

(Aircraft) CASE STUDY

TITLE:

FOCUS SKILL: **Adaptability/Flexibility**

SOURCE:

TERMINAL OBJECTIVE: Through the use of this case study, you will understand the importance of maintaining Adaptability and Flexibility to overall mission accomplishment.

ENABLING OBJECTIVES: 1.

2.

DESCRIPTION:

INTRODUCTORY TEACHING POINTS:

What is Adaptability/Flexibility?

Adaptability/Flexibility refers to the ability to alter a course of action based on new information, maintain constructive behavior under pressure, and adapt to the internal and external environmental changes.

Effective Adaptable/Flexible Behaviors:

Adaptable/Flexible aircrew members should be able to:

- Alter their behavior to meet situational demands
- Be open and receptive to other's ideas
- Help others when necessary
- Maintain constructive behavior under pressure
- Adapt to internal and external environmental changes

Situations Requiring Adaptability:

When:

- Unbriefed situations arise
- A routine mission becomes an emergency
- Transitions occur
- A crew member is incapacitated
- Interactions are strained

Maintaining Adaptability:

Once a decision has been made, it is not irrevocable. The crew should keep an open mind and evaluate the decision against new data. The critical aspects of being adaptable are to:

- Anticipate problems
- Recognize and acknowledge any change or abnormality
- Determine if an SOP is appropriate
- Take alternative actions, if necessary
- Gain support for the actions you choose
- Provide and ask for assistance
- Interact constructively with others

Remember:

- A mission's success depends on your ability to alter behavior and dynamically manage crew resources to meet situational demands.
- To effectively respond to situations, crews must remain flexible in their decision making and actions.

INSTRUCTOR DIRECTIONS: Divide the participants into case study discussion groups. If the class is small, each member can work on their own. Present the case study using the following steps:

1. Describe the goal of the case study exercise and present the focus questions. Ask if any one has questions about the objective or the focus questions.
2. Allow time to read and discuss the synopsis in relation to the focus questions.
3. Lead a discussion or have groups present their findings in relationship to the focus questions. Highlight the key points on board or other medium as the discussion develops.

DESCRIPTIVE SYNOPSIS:

1. (Synopsis with annotations)
2. Possible Synopsis Additions.
 - a.
 - b.
 - c.
3. List of focus and support CRM skills:
 - a. **Decision Making:** The ability to choose a course of action using logical and sound judgment based on the available information.
 - b. **Assertiveness:** The willingness to actively participate, state, and maintain a position until convinced by the facts that other options are better.
 - c. **Mission Analysis:** The ability to develop short-term, long-term, and contingency plans and to coordinate, allocate, and monitor crew and aircraft resources.
 - d. **Communication:** The ability to clearly and accurately send and receive information, instructions, or commands; and provide useful feedback.
 - e. **Leadership:** The ability to direct and coordinate the activities of crew members and to encourage the crew to work together as a team.

- f. **Adaptability/Flexibility:** The ability to alter a course of action based on new information, maintain constructive behavior under pressure, and adapt to internal and external environmental changes.
- g. **Situational Awareness:** The degree of accuracy by which one's perception of the current environment mirrors reality.

FOCUS QUESTIONS AND ANSWERS:

1. What THREATS came “at” the crew and what Strategies were used to Prepare for Threats and initially deal with them?
2. What ERRORS came “from” the crew and how did they use AF to Repair the Errors?
3. What Undesired Aircraft State was achieved and how did the crew use AF to Recover?
4. What could have been done to avoid this situation?

SUMMARY TEACHING POINTS:

- 1.
- 2.
- 3.

(Aircraft) CASE STUDY

TITLE:

SOURCE:

SYNOPSIS:

FOCUS QUESTIONS:

2. What THREATS came “at” the crew and what Strategies were used to Prepare for Threats and initially deal with them?
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Case Study Title

CRM CASE STUDY

Name

- Personal Info
- Etc.

Question Policy

Overview

- Objectives
- Critical Skills Review
- Case Study Focus Skill
- Synopsis
- Focus Questions

Objectives

- Terminal Objective
- Enabling Objective

Crew Resource Management

- Allows crew to interact effectively while performing mission tasks
- A program to effect behavior modifications in order to prevent human factor and crew preventable errors
- To improve mission effectiveness through increased awareness of associated behavioral skills

CRM Critical Skills Review

- Decision Making (DM)
- Assertiveness (AS)
- Mission Analysis (MA)
- Communication (CM)
- Leadership (LD)
- Adaptability/Flexibility (AF)
- Situational Awareness (SA)

Case Study Focus Skill

ADAPTABILITY/FLEXIBILITY

- The ability to alter a course of action based on new information, maintain constructive behavior under pressure, and adapt to internal and external environmental changes

Situations requiring A/F

- Unbriefed situations
- Routine mission becomes an emergency
- Transitions
- A crew member becomes incapacitated
- Interactions are strained

Effective A/F behaviors

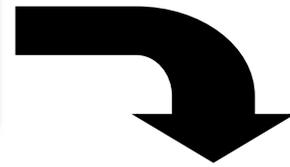
- Alter behavior to meet situational demands
- Be open and receptive to other's ideas
- Help others when necessary
- Maintain constructive behavior under pressure
- Adapt to internal and external environmental changes

Maintaining Adaptability

- Decision not irrevocable - continue to evaluate
- Anticipate problems
- Recognize and acknowledge any change
- Take alternative actions, if necessary
- Interact constructively with entire crew
 - provide and ask for assistance
 - gain crew support for decisions made

Synopsis

MISSION EFFECTIVENESS



Safe Operations

Threats

Prepare

Strategies

Errors

Repair

Resist /
Resolve

Undesired

Aircraft
State

Recover

CRM/TEM

Incident/Accident

CRM 7 Critical Skills

Decision Making

Assertiveness

Mission Analysis

Communication

Leadership

Adaptability / Flexibility

Situational Awareness

Identify:

- Threats
- Strategies
- Errors
- Resist/Resolve

Focus Questions

1. What THREATS came “at” the crew and what Strategies were used to Prepare for Threats and initially deal with them?
2. What ERRORS came “from” the crew and how did they use AF to Repair the Errors?
3. What Undesired Aircraft State was achieved and how did the crew Recover?
4. What could have been done to avoid this situation?

Focus Question #1

- What THREATS came “at” the crew and what Strategies were used to Prepare for Threats and initially deal with them?



Identify and PREPARE

Strategies to Prepare:

- CRM
- ORM
- TEM
- Clearly defined roles of aircrew members
- Complete briefing and effective communication
- NATOPS / System Knowledge

Focus Question #2

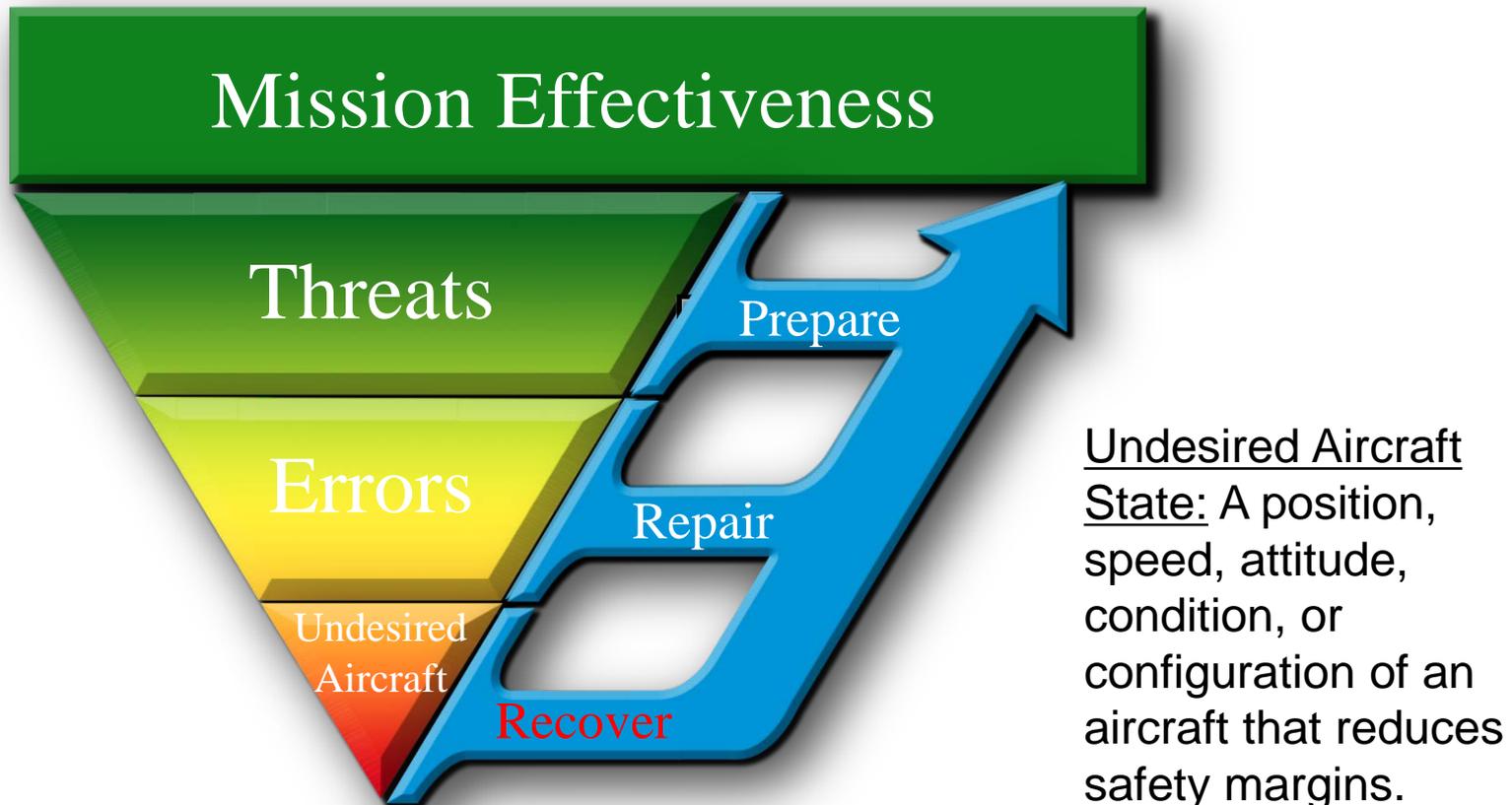
- What ERRORS came “from” the crew and how did they use AF to Repair the Errors?

↓Errors↓



Focus Question #3

- What Undesired Aircraft State was achieved and how did the crew Recover?



Identify and **RECOVER**

Focus Question #4

- What could have been done to avoid this situation?

Remember

- Mission success depends on altering behavior and dynamically managing crew resources to meet situational demands
- Crew decision making must remain flexible to effectively respond to all situations

Questions?