# Conditions of Use

Thank you for your interest in our work. We are more than happy to share with you the items that we have developed to assess the Marks, Mathieu & Zaccaro (2001) team process taxonomy. Our measure includes five items for each of the 10 dimensions that we discussed in our article (50 items total). We have preliminarily designated three items from each dimension to serve as a 30-item short form. If you wish to use the measure, you will need to at least administer the 30-item version. Obviously we recommend that you administer the 50-item version as it will better assess the underlying constructs and provide you (and us) with better data for validation purposes.

We are willing to share our items under the following conditions: 1) they will only be used for research purposes and not for profit; 2) you will not circulate them further without our permission; and 3) you are willing to share with us raw data from your individual respondents. Assuming that these conditions are agreeable to you, we'll send you a copy of the items for consideration.

Because we are currently validating these scales, their use is contingent on us receiving raw data. Such data will ONLY be used by us to validate these measures and does not preclude you from using them for your substantive publications. We are gathering this information from everyone who requests the scales and will be pooling data for the validation effort. To make the data most valuable, we would appreciate knowing the following features about the teams that you sample: 1) size; 2) type; 3) composition (e.g., members' age, sex, functional area, etc.); and 4) anything else that you can provide in terms of assessing the construct validity of the measures. For example, if you also collected any type of team performance information that would be very valuable.

Please prepare your raw data file as an EXCEL or SPSS file and include: 1) a team membership designator; 2) respondents' demographic and other information; and 3) then the team process ratings. Each respondent should appear as a separate line. We do not need, nor want, any identifying information about your respondents. Therefore, this should not present any concerns for your IRB reviews. Please note the codes for the process items if they aren't self evident. Again, if you have any additional information that you can share, we would appreciate receiving it in a separate file (make sure to include the team designator).

We appreciate your willingness to cooperate with us on this effort. In exchange, we will gladly share with you our validation report.

Sincerely,

John Mathieu & Michelle Marks

# **Transition Processes**

To what extent does our team actively work to .....

- 1 = Not at all
- 2= Very Little
- 3= To Some Extent
- 4= To a Great Extent
- 5= To a Very Great Extent

Mission Analysis

- \*1. Identify our main tasks?
- \*2. Identify the key challenges that we expect to face?
- \*3. Determine the resources that we need to be successful?
- 4. Develop a shared understanding of our purpose or mission?
- 5. Understand the needs of our primary stakeholders (e.g., customers, top management, other organizational units)?

## Goal Specification

- \*1. Set goals for the team?
- \*2. Ensure that everyone on our team clearly understands our goals?
- \*3. Link our goals with the strategic direction of the organization?
- 4. Prioritize our goals?
- 5. Set specific timelines for each of our goals?

Strategy Formulation & Planning

- \*1. Develop an overall strategy to guide our team activities?
- \*2. Prepare contingency ("if-then") plans to deal with uncertain situations?
- \*3. Know when to stick with a given working plan, and when to adopt a different one?
- 4. Periodically re-evaluate the quality of our working plans?
- 5. Specify the sequence in which work products should be accomplished?

\* Indicates items for short form. Highlighted items represent a suitable 10-item version. JM: 7/10/10

# **Action Processes**

To what extent does our team actively work to .....

1 = Not at all

- 2= Very Little
- 3= To Some Extent
- 4= To a Great Extent
- 5= To a Very Great Extent

## Monitoring Progress Toward Goals

- \*1 Regularly monitor how well we are meeting our team goals?
- \*2. Use clearly defined metrics to assess our progress?
- \*3. Seek timely feedback from stakeholders (e.g., customers, top management, other organizational units) about how well we are meeting our goals?
- 4. Know whether we are on pace for meeting our goals?
- 5. Let team members know when we have accomplished our goals?

## Resource and Systems Monitoring

- \*1. Monitor and manage our resources (e.g., financial, equipment, etc.)?
- \*2. Monitor important aspects of our work environment (e.g., inventories, equipment and process operations, information flows)?
- \*3. Monitor events and conditions outside the team that influence our operations?
- 4. Ensure the team has access to the right information to perform well?
- 5. Manage our personnel resources?

## Team Monitoring and Backup

- \*1. Develop standards for acceptable team member performance?
- \*2. Balance the workload among our team members?
- \*3. Assist each other when help is needed?
- 4. Inform team members if their work does not meet standards?
- 5. Seek to understand each other's strengths and weaknesses?

## Coordination

- \*1. Communicate well with each other?
- \*2. Smoothly integrate our work efforts?
- \*3. Coordinate our activities with one another?
- 4. Re-establish coordination when things go wrong?
- 5. Have work products ready when others need them?

\* Indicates items for short form.

Highlighted items represent a suitable 10-item version. JM: 7/10/10

## PLEASE: Do Not Circulate without Permission ©

# **Interpersonal Processes**

To what extent does our team actively work to .....

- 1 = Not at all
- 2= Very Little
- 3= To Some Extent
- 4= To a Great Extent
- 5= To a Very Great Extent

Conflict Management

## \*1. Deal with personal conflicts in fair and equitable ways?

- \*2. Show respect for one another?
- \*3. Maintain group harmony?
- 4. Work hard to minimize dysfunctional conflict among members?
- 5. Encourage healthy debate and exchange of ideas?

## Motivating & Confidence Building

- \*1. Take pride in our accomplishments?
- \*2. Develop confidence in our team's ability to perform well?
- \*3. Encourage each other to perform our very best?
- 4. Stay motivated, even when things are difficult?
- 5. Reward performance achievement among team members?

## Affect Management

- \*1. Share a sense of togetherness and cohesion?
- \*2. Manage stress?
- \*3. Keep a good emotional balance in the team?
- 4. Keep each other from getting overly emotional or frustrated?
- 5. Maintain positive work attitudes?

# **External Boundary Management**

To what extent does our team actively work to .....

1 = Not at all

- 2= Very Little
- 3= To Some Extent
- 4= To a Great Extent
- 5= To a Very Great Extent
- 1) ....seek out and collect external information and resources for support of the teams' goals?
- 2) ....collect information/ideas from individuals outside of my team?
- 3) ....keep outsiders informed of the teams progress?

From Kukenberger, M. R. (2012). A SHARED LEADERSHIP CLASSIFICATION AND MULTI-LEVEL EXPLORATION OF COMPOSITIONAL ANTECEDENTS AND TEAM AND INDIVIDUAL OUTCOMES. University of Connecticut Doctoral Dissertation. Ancona, D. G. & Caldwell, D. F. (1992). Bridging the Boundary: External Activity and Performance in Organizational Teams. Administrative Science Quarterly, **37**, (4), 634-665.

## Ambassador

- 1. Absorb outside pressures for the team so it can work free of interference.
- 2. Protect the team from outside interference.
- 3. Prevent outsiders from "overloading" the team with too much information or too many requests.
- 4. Persuade other individuals that the team's activities are important.
- 5. Scan the environment inside your organization for threats to the product team.
- 6. "Talk up" the team to outsiders.
- 7. Persuade others to support the team's decisions.
- 8. Acquire resources (e.g., money, new members. equipment) for the team.
- 9. Report the progress of the team to a higher organizational level.
- 10. Find out whether others in the company support or oppose your team's activities.
- 11. Find out information on your company's strategy or political situation that may affect the project.
- 12. Keep other groups in the company informed of your team's activities.

# Task Coordination

- 13. Resolve design problems with external groups.
- 14. Coordinate activities with external groups.
- 15. Procure things which the team needs from other groups or individuals in the company.
- 16. Negotiate with others for delivery deadlines.
- 17. Review product design with outsiders.
- 18. Find out what competing firms or groups are doing on similar projects.

# Scout

- 19. Scan the environment inside or outside the organization for marketing ideas/expertise.
- 20. Collect technical information/ideas from individuals outside of the team.
- 21. Scan the environment inside or outside the organization for technical ideas/expertise.

# Guard

- 22. Keep news about the team secret from others in the company until the appropriate time.
- 23. Avoid releasing information to others in the company to protect the team's image or product it is working on.
- 24. Control the release of information from the team in an effort to present the profile we want to show.

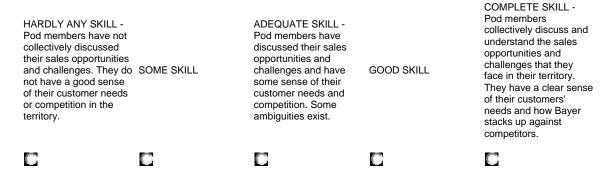
\* Indicates items for short form. Highlighted items represent a suitable 10-item version. JM: 7/10/10

# Pharma Teams – Marks et al. Team Process - BARS

The following set of categories relates to ways in which your Pod works together. Please select the item that best describes how your Pod works together.

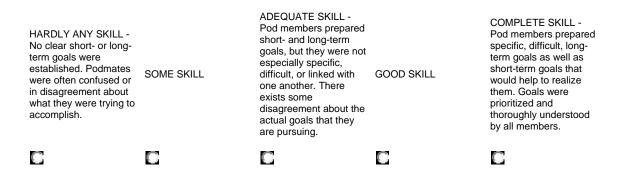
#### **Environmental Analysis**

Definition: Interpretation and evaluation of the team's mission, including identification of their main tasks as well as the operative environmental conditions and team resources available for performance.



#### **Goal Specification**

Definition: Identification and prioritization of goals and sub-goals for mission accomplishment.



#### Strategy Formulation and Planning

Definition: Formulation of strategies and courses of action for mission accomplishment. This dimension includes generic planning, contingency planning, and reactive strategic adjustment.

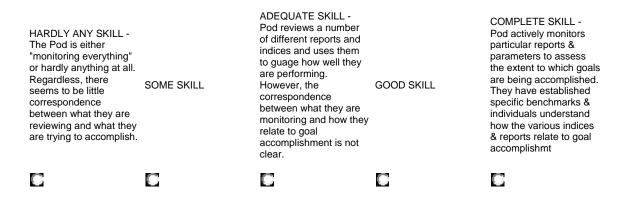
HARDLY ANY SKILL -Pod is primarily in a responsive mode and "seeing what happens" and trying to make sense out of it. They have not established alternative courses of action tied specifically to any performance problems.

ADEQUATE SKILL -Pod has general idea about what it is trying to accomplish. They have some contingency plans in mind, but have no specific decision points established for when they might change strategies. COMPLETE SKILL -Pod developed an overall strategy as well as contingency plans. They have specific "triggers" in place for determining whether to pursue their original plan, contingency plans, or the need to develop new strategies as circumstances warrant.

0	0	0	0	$\odot$

#### **Monitoring Progress Towards Goals**

Definition: Tracking task and goal progress toward mission accomplishment, interpreting system information in terms of what needs to be accomplished for goal attainment, transmitting goal progress to Pod members.



#### Systems Monitoring

Definition: Tracking Pod resources and environmental conditions as they relate to mission accomplishment. This dimension includes internal systems monitoring and environmental monitoring.

HARDLY ANY SKILL - Pod is not sure what industry trends and customer reports to monitor and how they relate to goal accomplishment. They often miss opportunities or have duplications of efforts.	SOME SKILL	ADEQUATE SKILL - Pod monitors a number of industry trends and customer reports and focuses on which ones seem to be most important for their sales strategies. There are few missed opportunities or duplications of effort.	GOOD SKILL	COMPLETE SKILL - Pod knows what industry trends, customer reports and parameters to monitor and how they relate to what they are trying to accomplish. They exploit emerging opportunities and avoid duplications of efforts.
C	C	C	B	0

#### **Team Monitoring and Backup Behavior**

Definition: Assisting Pod members to perform their tasks. Assistance may occur by: a) providing a Podmate verbal feedback or coaching by assisting a Podmate behaviorally in carrying out actions, or b) by assuming and completing a task for a Podmate. This includes providing feedback and task related support and the seeking of help from Podmates when necessary.

HARDLY ANY SKILL -Pod members do not observe & are not aware of each others' actions. Little feedback is provided to each other & people do not seek help when necessary. There is no plan or strategy in ADEQUATE SKILL -Pod members observe and are aware of each others' actions. They offer feedback when necessary. Rarely do individual Pod membes ask for help and there is no informal strategy for

GOOD SKILL

COMPLETE SKILL -Pod members observe & are aware of each others' actions. They offer feedback & task related support. Individual members seek help when necessary. The Pod has

place for how they would deal with member unavailability	t	dealing with member unavailability.		a specific plan for how they will operate if one or more members become unavailable.
C	8	C	C	8

#### **Coordination Activities**

Definition: Orchestrating the sequence and timing of interdependent actions.

HARDLY ANY SKILL - Many coordination breakdowns occur and members can't seem to effectively combine their collective contributions. Customers wonder why their sales team has trouble "getting its act together."	SOME SKILL	ADEQUATE SKILL - Pod members stay in contact with each other & have determined how they will serve each customer. There are a few breakdowns in coordination, but generally there are no adverse effects on customers.	GOOD SKILL	COMPLETE SKILL - Pod members are in frequent contact with each other and have clearly understood roles and responsibilities. Customers perceive that their sales team is a well coordinated unit and that Pod members are well aware of what one another are doing.
0	8	G	C	0

#### Affect Management

Definition: Regulating members' work related emotions, including (but not limited to) teamwork frustration, and excitement.

HARDLY ANY SKILL - Pod members are very apathetic about the task and about the Pod. Meetings and coordination are not enjoyed and seen as "something else that they have to do." If given the options, members would prefer to work alone.	SOME SKILL	ADEQUATE SKILL - Pod members support each other emotionally but sometimes things deteriorate. They spend an undo (or not enough) amount of time dealing with interpersonal and emotional reactions.	GOOD SKILL	COMPLETE SKILL - Pod members support each other emotionally; members try to regulate emotions of the Pod and maintain cohesion and a level plain of emotions. People feel positively toward one another.
	0	C	0	C

#### **Conflict Management**

Definition: Establishing conditions to prevent, control, or guide Pod conflict before it occurs. Working through task, interpersonal, and process disagreements among Pod members.

HARDLY ANY SKILL -The Pod experiences a great deal of conflict. Even task-based disagreements deteriorate and begin to get personal. It seems like more time is spent eliminating conflict than actually working. ADEQUATE SKILL -Pod members are willing to discuss different performance strategies with relatively little ill feelings developing. If disagreements exist, consensus is eventually reached and it does not undermine the Pod efforts. COMPLETE SKILL -Pod members openly discuss different performance strategies without letting things get personal. They have taken measures to minimize interpersonal conflicts, and if any develop, they are dealt with quickly and

				effectively.
C	0	0	C	C

#### **Motivating and Confidence Building**

Definition: Generating and preserving a sense of collective confidence and motivation.

COMPLETE SKILL -HARDLY ANY SKILL -Pod members are highly ADEQUATE SKILL -Confidence is low in the motivated, share a Pod members are Pod and people seem to sense of confidence. motivated to do well in be "going through the motions." When faced their sales territory. They GOOD SKILL and believe that they will SOME SKILL be successful in their believe that they can with adversity, the Pod territory. Adversity "hold their own" and members start to give up brings out the best in secure a fair share of and believe that they them and they are their market. cannot recover. motivated to do well and to continually improve.  $\Box$  $\Box$  $\Box$  $\Box$  $\square$ 

Next Page

# Business Strategy Simulation – Marks et al. (2001) Team Process BARs

# **Mission Analysis**

Definition:	Interpretation and evaluation of the team's mission, including identification of the mission's main tasks as well as the operative environmental conditions and team resources available for mission execution.		
Examples:	-Developing mission statements -Evaluating prospects for industry wide growth -Identifying projected annual footwear demand -Identifying what key competitors are likely to be doing		
5- Complete s	kill	Team members collectively discussed and decided on the company mission (strategic vision) and evaluated the environmental conditions they face; also took inventory of resources available for mission execution.	
4			
3 - Adequates	skill	Team members came up with a mission for the company (strategic vision) but it is not derived specifically from information that is available. They have some idea how their available resources will enable them reach their objectives.	
2			
1 - Hardly any	y skill	Team members did not collectively discuss or decide on a company mission (strategic vision) and did not evaluate the environmental conditions they face. They are not sure how their available resources relate to their objectives.	
Comments:			

# **Goal Specification**

Definition:	Identification and prioritization of goals and sub-goals for mission accomplishment.
Examples:	<ul> <li>-Determining what and how much must be accomplished by a specified time and within certain quality standards</li> <li>-Long-term goals such as building a sustainable competitive advantage and maneuvering a company into industry leading position. These might include market share, long-term financial performance (e.g., growth in revenues, net income, bond rating, etc.), and other performance outcomes.</li> <li>-Short-term goals such as entering certain market, reducing production costs, gaining market share, etc.</li> </ul>
5 - Complete skill	Team members prepared specific, difficult, long-term goals as well as short-term goals that would help to realize them. Goals were prioritized and thoroughly understood by all members.
4	
3 - Adequate skill	Team members prepared long-term and short-term goals, but they were not especially specific, difficult, or linked with one another. There exists some disagreement about the actual goals that they are pursuing.
2	
1 - Hardly any skill	No clear long-term or short-term goals were established. Teammates were often confused or in disagreement about what they were trying to accomplish.
Comments:	

# **Strategy Formulation and Planning**

Definition:	Formulation of strategies and courses of action for mission accomplishment. This dimension includes generic planning, contingency planning, and reactive strategic adjustment.
Examples:	<ul> <li>-Determining primary market target (e.g., private vs. branded; US, Europe and/or Asia) and overall competitive positioning</li> <li>- Developing alternative courses of actions that are tied specifically to certain performance parameters and other information</li> <li>-Developing special functional area strategies (e.g., production, marketing, finance, human resources) in line with the overall strategies</li> </ul>
5 - Complete skill	Team developed a overall strategy and conducted what-iffing and sensitivity analysis to test its' viability. They have specific "triggers" in place for determining future courses of action, and react quickly and effectively as circumstances warrant.
4	
3 - Adequate skill	Team has a general idea about what it is trying to accomplish. They have some contingency plans in mind, but have no specific decision points established for when they might change strategies.
2	
1 - Hardly any skill	Team is primarily in a responsive mode and "seeing what happens" and trying to make sense out of it. They have not established alternative courses of action tied specifically to any game parameter.
Comments:	

# **Monitoring Progress Toward Goals**

Definition:	Tracking task and goal progress toward mission accomplishment; interpreting system information in terms of what needs to be accomplished for goal attainment; transmitting goal progress to team members.
Examples:	<ul> <li>Tracking team's performance on various industry reports and indices</li> <li>Assessing key goal success factors to help make decisions to move forward</li> <li>Reporting and communicating progress of goals to team members</li> </ul>
5- Complete skill	Team actively monitors particular reports and parameters to assess the extent to which goals are being accomplished. They have established specific benchmarks and individuals understand how the various indices and reports relate to goal accomplishment.
4	
3 - Adequate skill	Team reviews a number of different reports and indices and uses them to gauge how well they are performing. However, the correspondence between what they are monitoring and how they relate to goal accomplishment is not clear.
2	
1 - Hardly any skill	The team is either "monitoring everything" or hardly anything at all. Regardless, there seems to be little correspondence between what they are reviewing and what they are trying to accomplish.
Comments:	

# Systems Monitoring

Definition:	missio	ng team resources and environmental conditions as they relate to n accomplishment. This dimension includes internal systems oring and environmental monitoring.	
Examples:	<ul> <li>-Utilizing footwear industry report and competitor analysis reports to track environmental conditions</li> <li>-Monitoring and maintaining adequate costs (i.e. labor, materials, supervision, advertising, etc.), product quality, styling/features and reject rates</li> <li>-Assuring adequate service to retailers and sufficient number of outlets</li> </ul>		
5 - Complete s	skill	Team knows what industry and benchmarking reports and parameters to monitor and how they relate to what they are trying to accomplish. They remain aware of what is going on in the competitive environment as well as how well their company is doing.	
4			
3 - Adequate s	skill	Team monitors a number of industry and benchmarking reports and focuses on which ones seem to be most important. They review company reports to make sure that things are running ok.	
2			
1 - Hardly any	<sup>7</sup> skill	Team is not sure what industry and benchmarking reports to monitor and how they relate to goal accomplishment. They review their company reports in a general way looking for patterns.	
Comments:			

# Team Monitoring and Backup Behavior

Definition:	(a) pro- teamm comple	ng team members to perform their tasks. Assistance may occur by viding a teammate verbal feedback or coaching, (b) by assisting a ate behaviorally in carrying out actions, or (c) by assuming and eting a task for a teammate. This includes the providing feedback k related support and the seeking of help from teammates when ary.
Examples:	<ul> <li>-Team members look out for one another and assume different roles when called for</li> <li>-Team has contingency plan in case one member cannot meet responsibilities</li> <li>-Team members inform each other of individual progress and setbacks</li> <li>-Team members offer each other feedback</li> </ul>	
5 - Complete s	skill	Team members observe and are aware of each others' actions. They offer feedback and task related support. Individual team members seek and ask for help when necessary. The team has a specific plan for how they will operate if one or more members become unavailable.
4		
3 - Adequate s	kill	Team members observe and are aware of each others' actions. They offer feedback when necessary. Rarely do individual team members ask for help and there is an informal strategy for dealing with member unavailability.
2		
1 - Hardly any	skill	Team members do not observe and are not aware of each others' actions. Little feedback is provided to each other and people do not seek help when necessary. There is no plan or strategy in place for how they would deal with member unavailability.
Comments:		

# **Coordination Activities**

Definition:	Orchestrating the sequence and timing of interdependent actions.		
Examples:	-Decid membe -Deter	mining ways to communicate/get a hold of each other lishing decision processes to be used (e.g., consensus, devil's	
5 - Complete s	skill	Team members are in frequent contact with each other and have clearly understood roles and responsibilities. Everyone's input is considered. It is very clear how the team will arrive at their weekly decisions.	
4			
3 - Adequate s	skill	Team members stay in contact with each other and have determined how they will decide on each week's set of decisions. There are some breakdowns in coordination, but nothing that is so disabling that one or more members' input is not considered.	
2			
1 - Hardly any	<sup>7</sup> skill	Many coordination breakdowns occur and members can't seem to effectively combine their collective contributions. Meetings are missed or rushed to conclusion. Sometimes decisions are submitted without the benefit of everyone's input.	
Comments:			

# **Affect Management**

Definition: Regulating member emotions during BSG related work including (but not limited to) social cohesion, frustration, and excitement. Examples: -Team members try to cheer up each other when needed -The members of the team are always ready to cooperate and help each other -The members of the team really stick together -Relationships between members of the team are positive and rewarding 5 - Complete skill Team members support each other emotionally; members try to regulate the emotions of the team and maintain cohesion and a level plain of emotions. 4 3 - Adequate skill Team members support each other emotionally but sometimes things deteriorate. They spend undo (or not enough) amount of time dealing with interpersonal and emotional reactions to the simulation and working with each other. 2 1 - Hardly any skill Team members are very apathetic about the task and about the team. Meetings and work are not enjoyed and seen as "something else that they have to do." If given the options, members would walk away from the entire experience. Comments: \_\_\_\_\_

# **Conflict Management**

occurs	Establishing conditions to prevent, control, or guide team conflict before it occurs. Working through task, interpersonal, and process disagreements among team members.		
alterna -Mem based -Rules	<ul> <li>Team members work through task-based conflict and are open to alternative ideas</li> <li>Members agree upon how they will work or other minimize process based conflicts</li> <li>Rules are established in dealing with interpersonal conflict</li> <li>Preventative conflict measures are stressed among members</li> </ul>		
5- Complete skill	Team members openly discuss different approaches and strategies for game simulation without letting things get personal. They have agreed upon ways that they will operate and have taken measures to minimize interpersonal conflicts. If interpersonal conflicts develop, they are dealt with quickly and effectively.		
4			
3- Adequate skill	Team members are willing to discuss different approaches and strategies for game simulation with relatively little ill feelings developing. While there may be some disagreements about how the team should proceed, consensus is eventually reached. While some interpersonal conflict may exist, it doesn't undermine the team efforts.		
2			
1- Hardly any skill	The Team experiences a great deal of conflict. Even task-based disagreements deteriorate and begin to get personal. It seems like more time is spent eliminating conflict than actually working.		
Comments:			

# Motivating and Confidence Building

Definition:	Generating and preserving a sense of collective confidence, motivation, and task based cohesion with regard to mission accomplishment.		
Examples:	-Wher harde	bers are really motivated to work hard on the game and to do well a faced with adversity, the team really rallies together and works r n members have a shared sense that they can be successful.	
5 - Complete skill		Team members are highly motivated, share a sense of confidence, and believe that they will be successful. Adversity brings out the best in them and they are motivated to do well and to continually improve.	
4			
3 - Adequate skill		Team members are motivated to do well in the simulation. They believe that they can "hold their own" and do not fold in the face of adversity.	
2			
1- Hardly any skill		Confidence is low in the team and people seems to be "going through the motions." When faced with adversity, the team members start to give up and believe that they cannot recover.	
Comments: _			

# ACES Flight Simulation – Marks et al. (2001) BARS

# MISSION ANALYSIS

Definition:	Interpretation and evaluation of the team's mission, including identification of the mission's main tasks as well as the operative environmental conditions and team resources available for mission execution.				
Examples:	<ul> <li>Gathering appropriate and relevant information</li> <li>Understanding the overall MTS mission and the team's contributions to the mission</li> <li>Identifying the main tasks and environmental contingencies of the mission</li> <li>Prioritizes the mission objectives and required tasks</li> <li>Allocating team resources to accomplish each task</li> <li>Communicating the mission plan to all team members</li> </ul>				
Complete skill	5		Team members fully understood their individual/flight team's roles and task responsibilities; they also fully understood the individual or flight team's contribution to the overall mission.		
Very much skill	4				
Adequate skill	3		Team members understood their individual/flight team's roles and task responsibilities; but did not understand the individual or flight team's contribution to the overall mission.		
Some skill	2				
Hardly any skill	1		Team members did not understand their individual/flight team's roles and task responsibilities; nor did they understand the individual or flight team's contribution to the overall mission. They had no idea what their mission objectives were.		

# Definition: Identification and prioritization of goals and subgoals for mission accomplishment. Examples: - Developing and assigning overall mission goals for MTS - Developing and assigning goals for each team in the MTS - Developing and assigning subgoals that help teams accomplish larger goals Complete skill 5 Identified and focused on their primary and secondary goals throughout the mission. Very much skill 4 Adequate skill 3 Identified and focused on their primary and secondary goals throughout half of the mission. Some skill 2 Hardly any skill 1 Displayed no identification of any goals throughout the mission.

#### **GOAL SPECIFICATION**

### STRATEGY FORMULATION & PLANNING

Definition:	Formulation of strategies and courses of action for mission accomplishment. This dimension includes generic planning, contingency planning, and reactive strategic adjustment.		
Examples:	<ul> <li>Developing a main plan to take out enemy targets without getting killed</li> <li>Communicating plans to team members</li> <li>Considering factors (e.g., enemy vehicles, friendly casualties) that might alter their mission plan</li> <li>Developing an alternative plan or specifically addressing how their mission plan and actions will be adjusted to unexpected events</li> <li>Adjusting team actions or responsibilities to adjust to unexpected events (e.g., plane running out of mavericks, enemies are just spotted to the rear of the aircraft).</li> <li>Recognizes how unplanned reactions impact remainder of mission plan (e.g., weapons availability, flight route, altitude and airspeed adjustment)</li> </ul>		
Complete skill	5	Team members (1) developed a primary course of action for mission accomplishment (2) considered a prior alternatives to their primary course of action and developed at least two or three secondary courses of action (3) were able to detect and quickly adapt/coordinate their actions to unexpected situations with appropriate behavior. All team members are aware of and understand how their individual task	
Very much skill	4	responsibilities fit into the primary and secondary courses of action.	
Adequate skill	3	Team members (1) had some difficulty developing a primary course of action for mission accomplishment (2) briefly considered a prior alternatives to their primary course of action and developed at least one secondary course of action (3) noticed and adapted their individual task responsibilities, but do not coordinate their actions within the MTS. All team members are aware of but may not understand how their individual	
Some skill	2	<u></u> task responsibilities fit into the primary and secondary courses of action.	
Hardly any skill	1	Team members (1) were unable to develop a primary course of action for mission accomplishment (2) did not consider a prior alternatives (3) failed to notice unexpected events and situations and were unable to adapt/coordinate their actions. All team members are unaware how their individual task responsibilities fit to accomplish the task at hand.	

## MONITORING PROGRESS TOWARD GOALS

Definition:	Tracking task and goal progress toward mission accomplishment; interpreting system information in terms of what needs to be accomplished for goal attainment, transmitting team goal progress to team members.		
Examples:	<ul> <li>Tracking team's (teams') progress on goals and subgoals (e.g., flight routes, targets destroyed, friendly casualties, and time expenditure)</li> <li>Reporting team's (teams') progress on goals and subgoals (e.g., flight routes, targets destroyed, friendly casualties, and time expenditure)</li> </ul>		
Complete skill	5	Maintained awareness of and tracked their primary and secondary goals progress throughout the mission. Understood which individual tasks and flight team responsibilities were necessary for goal attainment.	
Very much skill	4		
Adequate skill	3	Maintained awareness of and tracked their primary and secondary goal progress throughout half of the mission for individualized tasks or flight teams. Did not understand how individual tasks and flight team responsibilities fit into goal attainment.	
Some skill	2		
Hardly any skill	1	Displayed no awareness or tracking of any goal progress throughout the mission.	

#### SYSTEMS MONITORING

- Definition: Tracking team resources and environmental conditions as they relate to mission accomplishment. This dimension includes internal systems monitoring and environmental monitoring.
- Examples: Tracking team related factors (e.g., weapon availability, speed, fuel, altitude, radar information) and ensure that these systems are operating effectively
   Tracking aspects of the aircraft environment (e.g., terrain shifts, enemy locations and strength, friendly forces)

5 Team members effectively monitor the flight system, each other's Complete skill individual task responsibilities, and any communication generated They also effectively monitor the external within the MTS. environment, location of enemy targets/threats, friendly and neutral forces, air and ground battles, etc.; keeping in mind the overall MTS Teams understand their individual roles and task mission. responsibilities within this changing environment. Very much skill 4 Adequate skill 3 Team members monitor the flight system, and their own individual task responsibilities. They may be some communication generated within the MTS, but they do not attend to it. They also monitor the external environment, location of enemy targets/threats, friendly and neutral forces, air and ground battles, etc. Teams understand their individual roles and task responsibilities within this changing environment. Some skill 2 Hardly any skill 1 Team members have no idea how to monitor the flight system, each other's individual task responsibilities, and any communication generated within the MTS. They also fail to monitor the external environment, location of enemy targets/threats, friendly and neutral forces, air and ground battles, etc. Team members have no idea what their individual roles and task responsibilities are within this changing environment.

#### TEAM MONITORING AND BACKUP BEHAVIOR

Definition:	Assisting team members to perform their tasks. Assistance may occur by (a) providing a teammate verbal feedback or coaching, (b) by assisting a teammate behaviorally in carrying out actions, or (c) by assuming and completing a task for a teammate. This dimension includes the provision of feedback and task related support and the seeking of bala from teammates when pacessary.						
Examples:	-	<ul><li>help from teammates when necessary</li><li>Keeping an eye on other teammates to determine if and when they need help</li></ul>					
	- Helpi	ng team or how to	mates with their assigned roles by telling them what to do o do it				
Complete skill	5		All team members monitor each other in enacting the appropriate role and task requirements to successfully complete the overall mission.				
Very much skill	4						
Adequate skill	3		Team members are more concerned with monitoring whether they themselves are enacting the appropriate role and task requirements to successfully complete the overall mission. Little, if any attentional resources are expended on what other team members are doing.				
Some skill	2						
Hardly any skill	1		Team members fail to monitor each other in enacting the appropriate role and task requirements. They really don't even pay attention to what they are doing themselves.				

## **COORDINATION ACTIVITIES**

Definition: Orchestrating the sequence and timing of interdependent actions.

# Examples: - Organizing how and when team members (and teams) will synchronize actions that require the contribution of both pilot and weapons specialist Organizing how and when team members (and teams) will synchronize actions that require the efforts of more than one team in multi-team situations

Complete skill	5	Maintaining smooth coordination and synchronization of interdependent actions between individual roles and flight teams in accordance with the overall mission.
Very much skill	4	
Adequate skill	3	Maintaining a minimum level of coordination and synchronization of interdependent actions between individual roles in accordance with the overall mission. Team members are not very considered coordinating the MTS.
Some skill	2	
Hardly any skill	1	Complete lack of coordination and synchronization of interdependent actions between individual roles and flight teams. The flight mission is very disorganized and no one knows what is going on.

## CONFLICT MANAGEMENT

Definition: Examples:	<ul> <li>Establishing conditions to prevent, control, or guide team conflict before it occurs.</li> <li>Working through task and interpersonal disagreements among team members.</li> <li>Making statements or offering opinions about task related issues, the way the team functions together, or personal issues, that are likely to affect subsequent team conflict</li> <li>Attempting to work through conflict when conflict with the team (or between teams) arises</li> </ul>			
Complete skill	5	All team members are considerate of differences; they establish a pleasant and cooperative working environment while encouraging team members to present ideas and suggestions regarding the overall mission. Team members are able to constructively discuss problems. If conflict does occur, team members are able to manage and contain the disagreements effectively.		
Very much skill	4			
Adequate skill	3	Team members are sometimes considerate of differences; they establish a fair working environment between flight teams. Team members are able to discuss some problems and resolve most types of conflict. Some team members may just "stay out" of any disagreements which arise.		
Some skill	2			
Hardly any skill	1	Team members are inconsiderate of differences; they establish an unpleasant and uncooperative working environment regarding the overall mission. Team members argue about problems in a destructive manner and often experience much conflict. They are completely unwilling to discuss the issue at hand and have no clue how to resolve the disagreement.		

#### MOTIVATING AND CONFIDENCE BUILDING

- Definition: Generating and preserving a sense of collective confidence, motivation, and task based cohesion with regard to mission accomplishment.
- Examples:

# Motivating each otherInfluencing the level of task cohesion of team members with respect to the mission at hand

Complete skill	5	All team members exhibit a strong sense of collective efficacy as well as self efficacy. This attitude creates a positive attitude about the overall mission, and members seek to motivate one another through reinforcement and praise.
Very much skill	4	
Adequate skill	3	Team members exhibit a strong sense of self efficacy, but not much collective. This self-centered attitude allows one to accomplish his/her own task successfully, but there is not much encouragement or motivation between team members.
Some skill	2	
Hardly any skill	1	Team members fail to exhibit any sense of efficacy. This attitude creates a negative attitude about the overall mission, since there is a complete lack of encouragement or motivation between team members.

## AFFECT MANAGEMENT

Definition:	Regulating member emotions during mission accomplishment, including (but not limited to) social cohesion, frustration, and excitement.		
Examples:	- Influencing the positive and negative emotions of other members		
Complete skill	5 While carrying out the mission objectives, team members effectively extinguished negative emotions and enhanced positive emotions. They were able to regulate and maintain a solid sense of emotional stability within the larger team.		
Very much skill	4		
Adequate skill	3 While carrying out the mission objectives, team members extinguished their own negative emotions and retain some positive emotions. They were able to regulate and maintain a moderate level of emotional stability within their flight team, but not so much the larger team.		
Some skill	2		
Hardly any skill	1 While carrying out the mission objectives, team members failed to extinguish negative emotions and failed to enhance positive emotions. They were unable to regulate and maintain any sense of emotional stability within their flight team or the larger team.		

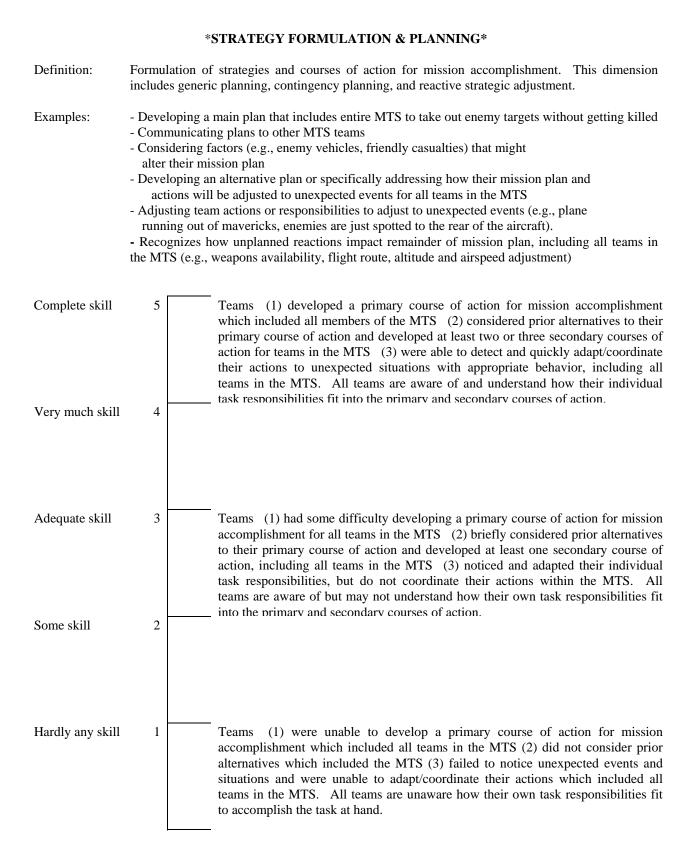
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## MISSION ANALYSIS

Definition:	Interpretation and evaluation of the entire MTS mission, including identification of the mission's main tasks as well as the operative environmental conditions and team resources available for mission execution.				
Examples:	<ul> <li>Gathering appropriate and relevant information for MTS</li> <li>Understanding the overall MTS mission and the team's contributions to the mission</li> <li>Identifying the main tasks and environmental contingencies of the mission for the MTS</li> <li>Prioritizes the mission objectives and required tasks for the MTS</li> <li>Allocating entire MTS resources to accomplish each task</li> <li>Communicating the mission plan to all teams within the MTS</li> </ul>				
Complete skill	5		Teams fully understood MTS roles and task responsibilities; they also fully understood MTS contribution to the overall mission.		
Very much skill	4				
Adequate skill	3		Team members usually understood most MTS roles and task responsibilities; but did not understand MTS contributions to the overall mission.		
Some skill	2				
Hardly any skill	1		Teams did not seem to understand MTS contributions to the overall mission. They had no idea what mission objectives were for all teams.		

#### **\*GOAL SPECIFICATION\***

Definition:	Identification and prioritization of goals and subgoals for mission accomplishment.
Examples:	<ul> <li>Developing and assigning overall mission goals for MTS</li> <li>Developing and assigning goals for each team in the MTS</li> <li>Developing and assigning subgoals within the MTS that help teams accomplish larger goals</li> </ul>
Complete skill	5 Identified which team in the MTS will complete each primary and secondary goal.
Very much skill	4
Adequate skill	3 Vaguely/occasionally identified which team in the MTS will complete each goal, may not specify primary or secondary, may be some confusion as to what goals are.
Some skill	2
Hardly any skill	Displayed no identification of any goals for the MTS throughout the mission. Didn't communicate any goals for each team in the MTS.



## \*MONITORING PROGRESS TOWARD GOALS\*

Definition:	Tracking MTS task and goal progress toward mission accomplishment; interpreting system information in terms of what needs to be accomplished for goal attainment, transmitting team goal progress to all members in MTS.				
Examples:	<ul> <li>Tracking MTS progress on goals and subgoals (e.g., flight routes, targets destroyed, friendly casualties, and time expenditure)</li> <li>Reporting MTS progress on goals and subgoals (e.g., flight routes, targets destroyed, friendly casualties, and time expenditure)</li> </ul>				
Complete skill	5	Continually maintained awareness of and tracked MTS primary and secondary goal progress throughout the mission.			
Very much skill	4	_			
Adequate skill	3	Occasionally maintained awareness of and tracked MTS primary and secondary goal progress throughout half of the mission.			
Some skill	2	_			
Hardly any skill	1	Displayed no awareness or tracking of any MTS goal progress throughout the mission.			

## **\*SYSTEMS MONITORING\***

Definition:	Tracking and communicating resources and environmental conditions to the MTS as they relate to mission accomplishment. This dimension includes communicating information to the MTS about internal systems monitoring and environmental monitoring.					
Examples:	<ul> <li>Tracking team related factors (e.g., weapon availability, speed, fuel, altitude, radar information) and ensure that these systems are operating effectively</li> <li>Tracking aspects of the aircraft environment (e.g., terrain shifts, enemy locations and strength, friendly forces)</li> </ul>					
Complete skill	5	Team members effectively monitor flight system and external environment, communicating this information to the MTS when it pertains to overall mission accomplishment. For example, each team needs to monitor the external environment (location of enemy targets/threats, friendly and neutral forces, air and ground battles, etc.) and the internal systems (weapon availability, speed, radar information, etc.), relaying this information to the MTS.				
Very much skill	4					
Adequate skill	3	There may be some systems communication generated within the MTS, but they do not share information at all times. Half the time there is an attempt to relay systems information to the rest of the MTS.				
Some skill	2					
Hardly any skill	1	There is no systems communication generated within the MTS. There is no attempt to relay systems information to the rest of the MTS.				
	L					

#### **\*TEAM MONITORING AND BACKUP BEHAVIOR\***

Definition: Assisting other teams to perform their tasks. Assistance may occur by (a) providing another team verbal feedback or coaching, (b) by assisting a team behaviorally in carrying out actions, or (c) by assuming and completing a task for another team. This dimension includes the provision of feedback and task related support and the seeking of help from other teams when necessary. Examples: - Keeping an eye-on/track-of other team in MTS to determine if and when they need help - Helping other MTS team with their assigned roles by telling them what to do and/or how to do it Complete skill 5 Each team continually monitors the other team in the MTS, helping them to complete the appropriate role and task requirements to successfully complete the overall mission. Very much skill 4 Adequate skill 3 One or both team(s) occasionally monitor the other team in the MTS, helping them to complete the appropriate role and task requirements to successfully complete the overall mission. Some skill 2 Teams fail to monitor other MTS teams in enacting the appropriate role Hardly any skill 1 and task requirements.

## **\*COORDINATION ACTIVITIES\***

Definition:	Orchestrating the sequence and timing of interdependent MTS actions.		
Examples:	- Organizing how and when teams will synchronize actions that require the efforts of more than one team in multi-team situations		
Complete skill	5		MTS teams attempt to coordinate with each other to accomplish mission goals. When coordinating, they maintain smooth transitions and synchronization of interdependent MTS actions in accordance with the overall mission.
Very much skill	4		
Adequate skill	3		MTS teams make some effort towards coordination and synchronization of interdependent actions, but they may forget sometimes. When teams coordinate, transactions and synchronization is relatively smooth.
Some skill	2		
Hardly any skill	1		MTS teams make no effort towards coordination and synchronization of interdependent MTS actions. The flight mission is very disorganized and neither team knows what is going on in the other MTS team. They may completely ignore each other.

#### \*CONFLICT MANAGEMENT\*

Definition: Establishing conditions to prevent, control, or guide between MTS conflict before it occurs. Working through task and interpersonal disagreements in the MTS.

Examples: - Making statements or offering opinions about task related issues, the way the teams in the MTS function together, or personal issues, that are likely to affect

- subsequent MTS conflict
- Attempting to work through MTS conflict

5 All teams are considerate of differences between themselves and other Complete skill team; they establish a pleasant and cooperative working environment while encouraging other teams to present ideas and suggestions regarding the overall mission. Teams members constructively communicate and discuss problems within their MTS. If conflict does occur, teams are able to manage and contain the disagreements effectively. Very much skill 4 Adequate skill 3 Teams are sometimes considerate of the differences of teams in their MTS; they establish a fair working environment between flight teams. Teams are able to discuss some problems and resolve most types of conflict. Some teams may just "stay out" of any disagreements, which arise between teams. Some skill 2 Hardly any skill 1 Teams are inconsiderate of differences in the teams within their MTS; they establish an unpleasant and uncooperative working environment regarding the overall mission. Teams argue about problems in a

> destructive manner and often experience much conflict with other teams in their MTS. They are completely unwilling to discuss the any

issues and have no clue how to resolve any disagreements.

#### \*MOTIVATING AND CONFIDENCE BUILDING\*

 Definition:
 Generating and preserving a sense of collective/MTS confidence, motivation, and task based cohesion with regard to MTS mission accomplishment.

 Examples:
 - Motivating other MTS teams

 - Influencing the level of task cohesion of other MTS team members with respect to

the mission at hand

Complete skill 5 MTS team members exhibit a strong sense of collective MTS efficacy. This attitude creates a positive attitude about the overall mission, and members seek to motivate their MTS partner through reinforcement and praise. Very much skill 4 Adequate skill 3 MTS team members exhibit a flighting sense of collective MTS efficacy. There is some encouragement or motivation between teams in the MTS at times. Some skill 2 Hardly any skill 1 MTS team members fail to exhibit any sense of efficacy within the MTS. This attitude may create a negative attitude about the overall mission or apathy towards the overall mission, since there is a complete lack of encouragement or motivation between teams in the MTS.

## **\*AFFECT MANAGEMENT\***

Definition: Regulating other teams' emotions during mission accomplishment, including (but not limited to) maintaining appropriate levels of social cohesion, frustration, and excitement.

Examples: - Influencing the positive and negative emotions of the other team in the MTS

Complete skill	5	While carrying out the mission objectives, teams effectively extinguished negative emotions and enhanced positive, productive emotions of the other team in the MTS. They are able to regulate and maintain a solid sense of emotional stability within the overall MTS.
Very much skill	4	
Adequate skill	3	While carrying out the mission objectives, teams make attempts to extinguished negative emotions and retain some positive emotions within the MTS. They may let some emotions get out of hand within the MTS, but generally maintain positive, productive emotions.
Some skill	2	
Hardly any skill	1	While carrying out the mission objectives, teams fail to extinguish negative emotions and fail to enhance positive emotions for other teams in the MTS. They were unable to regulate and maintain any sense of emotional stability within the MTS.