



SQUADRON D-11N TRAINING
Module 8, Emergency Preparedness
(CRM)



U.S. COAST GUARD AUXILIARY



Emergency Preparedness-CRM Safety Session

- CRM definition/concept
- Mission planning-CRM
- Emergency scenario-CRM
- Crew Preparedness- CRM



CRM Concept

(Cockpit Resource Management)

- Focus on team coordination-including ground support
- CRM not just P-I-C Responsibility
- CRM starts prior to the flight, ends after post flight critique
- All crew are responsible for management of resources available to them
- CRM is MANDATED

Ref. Pages 6-2, 6-4 of Air Operations Training Manual



Emergency Execution Critique

- CRM activities identified?
- Mission preparedness?
- Execution, during, after ?
- Critique



Mission Description

- SAR flight over water- not offshore.
- Single engine A/C.
- Fuel on board-5 hours.
- Water temperature- 52°F.
- Altitude for search-2000 ft.
- Crew of 3, Pilot, Co-pilot, Observer
- Object being searched- 3 persons+raft
- Weather- clear, wind 290° at 25kts.



CREW PLANNING CHART-

Scenario- _____

<u>ACTION</u>	<u>PILOT</u>	<u>CO-PILOT</u>	<u>OBSERVER</u>
(P)-Primary	(CC)-Check	(I)-Input	



Mission Planning- Proposed Model

<u>ACTION</u>	<u>PILOT-PIC</u>	<u>CO-PILOT</u>	<u>OBSERVER</u>
Pre-Flight	(P)	(CC)	(I)
Flight Plan	(P)	(CC)	(I)
Communica tions-ATC	(CC)	(P)	
Communica tions-Guard		(CC)	(P)
Survival Eqpt.-Inv.	(CC)	(I)	(P)
(P)-Primary Resp.	(CC)-Cross- Check	(I)-Input	



Emergency Scenario

- Rough Engine-potential water landing given rough terrain
- Communications maintained with Guard & ATC
- Glide distance- 21/2 NM- 3 minute glide max.
- DESIGN CREW PLAN FOR THIS SCENERIO!



Ditching-Cessna T210L (POH)

1. Radio-TRANSMIT MAYDAY on 121.5, giving location and intentions
2. Heavy objects-Secure or Jettison
3. Landing Gear-UP
4. Wing Flaps-30°
5. Power-Establish 300 ft/min Descent at 75Kts
6. Approach-High Winds-INTO WIND
-Light Winds-PARALLEL TO SWELLS



Ditching (cont.)

6. (cont.) No Power- 85Kts. Flaps up; 80Kts. -10° flaps
7. Cabin Doors-UNLATCH
8. Touchdown-LEVEL AT 300 FT.MIN DESCENT
9. FACE- Cushion at touchdown with coat etc.
10. Airplane-Evacuate through cabin doors-open vent windows if necessary to flood
11. Life Vests and Raft- INFLATE



Crew Emergency Response- CRM-Potential model

<u>ACTION</u>	<u>PILOT</u>	<u>CO-PILOT</u>	<u>OBSERVER</u>
FLY the plane	(P)	(CC)	
Troubleshoot problem	(CC)	(P)	(I)
Mayday call & location	(CC)	(P)-ATC	(P)-Guard
Choose LDG. Site-conf. A/C	(P)	(CC)	(I)
Survival Eqpt.	(I)	(CC)	(P)
Prepare A/C-Crew	(P)	(CC)	(CC)



Crew Emergency Response- CRM (2)-After Landing

<u>ACTION</u>	<u>PILOT</u>	<u>CO-PILOT</u>	<u>OBSERVER</u>
Exit A/C- sequence	(P-briefing)	(CC)	(I)
Activate Locator		(P-ELT)	(P-EPIRB)
Deploy Raft	(I)	(CC)	(P)
Check Health Needs	(P)	(CC)	(CC)
Survival Eqpt.-inv.		(CC)	(P)
OTHER??			



Survival Equipment Req'd.- Offshore Operations

- PFD-type I, II, or III
- Life Raft
- 1-Class II EPIRB (on vest)
- Hypothermia protective clothing (single engine)-below 60°
- First Aid Kit
- Day/night fuses
- Signaling mirror
- Pocket strobe light
- Other recommended equipment pg. 6-10 Policy Manual



Emergency Preparedness

- Proceed to next module-Ditching