

Subject :

Amendments to IGC/GC codes
for existing gas carriers with
non-Japanese flag

NKTECHNICAL INFORMATION

No. : 258

Date. : 22 May 1998

To: Shipowners and Shipbuilders concerned

Amendments to IGC/GC codes will become effective on 1 July 1998. We attach these amendments adopted by IMO for your reference. The amendments should apply to new gas carriers, but certain requirements of them should also apply to existing gas carriers the keels of which were laid before 1 July 1998. The outline of the requirements applicable to existing gas carriers is as follows:

- 1) Chapter 15 "Filling limits for cargo tanks" was amended. For type C tanks, the loading limit may be determined by relative density of cargo at the highest temperature which the cargo may reach at loading/unloading or during transport, instead of at the temperature corresponding to the vapour pressure of the cargo at the set pressure of the pressure relief valves.
- 2) In column of vapour detection for "Butadiene" in Chapter 19 "Summary of minimum requirements" toxic vapour detection was added.

In connection to these amendments, you are requested to pay attention to the following points for existing gas carriers and to take necessary action accordingly:

I) Amendment to Chapter 15 "Filling limit for cargo tanks"

Due to being able to determine the loading limit by using relative density at the highest temperature which the cargo may reach, it is anticipated that gas carriers with type C tanks may be loaded with more cargo than ever, depending on their loading condition and voyage route. This amendment should apply to existing gas carriers on a voluntary basis. We will check compliance when we receive an application from the shipowners. In order to have this amendment apply to existing gas carriers, the vent system should comply with the relevant requirements of Chapter 8 of the codes.

For detail, please contact this Head Office, Machinery Department (Tel: 03 5226 2022, Fax: 03 5226 2024).

II) Amendment to Chapter 19 "Summary of minimum requirements" for "Butadiene"

Since the requirement of toxic gas detection was newly added, existing gas carriers carrying "Butadiene" should comply with the followings before 1 July 1998:

ClassNK NIPPON KAIJI KYOKAI
4-7, KIOI-CHO, CHIYODA-KU,
TOKYO 102-8567, JAPAN.

TELEX: J22975 CLASSNK
2324280 CLASNKJ
CABLE: CLASSNK TOKYO

- a) Toxic gas detector available for "Butadiene" should be on board (See Reg.13.6 of IGC/GC codes).
- b) Closing devices for all air intakes and openings into the accommodation spaces, service spaces and control stations should be operated from inside the space (See Reg.3.2.6 of IGC/GC codes). The existing gas carriers may already meet the requirement, where they have been permitted by the present certificate to carry other toxic gases.

At the time of periodical surveys held after 1 July 1998, this Society is going to check compliance with the requirements as set out in a) and b) above. Even before 1 July 1998, we will carry out survey for the compliance at the request of the shipowners. We, therefore, appreciate your early action for compliance by 1 July 1998.

III) Correction and re-issuance of "CERTIFICATE OF FITNESS FOR CARRIAGE OF LIQUEFIED GASES IN BULK (COF)" subject to IGC/GC codes

As it is stated in the COF which amendments to comply with, correction to each certificate is necessary as follows:

Certificate	Before correction	After correction
COF(IGC)	MSC 30(61)	MSC 32(63) and MSC 59(67)
COF(GC)	(Including First to Fourth sets of Amendments)	(Including First to Fourth sets of Amendments) and MSC 34(63) and MSC 60(67)

In case where the existing gas carrier needs to comply with the requirements as set out in II) above, these corrections will be made after checking the compliance.

In case where the existing gas carrier does not need to comply, it meets the amendments as it is, because there are no other substantial requirements to its construction and equipment. We will make these corrections to the certificates without charge at the time of periodical surveys excluding special surveys (= renewal surveys: a corrected certificate to be re-issued). Further, this Head Office can re-issue the certificate with charge at every time an application is received from the shipowners. We will conduct the said correction and re-issuance even before 1 July 1998.

Should you have any questions, please feel free to contact this Head Office, Tanker Section of Hull Department (Tel: 03 5226 2017, Fax: 03 5226 2019).

Attachment: Amendments to IGC/GC codes adopted by IMO (Resolution MSC32(63), MSC59(67), MSC34(63) and MSC60(67))

ANNEX 3

RESOLUTION MSC.32(63)
adopted on 23 May 1994

ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CODE FOR
THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING
LIQUEFIED GASES IN BULK (IGC CODE)

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution MSC.5(48), by which the Committee adopted the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code),

RECALLING FURTHER article VIII(b) and regulation VII/11.1 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, concerning the procedure for amending the IGC Code,

BEING DESIROUS of keeping the IGC Code up to date,

HAVING CONSIDERED, at its sixty-third session, amendments to the Code proposed and circulated in accordance with article VIII(b)(i) of the SOLAS Convention,

1. ADOPTS, in accordance with article VIII(b)(iv) of the SOLAS Convention, amendments to the Code, the text of which is set out in the Annex to the present resolution;
2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the SOLAS Convention, that the amendments shall be deemed to have been accepted on 1 January 1998 unless, prior to that date, more than one third of the Contracting Governments to the SOLAS Convention or Contracting Governments the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;
3. INVITES Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the SOLAS Convention, the amendments shall enter into force on 1 July 1998 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the SOLAS Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the Annex to all Contracting Governments to the SOLAS Convention;
5. FURTHER REQUESTS the Secretary-General to transmit copies of the resolution and its Annex to Members of the Organization which are not Contracting Governments to the SOLAS Convention.

ANNEX

AMENDMENTS TO THE INTERNATIONAL CODE FOR THE CONSTRUCTION AND
EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK (IGC CODE)

Amendments related to application

- 1 Existing paragraphs 1.1.2 and 1.1.3 are replaced by the following:

"1.1.2 Unless expressly provided otherwise, the Code applies to ships the keels of which are laid or which are at a stage at which:

- .1 construction identifiable with the ship begins; and
- .2 assembly of that ship has commenced comprising at least 50 tonnes or 1% of the estimated mass of all structural material, whichever is the less;

on or after 1 July 1998. Ships constructed before 1 July 1998 are to comply with resolution MSC.5(48) adopted on 17 June 1983 subject to amendments by resolution MSC.30(61) adopted on 11 December 1992.

1.1.3 A ship, irrespective of the date of construction, which is converted to a gas carrier on or after 1 July 1998 should be treated as a gas carrier constructed on the date on which such conversion commences."

Amendments related to filling limits

- 2 Existing chapter 15 is replaced by the following:

"CHAPTER 15

FILLING LIMITS FOR CARGO TANKS

15.1 General

15.1.1 No cargo tanks should have a higher filling limit (FL) than 98% at the reference temperature, except as permitted by 15.1.3.

15.1.2 The maximum loading limit (LL) to which a cargo tank may be loaded should be determined by the following formula:

$$LL = FL \frac{\rho_R}{\rho_L}$$

where:

- LL = loading limit expressed in percent which means the maximum allowable liquid volume relative to the tank volume to which the tank may be loaded;
- FL = filling limit as specified in 15.1.1 or 15.1.3;
- ρ_R = relative density of cargo at the reference temperature; and
- ρ_L = relative density of cargo at the loading temperature and pressure.

15.1.3 The Administration may allow a higher filling limit (FL) than the limit of 98% specified in 15.1.1 at the reference temperature, taking into account the shape of the tank, arrangements of pressure relief valves, accuracy of level and temperature gauging and the difference between the loading temperature and the temperature corresponding to the vapour pressure of the cargo at the set pressure of the pressure relief valves, provided the conditions specified in 8.2.17 are maintained.

15.1.4 For the purposes of this chapter only, "reference temperature" means:

- .1 the temperature corresponding to the vapour pressure of the cargo at the set pressure of the pressure relief valves when no cargo vapour pressure/temperature control as referred to in chapter 7 is provided;
- .2 the temperature of the cargo upon termination of loading, during transport, or at unloading, whichever is the greatest, when a cargo vapour pressure/temperature control as referred to in chapter 7 is provided. If this reference temperature would result in the cargo tank becoming liquid full before the cargo reaches a temperature corresponding to the vapour pressure of the cargo at the set pressure of the relief valves required in 8.2, an additional pressure relieving system complying with 8.3 should be fitted.

15.1.5 The Administration may allow type C tanks to be loaded according to the following formula provided that the tank vent system has been approved in accordance with 8.2.18:

$$LL = FL \frac{PR}{PL}$$

where:

- LL = loading limit as specified in 15.1.2;
- FL = filling limit as specified in 15.1.1 or 15.1.3;
- PR = relative density of cargo at the highest temperature which the cargo may reach upon termination of loading, during transport, or at unloading; under the ambient design temperature conditions described in 7.1.2; and
- PL = as specified in 15.1.2.

This paragraph does not apply to products requiring a type 1G ship.

15.2 Information to be provided to the master

The maximum allowable loading limits for each cargo tank should be indicated for each product which may be carried, for each loading temperature which may be applied and for the applicable maximum reference temperature, on a list to be approved by the Administration. Pressures at which the pressure relief valves, including those valves required by 8.3, have been set should also be stated on the list. A copy of the list should be permanently kept on board by the master.

15.3 Chapter 15 applies to all ships regardless of the date of construction."

3 The following words are added at the end of existing paragraph 8.2.17:

"at the maximum allowable filling limit (FL)".

4 The following new paragraph 8.2.18 is added after existing paragraph 8.2.17:

"8.2.18 The adequacy of the vent system fitted on tanks loaded in accordance with 15.1.5 is to be demonstrated using the guidelines developed by the Organization*. A relevant certificate should be permanently kept on board the ship. For the purposes of this paragraph, vent system means:

- .1 the tank outlet and the piping to the pressure relief valve;
- .2 the pressure relief valve;
- .3 the piping from the pressure relief valve to the location of discharge to the atmosphere and including any interconnections and piping which joins other tanks.

This paragraph may apply to all ships regardless of the date of construction."

Amendments related to cargo tank vent systems

5 Existing paragraph 8.2.3 is replaced by the following:

"8.2.3 In general, the setting of the pressure relief valves should not be higher than the vapour pressure which has been used in the design of the tank. However, where two or more pressure relief valves are fitted, valves comprising not more than 50% of the total relieving capacity may be set at a pressure up to 5% above MARVS."

6 The following sentences are added to existing paragraph 8.2.4:

"Valves should be constructed of materials with a melting point above 925°C. Consideration of lower melting point materials for internal parts and seals should be given if their use provides significant improvement to the general operation of the valve."

7 Existing paragraph 8.2.9 is replaced by the following:

"8.2.9 Each pressure relief valve installed on a cargo tank should be connected to a venting system which should be so constructed that the discharge of gas will be unimpeded and directed vertically upwards at the exit and so arranged as to minimize the possibility of water or snow entering the vent system. The height of vent exits should not be less than B/3 or 6 m, whichever is the greater, above the weather deck and 6 m above the working area, the fore and aft gangway, deck storage tanks and cargo liquid lines."

* Refer to the guidelines to be developed by the Organization.

- 8 The following sentences are added to existing paragraph 8.2.16:

"The pressure drop in the vent line from the tank to the pressure relief valve inlet should not exceed 3% of the valve set pressure. For unbalanced pressure relief valves the back pressure in the discharge line should not exceed 10% of the gauge pressure at the relief valve inlet with the vent lines under fire exposure as referred to in 8.5.2."

VOID

ANNEX 4

RESOLUTION MSC.59(67)
(adopted on 5 December 1996)

**ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CODE FOR THE
CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING LIQUEFIED
GASES IN BULK (IGC CODE)**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution MSC.5(48) by which it adopted the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code),

RECALLING FURTHER article VIII(b) and regulation VIII/11.1 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, concerning the procedure for amending the IGC Code,

BEING DESIROUS of keeping the IGC Code up to date,

HAVING CONSIDERED, at its sixty-seventh session, amendments to the Code proposed and circulated in accordance with article VIII(b)(i) of the SOLAS Convention,

1. ADOPTS, in accordance with article VIII(b)(iv) of the SOLAS Convention, amendments to the Code the text of which is set out in the Annex to the present resolution;
2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the amendments shall be deemed to have been accepted on 1 January 1998, unless, prior to that date, more than one third of the Contracting Governments to the SOLAS Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;
3. INVITES Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the SOLAS Convention, the amendments shall enter into force on 1 July 1998 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the SOLAS Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the Annex to all Contracting Governments to the SOLAS Convention;
5. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and its Annex to Members of the Organization, which are not Contracting Governments to the SOLAS Convention.

ANNEX

AMENDMENTS TO THE INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK (IGC CODE)

CHAPTER 1 - GENERAL

- 1 The following new paragraph 1.3.30.3. is added after existing paragraph 1.3.30.2:
- "1.3.30.3 *Recognized standards* are applicable international or national standards acceptable to the Administration or standards laid down and maintained by an organization which complies with the standards adopted by the Organization* and which is recognized by the Administration."

* Refer to the Minimum Standards for Recognized Organizations Acting on Behalf of the Administration, set out in appendix 1 to the Guidelines for the Authorization of Organizations Acting on Behalf of the Administration, adopted by the Organization by resolution A.739(18).

CHAPTER 2 - SHIP SURVIVAL CAPABILITY AND LOCATION OF CARGO TANKS

- 2 In paragraph 2.3.3, the words "should be of a type acceptable to the Administration and" are deleted and the words "and should comply with recognized standards" are added at the end of the paragraph.

CHAPTER 3 - SHIP ARRANGEMENTS

- 3 In paragraph 3.8.1, the words "to the approval of the Administration and" are deleted.

CHAPTER 4 - CARGO CONTAINMENT

- 4 In paragraph 4.2.4.2, in the first sentence, the words "Recognized Standards*" are replaced by the words "recognized standards".
- 5 In paragraph 4.2.4.3, in the second sentence, the words "(gravity tests)" are replaced by the words "(gravity tanks)".
- 6 In paragraph 4.2.4.4, the expression "55 N/mm² for ferritic/martensitic steel" is replaced by the expression "55 N/mm² for ferritic-perlitic, martensitic and austenitic steels".
- 7 In the introductory phrase of paragraph 4.11.2, the words "with the approval of the Administration" are deleted.

CHAPTER 5 - PROCESS PRESSURE VESSELS AND LIQUID, VAPOUR AND PRESSURE PIPING SYSTEMS

8 In paragraph 5.2.2.1, in the definition of the efficiency factor "e", the existing text of the last sentence is replaced by the following:

"In other cases an efficiency factor of less than 1.0, in accordance with recognized standards, may be required depending on the manufacturing process."

9 In the paragraph 5.2.4.4, in the first sentence, the words "be to a standard acceptable to the Administration" are replaced by the words "should comply with recognized standards" and at the end of the second sentence, the words "by the Administration" are deleted.

10 In paragraph 5.4.1, the existing text of the second sentence is replaced by the following:

"Relaxations from these requirements may be accepted, in accordance with recognized standards, for piping inside cargo tanks and open-ended piping."

11 In paragraph 5.4.2.2, the words "satisfactory to the Administration" are replaced by the words "in accordance with recognized standards".

12 In paragraph 5.4.2.3, the words "acceptable to the Administration" are replaced by the words "complying with recognized standards".

13 In paragraph 5.4.3.2, in the first sentence, the words "standards acceptable to the Administration" are replaced by the words "recognized standards".

14 In paragraph 5.6.4, in the sixth sentence, the words "with 30 s of actuation" are replaced by the words "within 30 s of actuation".

CHAPTER 8 - CARGO TANK VENT SYSTEMS

15 In paragraph 8.2.2, the words "to the satisfaction of the Administration" are replaced by the words "complying with recognized standards".

CHAPTER 11 - FIRE PROTECTION AND FIRE EXTINCTION

16 In paragraph 11.2.4, in the second sentence, the words "All pipes, valves nozzles" are replaced by the words "All pipes, valves, nozzles".

CHAPTER 13 - INSTRUMENTATION (GAUGING, GAS DETECTION)

17 In paragraph 13.3.1, in the last sentence, the word "Administration" is deleted and the words "port Administration" are replaced by the words "port State authority".

18 In paragraph 13.6.9, the expression "column h" is replaced by the expression "column i".

CHAPTER 14 - PERSONNEL PROTECTION

- 19 In paragraph 14.4.1, the expression "column h" is replaced by the expression "column i".

CHAPTER 16 - USE OF CARGO AS FUEL

- 20 In paragraph 16.5.6, in the second sentence, the words "and these arrangements should be to the satisfaction of the Administration" are deleted.

CHAPTER 17 - SPECIAL REQUIREMENTS

- 21 In paragraph 17.20.3.1, in the first sentence, the words "or other material acceptable to the Administration" are replaced by the words "in accordance with recognized standards," and the second sentence is deleted.

- 22 In paragraph 17.20.14, in the first sentence, the words "filling limits" are replaced by the words "loading limits".

CHAPTER 19 - SUMMARY OF MINIMUM REQUIREMENTS

- 23 In column "f" of the table, for the product "Butadiene", the entry "F" is replaced by the entry "F+T".

ANNEX 5

RESOLUTION MSC.34(63)
adopted on 23 May 1994

ADOPTION OF AMENDMENTS TO THE CODE FOR THE CONSTRUCTION
AND EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.328(IX), by which the Assembly, at its ninth session, adopted the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (Gas Carrier Code) and authorized the Committee to amend the Code as may be necessary,

NOTING resolution MSC.32(63), by which the Committee adopted amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code),

RECOGNIZING the need to bring the corresponding amendments to the Gas Carrier Code into force on the date on which the amendments to the IGC Code enter into force,

HAVING CONSIDERED at its sixty-third session amendments to the Gas Carrier Code proposed by the Sub-Committee on Bulk Chemicals,

1. ADOPTS amendments to the Gas Carrier Code, the text of which is given in the Annex to the present resolution;
2. DETERMINES that the amendments should become effective on 1 July 1998 upon acceptance and entry into force of the corresponding amendments to the IGC Code adopted by resolution MSC.32(63).

ANNEX

AMENDMENTS TO THE CODE FOR THE CONSTRUCTION AND EQUIPMENT OF
SHIPS CARRYING LIQUEFIED GASES IN BULK

- 1 Existing chapter XV is replaced by the following:

"CHAPTER XV

FILLING LIMITS FOR CARGO TANKS

15.1 General

15.1.1 No cargo tanks should have a higher filling limit (FL) than 98% at the reference temperature, except as permitted by 15.1.3.

15.1.2 The maximum loading limit (LL) to which a cargo tank may be loaded should be determined by the following formula:

$$LL = FL \frac{\rho_R}{\rho_L}$$

where:

LL = loading limit expressed in percent which means the maximum allowable liquid volume relative to the tank volume to which the tank may be loaded;

FL = filling limit as specified in 15.1.1 or 15.1.3;

ρ_R = relative density of cargo at the reference temperature; and

ρ_L = relative density of cargo at the loading temperature and pressure.

15.1.3 The Administration may allow a higher filling limit (FL) than the limit of 98% specified in 15.1.1 at the reference temperature, taking into account the shape of the tank, arrangements of pressure relief valves, accuracy of level and temperature gauging and the difference between the loading temperature and the temperature corresponding to the vapour pressure of the cargo at the set pressure of the pressure relief valves, provided the conditions specified in 8.2.17 are maintained.

15.1.4 For the purposes of this chapter only, "reference temperature" means:

- (a) the temperature corresponding to the vapour pressure of the cargo at the set pressure of the pressure relief valves when no cargo vapour pressure/temperature control as referred to in chapter VII is provided;

- (b) the temperature of the cargo upon termination of loading, during transport, or at unloading, whichever is the greatest, when a cargo vapour pressure/temperature control as referred to in chapter VII is provided. If this reference temperature would result in the cargo tank becoming liquid full before the cargo reaches a temperature corresponding to the vapour pressure of the cargo at the set pressure of the relief valves required in 8.2, an additional pressure relieving system complying with 8.3 should be fitted.

15.1.5 The Administration may allow type C tanks to be loaded according to the following formula provided that the tank vent system has been approved in accordance with 8.2.18:

$$LL = FL \frac{PR}{PL}$$

where:

- LL = loading limit as specified in 15.1.2;
- FL = filling limit as specified in 15.1.1 or 15.1.3;
- PR = relative density of cargo at the highest temperature which the cargo may reach upon termination of loading, during transport, or at unloading, under the ambient design temperature conditions described in 7.1.2; and
- PL = as specified in 15.1.2.

This paragraph does not apply to products requiring a type 1G ship.

15.2 Information to be provided to the master

The maximum allowable loading limits for each cargo tank should be indicated for each product which may be carried, for each loading temperature which may be applied and for the applicable maximum reference temperature, on a list to be approved by the Administration. Pressures at which the pressure relief valves, including those valves required by 8.3, have been set should also be stated on the list. A copy of the list should be permanently kept on board by the master.

15.3 Chapter XV applies to all ships regardless of the date of construction."

2 The following words are added at the end of existing paragraph 8.2.17:

"at the maximum allowable filling limit (FL)".

3 The following new paragraphs 8.2.18 and 8.2.19 are added after existing paragraph 8.2.17:

"8.2.18 The adequacy of the vent system fitted on tanks loaded in accordance with 15.1.5 is to be demonstrated using the guidelines developed by the Organization*. A relevant certificate should be permanently kept on board the ship. For the purposes of this paragraph, vent system means:

- (a) the tank outlet and the piping to the pressure relief valve;
- (b) the pressure relief valve;
- (c) the piping from the pressure relief valve to the location of discharge to the atmosphere and including any interconnections and piping which joins other tanks.

8.2.19 Paragraphs 8.2.17 and 8.2.18 apply, where applicable, to all ships regardless of the date of construction."

* Refer to the guidelines to be developed by the Organization.

ANNEX 5

RESOLUTION MSC.60(67)
(adopted on 5 December 1996)

**ADOPTION OF AMENDMENTS TO THE CODE FOR THE CONSTRUCTION AND
EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK (GC CODE)**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.328(IX), by which the Assembly, at its ninth session, adopted the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (Gas Carrier Code) and authorized the Committee to amend the Code as may be necessary,

NOTING resolution MSC.59(67), by which the Committee adopted amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code),

RECOGNIZING the need to bring the corresponding amendments to the Gas Carrier Code into force on the date on which the amendments to the IGC Code enter into force,

HAVING CONSIDERED, at its sixty-seventh session, amendments to the Gas Carrier Code proposed by the Sub-Committee on Bulk Liquids and Gases and approved by the Committee at its sixty-sixth session,

1. ADOPTS amendments to the Gas Carrier Code the text of which is set out in the Annex to the present resolution;
2. DETERMINES that the amendments should become effective on 1 July 1998 upon acceptance and entry into force of the corresponding amendments to the IGC Code adopted by resolution MSC.59(67).

ANNEX

**AMENDMENTS TO THE CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS
CARRYING LIQUEFIED GASES IN BULK (GC CODE)**

CHAPTER XIX - SUMMARY OF MINIMUM REQUIREMENTS

In column "f" of the table, the entry "I" for the product "Butadiene", is replaced by "I+T".

VOID