

**DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD**

U.S. Coast Guard (G-MTH-4)  
Washington, D.C. 20593  
Phone: (202) 426-2197

NVIC 2-84  
6 Apr 1984

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 2-84

Subj: Amendments to the 1974 Safety of Life at Sea (SOLAS) Treaty

Ref: (a) International Convention for the Safety of Life at Sea, 1974  
(b) 1978 Protocol Relating to the International Convention for the Safety of Life at Sea, 1974  
(c) 1981 Amendments to SOLAS 1974 (First Set of Amendments)  
(d) 1983 Amendments to SOLAS 1974 (Second Set of Amendments)

1. PURPOSE. The purpose of this Circular is to provide information to industry and Coast Guard personnel regarding the recent amendments to the 1974 Safety of Life at Sea (SOLAS) Treaty.

2. BACKGROUND.

- a. The SOLAS Treaty is the codification of one portion of the work performed by the International Maritime Organization (IMO), which, until 1982, was known as the Intergovernmental Maritime Consultative Organization (IMCO). The aim of SOLAS is to insure that the merchant ships of the world meet a minimum level of safety. The U.S., as a party to the treaty, is obligated to enforce its provisions. As the U.S. enforcement agency for SOLAS 1974, the Coast Guard has the authority and responsibility to ensure that U.S. ships and foreign ships visiting U.S. ports comply with the treaty and its amendments. The status of the various Treaties, Protocols, and Amendments can be confusing, and this Circular is intended to clarify some of these issues, and to indicate the ongoing regulatory projects incorporating these rules.
- b. The current SOLAS Treaty, SOLAS 1974, came into force internationally on 25 May 1980. Basically it incorporated resolutions and proposed, but not ratified, amendments that had been developed over the period from 1960 to 1974. Although the amendments to SOLAS 1960 never entered into force, the IMO Assembly adopted many of them and recommended that the individual States incorporate them into their own national maritime safety regulations. Several changes to SOLAS 1974 have been developed since the 1974 Treaty was finalized. These have been expressed in the 1978 Protocol Relating to the International Convention for the Safety of Life at Sea, 1974, the 1981 Amendments, and the 1983 Amendments. The majority of the changes in the 1981 Amendments were in Chapter 11-2, which deals with fire protection. Also, there were significant changes to Chapter III (Lifesaving Appliances) in the 1983 Amendments.

3. DISCUSSION.

a. The 1978 Protocol:

The 1978 Protocol came out of the 1978 Tanker Safety and Pollution Prevention Conference. This conference was a direct result of U.S. initiatives in response to a tragic series of tanker casualties that occurred in 1976/77. Since the 1974 SOLAS Treaty had not been ratified at that time, the Treaty could not be amended. Therefore, these changes were issued as a Protocol. The 1978 Protocol Relating to the International Convention for the Safety of Life at Sea, 1974, came into force 1 May 1981. It mandates steering gear improvements, collision avoidance aids, dual radars, inert gas systems (IGS) for new and existing tank ships down to 20,000 deadweight tons (DWT), deck foam systems for new tank ships down to 20,000 DWT, and closed ullage systems for all tank ships fitted with IGS. Finally, it requires IGS for tank ships capable of crude oil washing.

b. The 1981 Amendments:

There are two sets of amendments to SOLAS 1974. The first set was developed between 1974 and 1981 by the various IMO Subcommittees. In November 1981 the International Maritime Organization's Maritime Safety Committee (MSC) accepted the 1981 Amendments to SOLAS 1974, which will come into force 1 September 1984. These include changes to Chapters 11-1, 11-2, III, IV, V, and VI. The most important changes concern Chapter 11-1 (Subdivision and Stability, Machinery and Electrical Installations) and Chapter 11-2 (Construction - Fire Protection, Fire Detection and Fire Extinction). In both cases the Chapters have been virtually rewritten and updated.

The changes to Chapters 11-1, 11-2 and V contained in the 1978 SOLAS Protocol are embodied and partly updated in the first set of amendments. The following is a short description of the important changes on a chapter by chapter basis:

Chapter 11-1

The changes to Chapter 11-1 include the provisions of resolution A.325(IX) on machinery and electrical requirements and further changes to Regulations 29 and 30 of the 1978 SOLAS Protocol on steering gear. The requirements introduce the concept of duplication of steering gear control systems in tank ships.

Other changes include rules for collision bulkheads in cargo ships, requirements for passenger ships designed for the carriage of goods vehicles and accompanying personnel, and regulations governing bilge pumping arrangements for cargo ships.

The Coast Guard is currently incorporating these changes into Title 46 of the Code of Federal Regulations (regulatory project CGD 83-043).

Chapter 11-2

The changes to Chapter 11-2 include the suggested standards established in IMO Resolutions A.327(IX) and A.372(X), provisions for halogenated hydrocarbon extinguishing systems, and a new Regulation 62 on inert gas systems. The latter regulation

was adopted by the eleventh IMO Assembly as a recommendation in 1979. The changes were so extensive that Chapter 11-2 was essentially reorganized and rewritten.

The Coast Guard is currently incorporating these changes into Title 46 of the Code of Federal Regulations (regulatory project CGD 83-026).

### Chapter III

Chapter III (Life-saving Appliances) has only been changed to provide a cross-reference to the changed to Chapter 11-1, but this Chapter was the subject of a major revision in the second set of amendments (see section 3c). The regulations affected in the 1981 Amendments were Regulations 111/1, 111/27, 111/30, and 111/38.

### Chapters IV and V

Seven regulations in Chapter IV (Radiotelegraphy and Radiotelephony) have been replaced, changed, or expanded. The regulations affected in Chapter IV are IV/4-1, IV/7, IV/8, IV/10, IV/16, IV/17, and IV/19.

There were significant changes made to Chapter V (Safety of Navigation). Perhaps the most important changes to Chapter V are contained in the revised Regulation 12 which is concerned with carriage requirements for shipborne navigational equipment. The revised requirements cover such matters as gyro and magnetic compasses; the mandatory carriage of two radars and of automatic radar plotting aids in ships of 10,000 gross registered tons (grt) and more; collision avoidance aids; echo-sounders; devices to indicate speed and distance rudder angle; propeller revolution indicators; rate of turn indicator; radio-direction finding apparatus; and equipment for homing on the radiotelephone distress frequency. The regulations affected in Chapter V are V/12, V/16, V/18, V/19, V/19-1 and V/19-2.

### Chapter VI

There are a number of small changes to Chapter VI (Carriage of Grain), affecting Regulation VII and Part B of Chapter VIII.

c. The 1983 Amendments:

At the June 1983 MSC meeting a second set of amendments were approved (1983 Amendments). These amendments will come into force 1 July 1986. They include changes to Chapter 11-1, 11-2, III, IV and VII. The most important changes concern Chapter III (rewritten totally and updated) and Chapter VII (changed to make the International Bulk Chemical Code and the International Gas Code mandatory). The following is a short description of the important changes on a chapter by chapter basis:

#### Chapter 11-1

The changes to Chapter II-2 contain minor editorial improvements to six regulations. The regulations affected are 11-1/1, 11-1/3, 11-1/5, 11-116, 11-1/42 and 11-1/43.

#### Chapter 11-2

## NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 2-84

The changes to Chapter 11-2 contain: 1) improvements to the 1981 Amendments dealing with detection systems and inert gas systems, 2) several editorial changes, and 3) a significant rewrite of Regulation 56 (location and separation of spaces). The regulations affected are 11-2/3, 11-2/11, 11-2/12, 11-2/15, 11-2/27, 11-2/36, 11-2/37, 11-2/40, 11-2/42, 11-2/49, 11-2/52, 11-2/54, 11-2/56, 11-2/59, 11-2/61 and 11-2/62.

### Chapter III

This chapter encompasses the major portion of the second set of amendments. The chapter was totally updated and rewritten. This effort culminated over ten years of effort at IMO.

### Chapter IV

The changes to Chapter IV are a direct result of the rewrite of Chapter III (EPIRB's, etc.). They include Regulations IV/2, IV/14-1 and IV/14-2.

### Chapter VII

The major thrust of the changes to Chapter VII involves the incorporation by reference of the International Bulk Chemical Code and the International Gas Carrier Code into SOLAS. These two codes now become mandatory by the 1983 Amendments. In addition the chapter was divided into three parts (Packaged Goods and Bulk Cargoes, Chemical Tank Ships, and Gas Carriers). The regulations affected include Regulations VIII through VII/13.

#### 4. ACTION.

- a. Personnel involved should familiarize themselves with the contents of references (a)-(d). The information in this Circular should be given wide dissemination.
- b. Questions on the contents of this NVIC or on references (a)-(d) may be referred to COMDT (G-MTH).
- c. The Coast Guard does not sell nor have stocks for distribution of the IMO publications (references (a-d)). While the Coast Guard cannot recommend commercial sources for these publications, the following are two sources in the United States known to stock these items for sale:

New York Nautical Instrument  
and Service Corporation  
140 West Broadway  
New York, NY 10013  
(212) 962-4522

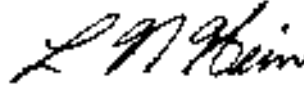
Southwest Instrument Company  
235 West 7th Street  
San Pedro, CA 90731  
(213) 832-0358

The publications may also be ordered directly from IMO at the following address:

International Maritime Organization  
4 Albert Embankment  
London SE1 75R

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 2-84

England



**L. N. HEIN**  
**Acting Chief, Office of Merchant Marine Safety**

Non-Standard Distribution:

- C:e Baltimore (45); Alameda (40); Port Arthur, Honolulu, Seattle (35); Miami, Mobile, Long Beach (25); Norfolk, Jacksonville, Portland OR (20); Boston, Portland ME, Charleston, Anchorage (15); Cleveland (12); Cincinnati, Louisville, Memphis, Nashville, Paducah, Pittsburgh, St. Louis, Savannah, San Juan, Tampa, Galveston, Buffalo, Chicago, Detroit, Duluth, Milwaukee, San Diego, Juneau, Valdez (10); Providence, Huntington, Wilmington, Corpus Christi, Toledo (5).
- C:m New Orleans (140); New York (70); Philadelphia (35); Houston (25); St. Ignace (5); Sturgeon Bay (4).
- D:l CG Liaison Officer MILSEALIFTCOMD M-65 STRAT MOB, Liaison Officer JUSMAGPHIL (1).

ZTC-68