



DEPARTMENT OF THE NAVY
COMMANDER TRAINING AIR WING ONE
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COMTRAWINGONEINST 3500.1D
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COMTRAWINGONE INSTRUCTION 3500.1D

From: Commander, Training Air Wing ONE

Subj: OPERATIONAL RISK MANAGEMENT

Ref: (a) OPNAVINST 3500.39C
(b) CNATRAININST 3058.1

Encl: (1) Training Air Wing ONE (TW-1) Operational Risk Management Worksheet
(2) Risk Assessment Matrix
(3) TW-1 ORM Flight/Cross Country Briefing Guide

1. Purpose. To establish Operational Risk Management as an integral part of TW-1 operations, training and planning at all levels in order to optimize capabilities, readiness and safety. This instruction is a complete revision and should be reviewed in its entirety.

2. Cancellation. COMTRAWINGONEINST 3500.1C

3. Background. Operational Risk Management is an effective tool for maintaining readiness. This instruction is part of an initiative to integrate this technique throughout TW-1. It provides a means to help define risk and control it where possible, thereby assisting Commanders in choosing the best course of action for an identified mission creating a safe environment in which to operate.

4. Operational Risk Management Terms

a. Control – A method for reducing risk for an identified hazard by lowering the probability of occurrence, decreasing potential severity or both.

b. Hazard – A condition with the potential to cause personal injury or death, property damage or mission degradation.

c. Risk – An expression of possible loss in terms of severity and probability.

d. Risk Assessment – The process of detecting hazards and assessing the associated risks.

e. Operation Risk Management (ORM) – The process of dealing with the risk associated with military operations, which includes risk assessment, risk decision making and implementation of effective risk controls.

f. Probability – The likelihood that a hazard will result in a mishap or loss.

g. Severity – The worst credible consequence which can occur as a result of a hazard.

5. Operational Risk Management (ORM) Process

a. Identify Hazards – Determine hazards associated with the operational mission or event.

b. Assess Hazards – For each hazard identified, determine the associated degree of risk in terms of probability and severity.

c. Make Risk Decisions – Develop risk control options and determine which control options are available and which options will minimize or eliminate the associated risk.

d. Implement Controls – Implement the controls at the right command level. Lower risks may be handled at the individual level, where higher risks may be forwarded to higher levels in the command.

(1) Administrative Controls:

(a) Provide suitable warnings, markings, placards, signs and notices.

(b) Establish written policies, programs, instructions and standard operating procedures (SOP).

(c) Train personnel to recognize hazards and take appropriate precautionary measures.

(d) Limit the exposure to a hazard.

(e) Supervise – Conduct follow-up evaluations of the controls to ensure they remain current and effective. Take corrective action when necessary.

(2) Engineering Controls - Controls that use engineering methods to reduce risks by design, material selection and manufacturing.

6. Principles of ORM. When conducting the five-step ORM process, the following four principles need to be followed.

a. Accept the risk when the benefits outweigh the cost.

b. Accept no unnecessary risk.

c. Anticipate and manage risk by planning.

d. Make risk decisions at the right level.

7. Levels of ORM. Individuals select the level of ORM based upon the mission, the situation, the time available, the proficiency level of personnel and assets available. Levels of ORM are as follows:

- a. Time-Critical – An “on-the-run” mental or oral review of the ORM five step process.
- b. Deliberate – Application of the complete five-step process in planning the operation or evaluating procedures.
- c. In-Depth – A deliberate process which uses a more thorough risk assessment which involves research of available data, tools, formal testing and long term tracking.

8. Risk Assessment Teams (RAT). Squadrons should utilize RAT during the deliberate and in-depth ORM process. The purpose of the RAT is to conduct the ORM process for identified missions or hazards within the command. Hazards should be referred to the command Safety Department via hazard report, anonymous report, or any other similar reporting device. A RAT will be formed whenever the command deems necessary to analyze a specific mission or hazard. A RAT shall consist of a team leader and, at a minimum, one other member of the command. For aviation related matters, the command Aviation Safety Officer shall act as the team leader. For detachment (DET) specific matters, the DET Officer in Charge (OIC) will act as Team Leader, ensuring a proper ORM assessment is performed and included in the Letter of Instruction preceding each DET. For Carrier Qualification DETs, the Wing Landing Signal Officer (LSO) is the primary RAT Leader. For all other matters, the command Ground Safety Officer shall act as team leader. Team leaders will select team members who will assist in identifying controls to minimize the risk for the mission or hazard. Team leaders may utilize enclosures (1) and (2) to document the hazards, risks and identify potential controls for the command. Controls should be implemented at the Safety Department level or referred to the Commanding Officer via the chain of command for moderate to high-risk issues.

9. Action. All personnel assigned to TW-1 shall comply with the program described in references (a) and (b). Enclosures (1) through (3) of this instruction provide additional guidance. Specific responsibilities include:

- a. The Commander, Training Air Wing One shall:
 - (1) Implement ORM within the Training Wing.
 - (2) Act as approval authority for high-risk missions which are referred from TW-1 squadrons.
- b. Aviation Safety Officer, Training Air Wing One shall:
 - (1) Assist Squadron Safety Officers in providing ORM training to their squadron.
 - (2) Monitor this instruction and implement changes when necessary.
 - (3) Act as the point of contact for TW-1 during all matters pertaining to ORM.
 - (4) Act as Risk Assessment Team (RAT) Leader for TW-1.
 - (5) Ensure Det OIC’s conduct proper ORM assessments prior to every detachment.

- c. Squadron Commanding Officers shall:
 - (1) Ensure new aviation students receive or have received ORM training.
 - (2) Implement ORM within the command.
 - (3) Act as the approval authority for all high-risk missions and high-risk activities within the command.
- d. Squadron Safety Officers shall:
 - (1) Manage the ORM process within the command.
 - (2) Conduct ORM training within the command.
 - (3) Solicit topics for the RAT.
 - (4) Participate in RAT meetings when available.
 - (5) Review RAT results. Implement controls when necessary.
- e. Squadron Operations Officers shall:
 - (1) Conduct ORM training within the Operations Department.
 - (2) Provide RAT members when appropriate.
 - (3) Act as the approval authority for all moderate risk missions.
- f. Squadron Department Heads shall:
 - (1) Implement ORM within their respective department.
 - (2) Provide RAT members when appropriate.
 - (3) Act as the approval authority for all moderate risk missions.
- g. Squadron Ground Safety Officer shall:
 - (1) Act as RAT leader for all non-aviation related matters within the command.

h. Pilot-in-Command shall:

(1) Conduct the ORM process prior to each mission. Enclosure (3) may be utilized to identify potential hazards prior to flight.

(2) Obtain approval authority up the chain of command when the mission entails moderate to high-risk.



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https://www.cnatra.navy.mil/TW1/pubs_instructions.asp

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**RISK ASSESSMENT MATRIX
(HIGH, MEDIUM, LOW RISK)**

		HAZARD PROBABILITY				
		Frequent	Probable	Occasional	Remote	Improbable
		A	B	C	D	E
Hazard Severity	Catastrophic	I	HIGH			MED
	Critical	II				
	Marginal	III	MED		LOW	
	Negligible	IV				

- Terms:**
- Frequent** - Likely to occur frequently in life of system, item.
 - Probable** - Will occur several times in the lifetime of item.
 - Occasional** - Likely to occur sometime in life of item.
 - Remote** - Unlikely but still can be reasonably expected to occur.
 - Improbable** - So unlikely it can be assumed occurrence may not be experienced.
 - Catastrophic** - Death or permanent disability/Class A Accident
 - Critical** - Permanent partial disability or temporary total disability/Severe outcome.
 - Marginal** - Minor injury, lost workday accident/Moderate outcome.
 - Negligible** - First aid or minor supportive medical treatment/Insignificant outcome.

RECOMMENDED CONTROLS:

TW-1 ORM FLIGHT/CROSS COUNTRY BRIEFING GUIDE

Pre-brief Guide:

- (1) Human factors
- (2) Read and initial board current?
- (3) Is SNA eligible for a mandatory or optional warm-up?
- (4) If SNA is scheduled for more than one flight:
 - Second and subsequent flights cancelled if SNA is marginal in stage.
 - If SNA is procedurally below average on first flight, then second and subsequent flights shall be cancelled.
- (5) Will flight violate crew rest or crew day?

Cross Country Preflight/Postflight checklist.

- (1) Request approved by CO/XO/Ops Officer?
- (2) ODO notification of deviation due to Weather.
- (3) Fuel Packet.
- (4) Current FLIP pubs/charts.
- (5) Post static display inspection:
 - FOD walkdown
 - Tape removal if used on exterior emergency egress devices.
 - Thorough pre-flight for spectator induced FOD.
- (6) Current weather brief.
- (7) ODO notified at destination.
- (8) Aircraft properly secured. (Landing Gear pinned, Hard/soft covers installed, canopy closed)