

FINDING THE ‘SHIP’: GUARDIAN OFFSHORE AU PTY LTD V SAAB SEAEYE LEOPARD 1702 REMOTELY OPERATED VEHICLE [2020] FCA 273

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The ‘ship’ is at the centre of Australian admiralty jurisdiction.¹ Under the *Admiralty Act 1988* (Cth) (‘Act’), a ship is one of the few *res* against which *in rem* proceedings may be brought.² But, despite its importance, the ‘ship’ is not exhaustively defined in the Act.³ In most cases, this is a non-issue because it is uncontroversial⁴ or an agreed fact that a particular vessel is a ship.⁵ However, where a vessel’s status is disputed there is not a clear test for determining whether that vessel is, or is not, a ship under the Act.⁶ At most, the possession of certain physical characteristics — which differ between cases — may be determinative.⁷ At the same time, the use of novel vessels — submersibles, marine remotely operated vehicles (‘ROV’) or autonomous unmanned ships — is increasing.⁸ Many of these vessels lack attributes commonly ascribed to traditional vessels. ROV may not be buoyant. Unmanned autonomous ships can be controlled remotely or be wholly autonomous.⁹ In light of the rights and liabilities peculiar to admiralty, greater understanding of the position of novel vessels under the Act is needed.

In *Guardian Offshore AU Pty Ltd v Saab Seaeeye Leopard 1702 Remotely Operated Vehicle* (‘*Seaeeye*’)¹⁰ the Federal Court of Australia considered whether an ROV was a ‘ship’. In finding that it was not,¹¹ Colvin J sets out a possible Australian approach for determining the status of novel vessels. Moreover, in formulating a ‘usual attributes’ approach, his Honour clarifies the meaning of ‘used in navigation’. This is an important step in assessing novel vessels.

1 Facts

Ford Commercial Diving Solutions (‘FCDS’) possessed two Saab Seaeeye ROVs – ROV 1702 and ROV 1704.¹² Each ROV was less than two cubic metres in size. Their design specifications meant that the ROVs had to be transported to the dive site aboard another ship (‘Main Ship’). When diving, the ROV received its power and controls from the Main Ship through a physical tethering system. A ship owned by Guardian Offshore transported ROV 1702 into the Bass Strait where the ROV conducted certain underwater works.¹³ A dispute then arose.

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¹ *Admiralty Act 1988* (Cth) ss 5(1), 14; Australian Law Reform Commission, *Civil Admiralty Jurisdiction* (Report No 33, December 1986) [98]. Several other Commonwealth and state acts also define a ‘ship’ but the definitions vary (eg *Shipping Registration Act* ss 3(1), 34; *Transport Operations (Marine Safety) Act 1994* (Qld) s 10(1) – (2)). Some acts only refer to ‘vessels’: *Navigation Act 2012* (Cth) s 14; *Marine Safety Act 2010* (Vic) s 3(1).

² *Admiralty Act 1988* (Cth) s 14.

³ This is intentional. The Australian Law Reform Commission, which drafted much of the Act, considered that a prescriptive definition would be cumbersome and that the courts were best placed to determine, on a case-by-case basis, whether a certain vessel is a ship: Australian Law Reform Commission (above n 1) [99].

⁴ See, eg, *McRae v Commonwealth Disposals Commission* (1951) 84 CLR 377, 389; *The Skulptor Vuchetich* (1996) 62 FCR 602, 604; *Metal Und Rohstoff Shipping and Holdings BV v Owners of Bunkers on Board the Ship MV Genco Leader* (2005) 145 FCR 145

⁵ See, eg, *Tisand Pty Ltd v Owners of the Ship MV Cape Moreton* (2005) 143 FCR 43; *Laemthong International Lines Co Ltd v BPS Shipping Ltd* (1997) 190 CLR 181.

⁶ See, eg, *Smith v Perese* [2006] NSWSC 288, [169] – [171]. Australian courts have primarily considered the definition of a ‘ship’ in cases dealing with whether bunkers or other fixtures are *part* of a ship. This is a distinct question from whether a vessel *is* a ship. The leading Australian case on bunkers is *Scandinavian Bunkering AS v The Bunkers on Board the Ship FV Taruman* (2006) 151 FCR 126 (‘*Taruman*’) which endorsed the definition of ‘ship’ set down in *The Silia* [1981] 2 Lloyd’s Rep 534. See also *The Skulptor Vuchetich* (1996) 62 FCR 602. A similar lack of clarity exists under public international law instruments including the *United Nations Convention on the Law of the Sea* and *International Regulations for Preventing Collisions at Sea*. See, generally, Craig H Allen, *International Law for Seagoing Officers* (Naval Institute Press, 6th ed, 2014) 194 – 7. The International Maritime Organization (‘IMO’) also conducting a scoping exercise, due to report in 2020, on how existing IMO instruments apply to autonomous surface ships: ‘Autonomous Shipping’, *International Maritime Organization* (Web Page) <<http://www.imo.org/en/MediaCentre/HotTopics/Pages/Autonomous-shipping.aspx>>.

⁷ Damien J Cremean, *Admiralty Jurisdiction, Law and Practice* (Federation Press, 4th ed, 2015) 35 – 6; Martin Davies and Anthony Dickey, *Shipping Law* (Thompson Reuters, 4th ed, 2016) 7 – 16.

⁸ On the increased use of autonomous unmanned ships, see generally Sir Bernard Eder, ‘Unmanned Vessels: Challenges Ahead’ [2019] 1 *Lloyd’s Maritime and Commercial Law Quarterly* 47.

⁹ See generally Comité Maritime International, *Working Group Position Paper on Unmanned Ships and the International Regulatory Framework* (2018).

¹⁰ [2020] FCA 273.

¹¹ *Guardian Offshore AU Pty Ltd v Saab Seaeeye Leopard 1702 Remotely Operated Vehicle* [2020] FCA 273, [80] – [81] (‘*Guardian Offshore*’).

¹² *Ibid* [5].

¹³ *Ibid* [26].

Guardian Offshore eventually brought a general maritime claim against FCDS and the writ named both ROVs as *in rem* defendants, with one as the defendant ship and the other as the defendant ship's surrogate.¹⁴ A warrant for the arrest of ROV 1702 was issued in late-January 2020 and ROV 1704 was arrested as the surrogate ship.¹⁵ After the arrest, DW Subsea ('DWS'), which claimed to own both ROVs, applied to dismiss the proceedings.¹⁶

DWS objected to the Court's jurisdiction and the arrest on several grounds, including that the ROV did not qualify as a 'ship' under the Act.¹⁷ The Act stipulates that *in rem* proceedings can only be commenced against a 'a ship or property'¹⁸ and Guardian Offshore did not suggest that the ROV was 'property'. As such, the Court's admiralty jurisdiction was not engaged. Guardian Offshore's position was that the ROV fell within the Act's definition of a 'ship'.¹⁹

2 Reasoning

As his Honour recognised, the question of whether the ROV was a ship is fundamentally one of statutory interpretation. Section 3(1) of the *Admiralty Act 1988* (Cth) defines 'ship' as:

a vessel of any kind used or constructed for use in navigation by water, however it is propelled or moved, and includes: (a) a barge, lighter or other floating vessel; (b) a hovercraft; (c) an off-shore industry mobile unit; and (d) a vessel that has sunk or is stranded and the remains of such a vessel; but does not include (e) a seaplane, (f) an inland waterways vessel; or (g) a vessel under construction that has not been launched.

On a plain reading of the provision, his Honour identified three elements in the Act's definition: a ship is (a) a vessel, (b) used in navigation by water and (c) moved by means of the water.²⁰ These elements are to be interpreted 'liberally'²¹ so as to give effect to the Act's purpose — namely, demarking the boundaries of admiralty jurisdiction and *in rem* arrest.²²

His Honour then turned to case-law to ascertain the content of each element.²³ Ultimately, Colvin J concluded that 'the decided cases eschew any attempt at a comprehensive definition of the characteristics of a vessel used in navigation by water'.²⁴ Instead, determining whether the ROV was a ship required assessing the extent to which the ROV possessed 'usual attributes associated with the concept of a vessel that can be navigated by water'.²⁵ Considering the Act's purpose, his Honour held that '[a]ttributes which mean the vessel can be moved readily from the jurisdiction or give to the kind of claims provided for in the *Admiralty Act* with be particularly significant' considerations.²⁶

It is notable that his Honour's primary focus appears to be on the second definitional element of 'ship'.²⁷ The meaning of 'vessel' receives comparatively little comment. Navigation by water is dealt with swiftly, with Colvin J concluding that a 'structure that moves *through* the water may be described as undertaking navigation by water'.²⁸ The upshot is that the Act does not inherently exclude 'structures that are submersible or undertake submarine navigation'.²⁹

¹⁴ Ibid [7], [9]. The writ described the defendant ship as 'Saab Seaye Leopard 1702 Remotely Operated Vehicle lately on board the Ship "Offshore Guardian" (the Ship)' and the surrogate ship as 'Saab Seaye Leopard 1702 Remotely Operated Vehicle, as surrogate ship'. The designation ROV 1702 and ROV 1704 was first adopted by the intervening party, DWS, after the arrest of the ROV in question: Ibid [23].

¹⁵ Ibid [10].

¹⁶ Ibid [12].

¹⁷ Ibid [13]. DWS objected to the ROV's arrest on the basis that it was not correctly named in the writ. Colvin J dismissed this argument on the basis that any error could be corrected and that the arrested ROV was referred to in the writ: [27]. DWS also said that jurisdiction was lacking because FCDS was not the actual owner of either ROV. His Honour found it unnecessary to decide this point: [40].

¹⁸ *Admiralty Act 1988* (Cth) s 14.

¹⁹ *Guardian Offshore* [2020] FCA 273, [16].

²⁰ Ibid [49]. Compare Matthew NC Harvey, 'Arresting a "ship": Boats, bunkers and barometers' (2012) 86 *Australian Law Journal* 189, 189 – 90. Harvey identifies four separate elements in the statutory definition.

²¹ *Elbe Shipping SA v The Global Peace* (2006) 154 FCR 439, [74] (Allsop J) ('*Global Peace*').

²² *Guardian Offshore* [2020] FCA 273, [46], [48], [81].

²³ Notably, Colvin J does not consider any of the bunkers cases (eg *Taruman* (2006) 151 FCR 126).

²⁴ Ibid [78].

²⁵ Ibid [80].

²⁶ Ibid [80].

²⁷ Ibid [67] – [77].

²⁸ Ibid [79] (emphasis added).

²⁹ Ibid [79].

In considering ‘used in navigation’, his Honour construed the phrase more broadly than did Sheen J in *Steedman v Scofield* (*Steedman*).³⁰ *Steedman* has been positively received in Australia,³¹ in particular Sheen J’s holding that ‘used in navigation’ under s 742 of the *Merchant Shipping Act 1894* (UK) ‘conveys the concept of transporting persons or property by water’.³² The New South Wales Supreme Court quoted this passage approvingly in *Smith v Perese*.³³ In contrast, Colvin J endorsed the Irish Supreme Court’s view in *The Von Rocks*³⁴ that transportation of people or property is not an essential element of ‘used in navigation’.³⁵

It is suggested that *Seaeye*’s treatment of the phrase better aligns with the Act’s ‘wide’³⁶ definition of ‘ship’ which is intended ‘to include many other types of vessels and even certain floating structures which are not ships or vessels in any recognisable sense of the word’.³⁷ For example, an off-shore mobile unit — a structure other than a vessel (i.e. oil rig) — is explicitly defined as a ship under the Act but, conceivably, may not carry passengers. Nor do all ocean-going vessels carry passengers or property (e.g. floating cranes; deepwater mining vessels). Excluding such vessels from the Act creates a lacuna in the admiralty jurisdiction. Notably, the UK Court of Appeal has rejected the person or property requirement, holding that ‘the function of conveying persons and cargo from place to place ... is not an essential characteristic’ of navigation’.³⁸

Further, Justice Colvin does not come to a definitive view as to whether ‘navigation’ also ‘connotes some form of purposeful or ordered direction from one place to another’.³⁹ However, his Honour does endorse the conclusion in *The Von Rocks* that ‘used in navigation’ may encompass non-conventional vessels.⁴⁰ In that case, a dredger which was not self-propelled and could not steer was held to be a ship on the basis that it was designed for ‘carrying out specific activities on the water, [was] capable of movement across the water and ... [spent] significant periods of time’ moving across the sea.⁴¹

Interestingly, *Seaeye* does not follow the Canadian Federal Court decision in *Cyber Sea Technologies Inc v Underwater Harvester Remotely Operated Vehicle* (*Cyber Sea*).⁴² *Cyber Sea* involved an application to set aside the arrest of a small unmanned submersible that received all power and controls through a tether.⁴³ Notably, the court was not required to reach a final view on whether the submersible was a ship, only whether there was a ‘slight possibility’ it was a ship.⁴⁴ In this context, the court observed that ‘in all probability’ the submersible was a ‘ship’ under the *Federal Courts Act*.⁴⁵

Distinguishing the Canadian decision was appropriate.⁴⁶ As Colvin J notes, *Cyber Sea* is informed by cases which do not underpin Australian admiralty jurisdiction.⁴⁷ Further, the definition of a ‘ship’ in the Canadian statute encompasses ‘any vessel or craft ... capable of being used solely or partly for navigation’.⁴⁸ This is far broader than the Act’s definition. The breadth of the Canadian conception of ‘ship’ is at the heart of the *Cyber Sea* decision.⁴⁹ For the Canadian court, ‘craft’ meant ‘anything that floats’⁵⁰ and the use of ‘vessel or craft’ expanded the definition to ‘anything used on or in the water’.⁵¹ This formulation is difficult to transpose onto the Act which restrains a ‘ship’ to vessels used in navigation.

³⁰ [1992] 2 Lloyd’s Rep 163.

³¹ Michael White, *Australian Maritime Law* (Federation Press, 3rd ed, 2014) 94; Cremean (above n 7) 35; *The Global Peace* (2006) 154 FCR 439, [104] (Allsop J).

³² *Steedman v Scofield* [1992] 2 Lloyd’s Rep 163, 166. The provision reads “‘ship’ includes every description of vessel used in navigation not propelled by oars”.

³³ *Smith v Perese* [2006] NSWSC 288, [171] (Studdert J).

³⁴ [1998] 2 Lloyd’s Rep 198.

³⁵ *Guardian Offshore* [2020] FCA 273, [71]; *The Von Rocks* [1998] 2 Lloyd’s Rep 198, 207 (Keane J).

³⁶ White (above n 31) 93.

³⁷ Davies and Dickey (above n 7) 2.

³⁸ *Perks v Clark* [2011] 2 Lloyd’s Rep 431, [42] (Carnwath J, Lord Walker agreeing). See also *The Sea Eagle* [2012] 2 Lloyd’s Rep 37.

³⁹ *Guardian Offshore* [2020] FCA 273, [78].

⁴⁰ *Ibid* [72].

⁴¹ *The Von Rocks* [1998] 2 Lloyd’s Rep 198, 208 (Keane J).

⁴² [2002] FCT 794.

⁴³ *Ibid* [1] (Hargrave Pth).

⁴⁴ *Cyber Sea Technologies Inc v Underwater Harvester Remotely Operated Vehicle* [2002] FCT 794, [3] (Hargrave Pth) (*Cyber Sea*).

⁴⁵ *Ibid* [3], [13] (Hargrave Pth). See also Gold et al (above n 7) 284.

⁴⁶ *Contra* Cremean (above n 7) 35.

⁴⁷ *Guardian Offshore* [2020] FCA 273, [74].

⁴⁸ *Federal Court Act*, RSC 1985, c F-7, s 2(1).

⁴⁹ *Cyber Sea* [2002] FCT 794, [11] (Hargrave Pth). [13], [18].

⁵⁰ *Ibid* [2002] FCT 794, [11] (Hargrave Pth).

⁵¹ *Ibid* [11] (Hargrave Pth). See also Gold et al, *Canadian Maritime Law* (Irwin, 2nd ed, 2016) 277 – 8.

Having formulated his approach, Colvin J considered whether the ROV's features were congruent with those of a ship. His Honour concludes that several features differed from the 'usual characteristics of a ship'.⁵² The ROV was small,⁵³ was not buoyant and⁵⁴ travelled from place to place onboard another ship.⁵⁵ Further, the ROV received its power and commands through a tether attached to another ship.⁵⁶ It could not navigate open waters⁵⁷ or leave the jurisdiction on its own.⁵⁸ The ROV was not a registered as a ship.⁵⁹ It could not retrieve large items from below the surface.⁶⁰ Collectively, these attributes demonstrated that the ROV was not a ship.

3 Comment

The diversity of vessel design and operation among both surface vessels and underwater vessel undermines a one-size-fits-all conceptualisation of the 'ship'. Given the *Seaeye* ROV's limited capabilities, including its tiny range (150 metres) and complete dependence on the Main Ship for power, the ultimate conclusion in *Seaeye* is sound. On the other hand, Colvin J's 'usual attributes' approach is open to critique. Previous courts have similarly sought to define the 'ship' by way of various characteristics⁶¹ and the 'usual attributes' do not really advance matters. The approach remains susceptible to the same critiques: the case-law does not establish a settled list of 'usual attributes';⁶² it is unclear how many 'usual attributes' a vessel must possess. An additional complexity which arises in the 'usual attributes' test is the possibility of a hierarchy of attributes. His Honour considers a vessel's ability to move from the jurisdiction and ability to incur liability or exercise rights found in admiralty to be 'particular significant'.⁶³ However, further guidance is lacking. Ultimately, whether a vessel is a ship remains a 'matter of impression'.⁶⁴

An interesting aspect of *Seaeye* is its implications for novel vessels. As a starting point, the rejection of the 'passenger or property' requirement broadens the range of vessels and watercraft that may be considered 'ships' and, thus, enliven admiralty jurisdiction. Further, Colvin J's endorsement of *The Von Rocks* suggests that new types of vessels that differ in some respects from traditional ships may still be ships.

Consider the position of unmanned autonomous ships which are being developed for commercial use.⁶⁵ These vessels – some of which are operated by remote control, others which are fully automated – meet many of Colvin J's criteria: they are large, float, propel themselves, are designed to carry out specific activities on water and have sizeable range.⁶⁶ The principal point of difference with conventional ships involves their 'use in navigation' – especially if the phrase is understood to require ordered movement based on human or human-like reasoning. Crucially, Colvin J specifically left open whether purposeful, ordered movement is an aspect of navigation.⁶⁷ Even if ordered movement is required, autonomous ships which are remotely controlled should easily fall within the Act because their movement is 'planned' insofar as it is the result of human control albeit from afar.⁶⁸ A trickier issue is whether a wholly automated ship could engage in navigation. The application of autonomous technology 'is increasingly intended to supplant the mariner' and human input.⁶⁹ Thus, if 'purposeful navigation' is taken to require human-like reasoning, then whether the vessel is 'used in navigation' will depend on the quality its artificial intelligence. *Seaeye* does not answer these threshold questions but the decision does indicate that wholly automated ships are not automatically excluded from the Act.

⁵² *Guardian Offshore* [2020] FCA 273, [82].

⁵³ *Ibid* [90].

⁵⁴ *Ibid* [83].

⁵⁵ *Ibid* [85].

⁵⁶ *Ibid* [84], [86].

⁵⁷ *Ibid* [87].

⁵⁸ *Ibid* [88].

⁵⁹ *Ibid* [89].

⁶⁰ *Ibid* [90].

⁶¹ See, eg, *Hedges & Son v London & St Katherine Docks Co* (1885) 16 QBD 597; *William Holyman & Sons Pty Ltd v Marin Board of Launceston* (1929) 24 Tas LR 64; *Steedman v Scofield* [1992] 2 Lloyd's Rep 163. See also Cremean (above n 7) 35 – 6.

⁶² See Davies and Dickey (above n 7) 7 – 16 and cases cited therein; Cremean (above n 7) 35 – 7.

⁶³ *Guardian Offshore AU* [2020] FCA 273, [80].

⁶⁴ Davies and Dickey (above n 7) 9 – 10; *Guardian Offshore* [2020] FCA 273, [91]: '[t]he ROV does not look like a vessel used in navigation and in most respects does not act like a vessel used in navigation'.

⁶⁵ One such vessel is the 120 TEU fully autonomous container ship *MV Yara Birkeland*. Yara Birkeland Press Kit', *Yara International ASA* (Web Page) <<https://www.yara.com/news-and-media/press-kits/yara-birkeland-press-kit/>>.

⁶⁶ Eder (above n 8) 49 – 51.

⁶⁷ *Guardian Offshore* [2020] FCA 273, [78].

⁶⁸ For example, in 2017 Wärtsilä operators in San Diego, California remotely controlled the 80-metre vessel *Highland Chief* in the North Sea: Craig H Allen, 'Determining the Legal Status of Unmanned Maritime Vehicles: Formalism v Functionalism' (2018) 49(4) *Journal of Maritime Law & Commerce* 477, 479.

⁶⁹ Allen, above n 68, 483.

Justice Colvin also expressly envisions that submersibles may be ships.⁷⁰ His Honour's comments on the *Seaeye* ROV indicate that to be 'ships' submersibles must be capable of extended operation independent of another ship and have sufficient range to easily leave the jurisdiction. *The Van Rocks* suggests that they must also be able to spend a significant amount of time at sea. Again, his Honour leaves the open whether 'ordered' navigation is required. As such, a submersible with these physical characteristics which is either manually or remotely operated by human operators should fall within the wide definition of 'ship' in the Act. Meanwhile, wholly automated submersibles are not intrinsically outside the Act.

Seaeye is unlikely to be the final word on autonomous vessels but the decision is a first step in locating the position of novel vessels under the Act. In this respect, Colvin J's refinement of 'used in navigation' is a notable development. However, the potential for certain novel vessels to enliven Australian admiralty jurisdiction has several effects which deserve further consideration. One is that it extends the ability of injured parties to pursue *in rem* proceedings (for example in the case of a collision with an unmanned autonomous vessel) which raises policy considerations and impacts shipowners, insurers and others. It also raises issues of legal coherence, including who is the 'master' of an autonomous ship and whether such vessels are also 'ships' under the *Navigation Act 1912* (Cth) or *Shipping Registration Act 1981* (Cth).

⁷⁰ *Guardian Offshore* [2020] FCA 273, [79].