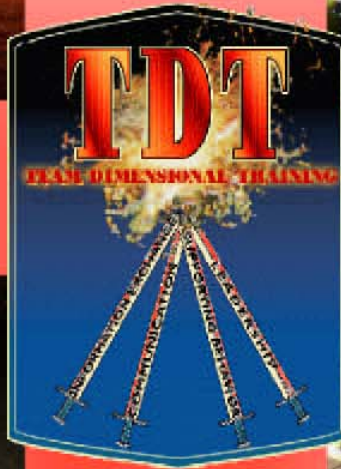


TDT

The Handbook For Team Dimensional Training First Responders





Purpose

In today's First Responders environment, the rapid pace of events, coupled with the increasingly complex demands on a first responder, require close coordination among those working to support numerous individuals. Given these concerns, teamwork is essential for success.

This booklet will introduce you to a strategy for developing high performance teams. Team Dimensional Training, or TDT, is a structured method of assessing and debriefing teams after a training exercise or actual performance event. This booklet will answer several common questions about TDT:

- What is TDT?
- How does TDT improve team performance?
- What are the four dimensions of TDT?
- How does TDT work?
- How has TDT been implemented in different training environments?
- What is necessary in order to be an effective TDT facilitator?



What is Team Dimensional Training?

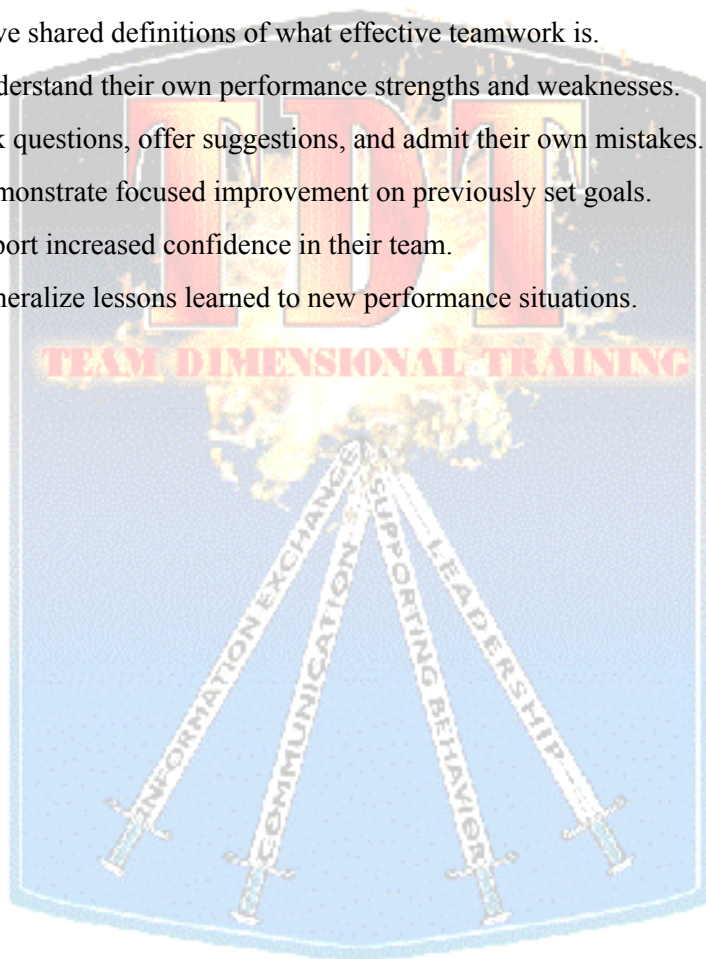
The objective of TDT is to enhance performance through improved team processes. The TDT approach can be summarized by the four basic components below:

- Team members gather after a training exercise or actual performance event to discuss their teamwork processes.
- The team discussion, or debrief, is structured around an expert model of teamwork.
- A facilitator guides the team in a process of self-correction.
- The team agrees upon process-related goals for improvement.

How does TDT improve team performance?

TDT helps teams to diagnose and correct their own performance problems. This enables them to adapt quickly to unfolding events and to learn from and build on their previous experiences together. Team members who participate in TDT are more likely to:

- Have shared definitions of what effective teamwork is.
- Understand their own performance strengths and weaknesses.
- Ask questions, offer suggestions, and admit their own mistakes.
- Demonstrate focused improvement on previously set goals.
- Report increased confidence in their team.
- Generalize lessons learned to new performance situations.



What are the dimensions of TDT?

Team Dimensional Training developed out of a program sponsored by the Office of Naval Research called Tactical Decision Making Under Stress. As part of this program, researchers at NAVAIR Orlando Training Systems Division investigated the question, "What makes a team of experts an expert team?" From this research four dimensions of teamwork emerged as being critical for effective team performance. TDT helps teams to monitor and regulate their performance on the following important teamwork dimensions.

Information exchange involves knowing what to pass to whom and when. The specific behaviors included in this dimension are:

- Utilizing information from all available sources.
- Passing information to the appropriate persons before having to be asked.
- Providing situation updates that summarize the big picture.

Communication focuses on how information is delivered. Specific components of communication delivery include:

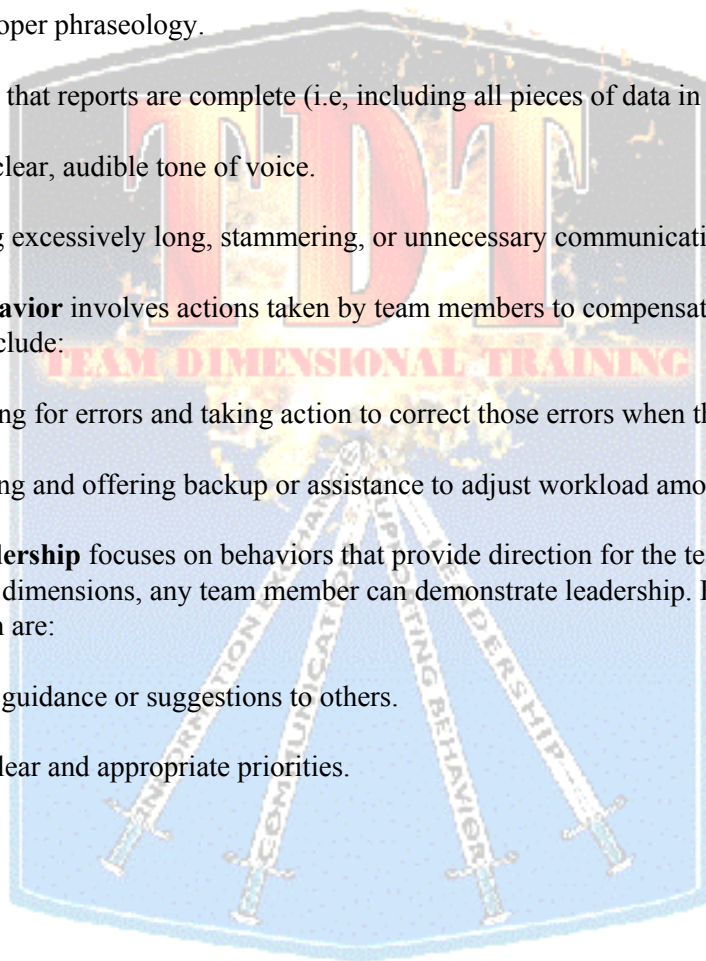
- Using proper phraseology.
- Ensuring that reports are complete (i.e, including all pieces of data in the standard order).
- Using a clear, audible tone of voice.
- Avoiding excessively long, stammering, or unnecessary communications.

Supporting behavior involves actions taken by team members to compensate for one another. These actions include:

- Monitoring for errors and taking action to correct those errors when they occur.
- Requesting and offering backup or assistance to adjust workload among team members.

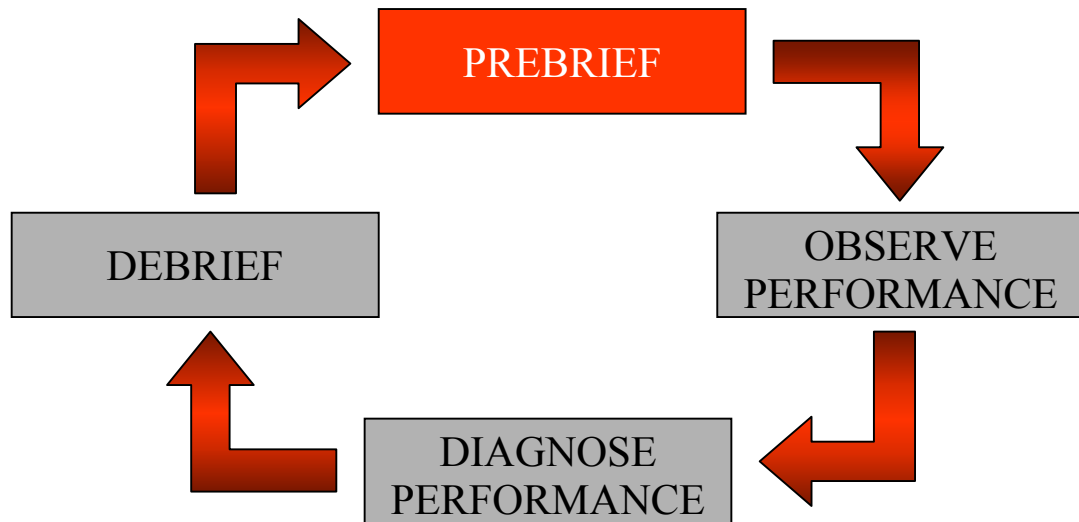
Initiative / Leadership focuses on behaviors that provide direction for the team. As is true of each of the four dimensions, any team member can demonstrate leadership. Behaviors included in this dimension are:

- Offering guidance or suggestions to others.
- Stating clear and appropriate priorities.



How does TDT work?

The TDT process offers a structured approach for improving each of the four teamwork dimensions through performance-based training.



Prebrief

TDT begins with an exercise pre-brief. A pre-briefing guide has been developed to aid in this process (see Figure 1). During the prebrief, a facilitator:

- Emphasizes that the objective of TDT is to improve team processes.* The objective of TDT is to improve team processes that consistently lead to more effective outcomes across a wide range of tasks.
- Defines the four teamwork dimensions and their component behaviors.* This provides team members with a common vocabulary they can use to discuss their performance. It is difficult for team members to collectively assess their performance if they do not share the same frame of reference.
- Reminds team members of goals that were set in previous TDT sessions.* By recalling previous lessons learned, facilitators encourage team members to think about how they can apply specific goals to new situations.
- Informs the team that they will critique their own performance during the subsequent debrief.* Team members should understand that they share responsibility for their learning process.
- Encourages active participation.* TDT facilitators are instrumental in creating a climate where team members feel comfortable asking questions, voicing concerns, admitting mistakes, and offering suggestions.

Prebrief/Debriefing Guide Sample

TEAM DIMENSIONAL TRAINING PREBRIEF

This exercise will give you the opportunity to work on improving the processes your team uses to accomplish its objectives. In particular, I'd like you to focus on four dimensions of teamwork; information exchange, communication delivery, supporting behavior, and team initiative/leadership. Before we start the exercise, let's go over the specific components of these four dimensions.

INFORMATION EXCHANGE

The first dimension is information exchange. Effective information exchange allows the team to develop and maintain a shared situation awareness.

The components of information exchange are:

- Utilizing all available sources of information
- Passing information to the appropriate persons without having to be asked
- Providing periodic situation updates which summarize the big picture

COMMUNICATION

The second dimension is communication. While information exchange deals with what is passed to whom, this dimension involves how that information is delivered.

The components of communication delivery are:

- Proper phraseology
- Completeness of standard reports
- Brevity/ Avoiding excess chatter
- Clarity/ Avoiding inaudible comms

SUPPORTING BEHAVIOR

The third dimension is supporting behavior. This involves compensating for one another in order to achieve team objectives.

The components of supporting behavior are:

- Monitoring and correcting team errors
- Providing and requesting assistance to balance workload

INITIATIVE/LEADERSHIP

The fourth dimension is initiative/leadership. Anyone on the team can demonstrate initiative/leadership.

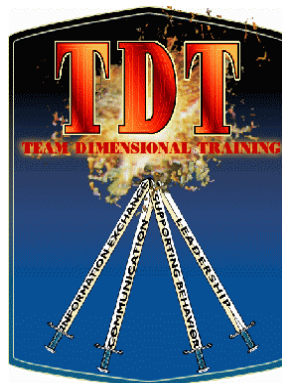
The components of initiative/leadership are:

- Providing guidance or suggestions to team members
- Stating clear and appropriate priorities

After the exercise, you will be asked to critique your own performance on these four dimensions. I will facilitate this process of team self-correction using a strategy called Team Dimensional Training, or TDT.

For TDT to be effective, all team members need to contribute to the process of identifying problems and coming up with solutions to those problems. I encourage everyone to take advantage of this opportunity to ask questions, state concerns, clarify issues, and offer suggestions on how your team can improve.

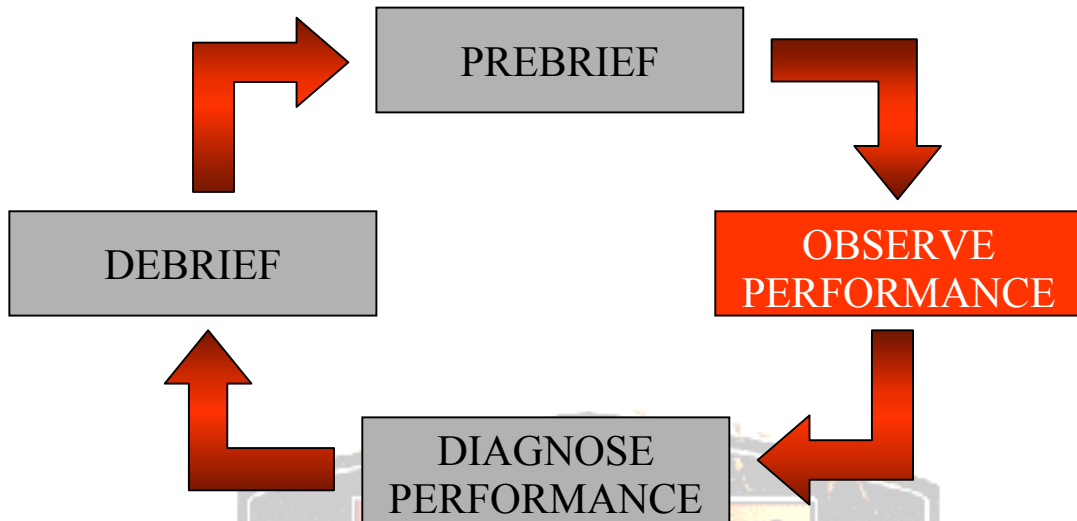
FIGURE 1



How does TDT work (cont'd)?

Observe performance

TDT can be used in conjunction with a training exercise or actual performance event. Exercises used for TDT can be as brief as 30 minutes. Whenever possible, instructors should allow team errors to unfold naturally so that the team's ability to identify and correct these errors can be assessed. The most important aspect of an exercise used for TDT is that it contains trigger events that are expected to challenge coordination among team members.



Instructors seek out and record examples of each component in the TDT model (see Figure 2).

These examples should:

- *Be recorded in detail.* Detailed examples help to make abstract concepts concrete for team members.
- *Include both positives and negatives.* Team members need to know what to keep doing right as well as what to stop doing wrong.
- *Include observations of a variety of team members.* If the examples collected by instructors (positive or negative) during an exercise are limited to one or two team members, those team members may feel singled out, and other team members may feel ignored.

Observe Performance Examples

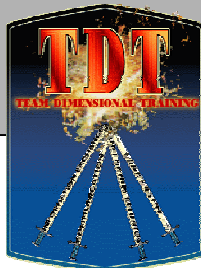
SUPPORTING BEHAVIOR

Record observations of positive and negative examples of:

Team Errors Caught/Corrected and Backup Behaviors

EVENT Time (mins.)	OBSERVED BEHAVIORS
00-00 Dispatch notifies Station 25 of a Structure Fire at 9:30 pm.	
04-30 Engine 25 arrives at the scene of the structure fire.	<i>No one noticed the driver of the engine parked the apparatus in front of the building instead of driving to the side of the building and parking there.</i>
05-45 The Rookie Firefighter tries to uncup the fire hydrant.	<i>The Rookie Firefighter had trouble uncapping the fire hydrant, and the Lieutenant assisted him.</i>
06-00 The Firefighter notices his teammate having trouble with the hose.	<i>Even though he sees the Firefighter having trouble with the hose, his partner is not able to assist him.</i>
08-15 Two Firefighters enter the building	<i>One team member noticed the other didn't have a flashlight and handed one to him</i>
10-30 The Firefighters bring out a victim.	<i>Firefighters assisted their teammates by taking their positions within the burning building to look for more victims.</i>
13-00 Fire is extinguished, all individuals taken to the hospital for care. Call is canceled.	

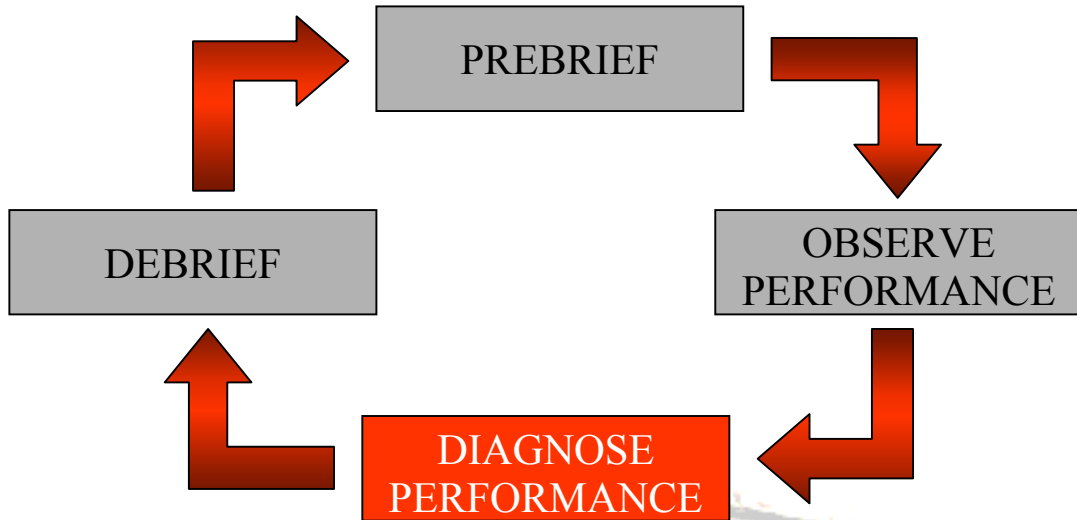
FIGURE 2



How does TDT work (cont'd)?

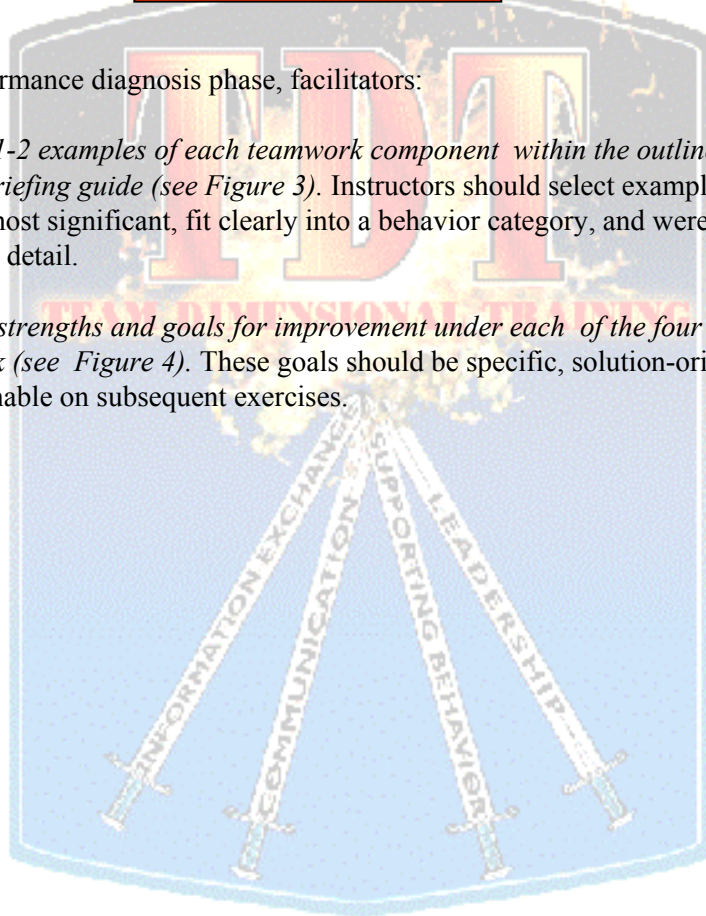
Diagnose performance

Following a TDT exercise or performance event, instructors gather to discuss their observations, diagnose performance problems, and prepare for a team debrief. For a group of instructors proficient at using TDT, this takes an average of 15 minutes.



During the performance diagnosis phase, facilitators:

- Record 1-2 examples of each teamwork component within the outline provided in the TDT debriefing guide (see Figure 3). Instructors should select examples for the debrief that are most significant, fit clearly into a behavior category, and were recorded in sufficient detail.
- Identify strengths and goals for improvement under each of the four dimensions of teamwork (see Figure 4). These goals should be specific, solution-oriented, challenging, and attainable on subsequent exercises.



Diagnose Performance Example

SUPPORTING BEHAVIOR

*The third teamwork dimension is SUPPORTING BEHAVIOR. One component of supporting behavior is error correction. This involves monitoring for team errors, bringing an error to the team's attention and seeing that it is corrected.

- Give me an example of an error that your team caught and corrected.
-How was it corrected?
- In retrospect, what errors were not caught and corrected that could have been?
-How could these errors have been caught and corrected, and by whom?

+ A Firefighter noticed his teammate had forgotten his flashlight and brought one to him.

- The engine driver parked the apparatus in front of the building instead of on the side and no one pointed it out to him.

*The second component of supporting behavior is providing backup/assistance. This involves noticing that another team member is overloaded or having difficulty performing a task and providing assistance to them by actually taking on some of their work load.

- Give me an example of when assistance or "backup" was provided to reduce another team member's workload.
-How did this improve the team's ability to deal with key events in the exercise?
- Describe for me an instance when someone on the team could have benefited from backup that was not provided.
-What kind of backup could have been given, and by whom?

+ The Lieutenant saw that the Rookie needed help with the hydrant and assisted him.

- No one was able to help the Firefighter who was struggling with the water hose.

FIGURE 3

TEAMWORK SUMMARY			
INFORMATION EXCHANGE		SUPPORTING BEHAVIOR	
Strength	Passing critical information to teammates without being asked.	Strength	Assisted each other well by sharing workload during stressful events.
Goals for Improvement	Need to use all sources of information-not just one.	Goals for Improvement	Need to monitor each other's actions better and correct mistakes or errors.
COMMUNICATION		INITIATIVE/LEADERSHIP	
Strength	Phraseology	Strength	Provide constructive and appropriate suggestions to teammates.
Goals for Improvement	Need to reduce unnecessary communications on the radio.	Goals for Improvement	Priorities need to be <u>explicitly</u> stated.

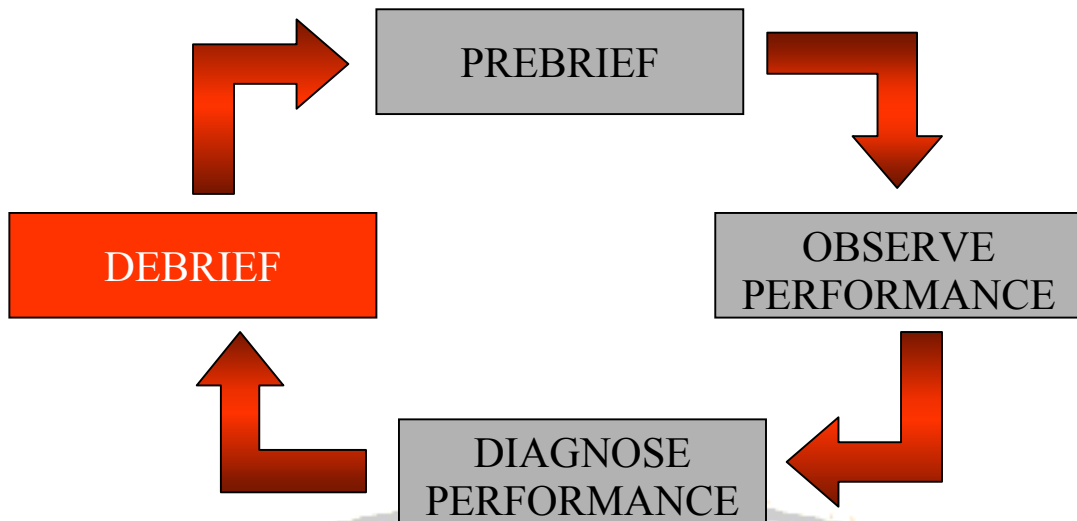
FIGURE 4



How does TDT work (cont'd)?

Debrief

The team debrief is the heart of the TDT process. This debrief is led by a facilitator who guides the team in critiquing their own performance. An experienced facilitator can complete a TDT debrief in 30-40 minutes.



During the debrief, facilitators:

- *Recap key exercise events.* Recapping the outcome of key performance events helps to trigger recall and to clarify team members' understanding of what happened before the team tries to discuss why it happened.
- *Review TDT dimensions.* This reinforces a common vocabulary for team members to discuss their performance.
- *Guide the team self-correction process.* Specific, open-ended questions listed in the debriefing guide (see Figure 5) are used to get team members to identify (1) positive and negative examples of each teamwork component, (2) actual and potential impacts of these behaviors on performance outcomes, and (3) solutions to each problem noted.
- *Provide feedback to the team.* TDT facilitators always ask the team for a particular type of example before providing their own observations. These observations are used to (1) stimulate discussion, (2) clarify points, and (3) help the team solve problems. As a team becomes more experienced with TDT, the facilitator provides less of the feedback and team members provide more. TDT facilitators model effective feedback skills by stating their own observations in a way that is specific, non-personal, and solution oriented.
- *Facilitate participative goal setting.* TDT facilitators coach the team in setting goals for improvement under each of the four dimensions. Goals identified by instructors during debrief preparation may be modified as a result of information that arises out of the team discussion. Team goals are then used to heighten team member awareness during subsequent exercises and may be tracked over time.

Debriefing Questions Example

SUPPORTING BEHAVIOR

* The third teamwork dimension is SUPPORTING BEHAVIOR. One component of supporting behavior is error correction. This involves monitoring for team errors, bringing an error to the team's attention and seeing that it is corrected.

•Give me an example of an error that your team caught and corrected.

+

-How was it corrected?

•In retrospect, what errors were not caught and corrected that could have been?

-

-How could these errors have been caught and corrected, and by whom?

• The second component of supporting behavior is providing backup/assistance. This involves noticing that another team member is overloaded or having difficulty performing a task and providing assistance to them by actually taking on some of their workload.

•Give me an example of when assistance or "backup" was provided to reduce another team member's workload.

+

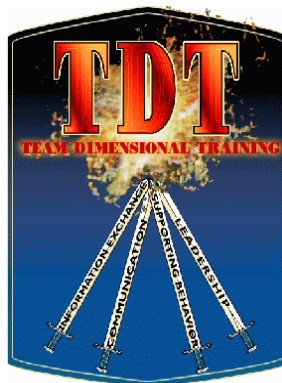
-How did this improve the team's ability to deal with key events in the exercise?

•Describe for me an instance when someone on the team could have benefited from backup that was not provided.

-

-What kind of backup could have been given, and by whom?

Bolded red type represents questions facilitators ask team members during a debrief.



How can TDT be implemented to meet the needs of different training environments?

To date, TDT has been used to train Naval combat systems, damage control, engineering, and seamanship teams within the surface community, as well as Naval air crews and subsurface teams. In the public safety sector TDT has also been used to train individuals in law enforcement, counterdrug and corrections environments. Lessons learned from these environments suggest a number of different ways that TDT can be implemented. When using TDT, you have flexibility in determining:

- Which team members will participate in the debrief together.
- Who will facilitate the team debrief.
- How examples will be collected during an exercise.
- How TDT will be used in conjunction with other types of training.

Team members:

When deciding which team members to include in a TDT debrief, you will need to consider:

- Which team positions are likely to have significant coordination challenges given trigger events the exercise?
- Which team members are proficient enough at their respective tasks to be able to benefit from and contribute to a team critique?
- How many team members can be effectively debriefed together, given time and space available?

TDT facilitators:

TDT facilitators keep the team debrief focused and constructive. In order to accomplish this, they must have effective feedback skills and a thorough understanding of the components within the four TDT dimensions. TDT can be facilitated by:

- Instructors
- Team Leaders
- Supervisors

Data collection:

When instructors are used to facilitate TDT, these instructors can collect examples of teamwork during an exercise in one of two ways.

- Instructors divide responsibility for recording examples within the four dimensions. This method of data collection is useful when instructors are first learning to use TDT because it is easier to focus on one dimension at a time. It also helps to ensure that a sufficient number of examples are gathered for each dimension.
- Each instructor looks for examples within all four dimensions. This method works best when instructors cannot monitor coordination across all team members from the same location or communication network. For example, team members may be physically distributed or highly mobile. This method is also more practical when instructors must monitor the technical skills of an individual as well as teamwork processes during the same exercise.

How can TDT be implemented to meet the needs of different training environments (cont'd)?

Integration with other training

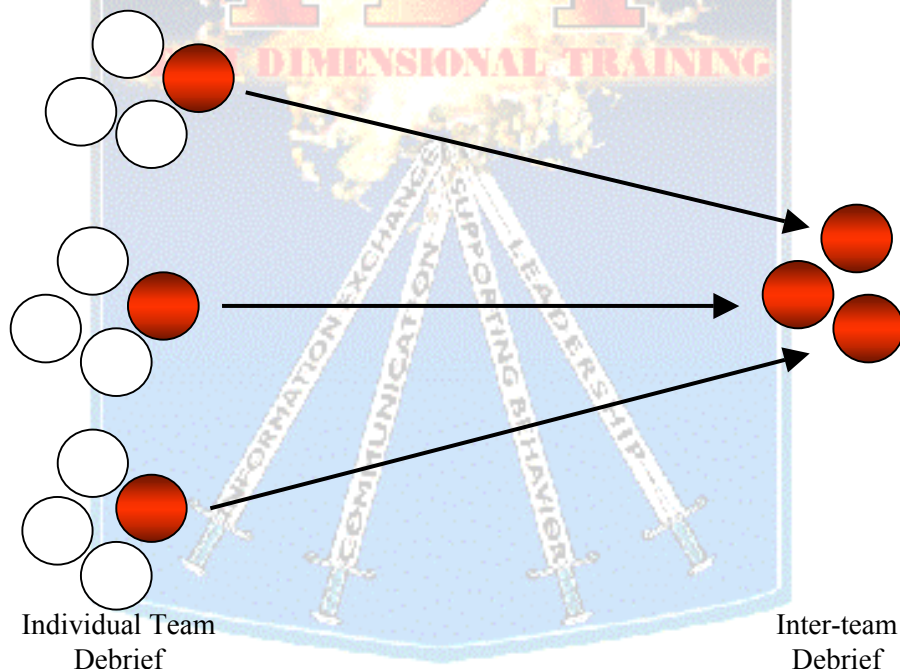
TDT can be used by itself or in conjunction with individual and multi-team training. These options are described below.

- Stand-alone TDT.* Occasionally, teams will participate in an exercise solely designed for TDT. This is particularly useful when teams are first learning TDT, when it has been a long time since they last used TDT, or when significant turnover has occurred in team membership. Exercises used for this purpose can be very brief in length (20-30 mins.) and tailored to emphasize coordination among a designated set of team members.

- TDT in conjunction with individual skills training.* Two methods have been used for integrating TDT with individual skills training.

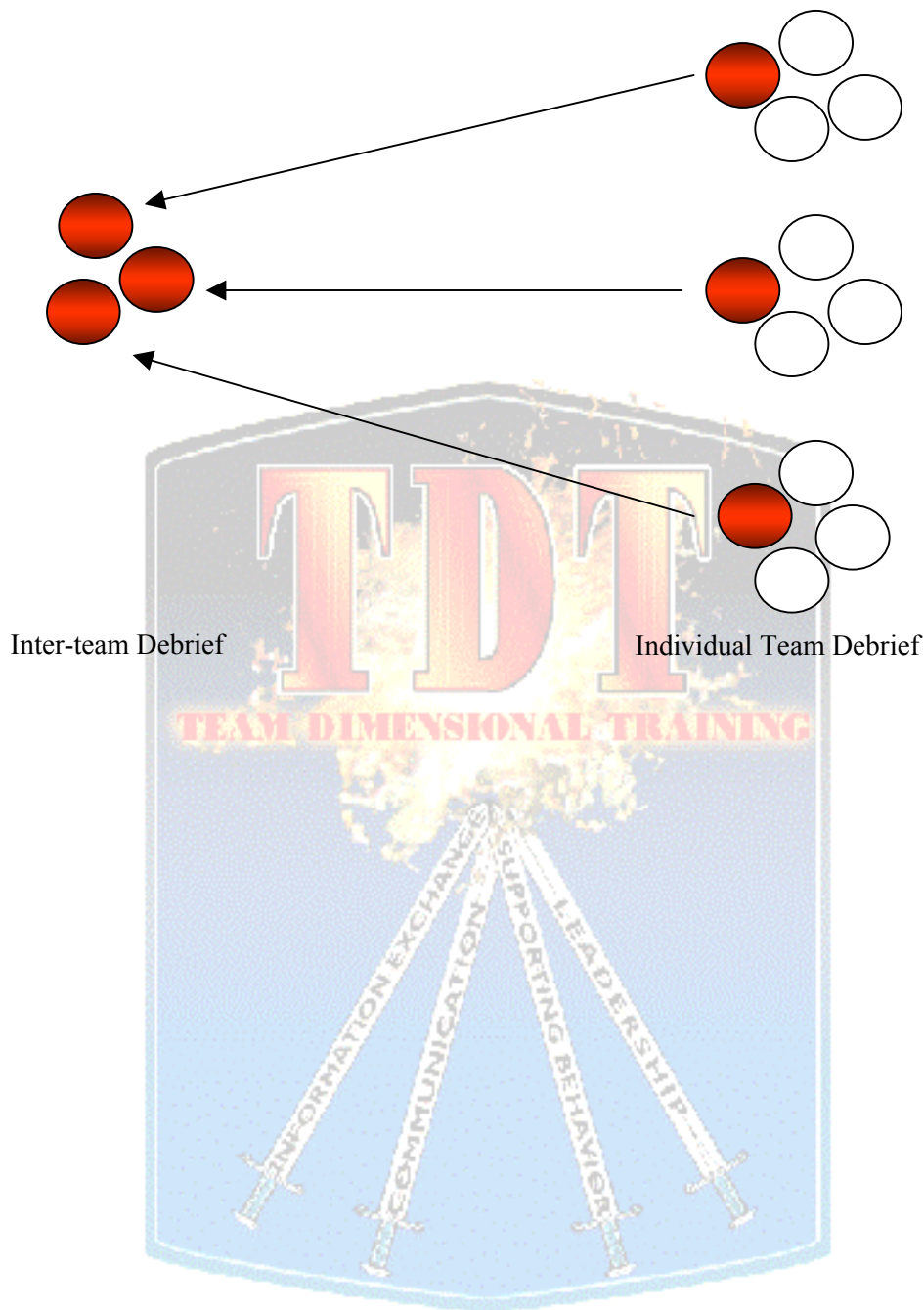
- Team members participate in a TDT debrief after receiving individualized feedback from instructors.
- Team members receive individualized feedback or training from instructors to follow up on performance problems identified in the TDT debrief.

- TDT in conjunction with multi-team training.* Two options have been used to implement TDT in conjunction with multi-team training. As illustrated below, one option is to begin by having individual teams gather for separate TDT debriefs. A representative from each team (e.g., supervisor or team leader) then meets to participate in an inter-team TDT debrief



How can TDT be implemented to meet the needs of different training environments (cont'd)?

A second option is to begin by having a representative from each team participate in an inter-team TDT debrief. Next, these representatives return with lessons learned to facilitate a TDT debrief with their respective sub-teams. (See figure below.)



What is necessary to be an effective TDT facilitator?

Facilitators are critical to the success of TDT. The final sections of this booklet describe methods for preparing to facilitate a TDT session.

Facilitator training:

Becoming an effective TDT facilitator is a 4-step process. A number of tools have been developed to support this process.

- Understand the TDT method.* In addition to this booklet, a book chapter, instructional video, and student guide have been created to introduce TDT concepts, tools, and processes.
- Practice categorizing examples within the TDT framework.* A computer-based training module is available to provide instructors and team members with the opportunity to practice categorizing concrete examples within the TDT model.
- Observe others facilitating TDT debriefs looking for effective and ineffective briefing behaviors.* Facilitators can become familiar with effective and ineffective briefing methods by critiquing sample debriefs presented in the TDT instructional video, as well as observing each other.
- Practice facilitating TDT and receive feedback on your debriefing skills.* The first few times you try using TDT, it is important that an experienced facilitator is available to guide you through the process and provide you with feedback on your debriefing skills.

Helpful hints:

First-time facilitators often find that their debrief was too lengthy, unfocused, or failed to elicit participation from team members. The following helpful hints are offered to facilitators to help avoid these common pitfalls.

- Give team members enough time to think about your question before offering your own observations.* If a facilitator is too quick to offer his/her own observations, team members may feel that the facilitator is just going through the motions of asking for input and is not truly interested in their point of view.
- Position low ranking team members in the center of the team prior to beginning the debrief.* This increases the eye contact they receive from facilitators which, in turn, leads to greater participation in the debrief.
- Become familiar with the TDT guide before beginning a team debrief.* When facilitators are familiar with the terminology, questions, and format of the debriefing guide, they are better able to (1) present information naturally (avoid reading), (2) maintain eye contact, and (3) keep the team discussion organized.
- Follow the outline provided in the TDT guide.* The organization presented in the debriefing guide is designed to keep team discussions focused and productive. This format helps team members to develop a shared frame of reference for diagnosing performance problems.
- Discuss only 1-2 examples per behavioral category.* A few good examples are enough to make the point, especially when these examples have been offered by team members.

SUMMARY

TDT is a strategy for guiding teams in diagnosing and correcting their own teamwork weaknesses.

This booklet has provided information about:

- How TDT improves team performance
- The four dimensions of TDT
- The TDT process
- Options for implementing TDT
- Steps for becoming an effective TDT facilitator
- Helpful hints for facilitating an effective TDT debrief



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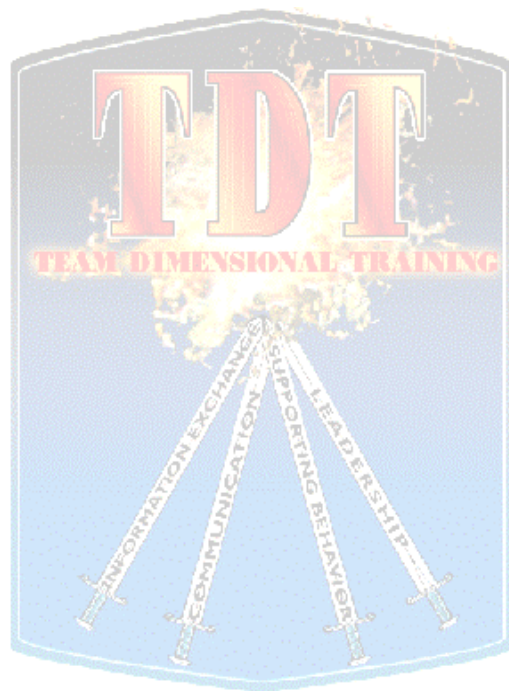
NAVAIR Orlando Training Systems Division is the principal Navy center for research, development, test and evaluation, acquisition and product support of training systems. Located in Orlando, Florida, it also provides interservice coordination and training system support for the Army and Air Force.

NAVAIR Orlando pioneered the use of simulation for military training and is recognized as the leader in the field. Since its inception, NAVAIR Orlando has developed more than 7,000 training systems covering all warfare areas - air, surface, submarine, and land. Throughout the world, training systems developed by NAVAIR Orlando are helping to keep military forces of the United States and its allies at the peak of operational readiness. Nearly every U.S. soldier, sailor, and marine in uniform today has been trained on NAVAIR Orlando systems.

Team Dimensional Training was developed as a part of the Tactical Decision Making Under Stress (TADMUS) project. Any questions, comments, or requests for materials associated with the First Responder's Team Dimensional Training methodology can be directed to:

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