# TRAINING AND OPERATIONS PANEL QUESTIONS

DAN FATALITY WORKSHOP

### 1. Running out of gas

- a. Running out of gas is strongly associated with fatalities due to asphyxia and CAGE.
- b. What might be done regarding equipment, training, diving operations, or community development to make insufficient gas less likely?

#### 2. Dive computers

Should entry-level divers be trained to use:

- a. only dive tables,
- b. only dive computers,
- c. both tables and computers, or
- d. either tables or computers?

### 3. Entanglement and entrapment

- a. Entanglement or entrapment is common in fatalities involving asphyxia.
- b. What might be done regarding equipment, training, diving operations, or community development to reduce the occurrence of entanglement or entrapment?

### 4. Overtraining

- a. Running out of gas, emergency ascent, entanglement, equipment trouble, buoyancy trouble, and rough water were risk factors associated with injuries leading to death. These occurred despite training.
- b. Might "overtraining" (excess skill repetition during training to make skills automatic/instinctive in emergencies) during initial training be applied to some skills to reduce the occurrence of the risk factors listed above?

#### 5. Deepest training dive

 Should a dive instructor perform 1-2 shallow training dives with AOW students before the deep dive to allow assessment of skills and comfort in the water?

### 6. Refresher training

- a. Diving inactivity reduces skills performance. Is there a minimal level of diving activity that should be maintained before a skillsrefresher review or check-out dive is desirable?
- b. Might instructor refresher training be useful?

#### 7. Dive conditions & dive site difficulty

- a. Should dive sites be assigned categories to indicate the level of training, experience, health, and physical condition needed for a particular site? (This might be similar to ski run categories -Green Circle, Blue Square, Black Diamond.) Could this put more responsibility on the diver in selecting a particular site?
- b. Might regional dive conditions be specified as part of certification levels?

### 8. Diver competency

- a. Diving accident investigators indicate that diver competency is a frequent problem in diving fatalities. Are codes of safety-related principles (such as the Responsible Diver Program and similar agency efforts) effective?
- b. Can effectiveness be tracked?

### 9. Diving operations manuals

- a. Might diving operations manuals (by individual agencies, DEMA, or RSTC) be useful for providing guidance to dive operators (vessels, resorts, shops, dive professionals, etc.) that might reduce the occurrence of risk factors associated with fatalities?
- b. Might the ISO standard be a model?

#### 10. Dive operators

 Should dive operators and dive professionals play a stronger role in reinforcing critical dive skills during pre-dive briefings?

#### 11. Hazards and waiver/releases

- a. How are candidate divers informed about specific hazards that can injure or kill them?
- b. What information should be in a "release" that certified divers sign before participating in dives conducted by dive operators? Are health questions appropriate?

## 12. Mishap rate comparison

- a. How do the mishap rates for "resort experience" programs compare with those for open water certification courses?
- b. Might age (young or old) be a contributing factor?

#### 13. Training statistics

 Might training agencies submit their annual training statistics to an unbiased third party for analysis and reporting in total and without attribution?

## 14. Quality control

 What are the key factors in dive instructor and dive leader quality control systems for maintaining instructor skills and performance?

#### 15. Instructor retention

- a. How long (assuming a moderate teaching load) does a diving instructor need to work before gaining the experience to handle a wide range of students?
- a. Do instructors receive adequate motivation to encourage them to continue teaching for long enough to ensure that most active instructors have achieved an optimal level of experience?

#### 16. Diver health and fitness assessment

 Is it feasible to assess certified divers for health and fitness before diving operations commence?