ACCESSION NUMBER:

PB98121072

PRODUCT INFO : 0000000CP2

PAPER STOCK : Plain

DYNAMIC COVERS : N.T.I.S. Cover

BINDING TYPE : Portrait Staple

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PB98-121072

COMDTPUB P16700.4
NVIC 10-97
07 NOVEMBER 1997

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 10-97

Subj: GUIDELINES FOR CARGO SECURING MANUAL APPROVAL

Ref: (a) Guidelines for the Preparation of the Cargo Securing Manual, International Maritime Organization, Maritime Safety Committee, MSC/Circ.745 of June 13, 1996
(b) 1994 Amendments to Chapters VI/5.6 and VII/6.6 of the International Convention for the Safety of Life at Sea, 1974 (SOLAS)

1. PURPOSE. To provide guidelines for Coast Guard inspectors and qualified organizations to use when inspecting U.S. vessels for compliance with references (a) and (b). Regulations are forthcoming that will set forth the criteria for organizations that may qualify to assist the Coast Guard in the approval of Cargo Securing Manuals (CSM). In the meantime, because of the rapidly approaching SOLAS deadline of December 31, 1997, this Navigation and Vessel Inspection Circular (NVIC) also provides interim CSM submittal, review, approval, and appeal procedures.

2. DIRECTIVES AFFECTED. None.

3. BACKGROUND. During the early 1990's several maritime incidents underscored the risk of serious injury or death, vessel loss, property damage, and maritime environmental damage caused by improperly secured cargoes aboard vessels in international trade. For example, in January 1992 the M/V SANTA CLARA I lost 21 freight containers, including four containers of toxic arsenic trioxide, off the U.S. Atlantic Coast due to cargo securing failures in connection with bad weather and human error (U.S. Coast Guard Marine Board of Inquiry Report of May 18, 1992; Serial Number: 16732/03 HQS 92). In another incident, cargo

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securing failures were believed to have contributed to the loss of a British vessel carrying bagged cement. Growing international concern led to the creation of a working group to develop cargo securing standards for adoption by the Maritime Safety Committee (MSC) of the International Maritime Organization (IMO). In June 1996, reference (a) was published, providing a uniform approach to the preparation of CSMs. Reference (b) requires that cargo be loaded, stowed, and secured throughout the voyage in accordance with "Administration Approved" CSMs.

4. DISCUSSION.

a. Beginning on December 31, 1997, cargo vessels engaged in international trade which are equipped with cargo securing systems or individual securing arrangements must have on board a CSM which has been approved by the vessel's flag state administration. Under Title 46, Code of Federal Regulations Part 90.05-10 (46 CFR 90.05-10) and reference (b), CSM requirements apply to all U.S. flag cargo vessels 500 gross tons or more engaged in international trade, except for those engaged solely in the carriage of bulk solid or liquid cargoes. Ship types affected include general cargo vessels, cellular containerships, roll on-roll off vessels, passenger/cargo vessels, supply vessels, bulk vessels capable of carrying non-bulk cargo, heavy lift ships, freight ships carrying packaged or break-bulk cargoes, and other similar vessels. Guidelines for preparation, submittal, review, approval, and appeal of CSMs are provided as enclosures (1) and (2). U.S. and foreign government port state control boardings may include examination of cargo securing for compliance with the vessel's CSM.

b. Executive Order (E.O.) 12234 of September 3, 1980, authorizes the Coast Guard to issue certificates and approvals required under the International Convention for the Safety of Life at Sea (SOLAS), 1974 including CSMs. The Coast Guard has delegated this authority to the American Bureau of Shipping (ABS). After the Coast Guard issues regulations explaining the necessary criteria, other organizations may be able to assist the Coast Guard in reviewing and approving CSMs on U.S. vessels. Further, under the authority of 46 U.S.C. § 3103, because of the rapidly approaching deadline to have approved CSMs on board U.S. vessels by December 31, 1997, and based on the National Cargo Bureau's (NCB) experience and familiarity in the field of loading and stowage, NCB is deemed to have met the criteria in enclosure (3). Therefore, Coast Guard units may direct U.S. vessel owners and operators to either ABS or NCB for CSM approval.

c. Other organizations have expressed interest in U.S. CSM Approval Authority authorization procedures. Application, review, and authorization guidelines are provided as enclosure (3).

5. IMPLEMENTATION.

a. Beginning December 31, 1997, U.S. cargo vessels meeting the criteria of 46 CFR 90.05-10 must have on board an approved CSM to maintain compliance with their SOLAS "Cargo Ship Safety Equipment Certificate" (CG-3347). Owners of U.S. cargo vessels subject to these requirements are required to prepare and submit CSMs for approval, using the guidance in enclosures (1) and (2).

b. Owners of U.S. cargo vessels less than 500 gross tons engaged in international commerce seeking voluntary CSM compliance shall prepare and submit CSMs for approval, using the guidance in enclosures (1) and (2).

c. Commandant (G-MSO) will initiate a rulemaking to specify U.S. flag vessel CSM responsibilities, establish U.S. CSM Approval Authority responsibilities, and identify application and selection procedures for organizations seeking U.S. CSM Approval Authority delegation.

d. Until regulations are issued, U.S. CSM Approval Authorities (those organizations delegated authority by the United States for the approval of U.S. flag vessel CSMs) will follow the guidance in enclosures (2) and (3).

e. Until regulations are issued, other organizations which desire to become an U.S. CSM Approval Authority may submit an application to Commandant (G-MOC) in accordance with enclosure (3). If the applicant meets the criteria and becomes qualified to approve CSMs, Commandant (G-MOC) will maintain an up-to-date listing of U.S. CSM Approval Authorities and shall publish a Notice in the Federal Register to notify the public of such determinations.

f. Commandant (G-MOC) will conduct periodic oversight audits of all U.S. CSM Approval Authorities to ensure compliance with the guidance in enclosures (2) and (3).

g. Beginning on December 31, 1997, OCMIs and representatives of authorized classification societies under the Alternate Compliance Program (ACP) will include CSM compliance checks as part of routine SOLAS inspections conducted aboard affected U.S. cargo vessels. As part of Cargo Ship Safety Equipment Certificate issuance, the OCMI and ACP classification society representatives will check for compliance with references (a) and (b) requirements to certify that "in all other respects the ship complied with the relevant requirements of the Convention" per Section. 2.6 of the certificate (enclosure (4)). Until regulations on this matter are issued, inspectors should explain to cargo vessel masters that the U.S. Coast Guard expects conformance with these newly implemented SOLAS requirements in order to ensure the vessel's compliance with 46 CFR 91.60-10. The public will be notified of this course of action in a Notice to be published in the Federal Register.

6. ACTION. Vessel designers, builders, owners, operators, or their representatives, are encouraged to take advantage of the procedures and guidelines detailed in this Circular. District Commanders, Commanders of Activities, Commanding Officers of Marine Safety Offices, and the Commanding Officer, Marine Safety Center are encouraged to bring this NVIC to the attention of appropriate individuals in the marine industry.

R. C. NORTH
Rear Admiral, U. S. Coast Guard
Assistant Commandant for Marine
Safety and Environmental Protection

Encl: (1) Guidelines for the Preparation of the Cargo Securing Manuals for U.S. Vessels
(2) Cargo Securing Manual Submittal, Review, Approval, and Appeal Procedures
(3) Authorization of U.S. Cargo Securing Manual Approval Authority
(4) SOLAS Cargo Ship Safety Equipment Certificate (CG-3347)

GUIDELINES FOR THE PREPARATION OF CARGO SECURING MANUALS FOR U.S. VESSELS

I. GENERAL. These guidelines provide the minimum standards for the preparation of Cargo Securing Manuals (CSM) for U.S. vessels to comply with the 1994 Amendments to Safety of Life at Sea (SOLAS), 1974 Regulations VI/5.6 and VII/6.6. Approved CSMs are required to provide up-to-date information and guidance to assist the vessel's Master and crew regarding the proper use of the equipment available to adequately stow and secure the vessel's cargo. An owner or manager must carry out a good deal of research and fact finding before drafting a CSM, often in consultation with the vessel's personnel responsible for cargo stowage and securing. IMO's Maritime Safety Committee Circular 745 (MSC/Circ. 745), "Guidelines for the Preparation of the Cargo Securing Manual", establishes a uniform international standard for CSM preparation and is provided as Attachment A to this enclosure.

II. APPLICABILITY. Compliance is required for all U.S. vessels 500 gross tons or more engaged in international trade, except those used solely in the carriage of bulk solid or liquid cargoes. Voluntary compliance is encouraged for other U.S. cargo vessels less than 500 gross tons engaged in international trade. CSMs will therefore be required for ship types such as:

A. General cargo vessels,

B. Cellular Containerships,

C. Roll on-Roll off (RO-RO) vessels,

D. Passenger/Cargo vessels,

E. Supply vessels,

F. Bulk carriers which may, on some voyages, carry non-bulk cargo requiring individual stowage and securing arrangements,

G. Heavy lift ships,

H. Freight ships carrying packaged or break-bulk cargoes, and

I. Vessels which are equipped with cargo securing systems or individual securing arrangements.

III. CSM PREPARATION GUIDELINES. CSMs for U.S. vessels shall comply with the provisions of MSC/Circ. 745, "Guidelines for the Preparation of the Cargo Securing Manual" (see Attachment A of this enclosure) and:

A. Be specific for a single ship or for sister-ships with identical cargo stowage arrangements.

B. Consistently use the same terminology, dimensional system, abbreviations, symbols, and other elements that must remain uniform throughout the manual.

C. Describe the types of cargo for which the manual is applicable using the general cargo categories of standardized, semi-standardized, and non-standardized as defined in Section 1.1, Definitions, of MSC/Circ. 745, "Guidelines for the Preparation of the Cargo Securing Manual."

D. Specifically identify applicable cargo securing standards to which the vessel was designed:

1. New construction may comply with:

a. Applicable classification society standards. For example, ABS classed vessels carrying intermodal containers built after 1988 should comply with ABS's "Guide for Certification of Container Securing Systems" for the design and construction of container securing systems for the carriage of standardized cargo, or

b. A level of safety equivalent to applicable classification society standards as formally approved by the vessel's classification society after careful review of securing system particulars.

2. Existing vessels shall comply with applicable international, maritime industry, or vessel owner's cargo securing equipment design standards in place at the time of vessel construction. When necessary, the vessel's owner shall provide complete copies of these applicable standards to the U.S. CSM Approval Authority in order to facilitate the review of the CSM.

E. With respect to non-standard cargo, comply with IMO Resolution A.714(17), "The Code of Safe Practice for Cargo Stowage and Securing" (IMO Publication 292E).

Attachment: (A): IMO
Maritime Safety Committee
Circular 745 of 13 June 1996

MSC/Circ.745
13 June 1996
Ref. T3/2.01

GUIDELINES FOR THE PREPARATION OF THE CARGO SECURING MANUAL

1 In accordance with regulations VI/5 and VII/6 of SOLAS 1974, as amended, cargo units and cargo transport units shall be loaded, stowed and secured throughout the voyage in accordance with the Cargo Securing Manual approved by the Administration, which shall be drawn up to a standard at least equivalent to the guidelines developed by the Organization.

2 The Maritime Safety Committee, at its sixty-sixth session (28 May to 6 June 1996), considered the draft Guidelines for the Preparation of the Cargo Securing Manual (DSC 1/27, annex 11 and DSC/Circ.1) prepared by the Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC), at its first session (5 to 9 February 1996), and approved the Guidelines as amended and set out in the annex to this circular.

3 These Guidelines are based on the provisions contained in the annex to MSC/Circ.385 but have been expanded to include the applications explicit to ships which are equipped or adapted for the carriage of freight containers, taking into account the provisions of the Code of Safe Practice for Cargo Stowage and Securing (CSS Code), as amended. They are of a general nature and intended to provide guidance on the preparation of such Cargo Securing Manuals which are required on all types of ships engaged in the carriage of all cargoes other than solid and liquid bulk cargoes.

4 Member Governments are invited to bring these Guidelines to the attention of all parties concerned, with the aim of having Cargo Securing Manuals carried on board ships prepared appropriately and in a consistent manner, and to implement them as soon as possible and, in any case, not later than 31 December 1997.

5 This Circular replaces MSC/Circ.385 dated January 1985.

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ANNEX

GUIDELINES FOR THE PREPARATION OF THE CARGO SECURING MANUAL

PREAMBLE

In accordance with the International Convention for the Safety of Life at Sea, 1974 (SOLAS) chapters VI, VII and the Code of Safe Practice for Cargo Stowage and Securing, cargo units, including containers shall be stowed and secured throughout the voyage in accordance with a Cargo Securing Manual, approved by the Administration.

The Cargo Securing Manual is required on all types of ships engaged in the carriage of all cargoes other than solid and liquid bulk cargoes.

The purpose of these guidelines is to ensure that Cargo Securing Manuals cover all relevant aspects of cargo stowage and securing and to provide a uniform approach to the preparation of Cargo Securing Manuals, their layout and content. Administrations may continue accepting Cargo Securing Manuals drafted in accordance with MSC/Circ.383 provided that they satisfy the requirements of these guidelines. If necessary, those manuals should be revised explicitly when the ship is intended to carry containers in a standardized system.

It is important that securing devices meet acceptable functional and strength criteria applicable to the ship and its cargo. It is also important that the officers on board are aware of the magnitude and direction of the forces involved and the correct application and limitations of the cargo securing devices. The crew and other persons employed for the securing of cargoes should be instructed in the correct application and use of the cargo securing devices on board the ship.

CHAPTER 1- GENERAL

1.1 Definitions

Cargo Securing Devices are all fixed and portable devices used to secure and support cargo units.

Maximum Securing Load (MSL) is a term used to define the allowable load capacity for a device used to secure cargo to a ship. Safe Working Load (SWL) may be substituted for MSL for securing purposes, provided this is equal to or exceed the strength-definition by, MSL.

Standardized Cargo means cargo for which the ship is provided with an approved securing system based upon cargo units of specific types.

Semi-standardized Cargo means cargo for which the ship is provided with a securing system capable of accommodating a limited variety of cargo units, such as vehicles, trailers, etc.

Non-standardized Cargo means cargo which requires individual stowage and securing arrangements.

1.2 General Information

This chapter should contain the following general statements:

1. "The guidance given herein should by no means rule out the principles of good seamanship, neither can it replace experience in stowage and securing practice."

2. "The information and requirements set forth in this Manual are consistent with the requirements of the vessel's trim and stability booklet, International Load Line Certificate (1996), the hull strength loading manual (if provided) and with the requirements of the International Maritime Dangerous Goods (IMDG) Code (if applicable)."

3. "This Cargo Securing Manual specifies arrangements and cargo securing devices provided on board the ship for the correct application to and the securing of cargo units, containers, vehicles and other entities, based on transverse, longitudinal and vertical forces which may arise during adverse weather and sea conditions."

4. "It is imperative to the safety of the ship and the protection of the cargo and personnel that the securing of the cargo is carried out properly and that only appropriate securing points or fittings should be used for cargo securing."

5. "The cargo securing devices mentioned in this manual should be applied so as to be suitable and adapted to the quantity, type of packaging, and physical properties of the cargo to be carried. When new or alternative types of cargo securing devices are introduced, the Cargo Securing Manual should be revised accordingly. Alternative cargo securing devices introduced should not have less strength than the devices being replaced."

6. "There should be a sufficient quantity of reserve cargo securing devices on board the ship."

"Information on the strength and instructions for the use and maintenance of each specific type of cargo securing device, where applicable, is provided in this manual. The cargo securing devices should be maintained in a satisfactory condition. Items worn or damaged to such an extent that their quality is impaired should be replaced."

CHAPTER 2- SECURING DEVICES AND ARRANGEMENTS

2.1 Specification for fixed cargo securing devices

This sub-chapter should indicate and where necessary illustrate the number, locations, type and MSL of the fixed devices used to secure cargo and should as a minimum contain the following information:

1. a list and/or plan of the fixed cargo securing devices, which should be supplemented with appropriate documentation for each type of device as far as practicable. The appropriate documentation should include information as applicable regarding:

   - Name of manufacturer
   - Type designation of item with simple sketch for ease of identification
   - Material(s)
   - Identification marking
   - Strength test result or ultimate tensile strength test result
   - Result of non destructive testing
   - Maximum Securing Load (MSL);

2. fixed securing devices on bulkheads, web frames, stanchions, etc. and their types (e.g. pad eyes, eyebolts, etc.), where provided, including their MSL;

3. fixed securing devices on decks and their types (e.g. elephant feet fittings, container fittings apertures, etc.) where provided, including their MSL;

4. fixed securing devices on deckhands, where provided, listing their types and MSL; and

5. for existing ships with non-standardized fixed securing devices, the information on MSL and location of securing points is deemed sufficient.

2.2 Specification for portable cargo securing devices

This sub-chapter should describe the number of and the functional and design characteristics of the portable cargo securing devices carried on board the ship, and should be supplemented by suitable drawings or sketches if deemed necessary. It should contain the following information as applicable:

1. a list for the portable securing devices, which should be supplemented with appropriate documentation for each type of devices as far as practicable. The appropriate documentation should include information as applicable regarding:

   - Name of manufacturer
   - Type designation of item with simple sketch for ease of identification
   - Material(s), including minimum safe operational temperature
   - Identification marking
   - Strength test result or ultimate tensile strength test result
   - Result of non destructive testing
   - Maximum Securing Load (MSL);

2. container stacking fittings, container deck securing fittings, fittings for interlocking of containers, bridge-fittings, etc., their MSL and use;

3. chains, wire lashings, rods, etc., their MSL and use;

4. tensioners (e.g. turnbuckles, chain tensioners, etc.), their MSL and use;

5. securing gear for cars, if appropriate, and other vehicles, their MSL and use;

6. trestles and jacks, etc., for vehicles (trailers) where provided, including their MSL and use; and

7. anti-skid material (e.g. soft boards) for use with cargo units having low frictional characteristics.

2.3 Inspection and maintenance schemes

This sub-chapter should describe inspection and maintenance schemes of the cargo securing devices on board the ship.

2.3.1 Regular inspections and maintenance should be carried out under the responsibility of the master. Cargo securing devices inspections as a minimum should include:

1. routine visual examinations of components being utilized; and

2. periodic examinations/re-testing as required by the Administration. When required, the cargo securing devices concerned should be subjected to inspections by the Administration.

2.3 2 This sub-chapter should document actions to inspect and maintain the ship's cargo securing devices. Entries should be made in a recordbook, which should be kept with the Cargo Securing Manual. This recordbook should contain the following information:

1. procedures for accepting, maintaining and repairing or rejecting cargo securing devices; and

2. record of inspections.

2.3.3 This sub-chapter should contain information for the master regarding inspections and adjustment of securing arrangements during the voyage.

2.3.4 Computerized maintenance procedures may be referred to in this sub-chapter.

CHAPTER 3 -STOWAGE AND SECURING OF NON-STANDARDIZED AND SEMI-STANDARDIZED CARGO

3.1 Handling and safety instructions

This sub-chapter should contain:

1. instructions on the proper handling of the securing devices; and
2. safety instructions related to handling of securing devices and to securing and unsecuring of units by ship or shore personnel.

3.2 Evaluation of forces acting on cargo units

This sub-chapter should contain the following information:

1. tables or diagrams giving a broad outline of the accelerations which can be expected in various positions on board the ship in adverse sea conditions and with a range of applicable metacentric height (GM) values;
2. examples of the forces acting on typical cargo units when subjected to the accelerations referred to in paragraph 3.2.1 and angles of roll and metacentric height (GM) values above which the forces acting on the cargo units exceed the permissible limit for the specified securing arrangements as far as practicable;
3. examples of how to calculate number and strength of portable securing devices required to counteract the forces referred to in 3.2.2 as well as safety factors to be used for different types of portable cargo securing devices Calculations may be carried out according to Annex 13 to the CSS Code or methods accepted by the Administration;
4. it is recommended that the designer of a Cargo Securing Manual converts the calculation method used into a form suiting the particular ship, its securing devices and the cargo carried. This form may consist of applicable diagrams, tables or calculated examples; and
5. other operational arrangements such as electronic data processing (EDP) or use of a loading computer may be accepted as alternatives to the requirements of the above paragraphs 3.2.1 to 3.2.4, providing that this system contains the same information.

3.3 Application of portable securing devices on various cargo units, vehicles and stowage blocks

3.3.1 This sub-chapter should draw the master's attention to the correct application of portable securing devices, taking into account the following factors:

1. duration of the voyage;
2. geographical area of the voyage with particular regard to the minimum safe operational temperature of the portable securing devices;
3. sea conditions which may be expected;
4. dimensions, design and characteristics of the ship;

5. expected static and dynamic forces during the voyage;

6. type and packaging of cargo units including vehicles;

7. intended stowage pattern of the cargo units including vehicles; and

8. mass and dimensions of the cargo units and vehicles.

3.3.2 This subchapter should describe the application of portable cargo securing devices as to number of lashings and allowable lashing angles. Where necessary, the text should be supplemented by suitable drawings or sketches to facilitate the correct understanding and proper application of the securing devices to various types of cargo and cargo units. It should be pointed out that for certain cargo units and other entities with low friction resistance, it is advisable to place soft boards or other anti-skid material under the cargo to increase friction between the deck and the cargo.

3.3.3. This sub-chapter should contain guidance as to the recommended location and method of stowing and securing of containers, trailers and other cargo carrying vehicles, palletized cargoes, unit loads and single cargo items (e.g. woodpulp, paper rolls, etc.), heavy weight cargoes, cars and other vehicles.

3.4 Supplementary requirements for ro-ro ships

3.4.1 The manual should contain sketches showing the layout of the fixed securing devices with identification of strength (MSL) as well as longitudinal and transverse distances between securing points. In preparing this sub-chapter further guidance should be utilized from IMO Assembly resolutions A.533(13) and A.581(14) as appropriate.

3.4.2 In designing securing arrangements for cargo units, including vehicles and containers, on ro-ro passenger ships and specifying minimum strength requirements for securing devices used, forces due to the motion of the ship, angle of heel after damage or flooding and other considerations relevant to the effectiveness of the cargo securing arrangement should be taken into account.

3.5 Bulk carriers

If bulk carriers carry cargo units falling within the scope of chapter VI/5 or chapter VII/6 of the SOLAS Convention, this cargo shall be stowed and secured in accordance with a Cargo Securing Manual, approved by the Administration.

CHAPTER 4- STOWAGE AND SECURING OF CONTAINERS AND OTHER STANDARDIZED CARGO

4.1 Handling and safety instructions

This sub-chapter should contain:

1. instructions on the proper handling of the securing devices; and

2. safety instructions related to handling of securing devices and to securing and unsecuring of containers or other standardized cargo by ship or shore personnel.

4.2 Stowage and securing instructions

This sub-chapter is applicable to any stowage and securing system (i. g. stowage within or without cellguides) for containers and other standardized cargo. On existing ships the relevant documents regarding safe stowage and securing may be integrated into the material used for the preparation of this chapter.

4.2.1 Stowage and securing plan

This sub-chapter should consist of a comprehensive and understandable plan or set of plans providing the necessary overview on:

1. longitudinal and athwartship views of under deck and on deck stowage locations of containers as appropriate;
2. alternative stowage patterns for containers of different dimensions;
3. maximum stack masses;
4. permissible vertical sequences of masses in stacks;
5. maximum stack heights with respect to approved sight lines; and
6. application of securing devices using suitable symbols with due regard to stowage position, stack mass, sequence of masses in stack and stack height The symbols used should be consistent throughout the Cargo Securing Manual.

4.2.2 Stowage and securing principle on deck and under deck

This sub-chapter should support the interpretation of the stowage and securing plan with regard to container stowage, highlighting:

1. the use of the specified devices; and
2. any guiding or limiting parameters as dimension of containers, maximum stack masses, sequence of masses in stacks, stacks affected by wind load, height of stacks.

It should contain specific warnings of possible consequences from misuse of securing devices or misinterpretation of instructions given:

4.3 Other allowable stowage patterns

This sub-chapter should provide the necessary information for the master to deal with cargo stowage situations deviating from the general instructions addressed to under sub-chapter 4.2, including appropriate warnings of possible consequences from misuse of securing devices or misinterpretation of instructions given. Information should be provided with regard to, *inter alia:*

1. alternative vertical sequences of masses in stacks;
2. stacks affected by wind load in the absence of outer stacks;
3. alternative stowage of containers with various dimensions; and
4. permissible reduction of securing effort with regard to lower stacks masses, lesser stack heights or other reasons.

4.4 Forces acting on cargo units

This sub-chapter should present the distribution of accelerations on which the stowage and securing system is based, and specify the underlying condition of stability. Information on forces induced by wind and sea on deck cargo should be provided.

It should further contain information on the nominal increase of forces or accelerations with an increase of initial stability. Recommendations should be given for reducing the risk of cargo losses from deck stowage by restrictions to stack masses or stack heights, where high initial stability cannot be avoided.

AUTHORIZATION OF U.S. CARGO SECURING MANUAL APPROVAL AUTHORITY

A. GENERAL. The Commandant (G-M) may authorize certain organizations to serve as designated U.S. CSM Approval Authorities of manuals for U.S. vessels. These guidelines summarize selection criteria, application procedures, and responsibilities of an authorized U.S. Cargo Securing Manual (CSM) Approval Authority.

B. SELECTION CRITERIA. Coast Guard authorization decisions will be based upon an assessment of each applicant's capability to fairly, professionally, and effectively review CSMs for approval. Authorization decisions by Commandant (G-M) are based upon the following criteria:

A. The organization's owners, managers, and employees are free from influence or control by vessel shipbuilders, owners, operators, lessors, or other related commercial interests as evidenced by past and present business practices.

B. The organization has demonstrated, through other related work, the capability to competently evaluate CSMs for completeness and sufficiency in accordance with SOLAS requirements.

C. The organization has an acceptable degree of financial security, as documented by recent audits from certified public accountants.

D. The organization has a documented ongoing training program and an established internal quality control process to ensure the consistent review of CSMs by its professional staff.

E. The organization maintains a corporate office in the United States that has adequate resources and staff to support all aspects of CSM review, approval, and record-keeping.

C. APPLICATION PROCEDURES.

A. Any organization seeking authorization to serve as a recognized U.S. CSM Approval Authority for U.S. vessels must submit a written application to: U.S. Coast Guard Commandant (G-MOC), 2100 Second Street, S.W., Washington, D.C. 20593-0001. Each application must be signed by an authorized officer of the organization.

B. Each application must include the following information:

1. A certified copy of the certificate of incorporation on file with the appropriate state, including the name and address of the organization,

2. A listing of the organization's principal executives, with their telephone and telefax numbers,

3. A description of the organization, including the ownership, managerial structure, and organizational components (including directly affiliated agencies and their functions) utilized for supporting technical services,

4. A list of the technical services offered,

5. A general description of the geographical area served,

6. A general description of the clients being served or intended to be served,

7. A description of the type of similar work performed by the organization in the past, noting the amount and extent of such work performed within the previous three years,

8. A listing by name of the full time professional staff available for technical review and approval of CSMs, including:

   a) Naval architects and/or naval engineers, including copies of their professional credentials such as college degrees, specialized training, etc.,

   b) Coast Guard licensed Masters of deep draft freight vessels, including a summary of the number of months experience aboard general cargo ships where cargo was secured and other credentials, and

   c) Proof of staff competency to perform specific tasks, evidenced by detailed summaries of the person's experience (measured in months or years) during the past five years evaluating maritime cargo securing systems. Experience summaries and assessments shall be documented on company letterhead and signed by the company executive who had direct and daily observation of the individual and the quality of his work products,

9. A complete description of the organizations internal quality control processes which will be used to ensure consistent CSM review and approval procedures by qualified professionals,

10. A description of the organization's training program for assuring continued competence of the professionals identified above to ensure uniformity of review and approval,

11. Evidence of financial stability over the past five year period, such as financial reports completed independently by certified public accountants,

12. At least five business references including the names, addresses, and telephone numbers of principle executives who can assess the results of similar work performed by the organization during the past two years, and

13. A statement that the organization understands that:

a) Coast Guard officials may inspect the organization's facilities and records of approvals within the scope of its authorization, including the name and telephone number of the person to be contacted to make those arrangements, and

b) Commandant (G-MOC) may request additional information other than that provided in the application in order to complete its evaluation of the organization.

C. The application may contain any additional information the organization deems to be pertinent.

D. APPLICATION REVIEW PROCEDURES.

A. Commandant (G-MOC), U.S. Coast Guard, will formally acknowledge receipt of each application and will approve, disapprove, or seek additional information within 60 days of receipt.

B. In cases where the application is incomplete, the Coast Guard may:

1. Formally deny approval of the application and return it. A denial on this basis is without prejudice to the organization, and the application may be resubmitted as new or amended, or

2. Provide written notice to the organization that further Coast Guard action pends receipt of additional specific information. When this option is exercised, the organization's application is placed on hold, awaiting additional information.

C. If an applicant satisfies all the criteria for delegation, the Commandant (G-MOC) will send the applicant a letter of delegation, assign an alphabetic Approval Authority identification code to the organization, and formally notify the Secretary- General of the International Maritime Organization.

D. If an applicant fails to satisfy all the criteria for delegation, the Coast Guard will provide the reasons for denial in writing. The applicant may contest the denial by submitting additional written evidence in support of its qualifications. Upon review of the evidence, Commandant (G-MOC) will formally notify the applicant of the final decision.

E. CONDITIONS OF AUTHORIZATION. Upon authorization by the Coast Guard each U.S. CSM Approval Authority shall:

A. Maintain all CSM records for a period of at least 15 years from the date of approval and provide them to the Commandant (G-MOC) upon request. Records to be maintained include:

1. Each CSM letter of approval issued for a U.S. vessel, and

2. A copy of the application and final approved CSM contents to which each approval refers,

B. Publish a schedule of fees for the approval services performed under these regulations and make it available to the public. The fees must not be disproportionate to the costs (including expenses, if any) actually incurred,

C. Grant the Coast Guard the right to inspect CSM records including approved CSMs, CSM changes, and supporting calculations or documents, and shall indicate the organization will cooperate in the conduct of such inspections, and

D. Comply with any other term or conditions stated in the Coast Guard's Letter of Authorization.

F. TERMINATION OF AUTHORIZATION.

A. A CSM Approval Authority may voluntarily terminate its authorization by giving written notice to the Commandant (G-MOC), U.S. Coast Guard, that it no longer wishes to review and approve Cargo Securing Manuals on behalf of the United States. This notice must contain the date on which the termination is to be effective.

B. Commandant (G-M), U.S. Coast Guard, may revoke an authorization when it is determined that the CSM Approval Authority has:

1. Made a material misrepresentation of itself in its application,

2. Failed to comply with a condition of the Coast Guard letter of designation or applicable provisions of this NVIC, and/or

3. Failed to fairly, professionally, and/or effectively execute its responsibilities.

C. When initiating a revocation of an U.S. CSM Approval Authority authorization, Commandant (G-M) shall provide the Approval Authority:

1. Written notice of the facts or conduct believed to warrant the revocation,

2. An opportunity to submit relevant information on its behalf about the discrepancy (ies), and

3. An opportunity to demonstrate or achieve compliance with the applicable requirement within a reasonable period of time.

D. In the case of termination for any cause:

1. Commandant (G-MOC) shall formally notify the Secretary- General of the IMO of the termination, including the organization's name, alphabetic Approval Authority identification code, termination date, and other particulars as necessary.

2. The affected organization within 30 days of the date of termination must:

a. For approved CSMs:

(1) Forward all records described in paragraph V.A. of this enclosure along with a complete inventory categorized by vessel owner, vessel name, and corresponding official number to: U.S. Coast Guard Commandant (G-MOC), 2100 Second Street, S.W., Washington, D.C. 20593-0001, and

(2) Notify each vessel owner of its termination and of the records forwarded to U.S. Coast Guard Commandant (G-MOC), categorized by the vessel name and corresponding official number.

b. For CSMs under review, return all records to the appropriate vessel owner along with a letter which catalogs the records being returned by vessel name, summarizes completed review actions, and individually addresses all areas pending resolution. A copy of each letter will be provided to U.S. Coast Guard Commandant (G-MOC), 2100 Second Street, S.W., Washington, D.C. 20593-0001.

CARGO SECURING MANUAL SUBMITTAL, REVIEW, APPROVAL, AND APPEAL PROCEDURES

A. GENERAL. These guidelines summarize the submittal and approval requirements for Cargo Securing Manuals (CSM) for U.S. vessels to comply with the 1994 Amendments to Safety of Life at Sea, 1974 Regulations VI/5.6 and VII/6.6. The Coast Guard has authorized certain organizations to approve CSMs for U.S. vessels.

B. SUBMITTAL PROCEDURES. Owners of U.S. vessels who must comply with SOLAS regulations shall:

A. Prepare their vessel's CSM in accordance with the guidelines provided by Enclosure (1) of this NVIC.

B. Submit their vessel's CSM for review and approval by an organization that has been designated by the U.S. Coast Guard. Authorized U.S. CSM Approval Authorities include:

1. The American Bureau of Shipping, ABS Plaza, 16855 Northchase Drive, Houston, TX 77060. [Telephone: (713) 873-0700/ Fax: (713) 874-8195],

2. The National Cargo Bureau, Inc., 30 Vesey Street, New York, NY 10007; [Telephone: (212) 571-5000/ Fax: (212) 571-5005], and

3. Any other organization authorized by the Coast Guard. In the future, other organizations may become authorized U.S. CSM Approval Authorities in addition to ABS and NCB. A complete up-to-date listing of U.S. CSM Approval Authorities is available from U.S. Coast Guard Commandant (G-MOC), 2100 Second Street, S.W. Washington, D.C. 20593; [Telephone: (202) 267-0495/ Fax: (202) 267-0506].

C. REVIEW PROCEDURES. U.S. CSM Approval Authorities designated by the Coast Guard shall:

A. Acknowledge receipt of each CSM and amendment submitted for approval.

B. Review submittals on a timely basis, requesting additional information whenever necessary.

C. Ensure only professional full time staff are used who are qualified to perform CSM review and approval functions, in accordance with the organization's internal quality control procedures. Qualifications considered to be satisfactory evidence of an individual's competency to perform specific CSM review and approval tasks are described in paragraph III.B.8 of Enclosure (3) to this NVIC.

D. Maintain a copy of each approved CSM and its amendments, together with supporting documents and calculations utilized in granting the approval, for review by the Coast Guard upon request.

D. APPROVALS. U.S. CSM Approval Authorities shall individually document CSM and amendment approvals on organization letterhead which:

A. Are dated,

B. Includes the following subject line: "APPROVAL OF CARGO SECURING MANUAL (AMENDMENT) FOR THE M/V _____, OFFICIAL NUMBER _____.",

C. Includes the following statement: "This is to certify that the Cargo Securing Manual (Amendment) dated _____ for the M/V _____ , Official Number _____ , has been approved on behalf of the United States. The Cargo Securing Manual (Amendment) was reviewed for compliance with Maritime Safety Committee Circular 745 for content, completeness, and correctness of the calculations on which the

approval is based. This approval letter is to be kept with the Cargo Securing Manual, as proof of compliance with regulations VI/5.6 and VII/6.6 of the 1994 amendments to the International Convention for the Safety of Life at Sea (SOLAS) 1974. ",

D. Are signed by the official within the U.S. CSM Approval Authority responsible for Cargo Securing Manual review and approval, and

E. Includes the U.S. CSM Approval Authority's seal or stamp of authority.

E. APPEALS. Vessel owners shall use the following procedures to appeal a decision made by an U.S. CSM Approval Authority:

A. Submit to the CSM Approval Authority a written argument, including the rationale for reconsideration. Within 30 days of receiving the appeal, the CSM Approval Authority must formally provide the vessel owner a ruling on the appeal with a copy to the Commandant (G-MOC).

B. Vessel owners who are not satisfied with the CSM Approval Authority's ruling may appeal directly to the Commandant (G-MOC). The appeal must be made in writing, including any documentation and evidence that needs to be considered. Further, the appeal may ask the Commandant (G-MOC) to stay the effect of the appealed decision by the CSM Approval Authority while it is under review.

C. The Commandant (G-MOC) will make a decision on the appeal and send a formal response to the vessel owner and a copy to the U.S. CSM Approval Authority. The Coast Guard decision will constitute final agency action on the appeal request.

OMB APPROVAL 2115-0056

CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment (Form E)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

as modified by the Protocol of 1978 relating thereto

under the authority of the Government of

THE UNITED STATES OF AMERICA

by the UNITED STATES COAST GUARD

Particulars of Ship

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage

Deadweight of Ship (metric tons) (Note 1)	Length of Ship (regulation III/3.13)	IMO Number (Note 2)	Date on which keel was laid (Note 3)

Type of Ship

- ☐ Oil Tanker
- ☐ Chemical Tanker
- ☐ Gas Carrier
- ☐ Cargo ship other than any of the above

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with the requirements of regulation I/8 of the Convention, as modified by the 1978 Protocol.

Note

1. For Oil Tankers, Chemical Tankers and Gas Carriers only.
2. In accordance with resolution A.600(15) IMO Ship Identification Number Scheme, this information may be inclused voluntarily.
3. Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced

The Coast Guard estimates that the average burden for this report is 5 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (G-MVI), U.S. Coast Guard, Washington, D.C. 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (2115-0056), Washington, D.C. 20503.

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CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

2. That the survey showed that:

2.1 the ship complied with the requirements of the Convention as regards fire safety systems and appliances and fire control plans;

2.2 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;

2.3 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;

2.4 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;

2.5 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;

2.6 in all other respects the ship complied with the relevent requirements of the Convention.

3. That the ship operates in accordance with regulation III/26.1.1.1 within the limits of the trade area: _____

4. That in implementing regulation I/6(b) the Government has instituted mandatory annual surveys.

5. That an Exemption Certificate has

This certificate is valid until: _____

Issued at: _____
Place of issue of certificate

_____ _____
Date of issue *Officer in Charge, Marine Inspection, U.S. Coast Guard*

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Enclosure (4) to NVIC

CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

INTERMEDIATE SURVEY

(FOR TANKERS OF 10 YEARS OF AGE AND OVER)

THIS IS TO CERTIFY that an intermediate survey required by regulation I/8 of the Convention, as modified by the 1978 Protocol, this ship was found to comply with the relevant provisions of the Organization.

Signed: _____

Place: _____

Date: _____

MANDATORY ANNUAL SURVEY

THIS IS TO CERTIFY that the ship has been surveyed in accordance with regulation I/6(b) of the Convention, as modified by the 1978 Protocol and the relevant recommendations of the Organization (Note 1).

Mandatory annual survey (Note 2) Signed: _____

Place: _____

Date: _____

Under the provisions of regulation I/14 of the Convention, as modified by the 1978 Protocol, the validity of this Certificate is extended until: _____

Signed: _____

Place: _____

Date: _____

Notes:

1. Refer to the Guidelines on Surveys Required by the 1978 SOLAS Protocol, the International Bulk Chemical Code and the International Gas Carrier Code, adopted by the Organization by resolution A.560(14).
2. An intermediate survey may take the place of a mandatory annual survey.

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