



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

IN REPLY REFER TO
OPNAVINST 3501.139A
OP-375
27 MAY 1988

OPNAV INSTRUCTION 3501.139A

From: Chief of Naval Operations

Subj: PROJECTED OPERATIONAL ENVIRONMENT (POE) AND REQUIRED
OPERATIONAL CAPABILITIES (ROC) FOR THE EDENTON (ATS 1)
CLASS SALVAGE AND RESCUE TUGS

Ref: (a) OPNAVINST C3501.2G

Encl: (1) Projected Operational Environment (POE) for the
EDENTON (ATS 1)
(2) Required Operational Capabilities (ROC) for the
EDENTON (ATS1)

1. Purpose. To issue a complete revision to the Projected Operational Environment (POE) and the Required Operational Capabilities (ROC) for the EDENTON (ATS 1) Class Salvage and Rescue Tugs.
2. Cancellation. OPNAVINST 3501.139
3. Discussion. Enclosures (1) and (2) have been prepared per reference (a). The ROC and POE provide the necessary details to describe the mission areas and operational capabilities for which the EDENTON (ATS 1) Class Salvage and Rescue Tug was designed and is organized. Together, the ROC and POE establish personnel requirements requisite for developing the Ship's Manning Documents (SMD).
4. Information. The Chief of Naval Operations has approved the ATS-1 Class ROC and POE, and initial distribution has been made to commands concerned.
5. Action. Fleet Commanders in Chief are requested to periodically review enclosures (1) and (2) and recommend to the Chief of Naval Operations (Attn: OP-375) changes as may be appropriate when capability of the class is significantly altered by introduction or deletion of systems.


J.V. INQUIST
Assistant Chief of Naval Operations
(Surface Warfare)

Distribution:
SNDL 21A

(Fleet Commanders in Chief and Detachment)

OPNAVINST 3501.139A

27 MAY 1988

Copy to:

SNDL A5 (Bureaus) (CHNAVPERS, only)
22A (Fleet Commanders)
24D (Surface Force Commanders)
26F (Operational Test and Evaluation Force
and Detachment)
28J (Service Group and Squadron)
32QQ (Salvage and Rescue Ship)
FF8 (Inspection and Survey Board)
FJA10 (Manpower Engineering Center)
FKA1G (Sea Systems Command) (3)
FKP1G (Ship Weapon Systems Engineering Station)
FL1 (COMNAVDAC) (CODE 813, only) (20)
OPs 08, 094, 07, 098, 04, 111, 12, 32, 35, 37 (25), 39, 643,
03R and 095

Stocked:

CO, NAVPUBFORMCEN
5801 Tabor Avenue
Philadelphia, PA 19120-5099 (100 copies)

27 MAY 1988

PROJECTED OPERATIONAL ENVIRONMENT
FOR ATS 1 CLASS SHIPS

1. At sea in wartime.
2. Capable of performing limited defensive functions simultaneously while in Readiness Condition I.
3. Capable of performing other functions which are not required to be performed simultaneously.
4. Continuous Readiness Condition III at sea.
5. Capable of performing all maintenance for which ship's company is assigned responsibility.
6. To provide towing, salvage, rescue and diving services to fleet units.
7. Support conventional diving operations to a depth of 190 feet. Support mixed gas diving operations to a depth of 300 feet. When assigned a portable deep dive system, support diving operations to a depth of 850 feet.
8. To provide the capability for a tidal lift of 300 short tons and dynamic lift of 150 short tons.
9. Capable of providing compressed air for blowing a submarine free of flooding water from diving limit depth.
10. Primary and secondary mission areas are:

<u>AAW</u>		<u>ASU</u>		<u>CCC</u>		<u>FSO</u>	<u>INT</u>	<u>MIW</u>	<u>MOB</u>		<u>NCO</u>
(F)	(U)	(F)	(U)	(F)	(U)				(F)	(U)	
	S		S		P	P	S	S		P	S

27 MAY 1988

REQUIRED OPERATIONAL CAPABILITIES
FOR THE ATS 1 CLASS SHIP

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
a. <u>ANTI-AIR WARFARE (AAW)</u>						
AAW 6 - Detect, identify and track air targets.						
AAW 6.2	F	F	F	F		
Recognize by sight friendly and enemy aircraft which may be encountered in expected operating areas.						
AAW 9 - Engage airborne threats using surface-to-air armament.						
AAW 9.4	F	P				
Engage low/medium/high altitude airborne threats with gunfire.						
III(P) One 20mm mount manned, without magazine.						
b. <u>ANTI-SURFACE SHIP WARFARE (ASU)</u>						
ASU 1 - Engage surface threats with antisurface armaments.						
ASU 1.6	F	P				
Engage surface ships with minor caliber gunfire.						
III(P) One 20mm mount manned, without magazine.						
ASU 4 - Detect, identify, localize and track surface ship targets.						
ASU 4.1	F	F		F		
Detect, localize and track surface contacts with radar.						

OPNAVINST 3501.139A

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/TT</u>
ASU 4.4 Detect and track surface contacts visually.	F	F	F	F		
ASU 4.7 Identify surface contacts.	F	F		F		
ASU 6 - Disengage, evade and avoid surface attack.						
ASU 6.2 Employ evasion techniques.	F	F		F		
c. <u>COMMAND AND CONTROL AND COMMUNICATIONS (CCC)</u>						
CCC 2 - Coordinate and control the operations of the task organization or functional force to carry out assigned missions.						
CCC 2.8 Function as on-scene commander for a SAR operation.	F	F	F	F		
CCC 3 - Provide own unit's command and control functions.						
CCC 3.3 Carry out emergency destruction of classified matter and equipment rapidly and efficiently.	F	P	P	P	P	A
III(P), S(P), IV(P), IP/V(P) May require augmentation by off-watch personnel.						
CCC 3.4 Employ IFF/SIF including secure IFF Mode 4.	F	F	F	F		
CCC 6 - Provide communications for own unit.						
CCC 6.1 Provide tactical voice communications.	F	F	F	F	P	
IP(P) Augmented by off-watch personnel.						

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
CCC 6.2 Maintain visual communications. III(P), S(P), IV(P), IP(P) Augmented by off-watch personnel.	F	P	P	P	P	A
CCC 6.3 Maintain multichannel cryptographically covered teletype receive circuits. IP(P) Augmented by off- watch personnel.	F	F	F	F	P	A
CCC 6.4 Maintain uncovered RATT/ CW communications. IP(P) Augmented by off- watch personnel.	F	F	F	F	P	A
CCC 6.5 Maintain full duplex cryptographically covered HF teletype circuits. IP(P) Augmented by off- watch personnel.	F	F	F	F	P	A
CCC 6.6 Process message traffic. S(P) and IP(P) Augmented by off-watch personnel.	F	F	P	F	P	A
CCC 6.10 Maintain voice/teletype/ computer data cryptographi- cally covered satellite communication circuits. S(P), IP/V(P) Augmented by off-watch personnel.	F	F	P	F	P	A
CCC 6.12 Maintain internal communi- cations systems.	F	F	F	F	F	
CCC 6.18 Provide tactical, secure voice communications.	F	F	F	F	P	A

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
IP/V(P) Augmented by off-watch personnel.						
CCC 7 - Implement Operations Security (OPSEC) measures and conduct military deception actions.						
CCC 7.2 Execute OPSEC measures.	F	F	F	F		
CCC 7.4 Execute Navy operational deception actions using tactics, operations, exercises or physical means.	P	P	P	P		A
I(P), III(P), S(P), IV(P) Noncombatant operations only.						
CCC 9 - Relay naval communications.						
CCC 9.1 Relay visual communications.	F	F	P	P	P	A
S(P), IV(P), IP(P) Off-watch/salvage personnel required to man stations.						
NOTE: Work one contact and maintain watch simultaneously in all but Condition I.						
CCC 9.3 Relay electronic communications.	F	F	P	F	F	A
S(P) May require augmentation of salvage personnel.						

d. FLEET SUPPORT OPERATIONS (FSO)

FSO 1 - Repair and overhaul ships, aircraft, and associated equipment.

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
FSO 1.1 Provide services for:			P		P	E
(21) Diving services, to include emergency hull inspections and minor underwater repair.						
S(P) and IP/V(P) Off-watch personnel required to man special detail.						
FSO 3 - Provide support services to other units.						
FSO 3.10 Conduct diver proficiency and requalification/recertification training.			P		P	E
S(P) and IP/V(P) Off-watch personnel required to man special detail.						
FSO 3.11 Provide deep and shallow water diving services including the maintenance and operation of the deep diving system.			F			
FSO 3.15 Provide recompression chamber services.			P	P		A
S(P), IV(P) Requires off-watch personnel to man special detail.						
FSO 5 - Conduct towing/search/salvage/rescue operations.						
FSO 5.1 Conduct towing operations.	F	F	F	F		
NOTE: Requires securing towing watch from Condition I, III, and IV stations.						
FSO 5.2 Conduct salvage operations.			F			

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/</u>
FSO 5.3 Conduct rescue operations.			F			
FSO 5.5 Act as escort ship to submarines during dives associated with post-shipyard sea trials. III(P), IV(P) Off-watch personnel required to man special detail.		P	F	P		A
FSO 5.8 Conduct limited mobile salvage operations (including saturated diving operations to a depth of 850 feet using the deep diving system).			F			
FSO 5.9 Conduct underwater search operations with divers to unit's depth capability.			F			
FSO 5.11 Conduct underwater search operations utilizing sonar and/or magnetometer. III(P), S(P), IV(P), IP/V(P) When special detail is embarked.		P	P	P	P	
FSO 6 - Support/conduct Search And Rescue (SAR) operations in a combat/noncombat environment.						
FSO 6.2 Conduct combat/non-combat SAR operations by surface ships.	F	F	F	F		
FSO 6.4 Recover man overboard. I(P) Personnel must secure from Condition I to man special detail. III(P), IV(P), IP(P) Off-watch personnel required to man special detail.	P	P		P	P	E

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
FSO 6.6 Conduct search and rescue operations (including operations involving submarine disasters/rescues).	P	P		P	P	
I(P) Personnel must secure from Condition I station to man special detail.						
III(P), IV(P), IP(P) Off-watch personnel required to man special detail.						
FSO 6.7 Conduct general surveillance.	F	F		F		
FSO 6.8 Acquire and display distress data.	F	F	F	F	F	
FSO 6.9 Report situation assessment.	F	F	F	F	F	
FSO 6.10 Coordinate SAR operations.	F	F	F	F	F	
FSO 9 - Provide routine health care.						
FSO 9.1 Conduct daily sick call.		F	F	F	F	
FSO 9.2 Conduct physical examinations.		P	P	P	P	
III(P), S(P), IV(P), IP/V(P) Limited without an assigned medical doctor.						
FSO 9.5 Conduct sanitation and safety inspections and provide preventive medicine instruction.		F	F	F	F	
FSO 9.6 Conduct appropriate industrial hygiene/environment health monitoring and occupational safety and health training.				F	F	

OPNAVINST 3501.139A
27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF,</u>
FSO 9.9 Conduct associated administrative services.				F	F	
FSO 10 - Provide first aid assistance.						
FSO 10.1 Identify, equip and maintain appropriate first aid spaces.		F		F	F	
FSO 10.2 Train assigned personnel in first aid, self and buddy aid procedures.				F	F	
FSO 10.3 Train stretcher bearers.				F	F	
FSO 11 - Provide triage.						
FSO 11.1 Identify, equip and maintain suitable triage spaces.	F	F	F	F	F	
FSO 11.2 Train assigned medical/dental personnel in triage care.				F	F	
FSO 11.3 Provide for augmentation by specialized personnel and equipment.	P	P	P	P	P	
	I(P), III(P), S(P), IV(P), IP(P) Limited by available space.					
FSO 12 - Provide resuscitation.						
FSO 12.1 Identify, equip and maintain suitable resuscitation spaces.	F	F	F	F	F	
FSO 12.2 Train assigned medical/dental personnel in resuscitation.				F	F	

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
FSO 13 - Provide definitive care.						
FSO 13.1	F	F	F	F	F	
Provide emergency minor surgery by hospitalman. Identify, equip and maintain suitable operating space, utilizing local anesthesia, appropriate sterilizer, laundry, supply and medical instrument support spaces.						
FSO 13.4	P	P	P	P	P	
Provide for augmentation by specialized personnel and equipment.						
I(P), III(P), S(P), IV(P), IP(P) Limited by available space.						
FSO 20 - Provide fleet training services.						
FSO 20.1	F	F	F	F		
Act as target for submarines.						
FSO 20.8					P	
Recover exercise torpedoes/drones.						
IV(P) Augment with off-watch personnel.						
FSO 20.22					P	
Recover non-serving mines and mine simulators.						
IV(P) With remote, operates vehicle embarked.						
FSO 20.24			F		F	
Provide technical guidance, training, and assistance to fleet units in underwater ship salvage and aircraft recovery.						
FSO 20.25			F		F	
Provide technical guidance, training, and						

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
assistance to fleet units in underwater cutting and welding operations.						
FSO 20.26 Provide airborne and/or ground launch of aerial missile targets.			F		F	
e. <u>INTELLIGENCE (INT)</u>						
INT 1 - Support/conduct intelligence collection.						
INT 1.5 Support/conduct radar intelligence information collection.	F	P	P	P	P	E
III(P), S(P), IV(P), IP/V(P) Augmented by off-watch personnel.						
INT 1.11 Maintain radar scope photography capability.	F	P	P	P	P	E
III(P), S(P), IV(P), IP/V(P) Augmented by off-watch personnel.						
INT 2 - Provide intelligence.						
INT 2.1 Maintain intelligence summary plots on air, surface, and subsurface activities.	F	F		F		
INT 2.2 Evaluate and disseminate intelligence information.	F	F		F		
INT 3 - Conduct surveillance and reconnaissance.						
INT 3.2 Conduct overt surveillance and reconnaissance operations.	F	F				

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
INT 4 - Provide the capability to conduct ocean surveillance operations against targets of interest.						
INT 4.1 Provide the capability to detect and locate targets of interest.	F	F		F		
INT 4.2 Provide the capability to classify and identify targets of interest.	F	F		F		
INT 4.3 Provide the capability to track targets of interest.	F	F		F		
f. <u>MINE WARFARE (MIW)</u>						
MIW 6 - Conduct magnetic silencing (degaussing, deperming, etc.)						
MIW 6.7 Maintain magnetic signature limits.	F	F		F		
g. <u>MOBILITY (MOB)</u>						
MOB 1 - Steam to designed capability and in the most fuel efficient manner.						
MOB 1.1 Steam at full power.	F	F		F		
MOB 3 - Prevent and control damage.						
MOB 3.1 Control fire, flooding, electrical, structural, propulsion and hull casualties.	F	P	P	P	P	A
III(P), S(P), IV(P) Assistance required from off-watch/salvage personnel.						
IP(P) Duty damage control party.						

OPNAVINST 3501.139A

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
MOB 3.2 Counter and control NBC contaminants/agents.	F	P	P	P	P	A
III(P), S(P), IV(P) Assistance required from off-watch/salvage personnel.						
IP(P) Reduced capability due personnel ashore.						
MOB 3.3 Maintain security against unfriendly acts.	F	F	F	F	F	
MOB 3.5 Provide damage control security/surveillance.	F	F	F	F	F	
MOB 3.6 Conduct underwater hull security inspections.		P	F	P	P	A
III(P), IV(P), IP(P) Augmented by off-watch personnel as required.						
MOB 3.8 Provide emergency breathing devices per ship's allowance.	F	F	F	F	F	
MOB 5 - Maneuver in formation.	F	F		F		
MOB 7 - Perform seamanship, airman-ship and navigation tasks.						
MOB 7.1 Navigate under all conditions of geographic location, weather, and visibility.	F	P	P	P		E
III(P), S(P), IV(P) Augmented by special detail.						
MOB 7.2 Conduct precision anchoring.	P	P		P		E

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
I(P) May require securing personnel from Condition I stations.						
III(P), IV(P) Augmented by special detail.						
MOB 7.3 Get underway, moor, anchor, and sortie with duty section in a safe manner.					P	A
IP(P) Will require recall of personnel if more than four section liberty requirements are met.						
MOB 7.5 Utilize programmed evasive steering.	F	F	F	F		
MOB 7.6 Abandon/scuttle ship rapidly.	F	P	P	P		E
III(P), S(P), IV(P) Augmented by special detail.						
MOB 7.7 Provide lifeboat/raft capacity per unit's allowance.	F	F	F	F	F	
MOB 7.8 Tow or be towed (Towing engine not required).	F	P	P	P		E
I(P), III(P), S(P), IV(P) Augmented by special detail.						
MOB 7.9 Operate day and night and under all weather conditions.	F	F	F	F		
MOB 7.10 Conduct undetected transits.	F	F	F	F		
MOB 10 - Replenish at sea.						

27 MAY 1968

		<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/w</u>
MOB 10.1	Receive vertical replenishment. III(P), IV(P), IP(P) Off-watch personnel required to man special detail.		P		P	P	E
MOB 10.2	Receive fuel while underway (alongside method). III(P), IV(P) Off-watch personnel required to man special detail.		P		P		E
MOB 10.3	Receive munitions and provisions while underway. III(P), IV(P) Off-watch personnel required to man special detail.		P		P		E
MOB 10.4	Receive potable and/or feed water while underway. III(P), IV(P) Off-watch personnel required to man special detail.		P		P		L
MOB 10.6	Receive fuel while underway (astern method). III(P), IV(P) Off-watch personnel required to man special detail.		P		P		E
MOB 12 -	Maintain the health and well-being of the crew.						
MOB 12.1	Ensure all phases of food service operations are conducted consistent with approved sanitary procedures and standards. I(P) Battle messing.	P	F	F	F	F	

27 MAY 1988

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
MOB 12.2 Ensure the operation of the potable water system in a manner consistent with approved sanitary procedures and standards.		F	F	F	F	
MOB 12.3 Monitor to ensure the protection of personnel from overexposure to hazardous levels of radiation, temperature, noise, vibration, and toxic substances in accordance with current instructions.		F	F	F	F	
h. <u>NONCOMBAT OPERATIONS (NCO)</u>						
NCO 2 - Provide administrative and supply support for own unit.						
NCO 2.1 Provide supply support services.	P	F	P	F	P	
I(P) and S(P) SK available for emergency issue.						
IP(P) Limited due to personnel ashore.						
NCO 2.2 Provide clerical services.				F	P	
IP(P) Limited due to personnel ashore.						
NCO 2.5 Provide messing facilities.	P	F	F	F	F	
I(P) Battle messing only.						
NCO 2.6 Provide ships service facilities.		P		F	F	
III(P) Limited service because of watch requirements.						
NCO 2.7 Provide inventory and custodial services.				F	P	

	<u>I</u>	<u>III</u>	<u>S</u>	<u>IV</u>	<u>IP/V</u>	<u>OFF/W</u>
NCO 8.1 Provide technical assistance for installed test and evaluation equipments.				F	F	
NCO 8.2 Perform the test and evaluation functions set forth in the appropriate test plans.				F	F	
NCO 9 - Support/conduct space vehicle recovery operations.						
NCO 9.3 Support/perform sea recovery of space vehicles.				F		
NCO 10 - Provide emergency/disaster assistance.						
NCO 10.1 Provide emergency flooding/fire fighting assistance to another unit.	F				F	
IP/V(P) Off-watch personnel are restricted to man special detail.						