#### United States Coast Guard



## ALTERNATE COMPLIANCE PROGRAM FREIGHT VESSEL EXAMINATION BOOK

Name of Vessel				
Official Number	ACP Class Society			
Date Completed	Location			
Vessel Built in Compliance with SOLAS: 60 74 74/78				
Exam Type				
☐ Annual ☐ Reexa	mination			
Inspectors				
1	3			
2	4			

CG-840 ACP FV Rev. 1/99

# **Total Time Spent Per Activity:**

Regular Personnel (Active Duty)						
ACTIVITY TYPE	ACTIVITY	Т	RAINING	(PERS) MI		
TOTAL ADM	IIN HOURS		TOT	AL TRAVEL HOURS		
	Rese	rve	Personnel			
ACTIVITY TYPE	ACTIVITY	Т	RAINING	(PERS) MI		
TOTAL ADMIN HOURS		TOT	AL TRAVEL HOURS			
	Auxilia	ary	Resources	3		
TOTAL BOAT HOURS		TOTA	L AIRCRAFT HOURS			

#### **Use of ACP Freight Vessel Examination Book:**

This examination book is intended to be used as a job aid by Coast Guard marine inspectors during annual examinations and reexaminations of U.S. flagged vessels participating in the Alternate Compliance Program (ACP). This book contains an extensive list of possible examination items. It is not, however, the Coast Guard's intention to "inspect" all items listed. The marine inspector must verify that the vessel and its crew are in substantial compliance with international conventions and the requirements of the ACP class society's U.S. Supplement. The depth and scope of the examination must be determined by the marine inspector's observation of the vessel, its equipment, and its crew.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to IMO publications, CFR's, the ACP class society's U.S. Supplement, NVIC's, or any locally produced cite guides for specific regulatory references. Although not all items in this book are applicable to all vessels, Section 1 should be filled out in its entirety at each examination and reexamination.

**NOTE:** Guidance on how to examine ACP vessels can be found in MSM Volume II, Chapter 32: Alternate Compliance Program, and NVIC 2-95, Change 1. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.

#### **Guide to Examinations:**

	Annual examination and reexamination
$\Diamond$	Annual examination only
0	Expanded examination as required

These three stages are only a general guide. Each marine inspector should determine the depth of the examination necessary. A checked box should be a running record of what has been examined by the marine inspector. It does not imply that the entire system has been examined or that all or any items are in full compliance.

**NOTE:** A reexamination normally includes an examination of the vessel's documents, certificates, and licenses, in addition to a "walk-through" of the vessel.

#### **Pre-inspection Items**

- Review vessel computer (survey status) reports from the ACP class society.
- Review reports pertaining to conditions of class or statutory deficiencies
- Obtain copies of forms or certificates to be issued.

#### **Post-inspection Items**

- Issue forms/certificates to vessel.
- Update MSIS with international certificate data.

VFOD - MSDSVFLD - MIDR

MIAR

 Initiate Report of Violation (ROV) if necessary

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### **Section 1: Administrative Items**

# **IMO Applicability Dates:**

Reference	Date
SOLAS 1960	26 MAY 65
SOLAS 1974	25 MAY 80
1978 Protocol to SOLAS 1974 1981 Amendments (II-1 & II-2) 1983 Amendments (III)	01 MAY 81 01 SEP 84 01 JUL 86
Various additional amendments to SOLAS	
MARPOL 73/78 Annex I	02 OCT 83
MARPOL 73/78 Annex II	06 APR 87
MARPOL 73/78 Annex III	01 JUL 92
MARPOL 73/78 Annex V	31 DEC 88
IBC Code	After 01 JUL 86
BCH Code	Prior to 01 JUL 86
COLREGS 1972	15 JUL 77
Various additional amendments to COLREGS	
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments	01 DEC 92
1994 Amendments 1995 Amendments	01 JAN 96 01 FEB 97

# **Involved Parties & General Information:**

Vessel's Representatives	
Phone Numbers	
Owner—Listed on DOC (if applicable), or COFR	
☐ No Change	
Operator	
☐ No Change	

# **Vessel Information:**

Classification Society					
ISM Issuer: Same as above?					
☐ Yes ☐ No If not the same Recognized Organ	·				
<b>NOTE:</b> The period of validity for ISM docume If they do NOT, ISM documents should be fu					
☐ 5 years = Full term (SMS and DOC)	☐ 12 months = Interim (DOC)				
☐ 6 months = Interim (SMC)	☐ 5 months = Short term (SMC)				
Date of Last Class Survey					
☐ Outstanding conditions of class	or non-conformities				
Last Port of Call	Next Port of Call				
Cargo	Current Operations				
Call Sign	☐ No Change (VFID)				
Gross Tons	□ No Change (VFMD)				
Built Date (use delivery date)	□ No Change (VFCD)				
Overall Length (in feet)	☐ No Change (VFMD)				
Vessel Description:					
Container Vessel	☐ Bulk Carrier				
	_ Bulk Carrier				
☐ Vehicle Carrier	Other				

#### **Section 2: Certificates and Documents**

### **International Certificates:**

Name of Certificate	Issuing Agency	ID#	Port Issued/ Country	Issue Date	Exp. Date	Endors. Date
Certificate of Documentation	USCG					
□ No Change	USCG					
Classification Document						
□ No Change						
Certificate of Financial Responsibility (COFR)	USCG					
☐ No Change						
Safety Construction (SLC)						
□ No Change						
Safety Equipment (SLE)						
□ No Change						
Safety Radio (SLT)						
☐ No Change						

Name of Certificates	Issuing Agency	ID#	Port Issued/ Country	Issue Date	Exp. Date	Endors. Date
International Load Line (ILL)						
☐ No Change						
International Oil Pollution Prevention (IOPP)						
☐ No Change						
International Tonnage (ITC)						
☐ No Change						
Safety Management (SMC)						
☐ No Change						
Document of Compliance (DOC)						
☐ No Change						

Mar	nning:	
	Officers' licenses current	STCW 95 I/2 STCW 95 I/10 STCW 95 VI/1 STCW 95 VI/2
	Rest periods	STCW 95 VIII/1
	Review watch schedules	
Log	s and Manuals:	
	Lifesaving equipment maintenance record	SOLAS 74/78 III/19
	Periodic checks as required	
	<ul> <li>Visual inspection of survival craft / rescue boat and launching appliances</li> </ul>	
	Operation of lifeboat / rescue boat engines	
	<ul> <li>Lifesaving appliances, including lifeboat equipment examined</li> </ul>	
	Emergency training and drills	SOLAS 74/78 III/18
	<ul> <li>Onboard training in use of lifesaving equipment (all crew members)</li> </ul>	
	SOLAS training manual	
	<ul><li>Logbook records</li><li>Weekly and lifeboat drills</li></ul>	SOLAS 74/78 III/18.5 SOLAS 74/78 III/25
	Bridge log	STCW 95 I/14
	Pre-arrival tests conducted	33 CFR 164.25
	<ul> <li>Casualties (navigation equipment and steering gear failures reported)</li> <li>Steering gear drills</li> </ul>	33 CFR 164.53
_	Emergency steering drills	
Ц	Exemptions to SOLAS certificates	SOLAS 74/78 I/4
Poll	ution Prevention Records:	
	Current pollution prevention records	
	Person-in-charge	33 CFR 155.700
	Transfer equipment tests and inspections	33 CFR 156.170
Note	Declaration of Inspection     S:	33 CFR 156.150
14010	o	

$\Diamond$	Oil record book (Part 1) (spot-check)	MARPOL Ax. I/20
	Each operation signed by person-in-charge	33 CFR 151.25
	<ul> <li>Each complete page signed by master</li> </ul>	
	Book maintained for 3 years	
>	Shipboard oil pollution emergency plan	MARPOL Ax. I/26.1
	<ul> <li>Approved by flag state / class society</li> </ul>	33 CFR 151.26
	<ul> <li>Contact numbers correct</li> </ul>	
	Immediate Actions List	
>	Vessel response plan	33 CFR 155.1045
	(vessels carrying oil as secondary cargo)	33 CFR 155.1030
>	Oil transfer procedures	33 CFR 155.720
	<ul> <li>Posted / available in crew's language</li> </ul>	
	<ul> <li>List of products carried by vessel</li> </ul>	
	Description of transfer system including a line	
	diagram of piping	
	Number of persons required on duty     Duties by title of each person	
	<ul> <li>Duties by title of each person</li> <li>Means of communication</li> </ul>	
	Procedures to top off tanks	
	Procedures to report oil discharges	
Car	go Records:	
	Packaged hazardous materials	
	Dangerous Cargo Manifest	001.10-1/-01/4
	<ul> <li>Division 1.1 or 1.2 explosives (check for required</li> </ul>	SOLAS 74/78 VII/5 49 CFR 176.30
	permit for designated dangerous cargo)	49 CFR 176.100
	Training records (check records of crew members	
	considered to be hazmat employees)	49 CFR 172.700-704
	DOT hazmat registration	49 CFR 176.13 49 CFR 107.601
]	Bulk solid hazmat	
	Special permit on board (unlisted cargoes only)	40 OED 440 04 7
	Shipping papers	46 CFR 148.01-7
	DCM on board	46 CFR 148.02-1 46 CFR 148.02-3
	Cargo inspections carried out and logged	46 CFR 148.02-3 46 CFR 148.03-7
		40 01 10 140.03-7
lote	S:	

### **Section 3: General Examination Items**

# Navigation Safety:

	Charts and publications for US waters/intended voyage	33 CFR 164.33	
	<ul> <li>Current and corrected charts</li> <li>US Coast Pilot</li> <li>Sailing directions</li> <li>Coast Guard Light List</li> <li>Tide tables</li> <li>Tidal current tables</li> <li>International Rules of the Road</li> <li>Inland Rules of the Road</li> </ul>		
	International Code of Signals	22 OFD 464 25	
П	<ul> <li>Plotting equipment</li> <li>Operationally test radar(s) and ARPA</li> </ul>	33 CFR 164.35 33 CFR 164.35	
_	<ul> <li>2 required if over 10,000 GT</li> <li>Operate independently</li> <li>ARPA acquires targets</li> </ul>	33 CFR 164.37 33 CFR 164.38	
	Compasses	33 CFR 164.35	
	<ul> <li>Illuminated gyrocompass with repeater at stand</li> <li>Illuminated magnetic compass</li> <li>Current deviation table</li> </ul>		
	Test electronic depth sounding device and recorder	33 CFR 164.35	
П	<ul> <li>Accurate readout</li> <li>Test all transducers</li> <li>Continuous recorder (chart)</li> </ul> Electronic position fixing device	00.050.404.44	
	Location accurate	33 CFR 164.41	
Note	es:		
			_
			_

	Indicators	33 CFR 164.35
	<ul> <li>Illuminated rudder angle indicator</li> <li>Centerline RPM indicator</li> <li>Propeller pitch (CPP systems)</li> <li>Speed and distance indicators</li> <li>Lateral thrusters</li> </ul>	33 CFR 164.40
	Communications	SOLAS 74/78 IV/6.3
	VHF radio	33 CFR 26.03
	<ul><li>Steering gear instructions</li><li>Instructions</li><li>Emergency instructions</li><li>Block diagram</li></ul>	33 CFR 164.35
	Maneuvering facts sheet with warning statement	33 CFR 164.35
	Radiotelephone (VHF-FM)	33 CFR 26.03 & 26.04
	EPIRB (406 MHz)	SOLAS 74/78 IV/7.1.6
	<ul><li>Float-free amount</li><li>Battery date current</li><li>Hydrostatic release</li></ul>	
	<ul><li>GMDSS</li><li>Additional radio equipment for area of operation</li></ul>	SOLAS 74/78 IV/8 SOLAS 74/78 IV/9 SOLAS 74/78 IV/10 SOLAS 74/78 IV/11
$\Diamond$	Operationally test bridge steering  Test power/control pumps independently Test follow-up and non-follow-up controls Rudder angle indicator accurate Activate loss of power alarm	SOLAS 74/78 II/1-29
$\Diamond$	<ul> <li>GMDSS lifeboat radios (VHF)</li> <li>3 if over 500 GT</li> <li>Operable condition</li> </ul>	SOLAS 74/78 III/6.2
Note	es:	

$\Diamond$	<ul> <li>9 GHz radar transponder (SART)</li> <li>Vessels &gt; 300 GT and &lt; 500 require 1</li> </ul>	SOLAS 74/78 III/6.2 NVIC 9-93
	Vessels > 500 GT and < 500 require 1     Vessels > 500 GT require 2	
	Stowed so to be rapidly placed in survival craft, or stowed in survival craft	
$\Diamond$	NAVTEX	SOLAS 74/78 IV/7.1.4
$\Diamond$	Radio installation	SOLAS 74/78 IV/6.2
	Marked with call sign	
<u>Ge</u>	neral Health and Safety	
	Accident Prevention and Occupational Health	
	<ul> <li>Rails, guards, protective clothing and equipment, warning signs posted in crew work areas</li> </ul>	
	Crew accommodations	46 CFR 92.20
	<ul> <li>Habitable conditions</li> <li>Adequate lighting and ventilation</li> <li>Free of cargo and stores</li> <li>Individual berths</li> </ul>	MSM Ch. 13.C
	Hospital space	46 CFR 92.20-15
	<ul> <li>Designated for ships ≥ 500 GT with 15 or more crew on voyage of more than 3 days</li> <li>Not used for stowage or berthing</li> <li>Properly operating toilet</li> </ul>	MSM Ch. 13.C
	Galley	MSM Ch. 6.P.8
	<ul> <li>Sanitary conditions</li> <li>Adequately equipped to prepare food</li> <li>Mess hall provided for crew</li> </ul>	MSM Ch. 13.C
	Muster lists and emergency instructions	
	Available for each person	SOLAS 74/78 III/8
	<ul><li>Posted in conspicuous places</li><li>Shows crew member duties</li></ul>	SOLAS 74/78 III/53
Note	98:	

### **Structural Integrity**

**NOTE:** Request records of Outstanding Conditions of Class. (Form or format may vary depending on class society.) Conditions of Class may identify structural defects, wastage, etc. Conditions may also identify ships overdue for drydocking, repair or other required service.

	Hull structure	ICLL 66 Reg. 1
	<ul> <li>Frame pulling away</li> <li>Fractures in corners</li> <li>Holes in main decks</li> <li>Leaks / patching on ballast tanks</li> <li>Bulkheads / decks warped</li> <li>Excessive wastage</li> </ul>	
	Side shell, accessible structural members, decks, cargo hatches and superstructure	ICLL 66 Reg. 1
	<ul> <li>Fractures, corrosion, wastage, pitting or damage to the extent that it may impair ship's seaworthiness</li> <li>Excessive doublers, postage stamp inserts, cement boxes or soft patches</li> <li>Welding burn marks or other evidence of recent repair work</li> </ul>	
	<ul> <li>Load line marked in accordance with certificates</li> <li>Hailing port</li> <li>Name</li> <li>Railings</li> </ul>	ICLL 66 Regs. 4 - 9
	Hatch covers	ICLL 66 Regs. 13 - 16
	<ul> <li>Holes in covers</li> <li>Frames pulling away</li> <li>Gaskets / compression bar</li> <li>Coaming</li> <li>Hydraulics systems</li> <li>Wastage / coatings</li> </ul>	IOLE 00 Negs. 15 110
	Watertight/weathertight openings	
	<ul> <li>Watertight doors, gaskets, dogs</li> <li>Other openings (means of securing)</li> <li>Vents, air pipes and closing appliances</li> </ul>	ICLL 66 Reg. 12 ICLL 66 Regs. 13 - 18 ICLL 66 Regs. 19 & 20
Note	s:	

#### **Ground Tackle:**

- Anchor and windlass (spot-check) Foundations
  - Drive units

  - Guards
  - Covers for moving parts
  - Brake pads
  - Deck fittings
  - Electrical (wiring) or hydraulic piping
- Mooring winches / capstans
  - Foundations
  - Cables / hooks
  - Boom
  - Brake
  - Electrical (wiring) or hydraulic piping
  - Ladders / rails

### **Cargo Operations:**

	Cargo securing manual	SOLAS 74/78 VI/5.6 SOLAS 74/78 VII/6.6
	Packaged hazmat  Hazmat containers stowed in accordance with stowage plan and DCM  Unsafe / damaged containers  Leaking / damaged packages  Placarding  "No Smoking" signs posted	SOLAS 74/78 VII/6 49 CFR 176.30 49 CFR 176.50 SOLAS 74/78 VII/4 49 CFR 172.50 49 CFR 176.60
_	<ul> <li>Stowage conditions observed</li> <li>Special additional requirements</li> <li>Additional requirements of special permit</li> </ul>	46 CFR 148.03-11 46 CFR 148.04 46 CFR 148.01-11
Note	98:	

	Cargo ventilation systems  Continuously running  Remote controls outside space			SOLAS 7	4/78 II-2/53
	<ul> <li>Indicators on bridge</li> <li>Hazardous wiring</li> <li>Lights and fixtures</li> <li>Wiring</li> </ul>			SOLAS 7	4/78 II-2/53
	Ramps / watertight doors  Watertight integrity  Seals  Locking arrangements  Controls / warning alarms		ICLL 66 F	Reg. 21	
Life	sa	ving Equipme	ent:		
		reboats / rescue   Required number Hull integrity and the Engine starts with Test engine at	boats fittings in 5 minutes	SOLAS 7	4/78 III/26 4/78 III/19.2
		Stbd Lifeboat	Port Lifeboat	Lifeboats	
		Engine equipped	Engine equipped	Wooden	
		Engine tested	Engine tested	Fiberglass	
		Lifeboat lowered	Lifeboat lowered	Steel	
				Covered	
		Free fall lifeboa	at with rescue boat		
	Da ·	Avit system Structure and four Roller tracks Lubrication (evide Falls; end for end No obstructions to	nce of use) / renew (2.5 / 5 years)		I 4/78 III/19.2 4/78 III/48
Note	s:				

	Embarkation area	SOLAS 74/78 III/11.7
	No obstructions	
	Embarkation ladder	
	<ul> <li>Launching instructions</li> </ul>	SOLAS 74/78 III/9
	Emergency lighting	
	Liferafts	SOLAS 74/78 III/19
	Required number	SOLAS 74/78 III/26
	<ul> <li>Stowage</li> </ul>	SOLAS 74/78 III/29
	<ul><li>Float-free arrangement</li><li>Hydrostatic release / weak link</li></ul>	
	<ul> <li>Annual servicing (hydrostatic release and inflatable liferaft)</li> </ul>	SOLAS 74/78 III/19.8.1 SOLAS 74/78 III/19.9.1
	- Maximum 17 months	
	Launching instructions posted	SOLAS 74/78 III/9
	Bow / stern station     Lashed down on deck or in marked location	
	Lifejackets available	
	Lifebuoys (spot-check)	
	<ul> <li>Condition</li> </ul>	SOLAS 74/78 III/19.2
	Bridge location	SOLAS 74/78 III/7.1
	Quick release system	
	Smoke and light float  Pack leasting	
	<ul><li>Deck location</li><li>50% with waterlights</li></ul>	
	Retro-reflective tape	SOLAS 74/78 III/30.2.7
	Lifejackets—watchstanders and crew (spot-check)	
	<ul> <li>Condition</li> </ul>	SOLAS 74/78 III/19.2
	Stowage	SOLAS 74/78 III/7.2.2
	Retro-reflective material	SOLAS 74/78 III/30.2.7
	• Light	SOLAS 74/78 III/27.2
	<ul> <li>Whistles</li> </ul>	SOLAS 74/78 III/32.1.6
	Line-throwing appliances (spot-check)	SOLAS 74/78 III/17
	<ul><li>4 charges</li></ul>	
	Pyrotechnics (spot-check)	SOLAS 74/78 III/6.3
	<ul> <li>12 distress flares</li> </ul>	
Note	es:	

	Immersion suits and thermal protective aids (spot-check)	SOLAS 74/78 III/27.3
	<ul><li>Condition</li><li>Retro-reflective material</li></ul>	SOLAS 74/78 III/19.2 SOLAS 74/78 III/30.2.7
<u>Fire</u>	Protection:	
	Fire control plan  Permanently exhibited  Language of flag state  Copy permanently stored in weathertight container outside deckhouse	SOLAS 74/78 II-2/20
	Portable fire extinguishers (spot-check)  Good condition / available for immediate use Located on stations Serviced at periodic intervals	SOLAS 74/78 II-2/6.5
	International shore connection  Means of escape from accommodation, machinery, and other spaces	SOLAS 74/78 II-2/19
	<ul><li>Two required (some exceptions)</li><li>Dead end corridors</li></ul>	SOLAS 74/78 II-2/45
	<ul> <li>Fire doors (spot-check)</li> <li>Machinery space and stair towers</li> <li>Not tied or blocked open</li> <li>Installed closure devices working</li> </ul>	SOLAS 74/78 II-2/46 SOLAS 74/78 II-2/47
	<ul> <li>Fire detection systems (spot-check)</li> <li>Smoke / fire alarms</li> <li>Remote pull stations</li> <li>Smoke / flame / heat detectors and sensors</li> </ul>	SOLAS 74/78 II-2/13 SOLAS 74/78 II-2/11.8 SOLAS 74/78 II-2/53
Notes	s:	

$\Diamond$	Test operation	of fire main sy	ystem		
	Required nur	mber of fire pumps	6		SOLAS 74/78 II-2/4
	<ul> <li>Location of p</li> </ul>	•			
		ants, piping, hose on and available for			SOLAS 74/78 II-2/21
$\Diamond$		protection (spo	ot-check)		SOLAS 74/78 II-2/42
	<ul><li>Bulkheads</li><li>Insulation</li></ul>				
	<ul><li>Ventilation</li></ul>				
	<ul> <li>Penetrations</li> </ul>				
$\Diamond$		nguishing syste d other spaces		Ο,	SOLAS 74/78 II-2/21
	release mec	ders, piping, contro hanisms in good c immediate use			
	Type of syst	em: (circle appr	opriate type)	)	
	Low Pressure CO <sub>2</sub>	High Pressure CO <sub>2</sub>	Halon	Foam	
<u>Pol</u>	lution Preve	ntion: (spot	-check a	at reexa	aminations)
	Pollution placa	ard posted			33 CFR 155.450
	MARPOL V pla	acard posted			33 CFR 151.59 MARPOL Ax. V/9
	Garbage				
	•	arbage properly di	sposed		MARPOL Ax. V/3
	Incinerator     Evidence	ce of use (clinkers	١		33 CFR 151.63
		of burner assembly			
	<ul><li>Electric</li></ul>	al controls	•		
	Garbage Ma	nagement Plan			MARPOL Ax. V/9
Note	es:				

	Oil and hazmat		
	<ul> <li>Fuel oil and bulk lubricating oil discharge containment</li> </ul>	33 CFR 155.320	
	Prohibited oil spaces	33 CFR 155.470	
	Oily-water separating equipment, bilge alarm, and bilge monitor	MARPOL Ax. I/16 33 CFR 155.380	
	<ul><li>Alarm, recorder</li><li>Standard Discharge Connection</li></ul>	33 CFR 155.430	
	Marine sanitation device  Type (I, II, or III)  Nameplate Placard	33 CFR 159.7 33 CFR 159.55 33 CFR 159.59	
Mad	chinery Spaces:		
	Main and auxiliary machinery installations		
	<ul><li>General housekeeping</li><li>Fire hazards</li></ul>	SOLAS 74/78 I/11(a)	
	Shock and electrical hazards	SOLAS 74/78 II-1/45.1	
	<ul> <li>Personnel hazards (moving parts not protected, hot surfaces, etc.)</li> <li>Leaking fuel oil piping or fittings</li> <li>Sea chests, sea valves / spool pieces in good condition</li> </ul>	SOLAS 74/78 II-1/26	
	Tank tops and bilges free of oil	SOLAS 74/78 II-2/15	
	<ul> <li>Watertight doors</li> <li>Hand / power operation</li> <li>Local / remote control</li> <li>Alarm</li> </ul>	SOLAS 74/78 II-1/23	
	Steering gear machinery	SOLAS 74/78 II-1/29	
	<ul><li>Linkages</li><li>Hydraulic leaks</li><li>Ram guides</li><li>Lubrication</li></ul>		
Note	es:		
	-		

$\Diamond$	Operationally test main and auxiliary steering gear	SOLAS 74/78 II-1/29.15 through 29.20
	<ul> <li>28-second operation</li> <li>Systems operate independently</li> <li>Unusual vibrations / leaks</li> <li>Ram hunting</li> <li>Limit switches</li> <li>Communications with bridge</li> <li>Steering gear instructions (block diagram)</li> </ul>	
$\Diamond$	Main ship service generators  NOTE: Two independent sources of power required.	SOLAS 74/78 II-1/41
	<ul><li>F/O piping</li><li>Cooling lines</li><li>Controls</li></ul>	
$\Diamond$	<ul> <li>Emergency generator room</li> <li>Test operation of prime mover</li> <li>Personnel safety</li> <li>Ventilation adequate</li> <li>Electrical switchboard  – Grounds</li> </ul>	SOLAS 74/78 II-1/43
$\Diamond$	• Two required	SOLAS 74/78 II-1/21
Note	s:	

### Section 4: Drills

## ♦ Fire Drill:

Initial notifications	Familiarity with duties	Space isolation
General alarms / signals	Familiarity with equipment	Smoke control
Crew response	Fire pumps started	Communications w/ bridge
Properly dressed / equipped	Two jets of water	
Language understood by crew	Fire doors and dampers	
(SOLAS 74/78 III/18.3; MSM Vo	I. II/22.C.7.i; NVIC 6-91)	
Location:		Time on Scene:
Notes:		

# Abandon Ship Drill:

General alarms / signals

Muster lists	Provide equipment	Egress procedures
Muster of crew	Familiarity with equipment	Davit-launched liferaft drill
Crew response	Lower lifeboat	Communication w/ bridge
Language understood by crew	Brake operation	Lighting
Lifejackets	Engine start	
(SOLAS 74/78 III/18.3; MSM Vo	I. II/22.C.7.h)	
Location:	Time	e to Water:
Notes:		

Familiarity with duties Boat operation

#### **Section 5: Expanded Examination Items**

### **Manuals and Instructions:**

0	Check for presence of the following documents				
	<ul> <li>Instructions for maintenance and operation of all installations / equipment for fighting and containing a fire</li> </ul>	SOLAS 74/78 II-2/20			
	<ul> <li>Training manual for lifesaving appliances</li> <li>Instructions for onboard maintenance of lifesaving appliances</li> </ul>	SOLAS 74/78 III/18.2 SOLAS 74/78 III/51 SOLAS 74/78 III/19.3 SOLAS 74/78 III/52			
	<ul> <li>Stability booklet, associated stability plans and information</li> </ul>	SOLAS 74/78 II-1/22 ICLL 66 Reg. 10			
0	Cargo gear certificate				
0	Grain loading manual     Bulk vessel (stability and grain manuals often combined)	SOLAS 74/78 VI/9.1			
0	Human Factors	STCW Code			
	Determine if the appropriate crew members are able to understand the information given in manuals, instructions, etc., relevant to the safe condition of the ship and its equipment, and that they are aware of the requirements for maintenance, periodical testing, training, drills, and recording of logbook entries.				

#### Safety Management System (SMS):

**NOTE:** Requirements and guidance for inspecting vessel Safety Management Systems are detailed in SOLAS 74/78, Chapter IX and NVIC 4-98.

- O Documentation (may be in the form of a Safety Management Manual)
  - Controlled documents
  - Quality policy
  - Master of vessel familiar with SMS
  - Language understood by crew
  - Documentation identifies:
    - Written procedures kept on board vessel
    - Essential or critical equipment identified (or a separate manual containing this information)
    - Procedures for reporting non-conformities
    - Company's designated person(s) (name or title, and address)

Notes:							

Company's training program conducted in STCW I/14 accordance with STCW NOTE: Documented procedures established to ensure new personnel and personnel transferred to new assignments are given proper familiarization with their duties. Proper documentation Training conducted before crew is assigned shipboard duties Essential instructions are documented and provided before sailing Crew familiar with SMS issues Ship's officers Documented procedures Preventative procedures for essential equipment Reporting requirements for non-conformities and able to identify typical scenarios that may result in a documented non-conformity Master and chief engineer familiar with internal audit procedures (e.g., know how many audits required per year and have participated in at least one) in addition to requirement's for ship's officers Documented maintenance system Documented in writing and computerized versions Readily available and in language understood by those who use them Procedures are followed Records maintained Vessel-specific procedures are documented in writing and address the following areas: **NOTE:** Not mandatory that they follow the exact format listed below. Preventative maintenance Navigation Bunkering operations Emergency preparedness Pollution prevention Technical procedures Communications

Notes:

0	Audits	
	<ul> <li>Internal audits conducted as specified by SMS NOTE: Do NOT examine internal audit records.</li> <li>External audit results reviewed         <ul> <li>Status of open non-conformities relevant to deficiencies leading to detention</li> <li>Status of implementation of corrective and preventative measure</li> </ul> </li> </ul>	
O	SMS review conducted by Master in accordance with procedures in SMS	
	<ul> <li>Non-conformities identified</li> <li>Report of non-conformity prepared and sent in accordance with procedures established by SMS</li> </ul>	
<u>Nav</u>	igation Safety:	
0	Test navigation equipment listed in Section 3 to the extent necessary to determine if equipment is operating properly.	
0	Human Factors (spot-check): determine if deck officers are familiar with the following items:	STCW Table A-II NVIC 3-98
	<ul> <li>Operation of bridge control and navigational equipment</li> <li>Use of nautical publications and charts</li> <li>Ship maneuvering characteristics</li> <li>Lifesaving signals</li> <li>Bridge procedures, instructions, manuals, etc.</li> <li>Changing steering from automatic to manual and vice versa</li> <li>Preparations for arrival and departure</li> <li>Communications with engineroom</li> <li>Use of VHF</li> <li>Raising the alarm</li> <li>Abandon ship drill and fire drill</li> </ul>	
Note	·	
	S	

$\circ$	Lights, shapes, and sound signals	72 COLREGS
	<ul><li>Navigation lights</li><li>Sound signals</li><li>Distress signals</li></ul>	
0	Radio log	SOLAS 74/78 IV/17
0	Radio operation  Transmit on 2182 MHz and Ch. 6, 13, 16, 70	SOLAS 74/78 IV/7
0	INMARSAT communications	SOLAS 74/78 IV/7.1.5
<u>Caı</u>	go Operations:	
0	<ul> <li>Emergency Response Information</li> <li>Packages properly marked and labeled</li> <li>All labeled and placarded cargoes listed on DCM</li> <li>Proper stowage and segregation</li> </ul> Human Factors: determine if personnel are	49 CFR 172.600 49 CFR 172.300-450 49 CFR 176.30 49 CFR 176, Subparts C & D STCW Table A-II/III
	<ul> <li>familiar with the following items:</li> <li>Hazardous material regulations</li> <li>Special requirements (e.g., loading, segregation, firefighting equipment, etc.) for particular cargoes</li> <li>Dangers posed by the cargo</li> <li>Measures to be taken for cargo emergencies</li> </ul>	49 CFR 176.57
Note	es:	

# **Lifesaving Equipment:**

0	Lifeboats/liferafts/rescue boats	
	<ul> <li>Ensure effective operation of winches, davits, falls, sheaves, etc. (Lower at least one lifeboat to the water.)</li> </ul>	SOLAS 74/78 III/19
	<ul> <li>Test lifeboat and rescue boat flemming gear and/or engines</li> </ul>	
	<ul><li>Verify presence/condition of lifeboat equipment</li><li>Retro-reflective tape</li></ul>	SOLAS 74/78 III/41
	• Lighting	SOLAS 74/78 III/11.4
0	Emergency communication equipment	
	<ul> <li>2-way VHF radiotelephone apparatus</li> <li>Radar transponders</li> <li>Survival craft EPIRBs</li> </ul>	SOLAS 74/78 III/6.2
	Onboard communication and alarm system	SOLAS 74/78 III/6.4
0	Line-throwing appliance	SOLAS 74/78 III/17.49
_	Specifications and equipment	
0	Pilot ladders and hoists in good condition	SOLAS 74/78 V/17
0	Distress signals	SOLAS 74/78 III/6.3
	12 red rocket parachute flares	
Note		
Note	5	

## **Fire Protection:**

0	Structural fire protection	SOLAS 74/78 II-2/42, 43
	<ul> <li>Bulkheads and decks meet applicable fire integrity requirements</li> </ul>	44, 46, 47 49, & 50
	<ul> <li>Openings (e.g., doors, ductwork, electrical wires, piping, etc.) constructed so that they do not destroy fire resistance of bulkheads</li> </ul>	
	Manual and automatic fire doors examined / tested	
0	Fire detection, fire alarm, and automatic sprinkler systems fitted where required and operating properly	SOLAS 74/78 II-2/52
0	Ventilation systems	SOLAS 74/78 II-2/48
	<ul> <li>Main inlets and outlets of all ventilation spaces can be closed from outside ventilated space</li> <li>Power ventilation capable of being shutdown from outside ventilated space</li> </ul>	
0	Fire pumps	SOLAS 74/78 II-2/4
	<ul> <li>Fire main activated; water pressure satisfactory (energize forward-most and highest hydrants)</li> </ul>	
0	Paint lockers and flammable liquid lockers protected by an appropriate fire extinguishing arrangement	SOLAS 74/78 II-2/18.7
0	Special arrangements in machinery spaces	SOLAS 74/78 II-2/11
	<ul> <li>Machinery space ventilating fans can be shut down from outside spaces</li> <li>All openings capable of being closed from outside machinery spaces</li> </ul>	
	<ul> <li>Machinery driving forced / induced draft fans, oil fuel transfer pumps, and other fuel pumps fitted with remote shutdowns located outside space concerned</li> </ul>	
Note	es:	
		_

0	Firemen's outfits (spot-check)	SOLAS 74/78 II-2/17.3
	<ul> <li>Two lockers</li> <li>Two outfits</li> <li>Protective clothing</li> <li>Helmet, boots, and gloves</li> <li>Lamp</li> <li>Ax</li> <li>Breathing apparatus and lifeline</li> </ul>	
0	Fixed fire extinguishing arrangements in cargo spaces for vessels ≥ 2000 GT	SOLAS 74/78 II-2/53.1
	<ul> <li>Vessels with ro-ro spaces</li> <li>Fixed fire detection and alarm system (built after 01 FEB 92)</li> <li>Fixed fire extinguishing system</li> <li>Portable fire extinguishers and addition equipment</li> <li>Ventilation system requirements</li> <li>Explosion-proof fixtures</li> </ul>	
	Vessels with cargo holds intended for carrying motor vehicles with fuel in their tanks  Fixed fire detection and alarm system (built after 01 FEB 92)  Fixed fire extinguishing system  Portable fire extinguishers and addition equipment  Ventilation system requirements  Explosion-proof fixtures	vessels
	<ul> <li>Vessels carrying dangerous goods in packarsolid bulk form</li> <li>Special requirements (see Tables 54.1 and 54.3 of II-2/54.2.3 for specific requirements)</li> </ul>	SOLAS 74/78 VII/1-6
	<ul> <li>Document of Compliance (flag state)</li> </ul>	
Note	s:	

#### **Pollution Prevention:** Equipment Test automatic stopping device required for MARPOL Ax. I/6 discharge Segregation of oil fuel and water ballast systems MARPOL Ax. I/14 Oily residue tank (discharge arrangements. MARPOL Ax. I/17 homogenizers, incinerators, etc.) Witness operational test of emergency shutdown 33 CFR 155.780 **Human Factors** STCW Table A-III Oil and oily mixtures MARPOL Ax. I Responsible officer familiar with handling of sludge and bilge water Quantity of residues generated Capacity of holding tanks Capacity of oil water separator Note any inadequacies in reception facilities used; advise master to report these to flag state Garbage MARPOL Ax. V Note any inadequacies in reception facilities used; advise master to report these to flag Crew familiar with Annex V requirements

### **Machinery Spaces:**

	and	I machinery space	
	•	Two means, one of which must be an engine order telegraph Tested	
0	• •	ergency source of electrical power  Location  Generator and/or batteries tested under load  Emergency lighting	SOLAS 74/78 II-1/43 SOLAS 74/78 II-1/44
Note	s: _		

SOLAS 74/78 II-1/37

Communication between navigating bridge

0	Ma • • • •	rin engine / vital auxiliaries (spot-check)  F/O pumps / piping  S/W pumps / piping  J/W pumps / piping  L/O pumps / piping  Piston cooling pumps / piping  Air compressors / receivers  Fuel / oil purifiers  H/O heaters / transfer pump	SOLAS 74/78 II-1/27
0	• • •	eering gear alarms  Low hydraulic oil  Loss of power  Loss of phrase  Overload	SOLAS 74/78 II-1/29
O	famiter  •	man Factors: determine if personnel are niliar with the operation of the following ms  Emergency generator:  - Actions necessary before engine can be started  - Different methods by which generator may be started  Stand-by generator engine:  - Methods to start engine automatically or manually  - Blackout procedures  - Load-sharing system  Steering gear:  - Action needed to bring main and auxiliary into operation  - Changing steering from automatic to manual and vice versa  Bilge pumps:  - Starting procedures for main and emergency bilge pump  - Appropriate valves to operate  Fire pumps:  - Starting procedures for main and emergency fire pumps  - Appropriate valves to operate	STCW Table A-III

## **Section 6: Appendices**

# **Recommended ACP Vessel Deficiency Procedures:**

Step	Action				
1	Identify deficiency.				
2	Inform ve	ssel representative.			
3	Record or	n the Deficiency Summary Worksheet (next page).			
4	If deficien	cy is corrected prior to end of exam, go to Step 7.			
5	If deficiency is unable to be corrected prior to end of exam, follow guidance in the tables below.				
	TABLE 1: inspector*	Minor deficiency discovered by Coast Guard marine			
	Step	Action			
	1	Notify ACP class surveyor-in-charge.			
	2 If ACP class surveyor issues an OSR, go to Step 7.				
	3 If ACP class surveyor is not available, issue CG-835 to vessel with copy sent to ACP class surveyor-incharge. Go to Step 6.				
	TABLE 2: Major deficiency that poses a direct and immediate threat to vessel's crew, safety of navigation, or marine environment				
	Step Action				
	1	Notify ACP class surveyor-in-charge of deficiency.			
	2	Ascertain proposed corrective action.			
	Detain vessel if so determined by OCMI under SOLAS I/19 or MARPOL Article 5.				
	* NOTE: Deficiencies shall indicate the item must be completed to the satisfaction of either the OCMI or ACP class society. The OCMI may deny or revoke the COI for noncompliance with the terms and/or conditions of the deficiencies.				
6	Enter CG-	835 data in MIDR.			
7	Enter defi	ciency data in MSDS.			
8	Initiate Report of Violation (ROV) if necessary.				

#### **Deficiency Summary Worksheet:**

Name of Vessel	VIN		
Deficiency	MSIS Code	Req't. Issued / Date Completed	

Deficiencies identified should be listed with MSIS codes. At completion of inspection/examination, any outstanding deficiencies shall be entered in MIDR or PSDR as appropriate. All deficiencies found (outstanding and completed) shall be entered in the Deficiency Summary. Worklist items, which serve only as memory joggers to complete inspection/examination (e.g., test emergency fire pump), should not be coded as deficiencies.

#### **MSIS Codes for Deficiencies:**

BS	Ballast	DC	Dry Cargo	IC	I/C Engine
ВІ	Bilge	ES	Electrical	LS	Lifesaving
ВА	Boiler, Aux.	FF	Firefighting	MI	Miscellaneous
вм	Boiler, Main	FL	Fuel	NS	Navigation
cs	Cargo	GS	General Safety	PP	Propulsion
DM	Deck Machinery	НА	Habitation	SS	Steering
DL	Doc., Lics., Pmts.	HU	Hull		

Notes:	

## **Conversions:**

Distance and Energy									
Kilowatts (kW)	X	<u> </u>	1.341			lorsepower	(hp)		
Feet (ft)	X		3.281	=		feters (m)	(11)		
Long Ton (LT)	X	,	.98421			letric Ton (t	)		
Liquid (NOTE: Values are approximate.)									
Liquid		bbl/LT m³/t			bbl/m³		bbl/t		
Freshwater		6.40 1.00			6.29		6.29		
Saltwater		6.24	.975			6.13		5.98	
Heavy Oil	(	6.77	1.06			6.66		7.06	
DFM	(	6.60	1.19			7.48		8.91	
Lube Oil	-	7.66	1.20			7.54		9.05	
Weight									
1 Long Ton	= 2240 lbs			1 Metric 7	Гоп	= 2204 lbs	S		
1 Short Ton	= 2000 lbs			1 Cubic F	oot	= 7.48 ga	l		
1 Barrel (oil)	= 5.61 ft = 6.29 m <sup>3</sup>	42 gal =	1 psi			= .06895 Bar = 2.3106 ft of water		2.3106 ft	
<b>Temperature</b> : Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F - 32))									
0 = -	-17.8	80	=	26.7		200	=	93.3	
32 =	0	90	=	32.2		250	=	121.1	
40 =	4.4	100	=	37.8		300	=	148.9	
50 =	10.0	110	=	43.3		400	=	204.4	
60 =	15.6	120	=	48.9		500	=	260	
70 =	21.1	150	=	65.6		1000	=	537.8	
Pressure: Bars = Pounds per square inch									
1 Bar =	14.5 psi	5 Bars	=	72.5 ps	si	9 Bars	=	130.5 psi	
2 bars =	29.0 psi	6 Bars	=	87.0 ps	si	10 Bars	=	145.0 psi	
3 Bars =	43.5 psi	7 Bars	=	101.5 p	si				
4 Bars =	58.0 psi	8 Bars	=	116.0 p	si				