

National Standard for Commercial Vessels

Part G Non-survey vessels

Edition

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		Page
Contents		
Chapter 1	Preliminary	4
1.1	Scope	4
1.2	Application	4
1.3	Reference documents	4
1.4	Definitions	9
Chapter 2	Vessel design and construction	11
2.1	Design and construction standards	11
2.2	Maximum powering	14
2.3	Maximum load capacity	14
2.4	Fuel systems	15
2.5	Standards for flotation and decking	15
Chapter 3	Safety equipment	20
3.1	Kind and quantity of safety equipment	20
3.2	Safety equipment design, manufacture and performance standards	28
3.3	Operation	28
3.4	Accessibility	28
3.5	Servicing	29
3.6	Safety equipment belonging to a parent vessel	29
3.7	Bilge systems	29
Schedule 1	Standards for design, manufacture and performance of safety equipment	31

Chapter 1 Preliminary

1.1 Scope

This Part specifies the following for non-survey vessels and other domestic commercial vessels that are not required to have a certificate of survey:

- (a) the minimum standards for design and construction;
- (b) the minimum safety equipment to be carried on board.

Note 1 See clause 1.4(1) for the definition of a 'non-survey vessel'.

Note 2 This Part does not specify standards for operational safety, safety management systems, core complement, appropriate crewing or crew competencies. For requirements for:

- operational safety, safety management systems, core complement and appropriate crewing see *Marine Order 504 (Certificates of operation – national law) 2013*; and
- crew competencies see *Marine Order 505 (Certificates of competency – national law) 2013*.

1.2 Application

This Part applies to each non-survey vessel and other domestic commercial vessel that is required to comply with this Part by the National Law or its subordinate instruments.

Example It is a condition of *Marine Safety (Certificates of survey) Exemption 2016* that some vessels which are not required to hold a certificate of survey must comply with this Part.

1.3 Reference documents

- (1) Each document mentioned in the following table:
 - (a) is referenced in this Part; and
 - (b) is the latest revision of the document, including amendments, unless stated otherwise.

Note Section 1.7 in NSCV Part B provides that national, regional or international standards adopted or incorporated by reference in the NSCV are adopted or incorporated by reference as in force from time to time.

- (2) However, where an International Standards Organisation (ISO) standard is referenced in this Part, a version other than the latest revision of the standard may be used provided that the version remains in force under the Recreational Craft Directive (RCD) issued by the European Parliament and the Council of the European Union, as in force from time to time.

Note Complying with the ISO standard in force under the RCD allows a vessel to become CE certificated. Compliance with this Part may be determined by referencing the standards mentioned for the vessel on its Declaration of Conformity for CE certification or by directly verifying the vessel against the standards mentioned in this Part.

Publisher	Document	Available
American Boat and Yacht Council	<p><i>ABYC Standards and Technical Information Reports for Small Craft, H-5 Boat Load Capacity (ABYC H-5)</i></p> <p><i>ABYC Standard for Technical Information Reports for Small Craft, P-6 Propelled Shafting Systems (ABYC P-6)</i></p> <p><i>ABYC Standards and Technical Information Reports for Small Craft, H-8 Buoyancy in the Event of Flooding/Swamping (ABYC H-8)</i></p> <p><i>ABYC Standards and Technical Information Reports for Small Craft, H-26 — Powering of boats (ABYC H-26)</i></p> <p><i>ABYC Standards and Technical Information Reports for Small Craft, H-29 — Canoes and Kayaks (ABYC H-29)</i></p>	ABYC website at http://www.abycinc.org
Standards Australia	<p>AS 1499:1996 <i>Personal flotation devices – Type 2 (AS 1499)</i></p> <p>AS 2260: 1996 <i>Personal flotation devices – Type 3 (AS 2260)</i></p> <p>AS 4758.1:2015 <i>Lifejackets, Part 1: General requirements (AS 4758.1)</i></p> <p>AS 1799.1-2009/Amdt 3-2014 <i>Small craft-General requirements for power boats (AS 1799.1)</i></p> <p>AS 2092:2004 <i>Pyrotechnic marine distress flares and signals for pleasure craft (AS 2092)</i></p>	SAI Global website at http://www.saiglobal.org
Australian and New Zealand Standards	<p>AS/NZS 2906:2001 <i>Fuel containers – Portable – Plastic and metal (AS/NZS 2906)</i></p> <p>AS/NZS 1841.1:2007 <i>Portable fire extinguishers - General requirements (AS/NZS 1841.1)</i></p> <p>AS/NZS 1841.2:2007 <i>Portable fire extinguishers - Specific requirements for water type extinguishers (AS/NZS 1841.2)</i></p> <p>AS/NZS 1841.3:2007 <i>Portable fire extinguishers - Specific requirements for wet chemical type extinguishers (AS/NZS 1843.3)</i></p>	SAI Global website at http://www.saiglobal.org

Publisher	Document	Available
	<p>AS/NZS 1841.4:2007 <i>Portable fire extinguishers - Specific requirements for foam type extinguishers</i> (AS/NZS 1843.4)</p> <p>AS/NZS 1841.5:2007 <i>Portable fire extinguishers - Specific requirements for powder type extinguishers</i> (AS/NZS 1843.5)</p> <p>AS/NZS 1841.6:2007 <i>Portable fire extinguishers - Specific requirements for carbon dioxide type extinguishers</i> (AS/NZS 1843.6)</p> <p>AS/NZS 1841.7:2007 <i>Portable fire extinguishers - Specific requirements for vaporizing liquid type extinguishers</i> (AS/NZS 1843.7)</p> <p>AS/NZS 1841.8:2007 <i>Portable fire extinguishers - Specific requirements for non-rechargeable type extinguishers</i> (AS/NZS 1843.8)</p> <p>AS/NZS 4280.1:2003/Amdt 4:2013 <i>406 MHz satellite distress beacons - Marine emergency position-indicating radio beacons (EPIRB) (IEC 61097-2:2002, MOD)</i> (AS/NZS 4280)</p>	
Australian Maritime Safety Authority	<p><i>Marine Order 30 (Prevention of collisions) 2009</i></p> <p><i>Marine Order 504 (Certificates of operation – national law) 2013</i></p> <p><i>Marine Order 505 (Certificates of competency – national law) 2013</i></p> <p><i>Marine Safety (Certificates of Survey) Exemption 2016</i></p>	AMSA website at http://www.amsa.gov.au
Australian Maritime Safety Authority	<p><i>National Standard for Commercial Vessels</i></p> <p>Part B — <i>General requirements</i></p> <p>Part C, Section 5A — <i>Machinery</i></p> <p>Part C, Section 6B — <i>Buoyancy and stability after flooding</i></p> <p>Part C, Section 7A — <i>Safety equipment</i></p>	AMSA website at http://www.amsa.gov.au
International Dragon Boat Federation	<i>IDBF Dragon Boat Specifications - Part A - Technical Manual 202</i>	IDBG website at http://www.idbf.org

Publisher	Document	Available
International Maritime Organization	<i>International Regulations for the Prevention of Collisions at Sea Convention, 1972 (attached to the Prevention of Collisions Convention)</i>	IMO website at http://www.imo.org
International Standards Organisation	<p>ISO 6185-1:2001 <i>Inflatable boats, Part 1: Boats with a maximum motor rating of 4,5 kW (ISO 6185-1)</i></p> <p>ISO 6185-2:2001 <i>Inflatable boats, Part 2: Boats with a maximum motor rating of 4,5 kW to 15 kW inclusive (ISO 6185-2)</i></p> <p>ISO 6185-3:2014 <i>Inflatable boats, Part 3: Boats with a hull length less than 8 m with a motor rating of 15 kW and greater (ISO 6185-3)</i></p> <p>ISO 6185-4:2011 <i>Inflatable boats – Part 4: Boats with a hull length of between 8 and 24 m with a motor power rating of 15 kW or greater (ISO 6185-4)</i></p> <p>ISO 14946:2001 <i>Small craft – Maximum load capacity (ISO 14946)</i></p> <p>ISO 13590:2003 <i>Small craft – Personal watercraft – Construction and system installation requirements (ISO 13590)</i></p> <p>ISO 9094: 2015 <i>Small craft – Fire protection (ISO 9094)</i></p> <p>ISO 8848:2003 <i>Small craft – Electrically operated direct current bilge pumps (ISO 8848)</i></p> <p>ISO 8665:2006 <i>Small craft – Marine propulsion reciprocating internal combustion engines – Power measurements and declarations (ISO 8665)</i></p> <p>ISO 12402-3: 2006 <i>Personal flotation devices, Part 3: Lifejackets, performance level 150 – Safety requirements (ISO 12402-3)</i></p> <p>ISO 12402-4:2006 <i>Personal flotation devices, Part 4: Lifejackets, performance level 100 – Safety requirements (ISO 12402-4)</i></p>	ISO website at http://www.iso.org

Publisher	Document	Available
	<p>ISO 12402-5:2006 <i>Personal flotation devices, Part 5: Buoyancy aids (Level 50) – Safety requirements</i> (ISO 12402-5)</p> <p>ISO 10088:2013 <i>Small craft – Permanently installed petrol and diesel fuel systems</i> (ISO 10088)</p> <p>ISO 11105:1997 <i>Small craft – Ventilation of petrol engine and/or petrol tank compartments</i> (ISO 11105)</p> <p>ISO 7840:2013 <i>Small craft – Fire resistant fuel hoses</i> (ISO 7840)</p> <p>ISO 12217-1:2015 <i>Small craft – Stability and buoyancy assessment and categorization, Part 1: Non-sailing boats of hull length greater than or equal to 6 m</i> (ISO 12217-1)</p> <p>ISO 12217-2:2015 <i>Small craft – Stability and buoyancy assessment and categorization, Parts 2: Sailing boats of hull length greater than or equal to 6 m</i> (ISO 12217-2)</p> <p>ISO 12217-3:2015 <i>Small craft – Stability and buoyancy assessment and categorization, Part 3: Boats of hull length less than 6 m</i> (ISO 12217-3)</p> <p>ISO 11592-1:2016 <i>Determination of maximum propulsion power rating using manoeuvring speed, Part 2: Craft with a length of hull less than 8 m</i> (ISO 11592-1)</p> <p>ISO 21487:2012 <i>Small craft – Permanently installed petrol and diesel fuel tanks</i> (ISO 21487)</p> <p>ISO 16180: 2013 <i>Small Craft – Navigation Lights – installation, placement and visibility</i> (ISO 16180)</p>	
SAE International	<p>J1527 <i>Marine Fuel Hoses</i> (J1527)</p> <p>J1973 <i>Personal Watercraft – Flotation</i> (J1973)</p> <p>J2034 <i>Personal Watercraft Ventilation Systems</i> (J2034)</p> <p>J2046 <i>Personal Watercraft Fuel Systems</i> (J2046)</p>	SAE International website at http://www.sae.org

Publisher	Document	Available
	J2120 <i>Personal Watercraft – Electrical Systems</i> (J2120) J2566 <i>Personal Watercraft – Display of Persons Capacity Information</i> (J2566) J2608 <i>Off Throttle Steering Capabilities of Personal Watercraft</i> (J2608)	
UL	UL 1180 <i>Standard for Fully Inflatable Recreational Personal Flotation Devices</i> (UL1180)	UL website at http://www.ulstandards.u1.com

1.4 Definitions

(1) In this Part:

ACMA means the Australian Communications and Media Authority.

AMSA means the Australian Maritime Safety Authority.

dragon boat means a Chinese style boat that is solely propelled by human paddlers.

GNSS means global navigation satellite system.

GPS means global positioning system.

IDBF means the International Dragon Boat Federation.

land means a part of the earth's surface (other than a reef) above the ordinary high water line at spring tides.

MMSI means the Maritime Mobile Service Identity nine digit code assigned by AMSA for a DSC capable radio transceiver or AIS transceiver.

non-survey vessel means a vessel that is:

- (a) listed in *Schedule 1, Division 2 of the Marine Safety (Certificates of survey) Exemption 2016* and which does not have a certificate of survey issued under the national law; or
- (b) required by a National Law instrument to comply with this part of the National Standard for Commercial Vessels.

Note It is a condition of *Marine Safety (Certificates of Survey) Exemption 2016* that non-survey vessels, and some other domestic commercial vessels that are not required to hold a certificate of survey, must comply with this Part. Other National Law instruments, including exemptions, may also require domestic commercial vessels to comply with this Part.

personal watercraft means a vessel that:

- (a) is <4 m long; and
- (b) has an internal combustion engine powering a water-jet pump as its primary source of propulsion; and
- (c) is designed to be operated by at least 1 person sitting, standing or kneeling on the hull of the vessel.

remote enclosed waters means waterways where assistance from shore based facilities or other vessels is not readily available and where rescue services would likely be required in the event of an emergency.

safety equipment means appliances for saving or protecting life, including communications equipment, navigation equipment, fire equipment and anchoring systems.

Note Examples include lifejackets, life rafts, buoyant appliances, lifebuoys, first aid or medical equipment, emergency beacons, distress signals, compass, radio etc.

- (2) In this Part, the following terms have the meaning given by the Dictionary in NSCV Part B:

certificate of operation	Class 2 vessel	Class 3 vessel
Class 4 vessel	collared vessel	domestic commercial vessel
EPIRB	hire and drive vessel	
inflatable boat	inland waters	inshore operations
lifejacket	long	operational area
national law	National Regulator	NSCV
owner	partially smooth waters	rigid inflatable boat (RIB)
sailing vessel	service categories	shore base
smooth water operations	tender	

Chapter 2 Vessel design and construction

2.1 Design and construction standards

A vessel must meet the design and construction standards mentioned in Table 1 for a vessel of its type.

Note There are no design and construction standards specified in this Part for a type of vessel that is not mentioned in Table 1. However, these types of vessels are subject to equipment standards under Chapter 3 of this Part.

Table 1 - Design and construction standards

Item	Type of vessel	Design and construction standards
1	Dragon boat	The dragon boat must meet IDBF <i>Dragon Boat Specifications - Part A - Technical Manual 202</i> .
2	Pedal craft	The pedal craft must: <ul style="list-style-type: none"> (a) permit quick exit of persons in event of capsizing or swamping; and (b) have a drive mechanism that is guarded with no accessible pinch point during operation; and (c) have adequate hand holds for persons in the water; and (d) support the maximum number of persons to be carried on board — the weight to be attributed to each person is: <ul style="list-style-type: none"> (i) 80 kg for normal operations; and (ii) 25 kg if capsized or swamped.
3	Row boat that has no auxiliary engine and is not used as a tender	The vessel must: <ul style="list-style-type: none"> (a) permit quick exit of persons in event of capsizing or swamping; and (b) have adequate hand holds for persons in the water; and (c) have at least 1 attached tethering device for the paddle(s) if used ≥ 200 m from land; and (d) support the maximum number of persons to be carried on board — the weight to be attributed to each person is: <ul style="list-style-type: none"> (i) 80 kg for normal operations; and (ii) 25 kg if capsized or swamped.

Item	Type of vessel	Design and construction standards
4	(a) Human powered vessel including canoe and kayak (other than a vessel mentioned in items 1, 2 or 3 of this table) that has no propulsion motor fitted; or (b) Canoe or kayak that has an electric propulsion motor fitted that is 24 volts or less.	The vessel must either: (1) have: (a) the capacity to enable quick exit of persons in event of capsizing or swamping; and (b) adequate hand holds for persons in the water; and (c) at least 1 attached tethering device for the paddle(s) if used ≥ 200 m from land; and (d) support the maximum number of persons to be carried on board — the weight to be attributed to each person is: (i) 80 kg for normal operations; and (ii) 25 kg if capsized or swamped; or (2) Or meet the standard mentioned in item 5 of this table. Where propelled by a propulsion unit, the unit must be installed, serviced and maintained in accordance with the manufacturer's instructions.
5	Canoe and kayak that: (a) is described in item 4 of this table; or (b) that has a propulsion motor fitted that has ≤ 3.5 kW propulsion power	The vessel meets ABYC H-29.
6	Sailing vessel <7.5 m long that: (a) has no auxiliary engine; or (b) has an auxiliary engine of ≤ 3.5 kW propulsion power	The vessel must: (a) be self-draining; and (b) be capable of: (i) self-righting; or (ii) being righted from a capsize or inversion by the number of persons on board, while they are in the water; and (c) have adequate hand holds for all persons in the water; and

Item	Type of vessel	Design and construction standards
		(d) support the maximum number of persons to be carried on board — the weight to be attributed to each person is: <ul style="list-style-type: none"> (i) 80 kg for normal operations; and (ii) 25 kg if capsized or swamped.
7	Personal watercraft including those operating with an aerial freestyle device	The personal water craft must meet: <ul style="list-style-type: none"> (a) ISO 13590; or (b) each of the following standards: <ul style="list-style-type: none"> (i) J1973; and (ii) J2034; and (iii) J2046; and (iv) J2120; and (v) J2566; and (vi) J2608.
8	Tender <12m long (with or without mechanical propulsion), other than personal watercraft	The tender must comply with: <ul style="list-style-type: none"> (a) clause 2.2 (maximum powering), if it has mechanical propulsion; and (b) clause 2.3 (maximum load capacity); and (c) clause 2.4 (fuel systems), if it has mechanical propulsion; and (d) either: <ul style="list-style-type: none"> (i) clause 2.5 (standards for flotation), option 1; or (ii) the requirements mentioned in clause 2.5 (standards for flotation) for a collared vessel, RIB or inflatable. <p><i>Note</i> The standard used for maximum load capacity and flotation must be consistent. If a standard from one standard-setting organisation is used for determining compliance for maximum load capacity, a standard from another standard-setting organisation cannot be used for determining compliance for flotation.</p>
9	Vessel <12m long with mechanical propulsion (other than a vessel mentioned in items 4 to 8 of this table)	The vessel must comply with: <ul style="list-style-type: none"> (a) clause 2.2 (maximum powering); and (b) clause 2.3 (maximum load capacity); and (c) clause 2.4 (fuel systems); and (d) clause 2.5 (standards for flotation). <p><i>Note</i> The standard used for maximum load capacity and flotation must be consistent. If a standard from one standard-setting organisation is used for determining compliance for maximum load capacity, a standard from another standard-setting organisation cannot be used for determining compliance for flotation.</p>

Item	Type of vessel	Design and construction standards
10	Vessel ≥ 12 m long with mechanical propulsion	<p>The vessel must comply with:</p> <p>(a) clause 2.2 (maximum powering); and</p> <p>(b) clause 2.3 (maximum load capacity); and</p> <p>(c) clause 2.4 (fuel systems); and</p> <p>(d) clause 2.5 (standards for flotation).</p> <p><i>Note</i> The standard used for maximum load capacity and flotation must be consistent. If a standard from one standard-setting organisation is used for determining compliance for maximum load capacity, a standard from another standard-setting organisation cannot be used for determining compliance for flotation.</p>

2.2 Maximum powering

- (1) This clause applies to a vessel required by table 1 to comply with clause 2.2.
- (2) For a vessel, other than a sailing vessel, the maximum powering of the vessel must not exceed the limit set out in any one of the following standards that applies to the vessel:
 - (a) ABYC H-26;
 - (b) AS 1799.1;
 - (c) both ISO 8665 and ISO 11592-1;
 - (d) ISO 6185-1;
 - (e) ISO 6185-2;
 - (f) ISO 6185-3;
 - (g) ISO 6185-4.
- (3) A vessel with a shaft must meet either:
 - (a) ABYC P-6; or
 - (b) Chapter 3 of NSCV Part C Subsection 5A —Machinery.

2.3 Maximum load capacity

- (1) This clause applies to a vessel required by table 1 to comply with clause 2.3.
- (2) A vessel must not exceed the maximum load capacity specified in any one of the following standards that applies to the vessel:
 - (a) ABYC H-5;
 - (b) AS 1799.1;
 - (c) ISO 14946;
 - (d) ISO 6185-1;
 - (e) ISO 6185-2;
 - (f) ISO 6185-3;
 - (g) ISO 6185-4.

Note Determining load capacity in accordance with any of the standards mentioned will involve meeting a range of requirements in the loaded condition including stability assessment.

2.4 Fuel systems

- (1) This clause applies to a vessel required by table 1 to comply with clause 2.4.
- (2) The fuel system of the vessel must comply with:
 - (a) Chapter 4 of NSCV Part C Subsection 5A — Machinery; or
 - (b) each of the following standards:
 - (i) ISO 21487;
 - (ii) ISO 11105;
 - (iii) ISO 10088.
 - (c) where a portable fuel tank is used on a vessel:
 - (i) it must meet AS/NZS 2906; and
 - (ii) the flexible fuel line connecting the portable tank must be supplied as part of the outboard engine installation (OEM).
- (3) If the fuel system complies with subclause (2)(b):
 - (a) the installation of the fuel system must comply with ISO 10088; and
 - (b) a fuel shut off valve must be fitted to the tank, unless the tank is underdeck, sealed and in a cofferdam with no potential source of ignition, in which case the fuel shut off valve can be located at the filter instead of fitted at the tank; and
 - (c) fuel lines between the fuel filter and outboard engines may be as supplied as part of the outboard engine installation (OEM) otherwise flexible fuel lines installed as part of the fuel system must comply with either:
 - (i) ISO 7840; or
 - (ii) J1527.

Note for 2.4(3)(b) Examples of sources of ignition are underdeck 12 volt wiring or 12 volt bilge pumps.

2.5 Standards for flotation and decking

- (1) This clause applies to a vessel required by Table 1 to comply with Clause 2.5.
- (2) A vessel must comply with one of the options mentioned in Table 2 for the type of vessel.
- (3) A vessel must not use option 3 of Table 2 unless a risk assessment has been conducted and documented in the vessel's safety management system (SMS) and the assessment has to have shown that it is safe to do so.
- (4) Option 3 is not considered suitable for vessels operating in waters where it is unsafe for persons to be immersed in the water.

Example of the kinds of waters where it is unsafe for persons to be immersed may include those waters where the mean monthly water temperature is <15 degrees or the waters are infested with hazardous flora or fauna such as sharks, crocodiles or Irukandji jellyfish.
- (5) The standard for flotation and load capacity must:
 - (a) be consistent, if a standard from one standard-setting organisation is used for determining compliance with clause 2.3 a standard from another standard-setting organisation must not be used for determining compliance with clause 2.5; or
 - (b) comply with NSCV Subsection C6B for clause 2.5 and comply with AS 1799.1 for clause 2.3.

- (6) Safety equipment mentioned in Table 2, including lifejackets, buoyant appliances, life rafts and dinghies, must meet the standards for design, manufacture and performance mentioned for the equipment in Schedule 1.

Table 2 – Acceptable flotation and decking standards

Type of vessel	Option 1	Option 2	Option 3
Vessel <6 m long	<p>The vessel must meet the criteria for level flotation contained in one of the following standards:</p> <ul style="list-style-type: none"> (a) NSCV Subsection C6B; (b) AS1799.1; (c) ISO 12217-3; (d) ABYC H-8. <p>The criteria for modified level flotation contained in ABYC H-8 may also be used as an alternative to options (a) - (d) above.</p>	<ul style="list-style-type: none"> (a) The vessel must carry a life raft or dinghy sufficient to support all persons on board; and (b) The vessel must meet the criteria for basic flotation contained in one of the following standards: <ul style="list-style-type: none"> (i) NSCV Subsection C6B; (ii) AS1799.1; (iii) ISO 12217-3; (iv) ABYC H-8. 	<p><i>Note</i> This option is limited to vessels that have conducted a risk assessment that is documented in the vessel’s SMS and the assessment has to have shown that it is safe to use this option. See clause 2.5 (3) and (4).</p> <ul style="list-style-type: none"> (a) A lifejacket must be worn by each person on board; and (b) The vessel must either: <ul style="list-style-type: none"> (i) carry buoyant appliances sufficient to support all persons on board if they are not designed to be re-righted if capsized; or (ii) be fitted with grab lines secured to the side of the vessel; and (c) The vessel must meet the criteria for basic flotation contained in one of the following standards: <ul style="list-style-type: none"> (i) NSCV Subsection C6B; (ii) AS1799.1; (iii) ISO 12217-3; (iv) ABYC H-8. <p><i>Example of a vessel designed to be re-righted:</i> sailing dingy</p> <p><i>Note for (a)</i> see standard for lifejackets mentioned in Schedule 2 for persons wearing diving equipment.</p> <p><i>Note for (c)(iii)</i> a vessel is taken to comply with the requirements of basic flotation if it meets the flotation tests to be applied to sailing boats specified in ISO 12217-3.</p>

Type of vessel	Option 1	Option 2	Option 3
Vessel ≥ 6 m long	<p>The vessel must meet the criteria contained in one of the following standards:</p> <ul style="list-style-type: none"> (a) NSCV Subsection C6B — the criteria for level flotation; (b) AS1799.1 — the criteria for level flotation; (c) ISO 12217-1 — the criteria for flotation contained in clause 6.8. 	<ul style="list-style-type: none"> (a) The vessel must carry a life raft or dinghy sufficient to support all persons on board; and (b) The vessel must meet one of the following: <ul style="list-style-type: none"> (i) the criteria for basic flotation in NSCV Subsection C6B; (ii) the criteria specified for decked or well decked vessels, contained in NSCV Subsection C6B; (iii) the criteria for basic flotation in AS1799.1; (iv) the criteria specified for fully enclosed boats, contained in AS 1799.1; (v) the criteria for any of the options 1 to 5 of Table 2 of ISO 12217-1. 	<p><i>Note</i> This option is limited to vessels that have conducted a risk assessment that is documented in the vessel’s SMS and the assessment has to have shown that it is safe to use this option. See clause 2.5 (3) and (4).</p> <p>Vessels < 7.5m —</p> <ul style="list-style-type: none"> (a) a lifejacket must be worn by each person on board; and (b) the vessel must either: <ul style="list-style-type: none"> (i) carry buoyant appliances sufficient to support all persons; or (ii) be fitted with grab lines secured to the side of the vessel. <p><i>Note for (a)</i> see standard for lifejackets mentioned in Schedule 2 for persons wearing diving equipment.</p> <p>All vessels (including those < 7.5m) — The vessel must meet one of the following:</p> <ul style="list-style-type: none"> (a) the criteria for basic flotation in NSCV Subsection C6B; (b) the criteria specified for decked or well decked vessels, contained in NSCV Subsection C6B; (c) the criteria for basic flotation in AS1799.1; (d) the criteria specified for fully enclosed boats, contained in AS 1799.1; (e) the tests specified for any of the options 1 to 5 of Table 2 of ISO 12217-1.

Type of vessel	Option 1	Option 2	Option 3 <i>Note</i> This option is limited to vessels that have conducted a risk assessment that is documented in the vessel's SMS and the assessment has to have shown that it is safe to use this option. See clause 2.5 (3) and (4).
Collared vessel, RIB or inflatable	The vessel must comply with either: (a) ISO 6185 - Parts 1 to 4 as applicable; or (b) NSCV Subsection C6B.		
Sailing Vessel $\geq 6\text{m}$	(a) The vessel must comply with ISO 12217-2. (b) For vessels $< 7.5\text{m}$ — a lifejacket must be worn by each person on board. (c) For vessels in operational area C — a life raft or dinghy sufficient to support all persons on board.		

Chapter 3 Safety equipment

3.1 Kind and quantity of safety equipment

- (1) A vessel must carry at least the kind and quantity of safety equipment mentioned in Tables 3 – 8 for the type of vessel.

Note Section 2.6 of Part B of the NSCV provides that a vessel that has been assigned more than 1 service category must comply with the requirements of the highest of those service categories and any additional requirements of the other service categories to which it is assigned.

- (2) The owner of the vessel must consider whether the vessel requires any equipment in addition to the equipment mentioned in Tables 3 – 8, taking into account the location, number of persons permitted on board and the kind of activities intended for the vessel.

Note Part 3 of the *Marine Safety (Domestic Commercial Vessel) National Law* places duties on owners and masters to ensure, so far as reasonably practicable, the safety of the vessel, marine safety equipment that relates to the vessel and the operation of the vessel. Tables 3 – 8 contain the minimum equipment requirements for the vessel, and owners must consider what additional safety equipment may be required for the safe operation of the vessel.

Table 3 Canoe, kayak, dragon boat, pedal boat, row boat, other human powered vessel and sailing vessel <7.5 m — safety equipment

Type of vessel	Kind of safety equipment	Quantity/Requirement	
(a) Canoe, kayak, dragon boat, pedal boat, row boat or other human powered vessel that:	Anchor with chain or line	1 if the vessel is a keel sailing vessel operating in remote enclosed sheltered waters or >2 nm from land	
	a. has no propulsion motor fitted; or	Bailer	1 if the vessel is not self-draining
	b. has a propulsion motor fitted that is 24 volts or less	Bilge pump	Only a sailing vessel that has points of down flooding must comply with clause 3.7
(b) Sailing vessel <7.5 m that:	Buoyant appliance with 30 m of 8 mm buoyant rope attached	1 if the vessel is a keel sailing vessel operating in remote enclosed sheltered waters or >2 nm from land	
	a. has no auxiliary engine; or	Distress signal – orange smoke hand-held	1 if the vessel is operating in remote enclosed sheltered waters or >2 nm from land
	b. has an auxiliary engine of ≤ 3.5 kW propulsion power	Distress signal – red hand-held flare	1 if the vessel is operating in remote enclosed sheltered waters or >2 nm from land
		EPIRB– registered with AMSA	1 if the vessel is operating >2 nm from land

Type of vessel	Kind of safety equipment	Quantity/Requirement
	First aid kit	1 located at an appropriate location which may be on the vessel, on shore or with a tour leader
	Lifejacket	<p>1 lifejacket for each person on board that meets the following standard:</p> <p>(a) if the vessel is in operational area D or E — Level 50 standard (Type 2);</p> <p>(b) if the vessel is in or beyond operational area C — Level 100 (Type 1) standard</p>
	Navigation lights	<p>If operating at night or in restricted visibility the vessel must exhibit the lights required by the standards mentioned in Schedule 1 for navigation lights.</p> <p><i>Note</i> Generally the following arrangements of navigation lights will satisfy these requirements:</p> <p>(a) for vessels <7m, under sail only — a water-proof buoyant torch;</p> <p>(b) for vessels under oars — a water-proof buoyant torch.</p> <p>(c) for powered vessels <7m capable of operating only at <7 knots — the vessel must exhibit an all round white light;</p> <p>(d) for vessels ≥7m under sail only — the vessel must exhibit sidelights and a stern light;</p> <p>(e) for powered vessels ≥7m including sailboats under power — the vessel must exhibit sidelights and an all round white light.</p>
	Tethering device for paddle	1 if the vessel is paddled >200 m from land
	Waterproof buoyant torch	1

Table 4 Personal watercraft — safety equipment

Type of vessel	Kind of safety equipment	Quantity/Requirement
Personal watercraft, including those operated with an aerial freestyle device	Communication equipment for contacting a shore base or other vessels	1 if operating >2 nm from land See Schedule 1, row 4 for design requirements
	Distress signal – orange smoke hand-held	1 if operating in remote enclosed sheltered waters or >2 nm from land
	Distress signal – red hand-held flare	2 if operating in remote enclosed sheltered waters or >2 nm from land
	Distress signals – red star parachute rocket flare	3 if operating in remote enclosed sheltered waters or >2 nm from land
	EPIRB– registered with AMSA	1 if operating >2 nm from land
	Lifejacket	1 lifejacket for each person on board the personal watercraft or aerial freestyle device that meets one of the following standards: (a) Level 50 standard (Type 2); or (b) Level 50S standard.
	Safety helmet (wakeboard style)	1 worn by each person on an aerial freestyle device
Waterproof buoyant torch	1	

Table 5 Tender— safety equipment

Type of vessel	Kind of safety equipment	Quantity/Requirement
Tender, other than a personal watercraft or a row boat	Bailer	1
	Bilge pump	Tender must comply with clause 3.7
	Distress signal – red handheld distress flare	2 if operating in remote enclosed sheltered waters or >2 nm from land

Type of vessel	Kind of safety equipment	Quantity/Requirement
	Distress signal – orange smoke hand-held	2 if operating in remote enclosed sheltered waters or >2 nm from land
	Lifejacket	1 lifejacket for each person on board that meets Level 100 (Type 1) standard
	Secondary means of propulsion for a vessel that has mechanical propulsion	1 <i>Example</i> oars, paddles
	Waterproof buoyant torch	1

Table 6 Other vessels in operational area E — safety equipment

Type of vessel	Kind of safety equipment	Quantity/Requirement
All vessels types not mentioned in tables 3, 4 and 5 that are operating in operational area E	Anchor with chain and rope	1 where required to ensure the safety of the vessel in the applicable area of operation
	Bailer	1 if the vessel is not self-draining
	Bilge pump	Vessel must comply with clause 3.7
	Buoyant appliance with 30 m of 8 mm buoyant rope attached	(a) 1 with a self-igniting light if the vessel is <12m; and (b) 2, including 1 with a self-igniting light, if the vessel is ≥12m
	Communication equipment for contacting a shore base or other vessels	1 See Schedule 1, item 4 for design requirements
	Distress signal – orange smoke hand-held	1 if operating in remote enclosed sheltered waters or >2 nm from land
	Distress signal – red hand-held distress flare	2 if operating in remote enclosed sheltered waters or >2 nm from land
	First aid kit	1

Type of vessel	Kind of safety equipment	Quantity/Requirement
	Fire blanket	1 located in each galley space on the vessel
	Fire extinguisher	Either: (a) 2 dry powder fire extinguishers of 4.5 kg; or (b) the quantity and type of fire extinguisher mentioned in AS 1799.1
	Gangway or gangplank	1 if necessary for safe access and egress on vessels >7.5m
	Lifejacket	For each person on board, 1 lifejacket that meets: (a) Level 100 (Type 1) standard if the vessel is a Class 4 vessel; or (b) Level 150 (coastal lifejacket) standard if the vessel is a Class 2 vessel or Class 3 vessel
	Map or chart of operational area	1
	Navigation lights	If operating at night or in restricted visibility the vessel must exhibit the lights required by the standards mentioned in Schedule 1 for navigation lights. <i>Note</i> Generally the following arrangements of navigation lights will satisfy these requirements: (a) for a vessel <12m — 360 degree white light with port and starboard sidelights; and (b) for a vessel ≥12m — 360 degree white light with port and starboard sidelights, and masthead light and stern light
	Waterproof buoyant torch	1

Table 7 Other vessels in operational area D — safety equipment

Type of vessel	Kind of safety equipment	Quantity/Requirement
All vessels types not mentioned in tables 3, 4 and 5 that are operating in operational area D	Anchor with chain and rope	1 where required to ensure the safety of the vessel in the applicable area of operation
	Bailer	1 if the vessel is not self-draining
	Bilge Pump	Vessel must comply with clause 3.7
	Buoyant appliance with 30 m of 8 mm buoyant rope attached	(a) 1 with a self-igniting light for a vessel <12m; and (b) 2, including 1 with a self-igniting light, for a vessel ≥12m
	Communication equipment for contacting a shore base or other vessels	1 See Schedule 1, item 4 for design requirements
	Distress signal – orange smoke handheld	1 if operating in remote enclosed sheltered waters or >2 nm from land
	Distress signal – red handheld distress flare	2 if operating in remote enclosed sheltered waters or >2 nm from land
	Distress signal – red star parachute rocket	3 if operating in remote enclosed sheltered waters or >2 nm from land
	EPIRB – registered with AMSA	1 if operating >2 nm from land
	Fire blanket	1 located in each galley space
	Fire extinguisher	Either: (a) 2 dry powder extinguishers of 4.5 kg; or (b) the quantity and type of fire extinguisher mentioned in AS 1799.1
	First aid kit	1
Gangway or gangplank	1 if necessary for safe access and egress on vessels >7.5m	

Type of vessel	Kind of safety equipment	Quantity/Requirement
	Lifejacket	For each person on board, 1 lifejacket that meets: (a) Level 100 (Type 1) standard if the vessel is a Class 4 vessel; or (b) Level 150 (coastal lifejacket) standard if the vessel is a Class 2 vessel or Class 3 vessel
	Map or chart of operational area	1
	Navigation lights	If operating at night or in restricted visibility the vessel must exhibit the lights required by the standards mentioned in Schedule 1 for navigation lights. <i>Note</i> Generally the following arrangements of navigation lights will satisfy these requirements: (a) For a vessel <12m — 360 degree white light with port and starboard sidelights (b) For a vessel ≥12m — 360 degree white light with port and starboard sidelights, masthead light and stern light
	Waterproof buoyant torch	1

Table 8 Other vessels operating outside operational areas D or E, but within inshore operations

Type of vessel	Kind of safety equipment	Quantity/Requirement
All vessels types not mentioned in tables 3, 4 and 5 that are engaged in inshore operations	Anchor with chain and rope	1
	Bailer	1 if the vessel is not self-draining
	Bilge pump	Vessel must comply with clause 3.7

Type of vessel	Kind of safety equipment	Quantity/Requirement
	Buoyant appliance with 30 m of 8 mm buoyant rope attached	(a) 1 with a self-igniting light for a vessel <12m (b) 2, including 1 with a self-igniting light, for a vessel ≥12m
	Communication equipment for contacting shore or other vessels	1 as follows: (a) if within coverage area of VHF service — a VHF marine radio; and (b) if outside the coverage of VHF service: (i) a MF/HF transceiver approved by ACMA for maritime use; or (iii) a satellite phone
	Compass or GNSS <i>Note</i> GPS is a type of GNSS	1
	Distress signal – orange smoke handheld	1
	Distress signal – red handheld distress flare	2
	Distress signal – red star parachute rocket	3
	Distress signal — V sheet marine	1
	EPIRB – registered with AMSA	1 if operating >2 nm from land
	Fire blanket	1 located in each galley space
	Fire extinguisher	Either: (a) 2 dry powder extinguishers of 4.5 kg; or (b) the quantity and type of fire extinguishers mentioned in AS 1799.1
	First aid kit	1
	Gangway or gangplank	1 if necessary for safe access and egress on vessels >7.5m

Type of vessel	Kind of safety equipment	Quantity/Requirement
	Lifejacket	For each person on board, 1 lifejacket that meets Level 150 (coastal lifejacket) standard
	Life raft or dinghy	If required by table 2 (see clause 2.5)
	Map or chart of operational area	1
	Navigation lights	<p>If operating at night or in restricted visibility the vessel must exhibit the lights required by the standards mentioned in Schedule 1 for navigation lights.</p> <p><i>Note</i> Generally the following arrangements of navigation lights will satisfy these requirements:</p> <p>(a) For a vessel <12m — 360 degree white light with port and starboard sidelights</p> <p>(b) For a vessel ≥12m — 360 degree white light with port and starboard sidelights, masthead light and stern light</p>
	Waterproof buoyant torch	1

3.2 Safety equipment design, manufacture and performance standards

Safety equipment mentioned in Tables 3 to 8 must meet the standards for its design, manufacture and performance mentioned for the equipment in Schedule 1.

3.3 Operation

Safety equipment carried on board a vessel must operate effectively and be fit for purpose.

Example

A lifejacket must be the correct size for the person who must wear it.

3.4 Accessibility

- (1) Safety equipment carried on board a vessel must be quickly accessible to persons on board at all times.
- (2) There must be at least 1 set of pictorial instructions for the use of lifejackets displayed in a prominent place near their storage and clearly readable by all persons on board the vessel.

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- (3) For first aid kits, their location on the vessel must be clearly marked with a sign or sticker.

3.5 Servicing

- (1) If there are manufacturer instructions for a vessel's safety equipment, the equipment must be maintained and serviced in accordance with those instructions.
- (2) Safety equipment carried on board a vessel must be replaced if it exceeds the manufacturer's specified expiry date.

3.6 Safety equipment belonging to a parent vessel

- (1) The following safety equipment must be marked to identify the vessel to which it belongs:
 - (a) lifejackets;
 - (b) life rafts;
 - (c) buoyant appliances;
 - (d) lifebuoys;
 - (e) dinghies.
- (2) Markings must include either the parent vessel's name or the parent vessel's unique identifier.

3.7 Bilge systems

- (1) This clause applies to a vessel required by tables 3 – 8 to comply with clause 3.7.
- (2) The following vessels must have the kind and number of bilge pumps mentioned in Table 9:
 - (a) an open vessel;
 - (b) a vessel with covered bilges;
 - (c) a vessel with under-floor compartments, other than airtight void spaces filled with foam to over 90% of the void volume.
- (3) Each bilge pump must:
 - (a) have a strainer fitted to the suction pipe to prevent the pump choking; and
 - (b) if an extra low voltage electric motor powers the bilge pump — meet ISO 8848.
- (4) The bilge system must be arranged so that every compartment on the vessel can be pumped by at least one bilge pump, with a capacity as specified in table 9. However, underdeck voids filled with foam to over 90% of the void volume are not required to have a bilge pump.
- (5) A vessel $\geq 13\text{m}$ long must carry manual and powered pumps in accordance with columns 2 and 3 of Table 9.

Table 9 - Bilge systems — kind and number of pumps

Length of vessel	Manual pump or Extra low voltage (ELV) pumps		Engine or electric powered pumps (low voltage and higher)	
	Number	Capacity per pump	Number	Capacity per pump
<7.5m	1	4.0 kL/hr	1	If 1 manual or ELV pump of 5.5 kL/hr is used — 11 kL/hr If 2 manual or ELV pumps of 5.5 kL/hr are used — 5.5 kL/hr
≥7.5m to <13m	2	4.0 kL/hr		
≥13m	1 or 2	5.5 kL/hr		

Schedule 1 Standards for design, manufacture and performance of safety equipment

(clause 3.1)

Item	Kind of safety equipment	Standards
1	Anchor with chain or line	<p>(1) The anchor must have sufficient holding strength for seabed conditions and the vessel's size and weight</p> <p>(2) The chain or line must have sufficient strength and durability to securely attach the anchor</p>
2	Bailer	Must be a suitable receptacle for bailing water with a secure lanyard rope for attachment to the vessel
3	Buoyant appliance with 30m of 8mm buoyant rope attached	<p>(1) Must be designed and constructed to:</p> <p>(a) have a yellow or red safety colour; and</p> <p>(b) have marine grade reflective material fitted; and</p> <p>(c) be capable of supporting not less than 143 newtons of iron in fresh water for 24 hours</p> <p>(2) Must not be permanently secured</p> <p>(3) Must be capable of easy deployment</p>
4	Communication equipment for tables 4, 6 and 7	<p>Must be able to operate in the operational area(s) and geographic location of the vessel and provide the ability for persons on board the vessel to communicate with shore based facilities and other vessels</p> <p>An EPIRB does not meet the communication equipment requirement</p>
5	Compass	Must be liquid damped with at least a 75 mm diameter compass card showing the cardinal points
6	Distress signals – (a) orange smoke hand-held (b) red hand-held flare (c) red star parachute rocket flare	<p>(1) Must be designed and manufactured in accordance with AS 2092</p> <p>(2) Must not exceed the manufacturer's expiry date</p> <p>(3) In areas where distress signals are prohibited an EPIRB is to be carried in place of the distress signal.</p> <p><i>Example</i> The areas around some inland waterways prohibit the use of flares due to bush fire risk.</p>
7	Distress signals – V Sheet	Must be a fluorescent orange-red coloured sheet of dimensions not less than 1.8 metres × 1.2 metres with a black letter 'V' superimposed on the middle of the sheet. The letter "V" on the sheet must be no more than 150 millimetres wide

Item	Kind of safety equipment	Standards
8	EPIRB	(1) Must transmit on 406 Mhz frequency and meet AS/NZS 4280.1 (2) Must be registered with AMSA (3) Must be stowed so that it may not be activated inadvertently
9	Fire extinguisher	(1) Must meet AS/NZS 1841.1 to AS 1841.8 <i>Note</i> The fire extinguisher must comply with the standards in the series AS/NZS 1841.1 to 1841.8 that are applicable to fire extinguishers of its type.
10	First aid kit	(1) Must be stored in a weathertight and portable case of non-corrosive and strong material (2) Must have secure fasteners capable of quick release (3) Must contain medical supplies that are: <ul style="list-style-type: none"> (a) within their expiry date; and (b) accompanied by instructions for use that are in English and include advisory information from the Australian Pharmaceutical Formulary; and (c) sufficient for the nature of the vessel's operations taking into account: <ul style="list-style-type: none"> (i) the length of the voyage; and (ii) the number and ages of persons on board <i>Note 1</i> For first aid supplies and equipment, storage, disposal, labelling, and training — requirements in Commonwealth, State and Northern Territory legislation may apply. <i>Note 2</i> The kind and quantity of supplies contained in a first aid kit should be informed by an assessment that takes into account the: <ul style="list-style-type: none"> (1) distance and time required to access medical aid; (2) communication capability on board the vessel to access medical assistance and advice; (3) type of operation and activities being undertaken (e.g. types and level of hazards likely to be encountered); (4) length of the voyage; (5) number of persons on board; (6) profile of persons on board (e.g. children, elderly, level of experience, gender etc.); (7) level of first aid training of the crew, personnel and persons on board, including in the first aid procedures and drills carried out on board the vessel;

Item	Kind of safety equipment	Standards
		<ul style="list-style-type: none"> (8) prevailing or expected environmental conditions likely to be encountered on the voyage; and (9) incidents and accidents that have occurred in the operation and in the wider industry sector.
11	GNSS	May be a hard wired or portable unit with a reliable power source
12	Grab lines	<ul style="list-style-type: none"> (1) Grab-lines must not be secured more than 150 mm or less than 100 mm below the gunwale. (2) The securing points must be spaced ≤ 460 mm or > 300 mm centres and interlaced to prevent movement. (3) The depth of the loop when at right angles to the vessel must be not more than 200 mm or less than 150 mm.
13	Lifejacket	<ul style="list-style-type: none"> (1) For Level 50s (Type 3) lifejacket standard — must be designed and manufactured in accordance with: <ul style="list-style-type: none"> (a) AS 4758.1; or (b) AS 2260 (2) For a Level 50 (Type 2) lifejacket standard — must be designed and manufactured in accordance with: <ul style="list-style-type: none"> (a) AS 4758.1; or (b) AS 1499; or (c) ISO 12402-5 (3) For Level 100 (Type 1) lifejacket standard — must be designed and manufactured in accordance with: <ul style="list-style-type: none"> (a) AS 4758.1; or (b) ISO 12402-4; or (c) UL 1180 (4) For Level 150 (coastal lifejacket) standard — must be designed and manufactured in accordance with: <ul style="list-style-type: none"> (a) AS 4758.1; or (b) ISO 12402-3 (5) If the State or Territory where a Class 4 vessel is operating has recreational boating requirements for the wearing of lifejackets on equivalent recreational boats — the owner must ensure that each hirer and all other persons on the vessel wear a lifejacket.

Item	Kind of safety equipment	Standards
		(6) A person that is wearing, or in the process of donning or removing, diving equipment on board the vessel is taken to satisfy the requirement of wearing a lifejacket.
14	Life raft or dinghy	(1) Life rafts and dinghy's must be designed, constructed and maintained in accordance with requirements mentioned in NSCV Part C Subsection 7A
15	Map or chart	<p>(1) Maps must be a geographical representation of a marine area that identifies prominent shore marks and offshore islands, reefs and shoals</p> <p>(2) Charts must be a geographical representation of a marine area produced from a hydrographic survey for the provision of navigational aid that identifies any navigation markers and lights, prominent geographical features, reefs, shoals and other known dangers to navigation</p> <p><i>Note for (1) this requirement is satisfied if the vessel has a global positioning system (GPS) fitted that has relevant maps for the area of operation.</i></p>
16	Navigation Lights	<p>(1) Must comply with the design, performance and positioning requirements mentioned in:</p> <p>(a) Marine Orders Part 30, Prevention of collisions; or</p> <p>(b) ISO 16180</p> <p><i>Note</i> Marine Orders Part 30 gives effect to the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS).</p>
17	VHF marine radio	<p>(1) The VHF transceiver must be approved by ACMA for maritime use</p> <p>(2) If Digital Selective Calling (DSC) is fitted — the DSC must be operational and programmed with an AMSA assigned MMSI</p>
18	Waterproof/buoyant torch	<p>(1) Must be designed and constructed to be:</p> <p>(a) waterproof; and</p> <p>(b) able to float; and</p> <p>(c) capable of being used to signal for help</p> <p>(2) Must be stored with spare batteries</p>