

## Maritime Transport Act 1994

### **Maritime Rules**

### **PART 22 AMENDMENT RULES**

Pursuant to section 36 of the Maritime Transport Act 1994, I, Harry James Duynhoven, Minister for Transport Safety, hereby make the following maritime rules.

Signed at Wellington	å
this 22nd day of Aug	7 WST 2006
by HARRY JAMES DUYNHOVEN	
Jan	
Minister for Transport Safety	

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# **Part Objective**

The objective of the Part 22 Amendment Rules 2006 is to give effect to recent amendments to the International Regulations for Preventing Collisions at Sea (COLREGS) 1972 as adopted by the International Maritime Organisation (IMO) through Assembly Resolution A.910(22).

The amendments reflect the application of the COLREGS to Wing-in-Ground (WIG) craft. In addition, the amendments give effect to changes to the requirements for light signals and sound intensity and audibility requirements for whistles and bells.

The amendments to the COLREGS came into force internationally on 29 November 2003.

## **Extent of Consultation**

On 29 January 2005, the then Maritime Safety Authority published in each of the daily newspapers in the four main centres of New Zealand a notice inviting comments on the proposed Part 22 Amendment Rules. A notice was also published in the *New Zealand Gazette* on 27 January 2005. The Authority then made its invitation to comment and the draft rules available to the public with electronic and hard copies being sent automatically to interested parties. The draft was also posted on, and available for downloading from, the MSA website. Comments were requested by 24 March 2005.

Seven submissions were received on the Part 22 Amendment Rules. These submissions and any oral comments were considered, and where appropriate, the proposed rules were amended to take account of the comments made.

# **Preliminary**

## 1 Entry into Force

These amendment rules come into force on 21 September 2006.

### General

### 2 Rule 22.2 Definitions

Rule 22.2(1) is amended by -

(a) inserting the following definitions in the appropriate places -

- "Near the surface of the water", in relation to a WIG craft, means in close proximity to the water such that the craft might come into contact with, or impede the navigation, of other vessels:'
- "Wing-in-ground craft" or "WIG craft" means a multimodal craft that, in its main operational mode, flies –
- (a) in close proximity to, and without contact with, the water surface;
- (b) by using surface-effect action above the water; and
- (c) supported in the air primarily by an aerodynamic lift generated on the wing(s) or the hull of the ship or their parts.'
- (b) substituting for the definition of "vessel" the following -

"Vessel" means -

- (a) a ship;
- (b) a WIG craft while it is on or near the surface of the water; or
- (c) a seaplane while it is on the surface of the water:'

# Steering and Sailing

### 3 Rule 22.8 Action to Avoid Collision

Rule 22.8 is amended by substituting for subrule (1) the following -

"(1) Any action to avoid collision must be taken in accordance with the requirements of this Section and, if the circumstances allow, be positive, made in ample time and with due regard to the observance of good seafaring practice."

### 4 Rule 22.18 Responsibilities between Vessels

Rule 22.18 is amended by inserting the following subrules -

- "(6) A WIG craft when taking off, landing or in flight near the surface of the water, must keep well clear, and avoid impeding the navigation, of all other vessels.
- (7) A WIG craft operating on the surface of the water, must comply with the provisions of this Section for a power-driven vessel."

# **Lights and Shapes**

### 5 Rule 22.23 Power-Driven Vessels Underway

Rule 22.23 is amended by inserting the following subrule -

- "(4) In addition to the lights prescribed in rule 22.23(1), a WIG craft must and may only exhibit a high-intensity all-round flashing red light when -
  - (a) taking off;
  - (b) landing; or
  - (c) in flight near the surface of the water."

## 6 Rule 22.31 Seaplanes

For rule 22.31 is substituted the following -

## "22.31 Seaplanes and WIG Craft

Except as prescribed in rule 22.23(4), if it is not practicable to exhibit any of the lights or shapes prescribed in this Section, a seaplane or WIG craft may exhibit lights and shapes that are as similar, in characteristics and position, as possible."

# Sounds and Light Signals

## 7 Rule 22.33 Equipment for Sound Signals

Rule 22.33 is amended by substituting for subrule (1) the following -

- "(1) Every vessel of -
  - (a) 12 metres or more but less than 20 metres in length must be provided with a whistle;
  - (b) 20 metres or more but less than 100 metres in length must be provided with a whistle and a bell; and
  - (c) 100 metres or more in length must be provided with a whistle, a bell and a gong."

### 8 Rule 22.35 Sound Signals in Restricted Visibility

For rule 22.35(g) is substituted the following –

"(g) a vessel of -

- (i) less than 12 metres in length is not obliged to give any of the signals prescribed in this rule;
- (ii) 12 metres or more in length but less than 20 metres is not obliged to give any of the bell signals prescribed in paragraphs (e) and (f) of this rule,

but if the vessel does not give any such signal, it must make some other efficient sound signal at intervals of not more than 2 minutes."

# Appendix 1 Positioning and Technical Details of Lights and Shapes

## 9 High Speed Vessel

Appendix 1 is amended by substituting for clause 13 the following -

## "13 High Speed Vessel

- (1) The masthead light of a high speed vessel may be placed at a height lower than that prescribed in Appendix 1.2(1)(a) if the base angle of the isosceles triangle formed by the sidelights and masthead light, when seen in end elevation, is not less than 27 degrees.
- (2) In the case of a high speed vessel of 50 metres or more in length, the vertical separation between the foremast and mainmast lights, required by Appendix 1.2(1)(b), may be modified if that distance is not less than the value determined by the following formula:

$$y = \frac{(a+17\psi)C}{1000} + 2$$

where:

- **y** is the height of the mainmast light above the foremast light in metres;
- **a** is the height of the foremast light above the water surface in service condition in metres;
- $\psi$  is the trim in service condition in degrees; and
- C is the horizontal separation of masthead lights in metres."

# **Appendix 3 Technical Details of Sound Signal Appliances**

### 10 Whistles

Clause 1 of Appendix 3 is amended by -

(a) substituting for subclause (1) the following –

- "(1) Frequencies and range of audibility
  - (a) The fundamental frequency of the signal must lie within the range 70-700Hz;
  - (b) The range of audibility of the signal from a whistle must be determined by those frequencies, which may include the fundamental and/or one or more higher frequencies, that provide the sound pressure levels specified in Appendix 3.1(3), and that lie within the range –
    - (i) 180-700 Hz ( $\pm$  1%), for a vessel of 20 metres or more in length; or
    - (ii) 180-2100 Hz ( $\pm$  1%), for a vessel of less than 20 metres in length."
- (b) substituting for subclause (3) the following subclause and table
  - "(3) Sound signal intensity and range of audibility

A whistle fitted in a vessel must provide, in the direction of maximum intensity of the whistle and at a distance of 1 metre from it, a sound pressure level in at least one 1/3-octave band –

- (a) within the range of frequencies -
  - (i) 180-700 Hz ( $\pm$  1%), for a vessel of 20 metres or more in length; or
  - (ii) 180-2100 Hz ( $\pm$  1%), for a vessel of less than 20 metres in length;
- (b) of not less than the appropriate figure given in the table below -

Length of vessel in metres	1/3-octave band level at 1 metre in dB referred to 2 x 10 <sup>-5</sup> N/m <sup>2</sup>	Audibility ranget in nautical miles
200 or more	143	2.0
75 or more but less than 200	138	1.5
20 or more but less than 75	130	1.0
Less than 20	120*	0.5
	115+	
	111 <sup>v</sup>	

<sup>&</sup>lt;sup>†</sup> The range of audibility in the table is for information only. It is approximately the range at which a whistle may be heard on its forward axis, with 90% probability in conditions of still air, on board a vessel having average background noise level at the listening posts (taken to be 68 dB in the octave band centred on 250 Hz and 63 dB in the octave band centred on 500 Hz).

In practice, the range at which a whistle may be heard is extremely variable and depends critically on weather conditions. The values given can be regarded as typical, but under conditions of strong wind or high ambient noise level at the listening post, the range may be much reduced.

- \* if the measured frequencies lie within the range 180-450 Hz;
- if the measured frequencies lie within the range 450-800Hz;
- $^{\nabla}$  if the measured frequencies lie within the range 800-2100Hz."

## 11 Bell or Gong

Clause 2 of Appendix 3 is amended by substituting for subclause (2)(b) the following –  $\,$ 

"(b) the diameter of the mouth of the bell must not be less than 300 millimetres for vessels of 20 metres or more in length."

### **Maritime Rules**

### **Part 22 Amendment Rules**

#### **CONSULTATION DETAILS**

(This text does not form part of the rules contained in the Part 22 Amendment Rules. It provides details of the consultation undertaken in making the rules.)

## **Summary of Consultation**

An invitation to comment on the draft Part 22 Amendment Rules was issued on 27 January 2005 with a closing date for submissions of 24 March 2005.

As a result of the formal consultation process, one Regional Council - Northland Regional Council, three organisations - New Zealand Maritime School, New Zealand Shipping Federation and New Zealand Marine Transport Association - and three individuals - Mr K Simon, Mr J F Smallridge, and Mr I Butchart - made written submissions.

#### Rule 22 - General Comments

**Northland Regional Council** fully supported the proposed amendments, which, they noted, are mainly technical in nature.

The **New Zealand Maritime School** expressed some concern at the delay between the entry into force of the amendments to the International Collision Regulations and the implementation of those changes in these amendment rules. The school suggested that if New Zealand must have its own version of the COLREGS, it is essential that –

- at all times, the New Zealand version have precisely the same effect as the international rules; and
- in the future, the implementation process ensures a more acceptable amendment timeline.

Maritime NZ Comments: Maritime NZ recognises that there has been considerable delay in implementing these amendments to the COLREGS. However, in this particular case, the amendments are concerned mainly with WIG craft, which are still very much in their infancy in New Zealand, and do not significantly affect New Zealand. As a result, Maritime NZ has concentrated on other work items that have much greater impact on the New Zealand maritime industry and New Zealand as a whole. Although this does not excuse the length of time elapsed to implement the changes to the COLREGS, it does go some way to explaining the delay in implementing these particular amendments. Maritime NZ is pursuing various options to ensure amendments to international maritime conventions are implemented in a more timely manner.

The **New Zealand Maritime School** believes it is timely to adopt the International Collision Regulations into New Zealand law and withdraw the "uniquely worded" New Zealand version. The New Zealand Maritime School notes that other maritime rules incorporate current versions of IMO instruments by reference rather than by repeating the texts of the instruments. The school could not envisage a situation when New Zealand would wish to pursue collision regulations that are technically different than the international version. In the school's experience, the differences in wording have, in many instances, caused confusion for

students comparing the international rules, used in most textbooks, websites and computer based training applications, with the existing Part 22.

**Maritime NZ Comments:** Maritime NZ has applied for funding in the 2005/06 financial year to consider the option of implementing the International Collision Regulations by reference rather than by giving indirect effect to the Convention through substantive provisions. In its review, Maritime NZ will take into consideration all the concerns raised by the New Zealand Maritime School.

### Rule 22.23 - Power Driven Vessels Underway

**Mr J F Smallridge** questioned whether the lights required to be exhibited by a WIG craft when in flight, taking off or landing is suitably distinct from the lights required of other vessels. Mr. Smallridge argued that a surface craft, such as a small motor launch, may not see the flashing light of a WIG craft at sea level when the WIG craft is in flight, taking off or landing. Mr. Smallridge submitted that an elevated all round light might only be visible from a distance and a small vessel may not see it at close distance or may confuse the WIG craft with a seaplane.

Maritime NZ Comments: The requirement for VIIG craft to exhibit a high-intensity all-round flashing red light mirrors the requirements of the International Collision Regulations, ensuring that Part 22 is consistent with international standards for VIIG crafts. The light is required to be placed so as to provide an unbroken arc of light of 360 degrees over the horizon. This would ensure that the visibility of the light, to vessels at all ranges, is maximised.

### Rule 22.31 - Seaplanes and WIG Craft

The Marine Transport Association argued that, due to the very special nature of operation, the requirement in draft rule 22.23(4) for a WIG craft to exhibit a high-intensity all-round flashing red light should not be relaxed in draft rule 22.31. The proposed rule 22.31 would have allowed a similar light to be exhibited if a high-intensity all-round flashing red light was "not practicable."

Maritime NZ Comments: Maritime NZ agrees that a WIG craft must be required to exhibit a high intensity all round flashing red light due to its very special nature of operation. The proposed rule 22.31 has been amended accordingly. As a result, a WIG craft would need an exemption to exhibit a light other than a high-intensity all-round flashing red light.

### Rule 22.33 - Equipment for Sound Signals

The **Marine Transport Association** suggested that rule 22.33(1) could be clearer if each requirement was itemised according to vessel length, that rule 22.33(1) should have three paragraphs covering sound signal requirements for vessels over 12 metres, over 20 metres and over 100 metres.

*Maritime NZ Comments:* Maritime NZ accepts the Association's suggestion and the proposed draft has been amended accordingly.

**Mr Smallridge** asked if WIG craft are required to carry the same sound and fog signals as conventional vessels.

*Maritime NZ Comments:* A WIG craft is considered to be a 'vessel' for the purposes of Part 22 while it is on or near the surface of the water and is, therefore, required to provide sound signals in restricted visibility (e.g. fog) as required by rules 22.33, 22.35, and other applicable rules in Part 22.

**Mr Butchart** questioned the need to carry a bell for use as a sound signal as he has never used, nor had reason to use, a bell in his commercial career.

Maritime NZ Comments: The requirement to carry a bell is based on the sound signals required by ships at anchor, or aground, in restricted visibility (e.g. heavy fog), which is why very few ships have needed to use a bell. However, these sound signal requirements are recognised internationally, and, in addition to the use of plotters, radar and radio, are risk reduction measures for preventing collisions in conditions of restricted visibility.

### Rule 22.35 - Sound Signals in Restricted Visibility

The **New Zealand Shipping Federation** queried the drafting of the amendment to rule 22.35(g) to insert a new paragraph (ii).

*Maritime NZ Comments:* While the insertion of a subparagraph (ii) in rule 22.35(g) would have necessarily created a subparagraph (i), the proposed amendment has been redrafted to substitute a new rule 22.35(g).

## Appendix 1 - Positioning and Technical Details of Lights and Shapes

**Mr J Smallridge** questioned the appropriateness to WIG craft of the formula in the proposed clause 13(2) of Appendix 1. He believes that it would be difficult for WIG craft to comply with the formula for the minimum vertical separation between foremast and mainmast lights and that the separation should be calibrated to suit each craft rather than solely on the basis of the formula. Mr Smallridge maintained that smaller craft may not have the space to carry the lights as directed in the rule.

### *Maritime NZ Comments:*

The formula, in the proposed clause 13(2) of Appendix I, applies only to high speed vessels of 50 metres or more in length. WIG craft are not "high speed craft" for the purpose of the International Code of Safety for High Speed Craft, 2000 and, therefore, cannot be classed as a high speed craft for the purposes of Part 22. In addition, high speed vessels under 50 metres in length are not required to comply with the formula.

**Mr K Simon** queried whether the units of measurement for "trim in service condition" or " $\psi$ " in the formula, in the proposed clause 13(2) of Appendix 1, should be radians instead of degrees.

*Maritime NZ Comments:* The formula reflects the Convention, which applies degrees as the unit of measurement.

### Appendix 3 - Technical Details of Sound and Signal Appliances

**Mr K Simon** queried the accuracy of the  $\pm 1\%$  variance for the frequency range of whistle signals given in the proposed clause 1(1)(b)(i) and (ii) of Appendix 3.

*Maritime NZ Comments:* The variance is taken directly from the COLREGS. Maritime NZ is obliged to adopt the figures given in the convention.

**Mr K Simon** suggested that, for clarity, the figures given in the proposed Appendix 3 clause 1(3)(a) and the footnotes to the proposed clause 1(3)(b) should be inserted into a single table at clause 1(3)(b).

**Maritime NZ Comments:** The figures and footnotes given in clauses 1(3)(a) and (b) relate to two separate issues. Maritime NZ believes amalgamating the figures into a single table will make the requirements less, not more, clear.