Awareness about Mission	Speed of Command	Collaboration about Environment
	Speed of Decision	Collaboration about Forces
	Speed of Planning	Collaboration about Intentions
		Command Approach
		Completeness of Individual Decisions
		Consistency of Individual Decisions

"Anticipate" Event		
High Value	**Medium Value**	**Low Value**
		Correctness of Individual Decisions
		Currency of Individual Decisions
		Experience of Personnel
		Frequency of Command Interactions
		Frequency of Peer-to-Peer Interactions
		History
		Mode of Decision Making of Individual Decisions
		Precision of Individual Decisions
		Quality of Decisions
		Quality of Interactions
		Quality of Peer-to-Peer Interactions
		Relevance of Individual Decisions
		Responsiveness
		Synchronization of Actions
		Timeliness of Individual Decisions
		Uncertainty of Individual Decisions
Ability to model and predict CBRNE and TIM threats and events		
Understanding about Intentions		Atmospheric Weather
Understanding about Environment		Space Weather

"Anticipate" Event		
High Value	**Medium Value**	**Low Value**
		Sensor Persistence
		Sensor Coverage (Spatial)
		Sensor Coverage (Medium)
		Sensor Coverage (Spectrum)

2.2 "Find" Value

Table H-9: "Find" Value

"Find" Event		
High Value	**Medium Value**	**Low Value**
Fully merge and integrate sensor information to support battlespace situational awareness		
Sensor Coverage (Spatial)		Atmospheric Weather
Sensor Coverage (Medium)		Collaboration about Environment
Sensor Coverage (Spectrum)		Command Approach
Sensor Persistence		Frequency of Command Interactions
		Frequency of Peer-to-Peer Interactions
		History
		Quality of Interactions
		Quality of Peer-to-Peer Interactions
		Space Weather
Rapidly and accurately updated situational understanding as a result of changes in situational awareness		
Correctness of Information	Currency of Information	Accuracy

"Find" Event		
High Value	**Medium Value**	**Low Value**
Correctness of Individual Information	Currency of Individual Information	Completeness of Information
Correctness of Shared Information	Currency of Shared Information	Completeness of Individual Information
Timeliness of Information	Precision of Information	Completeness of Shared Information
Timeliness of Individual Information	Precision of Individual Information	Consistency of Information
Timeliness of Shared Information	Precision of Shared Information	Consistency of Individual Information
	Trust in Information	Consistency of Shared Information
		Data Interoperability
		Distribution of Information
		Experience of Personnel
		Extent of Shared Information
		Fusion
		Information Quality
		Information about Forces
		Information about Environment
		Information about Intentions
		Information Uncertainty
		Network Reach
		Relevance of Shared Information
		Richness of Collaborative Environment
		Share Information
		Uncertainty
		Uncertainty of Shared Information

"Find" Event		
High Value	**Medium Value**	**Low Value**
Accurate and real-time situational awareness of the battlespace to enable decision makers to correctly react to dynamic changes		
Awareness about Environment	Accuracy of Individual Awareness	Accuracy of Individual Decisions
Awareness about Forces	Accuracy of Shared Information	Collaboration about Forces
Awareness about Intentions	Force Effectiveness	Collaboration about Intentions
Awareness about Mission	Responsiveness	Command Approach
Speed of Command	Synchronization of Actions	Completeness of Individual Decisions
Speed of Decision		Control Approach
Speed of Planning		Consistency of Individual Decisions
Task Speed		Correctness of Individual Decisions
		Currency of Individual Decisions
		Experience of Personnel
		Mode of Decision Making of Individual Decisions
		Precision of Individual Decisions
		Quality of Decisions
		Relevance of Individual Decisions
		Timeliness of Planning
		Timeliness of Individual Decisions
		Uncertainty of Individual Decisions

2.3 "Fix" Value

Table H-10: "Fix" Value

"Fix" Event		
High Value	**Medium Value**	**Low Value**
Accurate and timely positive combat identification of ground, air, and space objects		
Accuracy of Collective understanding	Accuracy	Analyze
Accuracy of Individual Understanding	Adaptiveness	Awareness about Capabilities
Accuracy of Individual Awareness	Authentication	Awareness about Intentions
Correctness of Information	Currency of Shared Information	Collective Knowledge
Correctness of Shared Information	Completeness of Collective Understanding	Command Approach
Precision of Individual Information	Identification	Completeness of Information
Precision of Information	Level of Confidence	Completeness of Individual Decisions
Precision of Shared Information		Consistency of Information
Sensor Coverage (Spatial)		Consistency of Shared Information
Sensor Coverage (Medium)		Distribution of Information
Sensor Coverage (Spectrum)		Extend of Shared Information
Sensor Persistence		Fusion
Timeliness of Shared Information		Identification
Timeliness of Individual Information		Information about Capabilities
Timeliness of Information		Information Ambiguity
		Information Complexity
		Information Quality
		Information Uncertainty

"Fix" Event		
High Value	**Medium Value**	**Low Value**
		Mission Effectiveness
		Network Availability
		Network Reach
		Network Reliability
		Quality of Communications Equipment
		Quality of Computing Equipment
		Relevance of Shared Information
		Share Information
		Task Competence
		Task Speed
		Uncertainty of Shared Information

2.4 "Track" Value

Table H-11: "Track" Value

"Track" Event		
High Value	**Medium Value**	**Low Value**
Integration and display of operations information in a common operational picture available to entire network		
Accuracy of Shared Information	Accuracy	Adaptiveness
Accuracy of Collective Awareness	Completeness of Information	Atmospheric Weather
Accuracy of Individual Awareness	Completeness of Individual Information	Analyze
Accuracy of Intersection Awareness	Completeness of Shared Information	Awareness about Environment
Accuracy of Partial Awareness	Currency of Individual Information	Awareness about Forces

"Track" Event		
High Value	**Medium Value**	**Low Value**
Accuracy of Collective Understanding	Currency of Information	Awareness about Intentions
Accuracy of Individual Understanding	Currency of Shared Information	Awareness about Mission
Accuracy of Intersection Understanding	Information about Environment	Completeness of Collective Understanding
Accuracy of Partial Understanding	Information about Forces	Completeness of Individual Awareness
Correctness of Collective Awareness	Information about Intentions	Completeness of Individual Understanding
Correctness of Collective Understanding		Completeness of Intersection Understanding
Correctness of Individual Awareness		Completeness of Partial Understanding
Correctness of Individual Information		Consistency of Information
Correctness of Individual Understanding		Consistency of Individual Information
Correctness of Partial Awareness		Consistency of Individual Awareness
Correctness of Partial Understanding		Consistency of Individual Understanding
Correctness of Shared Information		Consistency of Intersection Understanding
Timeliness of Collective Awareness		Consistency of Partial Understanding
Timeliness of Collective Understanding		Consistency of Shared Information
Timeliness of Individual Awareness		Currency of Collective Awareness
Timeliness of Individual Information		Currency of Collective Understanding
Timeliness of Individual Understanding		Currency of Individual Awareness

"Track" Event		
High Value	**Medium Value**	**Low Value**
Timeliness of Information		Currency of Individual Understanding
Timeliness of Shared Information		Distribution of Information
		Dynamics across Time
		Extend of Shared Information
		Extent of Collective Understanding
		Extent of Partial Understanding
		Flexibility
		Fusion
		History
		Information Quality
		Information Uncertainty
		Indirect Sensing
		Network Reach
		Precision of Individual Awareness
		Precision of Individual Information
		Precision of Information
		Precision of Shared Information
		Relevance of Shared Information
		Responsiveness
		Robustness
		Shared Understanding
		Uncertainty of Collective Awareness
		Uncertainty of Collective Understanding

"Track" Event		
High Value	**Medium Value**	**Low Value**
		Uncertainty of Shared Information
Improve, automate, and streamline monitoring of friendly air and space force location		
Understanding about Environment	Adaptiveness	Analyze
Understanding about Forces	Flexibility	Collaboration about Environment
Understanding about Intentions	Responsiveness	Collaboration about Forces
Understanding about Mission	Robustness	Collaboration about Intentions
	Sensor Coverage (Medium)	Collaboration about Mission
	Sensor Coverage (Spatial)	Command Approach
	Sensor Coverage (Spectrum)	Distribution of Information
	Space Weather	Dynamics across Time
	Task Speed	Experience of Personnel
	Trust in Information	History
		Innovation
		Mobility
		Level of Confidence
		Perception of Cause and Effect
		Quality of Decisions
		Quality of Plan
		Risk Propensity
		Speed of Command
		Speed of Decision
		Speed of Planning
		Synchronization of Actions
		Synchronization of Decisions
		Task Competency

"Track" Event		
High Value	**Medium Value**	**Low Value**
		Timeliness of Individual Decisions
		Training

2.5 "Target" Value

Table H-12: "Target" Value

"Target" Event		
High Value	**Medium Value**	**Low Value**
Improve Commander's COA selection and dissemination process		
Accuracy of Collective Awareness	Completeness of Information	Atmospheric Weather
Accuracy of Intersection Awareness	Completeness of Shared Information	Accuracy of Individual Decisions
Awareness about Capabilities	Consistency of Information	Appropriateness of Individual Decisions
Awareness about Environment	Consistency of Shared Information	Authentication
Awareness about Forces	Correctness of Individual Information	C2 Doctrine
Awareness about Intentions	Correctness of Shared Information	Communication of Intent
Awareness about Mission	Command Approach	Constraint Enforcement
Currency of Individual Information	Constraint Setting	Control Approach
Currency of Information	Criticality	Data Interoperability
Currency of Shared Information	Direct Sensing	Distribution of Information
Lethal Effectors	Information about Environment	Decision Participants
Non-Lethal Effectors	Information about Forces	Degree of Decision Concurrence
Political Situation	Indirect Sensing	Dynamics across Time

"Target" Event		
High Value	**Medium Value**	**Low Value**
Social Situation	Information about Mission	Extent of Shared Information
	Information Uncertainty	Experience of Personnel
	Likelihood of Success	Flexibility
	Risk Propensity	Force Effectiveness
	Robustness	Information Quality
	Sensor Persistence	Identification
	Speed of Command	Individual Task Efficiency
	Synchronization	Mission Effectiveness
	Synchronization of Actions	Nature of Rules
	Task Speed	Political Situation
	Trust in Information	Precision of Individual Information
	Uncertainty of Shared Information	Precision of Information
	Willingness	Precision of Shared Information
		Quality of Decisions
		Quality of Plan
		Relevance of Shared Information
		Resource Allocation
		Resource Prioritization
		Responsiveness
		Role of Authority
		Share Information
		Skill
		Sensor Coverage (Medium)
		Sensor Coverage (Spatial)
		Sensor Coverage (Spectrum)
		Space Weather
		Task Competence

"Target" Event		
High Value	**Medium Value**	**Low Value**
		Task Efficiency
		Task Knowledge
		Timeliness of Individual Decisions
		Timeliness of Individual Information
		Timeliness of Information
		Timeliness of Shared Information
		Training
		Uncertainty of Individual Decisions

2.6 "Engage" Value

Table H-13: "Engage" Value

"Engage" Event		
High Value	**Medium Value**	**Low Value**
Better optimized use of the battlespace environment		
	Atmospheric Weather	Complicated-ness
	Communications Interoperability	Data Interoperability
	Direct Sensing	Network Availability
	Indirect Sensing	Network Reach
	Space Weather	Network Reliability
		Network Richness
		Political Situation
		Quality of Communications Equipment

"Engage" Event		
High Value	**Medium Value**	**Low Value**
		Quality of Computing Equipment
		Selectivity
		Social Situation
Real-time collaboration among all C2 entities		
	Completeness of Shared Information	Completeness of Individual Information
	Correctness of Shared Information	Correctness of Information
	Currency of Shared Information	Currency of Individual Information
	Distribution of Information	Currency of Information
	Extent of Shared Information	Information about Environment
	Relevance of Shared Information	Information about Forces
	Timeliness of Shared Information	Information about Intentions
	Trust in Information	Information about Mission
	Uncertainty of Shared Information	Information Quality
		Precision of Individual Information
		Precision of Information
		Timeliness of Information
Conduct real-time effects-based mission execution		
Awareness about Capabilities		Completeness of Individual Awareness
Awareness about Environment		Correctness of Collective Awareness
Awareness about Forces		Currency of Collective Awareness
Awareness about Intentions		Currency of Individual Awareness

"Engage" Event		
High Value	**Medium Value**	**Low Value**
Awareness about Mission		Shared Awareness (intersection)
Capability to achieve self-synchronization of forces		
Lethal Effectors	Adaptiveness	Accuracy
Mission Effectiveness	C2 Doctrine	Authentication
Non-Lethal Effectors	Command Approach	Clarity about Roles
Speed of Command	Command Arrangements	Constraint Enforcement
Speed of Decision	Communication of Intent	Constraint Setting
Task Competence	Control Approach	Completeness of Collective Understanding
Task Efficiency	Dynamics across Time	Correctness of Collective Understanding
Task Knowledge	Force Will	Criticality
Task Speed	Leadership	Currency of Collective Understanding
	Mobility	Experience of Personnel
	Resource Prioritization	Extent of Shared Information
	Role of Authority	Identification
	Risk Propensity	Level of Confidence
	Robustness	Likelihood of Success
	Synchronization	Nature of Rules
	Synchronization of Actions	Perception of Cause and Effect
	Team Culture	Political Situation
	Team Decisions	Quality of Understanding
	Training	Resource Allocation
	Trust in Information	Responsiveness
	Trust in People	Role of Emotion
		Selectivity
		Skill
		Sleep Deprivation

"Engage" Event		
High Value	**Medium Value**	**Low Value**
		Social Situation
		State of Mental Health
		State of Physical Health
		Stress Level
		Uncertainty of Individual Understanding
		Willingness

2.7 "Assess" Value

Table H-14: "Assess" Value

"Assess" Event		
High Value	**Medium Value**	**Low Value**
Real-time Red, Blue Gray force status assessment		
Awareness about Capabilities	Accuracy of Collective Awareness	Constraint Enforcement
Awareness about Environment	Accuracy of Individual Awareness	Constraint Setting
Awareness about Forces	Accuracy of Intersection Awareness	Experience of Personnel
Awareness about Intentions	Accuracy of Partial Awareness	History
Awareness about Mission	Collective Knowledge	Identification
Correctness of Collective Awareness	Completeness of Individual Awareness	Lethal Effectors
Correctness of Individual Awareness	Political Situation	Non-Lethal Effectors
Correctness of Intersection Awareness	Precision of Collective Awareness	Number of Mental Models
Correctness of Partial Awareness	Precision of Individual Awareness	Policy Effectiveness
	Social Situation	Stress Level

"Assess" Event		
High Value	**Medium Value**	**Low Value**
	Uncertainty	Team Culture
		Team Sensemaking Behaviour
Ability to accurately assess air and space operational impacts of physical environmental conditions		
Correctness of Individual Information	Precision of Individual Information	Accuracy of Shared Information
Correctness of Information	Precision of Information	Completeness of Individual Information
Correctness of Shared Information	Precision of Shared Information	Completeness of Shared Information
Currency of Information	Trust in Information	Extent of Shared Information
Currency of Shared Information		Fusion
		Information about Capabilities
		Information about Environment
		Information about Forces
		Information about Intentions
		Information Ambiguity
		Information Complexity
		Information about Mission
		Information Quality
		Information Uncertainty
		Relevance of Shared Information
		Timeliness of Shared Information
		Timeliness of Information
		Uncertainty of Shared Information
Improve COA evaluation and requirements process		

"Assess" Event		
High Value	**Medium Value**	**Low Value**
Correctness of Collective Understanding	Accuracy of Collective Understanding	Completeness of Collective Understanding
Correctness of Individual Understanding	Accuracy of Individual Understanding	Completeness of Individual Understanding
Correctness of Intersection Understanding	Accuracy of Intersection Understanding	Completeness of Partial Understanding
Correctness of Partial Understanding	Accuracy of Partial Understanding	Precision of Collective Understanding
Understanding about Capabilities	Extent of Collective Understanding	Precision of Individual Understanding
Understanding about Environment	Extent of Intersection Understanding	
Understanding about Forces	Extent of Partial Understanding	
Understanding about Intentions		
Understanding about Mission		

Rapid assessment and selection of targets to maximize desired effects		
Mission Effectiveness	Analyze	Constraint Enforcement
Task Competence	Assessment	Constraint Setting
Task Efficiency	Likelihood of Success	Discovery
Task Knowledge	Lethal Effectors	Identification
Task Speed	Non-Lethal Effectors	Innovation
		Level of Confidence
		Persistence
		Stress Level