Sunken warships: culturally and environmentally sensitive

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Craig Forrest*

Introduction

A significant number, it not the majority, of archaeologically, historically or culturally important shipwrecks are warships. These range from Roman and Viking warships to iconic vessels of the 16th to 18th century, such as the *Mary Rose*[1], *Vasa*[2] and *La Trinidad Valencera*[3], to the ironclads and stream powered warships of the 19th century, such as the *USS Monitor*[4], *CSS Hunley*[5] and *HMS Birkenhead*[6] . It is not surprising, for example to find that the majority of wrecks designated as being of historical or archaeological importance in UK territorial waters are warships. The significance of these wrecks may arise because of a number of factors, including age, rarity and association with historical events or persons. Whilst historic wrecks are often thought to be mainly those of past centuries, wrecks of the 20th century are increasingly regarded as embodying historic or other values of a cultural nature worthy of protection.[7] This is particularly so for many World War I and II wrecks, whose significance is recognised by their designation and protection by domestic heritage legislation in a number of States.[8] The historic value of these wrecks arises for a number of reasons. In some cases, the wreck may represent a rare or even unique example of a particular type of vessel, such as Nazi Germany's only aircraft carrier, the *Graf Zeppelin*; in others the vessel may hold an iconic status for a particular nation, such as *HMS Hood* for the UK, *Bismarck* for Germany, *Yamato* for Japan, *HMAS Sydney* for Australia and of course the *USS Arizona* for the US, all casualties of World War II. Wrecks may hold historic value because of the specific events giving rise to their sinking, such as the Japanese midget submarines that were able to pierce the coastal defence of Sydney harbour; association with a famous historical figure such as

* Reader. Marine and Shipping Law Unit, TC Beirne School of Law, University of Queensland, Australia.
[1] The ship foundered in July 1545 in the Solent, near the Isle of Wight.
[2] The ship foundered on its maiden voyage in August 1628 in Stockholm harbour.
[3] The ship foundered in September 1588 off Donegal Ireland after the failed Spanish invasion of England.
[4] The ship foundered whilst under tow in December 1862 off Cape Hatteras, North Carolina.
[5] The submarine *Hunley* sank in February 1864 having successfully sunk the *USS Housatonic* in Charleston Harbour, South Carolina.
[6] The ship foundered in February 1852, while transporting troops off the coast of South Africa near Cape Town.
[7] A number of wreck sites of warships have considerable salvage value due to the cargo carried. This would apply to vessels of earlier centuries, particularly Spanish Galleons, as well as vessels of more recent origin, such as the *HMS Edinbrugh* , the *SS John Barry* and the Japanese submarine *I-52*.
[8] Just some examples are the Japanese World War II vessels sunk in Chuuk (Truk) lagoon, which are collectively protected as a national monument under Chuuk State law; the US, Australian, New Zealand and Japanese wrecks in Iron Bottom Sound off the island of Guadalcanal, which are protected by Solomon Islands law; and the World War I scuttled German fleet at Scapa Flow, which is protected under UK law.

PT-109, commanded by John F. Kennedy and *HMS Hampshire*, on which Lord Kitchener died, or association with particular historical events, such as the wreck of USS *Indianapolis* which had transported uranium and components for 'Little Boy', the atomic bomb dropped on Hiroshima. The very fact that many lives may have been lost with a vessel will of itself imbue a wreck with historic significance, as well as more general cultural significance as a maritime gravesite and memorial. Although it is mainly warships that acquire significance for reasons of this kind, merchant vessels sunk during both war and peace may well constitute gravesites deserving of respectful treatment and may sometimes also have other historic significance.[9]

While many of these wreck are of undoubted historic significance, requiring their preservation, often *in situ*, many also pose significant threats, or at least some hazard or obstacle. The two World Wars have left a legacy of potentially hazardous wrecks, including bunker or cargo oils, munitions, or other poisonous or noxious cargoes. During World War II, for example, more than 9,000 military, auxiliary and merchant marine vessels were sunk. In the Pacific region alone, an estimated 3,319 vessel were sunk, of which 2,710 were merchant ships including a large number of tankers or munitions ships.[10] Indeed, a 2005 survey considered that of the 8,569 wrecks world-wide that potentially pose an oil pollution threat, over 75 per cent date back to World War II.[11] As time passes, and the structure of the hull erodes and disintegrates, the threat may well become more serious. Such wrecks can therefore be regarded as environmental 'time-bombs'. The *USS Mississinewa*, for example, sank in Ulithi lagoon in the Federated States of Micronesia with over 3 million gallons of oil on board.[12] With the deterioration of the hull, oil leaks increasingly polluted the lagoon, necessitating a substantial salvage effort to remove the oil. Similarly, in 1994 Norwegian authorities removed the bulk of the oil remaining in the World War II German heavy cruiser *Blücher*, sunk in 1940, at a cost of $7.1 million. More recently, the German U-boat *U864*, which sank with all hands in 1945, has been deemed an environmental threat by Norwegian authorities in light of its cargo of 65 tonnes of mercury, which has begun to contaminate fish stocks in the vicinity. Whilst the historic value of the *USS Mississinewa* and *U864* may be debatable,[13] many other World War II wrecks that pose a pollution hazard are of unquestionable historic significance. The *USS Arizona* continues to leak approximately 1.8 – 8.5 litres of oil a day.[14] Similarly, *HMS Royal Oak*, both historically important and the UK's

[9] *RMS Titanic*, *RMS Lusitania*, *Wilhelm Gustloff* and *Goya* are all examples. The sinking of the *Wilhelm Gustloff* remains the worst maritime disaster in history with over 9,000 German refugees dying when she was torpedoed by a Russian submarine off Poland in 1945. Similarly, the *Goya* was also sunk in 1945 by a Russian submarine with over 6,000 refugees and wounded German troops on board, most of whom perished.

[10] C.R. Petersen, 'A proposed Annex to the Wreck Removal Convention Treaty to Address Environmental hazards of Sunken World War II Naval Vessels' (2007) Master of Environmental Policy and Management Capstone Project, University of Denver, 5, 13.

[11] J. Michel, T. Gilbert, J. Waldron, C.T. Blocksidge, D.S. Etkin and R. Urban, *Potentially Polluting Wrecks in Marine Waters*, An Issue Paper Prepared for the 2005 International Oil Spill Conference, 5.

[12] R. Monfils, T. Gilbert and S. Nawadra, "Sunken WWII shipwrecks of the Pacific and East Asia: The need for regional collaboration to address the potential marine pollution threat" (2006) 49 *Ocean and Coastal Management* 779.

[13] *The U864* may have a claim to some historic importance as it is the only submarine deliberately sunk in action by another submarine.

[14] See www.nps.gov/valr/faqs.htm.

largest maritime war grave, was until quite recently leaking up to 1.5 tonnes of oil per week, causing considerable damage to the local environment. Indeed, in 2000 this one wreck was responsible for 96 per cent of the total quantity of oil discharged into UK waters.[15]
Wrecks present an opportunity for rich fishing, given the proclivity of fish to utilise wrecks as artificial reefs, but also present a hazard for the fishing industry, since wrecks can obstruct, damage and destroy fishing gear and snag fishing nets even to the extent of sinking the fishing vessel.[16] Usually fishing is seen as a threat to the integrity of historic wreck sites. However, wrecks also pose a threat to fishing. *HMS Royal Oak*, for example, has represented a substantial threat to nearby salmon and oyster farms of great importance to the regional economy.

While most hazardous historic vessels are warships, merchant vessels may also be both historic and hazardous, not only owing to oil that might remain on board, but possibly munitions too. *RMS Lusitania*, for example, a wreck of considerable historical importance, also contains munitions, although the precise quantity and nature of these has been the subject of great controversy. Dangers posed by ageing munitions is exemplified by the *SS Richard Montgomery*, lying in the busy Thames Estuary, which is so unstable that little can be done to mitigate the threat other than the establishment of an exclusion zone around the wreck site.[17]

Historic wrecks have also proved to be navigational hazards. With the ever increasing draught of ships using the Dover Strait, the wreck of the World War I German U-boat *UB38* became a navigational hazard 90 years after its sinking, requiring its removal in 2008 to deeper waters. The operation needed to be undertaken with considerable care to avoid disturbing torpedoes and ammunition still on board, as well as the remains of the crew.

Historic wrecks may also be an obstacle to development. In 2003, for example, a 16th century merchant ship was discovered when the Port of London Authority undertook survey work in advance of dredging operations. Despite the fact that the wreck offered a wealth of new information on Tudor shipbuilding, it was removed because of the obstacle it posed.[18] A better outcome was achieved in relation to the discovery in 2004 of a well-preserved early 17th century wreck during a survey in advance of dredging operations to deepen the approach to Poole Harbour.[19] Fortunately the port authorities were able to adjust their dredging regime in a way that allowed the wreck to remain *in situ*.[20] These developments have threatened

[15] Whilst a multi-million dollar 'hot-tapping' salvage operation in 2001 removed considerable quantities of oil, up to 1,500 tonnes still remains, posing a continued pollution hazard.
[16] In 2010 the Marine Accident Investigation Branch (MAIB) of the UK Department for Transport reported that it was aware of 36 incidents since 2002 involving fishing vessels that had capsized or sunk after snagging their gear on material (natural or manmade) on the seabed.
[17] The exclusion zone was established under s. 2 of the Protection of Wrecks Act 1973. While some of the 7,000 tons of explosives the vessel was carrying were recovered at the time of her grounding in 1944, approximately 1,400 tons remain on the wreck and it represents a significant hazard.
[18] See www.wessexarch.co.uk/projects/marine/thameswreck/index.html.
[19] See www.bournemouth.ac.uk/caah/maritimearchaeology/projects/swash_channel_wreck.html.
[20] The wreck was subsequently designated an historic wreck under the Protection of Wrecks Act 1973 in December 2004.

wrecks further and further away from the coast. The route of the major Nord Stream gas pipeline currently under construction between Russia and Germany, for example, was obstructed by Swedish warships scuttled in 1715 in the bay of Greifswald in Germany.[21] In consultation with German cultural authorities, one of the scuttled warships was excavated in July 2009 to make way for the pipeline.[22] Similarly, when Norsk Hydro, the developers of the proposed gas pipeline from Ormen Lange gas field off the coast of Norway to the mainland, undertook a survey of the planned pipeline route, among fourteen shipwrecks discovered was a well-preserved 18th century merchant vessel. Norsk Hydro funded the excavation of artefacts from the site, but the hull itself will be damaged or destroyed by the construction of the pipeline.[23]

Dealing with wreck that are historically important, but which pose some threat or obstacle, puts into stark contrast the various interests in the wreck. This paper considers some of the problems associated with such wrecks. These include addressing the very definition of warship and considering its scope, primarily because, associate with such wrecks, is the application of the international principle of sovereign immunity. Consideration is also given to some conventional developments that touch on the issues of wrecks, including the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage (UCH Convention)[24] and the 2007 IMO Convention on the Removal of Wrecks (WRC).[25]

Definition of warship

The definition of a warship has been resolved in article 29 of United Nations Convention on the Law of the Sea, which reads;

> [f]or the purposes of this Convention, 'warships' means a ship belonging to the armed forces of a State bearing the external marks distinguishing such ships of its nationality, under the command of an officer duly commissioned by the government of the State and whose name appears in the appropriate service list or its equivalent, and manned by a crew which is under the regular armed forces discipline.

Whilst appropriate for modern vessels, it is not necessarily definitive in relation to those active in the two World Wars. The status of merchant vessels engaged in the war effort has recently come under judicial scrutiny. In *R. (on the application of Fogg and Ledgard) v. Secretary of State for Defence*[26], the United Kingdom Court of Appeal that the *SS Storaa*, an armed merchantman, which was sunk by a German E-boat torpedo in 1943 while in a

[21] "Shipwrecks and World War Two bomb threaten £6bn pipeline", *The Times*, 26 July 2008.
[22] Nord Stream Press Release, 15 July 2009.
[23] F. Søreinde and J.E. Jasinski, "Ormen Lange: Investigation and excavation of a shipwreck in 170m depth" at *ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1640113*.
[24] As at 29 September 2011 there were 40 States Party to the Convention.
[25] The Convention will enter into force twelve months following the date on which ten States have either signed it without reservation as to ratification, acceptance or approval or have deposited instruments of ratification, acceptance, approval or accession. As at 29 September 2011, 3 States had become party to the Convention.
[26] [2006] EWCA Civ 1270, [2006] 3 WLR 53.

military-escorted convoy, was in military service when it sank and therefore qualified for designation under the *Protection of Military Remains Act* 1986. The decision turned on the function of this Act to protect gravesites. The definition of warship in earlier times is even less clear. Certainly the division between private and State interests in vessels such as privateers in the 16th and 17th century is problematic, and more so for vessels such as Viking longboats. Such problems bedevil the application of the international law principle of sovereign immunity.

Sovereign Immunity

The absolute sovereign immunity of modern warships and other State vessels are without doubt, and governed by articles 95 and 96 of UNCLOS. The immunity of these vessels derives from the international principles of sovereignty and comity of nations. This immunity is extended to the salvage of such vessels. Article 14 of the 1910 Brussels Convention for the Unification of Certain Rules with Respect to Assistance and Salvage at Sea states that the convention "does not apply to ships of war or to Government ships appropriated exclusively to a public service". However, this was amended in 1967 to allow for the salvage of these vessels with the limitation that such a claim could only be brought before the courts of the flag State. Article 5 of the 1989 London Salvage Convention declares that;

> this Convention shall not apply to warships or other non-commercial vessels owned or operated by a State and entitled, at the time of salvage operations, to sovereign immunity under general principles of international law unless that State decides otherwise.

It is therefore necessary to determine whether in fact the vessel in question was subject to sovereign immunity at the time of its salvage. It has been argued that a "State can prohibit any physical interference with the property, even to the point of allowing its remains to lie on the bottom of the sea."[27] The clandestine nature of the salvage of a Soviet Golf-II class nuclear submarine by the *Glomar Explorer* in 1975 supports this contention.[28]State practise in this regard, however, is certainly equivocal, with historical maritime powers such Spain, Portugal, the Netherlands and United Kingdom failing to adopt any consistent policy.

The proposition that a State retains exclusive jurisdiction over its sunken State vessels, allowing it to refuse salvage services for the recovery of its warships and other State vessels that lie on the bottom of the sea, irrespective of how long they have laid there, is supported by admiralty law principles in the US. In *Sea Hunt, Inc v. Unidentified Shipwrecked Vessel or Vessels*[29] a US Court of Appeal held that a sovereign could refuse salvage services, and where they were undertaken against the wishes of the sovereign, no salvage award would be forthcoming. This decision is consistent with traditional salvage law that allows an owner to

[27] F.A. Eustis III, 'The Glomar Explorer Incident: Implications for the Law of Salvage' (1975) 16 *Virginia Journal of International Law* 177 at 184
[28] M.G. Collins, 'Salvage of Sunken Military Vessels' (1977) 8 *Journal of Maritime law and Commerce* 433.
[29] 221 F.3d 634 (4th Cir. 2000); 2000 AMC 2113.

refuse salvage services in circumstances where a reasonable shipowner would do so. A refusal of assistance, whether blanket or otherwise, is not completed, however, until the salvor, acting as a reasonable person, has determined or could determine, the ownership of the object of salvage. In the case of historic wrecks, which have been submerged for a considerable period of time, and therefore not in eminent danger or marine peril, it seems reasonable to expect potential salvors to at least make efforts to determine ownership of the vessel. This would naturally be difficult in cases where the wreck is of some antiquity and ownership difficult to determine. Where the identity of vessel is known, however, it would appear that an owner, whether a sovereign or private party, could therefore refuse salvage.

This application of the principle of sovereign immunity has most recently been applied to historic wreck in the US District Court for the Middle District of Florida. In September 2011, the court found that Spain was entitled to exercise sovereign immunity in respect of the *Nuestra Senora de las Mercedes y las Animas*, a Spanish frigate that sank in combat in 1804, carrying a substantial amount of solver on board.[30] Because the wreck was immune from arrest, the salvors, Odyssey Marine Exploration Inc, were ordered to return the recovered material to Spain.

Ownership and Abandonment

The recognition of the sovereign immunity of warships and 'other State vessels' is dependent upon the continued ownership of the vessel by the flag State. Ownership, however, may be extinguished through abandonment by the flag State. Determining when a State has abandoned a warship is, however, problematic, as there appears to be no conventional or customary international law governing the question, and State practice in this regard is not consistent.[31] Two theories have been proposed. The first requires the flag State to expressly abandon title, while the second provides that abandonment may be implied by the facts, including the passage of time. While there is, in the US for example, a clear modern preference for the application of the express theory of abandonment, past US practice has been equivocal.[32] For example, while the text and legislative history of the US *Abandoned Shipwreck Act* clearly evinces an intention to apply the express abandonment theory to US vessels, it does not do so for foreign vessels. This is also reflected in US admiralty court decisions that have found that State vessels of Spain and the United Kingdom found in US waters, had been impliedly abandoned. Similarly, with regard to US State vessels, little consistency can be found in US admiralty court decisions, with implied abandonment found in the case of both the *USS Texas* and *USS Massachusetts* [33] while an express abandonment

[30] *Odyssey Marine Exploration Inc v Unidentified shipwrecked vessel* No10-10375; DC Docket No. 8:07-vc-00614-SDM-MAP, 21 September 2011.

[31] Disputes concerning the ownership of sunken State owned vessels include; the *Juno* and *La Galga*, Spanish vessels sunk in US territorial waters; the *La Balle*, a French vessel sunk in US territorial waters; a World War II German U-boat sunk in 1944 off Singapore; the *Akerendam*, a VOC vessels and *U-76* in Norwegian waters; and the *Birkenhead*, a UK vessel sunk in South African territorial waters.

[32] For a detailed discussion see D. Bederman, 'Rethinking the Legal Status of Sunken Warships' (2000) 31 *Ocean Development and International Law* 97.

[33] *Baltimore, Crisfeld & Onancock, Inc. v. United States*, 140 F.2d 230 (4th Cir. 1944) and *State by Erwin v. Massachusetts Co.*, 95 So. 2d 902 (Fla. 1956), cert. Denied, 355 U.S. 881 (1957).

was required in the case of the *CSS Alabama*.[34]

The most recent decision in US jurisprudence has however, coincided with the development of an express theory of abandonment. In *Sea Hunt, Inc v. Unidentified Shipwrecked Vessel or Vessels*[35], the court was required to determine whether Spain had abandoned title to the wrecks of the *La Galga* and *Juno*. While many Spanish vessels have been the subject of litigation in the US, Spain had never made any claim of ownership in the past[36]. Spain's appearance in the litigation to claim ownership was pivotal in the determination of the appropriate test of abandonment. The Court of Appeal referred to the decision in *Columbus-America Discovery Group v Atlantic Mutual Ins. Co*.[37] in which it had been held that although abandonment could be inferred in the case of 'long lost' shipwrecks, such an inference would not be sustained where a previous owner came forward and asserted a proprietary interest. Although this case concerned the wreck of a private merchant vessel, the Court in the *Sea Hunt* case relied on this precedent to assert that the appearance of Spain in claiming ownership required the application of the express abandonment theory.

While the US has grappled with the problem of abandonment of warships, few other States have had cause to do so. In the limited cases that have arisen, little consistency can be ascertained[38]. Few cases have reached national courts, and in most cases, the issue has been resolved through bi-lateral agreements between the claimant flag State and the State in whose waters the wreck was found.[39] In some cases, the agreement does not necessary recognise the claim of ownership of the flag State at all, and the agreements simply proceed on the basis that the States will co-operate in the recovery of the vessel, and in some way share the proceeds or artefacts recovered.[40]

While there has therefore been some evidence that States require the application of an express abandonment theory, there is no clear indication that customary international law endorses this theory and certainly no conventional international law that does so.

[34] *United States v. Steinmetz*, 973 F.2d 212 (3d Cir. 1992).
[35] 221 F.3d 634 (4th Cir. 2000); 2000 AMC 2113.
[36] For US cases involving Spanish vessels off the coast of the US, see Bederman, above note 29, at 117
[37] 974 F.2d 450 (4th Cir. 1992).
[38] See for example *Simon v. Taylor and Others* [1975] 2 Lloyd's Rep. 338 (Singapore High Court holding that a German U-boat sunk during World War II had not been impliedly abandoned by Germany after twenty-eight years); *Nordsjø Dykker Co. v. Høvding Skipsopphugging*, 135 Norsk Retstidende 346 (Norwegian Sup. Ct. March 21, 1970) (holding that a German U-boat sunk off Norway had not been impliedly abandoned by Germany) and *Robinson v. Western Australian Museum*, (177) 138 C.L.R. 283 (holding that the Netherlands, as successor in title to the Dutch East India Company had not impliedly abandoned the wreck of the *Vergulde Draeck* off Western Australia).
[39] These include the wreck of the *H.M.S Birkenhead*, a United Kingdom vessel sunk in South African territorial waters; the *CSS Alabama*, a US vessel sunk in French territorial waters; the *H.M.S Spartan*, a UK vessel sunk in Italian territorial waters and the *Admiral Nakhimov*, a captured Russian vessel sunk in Japanese territorial waters.
[40] See, for example, Agreement Between the Netherlands and Australia Concerning Old Dutch Shipwrecks reprinted in Lyndel V. Prott, & Ieng Srong, *Background Materials on the Protection of the Underwater Cultural Heritage* 24-25 (UNESCO Publishing 1999).

Protection of archaeological, historical, and cultural important sunken warships

The 2001 UNESCO Convention of the Protection of the Underwater Cultural Heritage which came into force on 2 January 2009, is the international response to concerns that shipwrecks and other forms of underwater cultural heritage are under threat from unregulated salvage activities. The predominant concern has been that commercial operators have targeted historic wrecks in order to recover coins, bullion and other valuables and, in the process, have failed to protect the archaeological or historical value of the wreck. The Convention therefore introduces a set of archaeological standards, contained in Rules in the Annex to the Convention, which are to be applied to all activities directed at UCH. Three core archaeological principles underpin the Convention: the primacy of preservation in situ whenever possible; the prohibition of commercial exploitation, particularly sale of artefacts; and the promotion of responsible non-intrusive access.

The Convention defines UCH as all traces of human existence having a cultural, historical or archaeological character, which has been partially or totally under water, periodically or continuously for at least 100 years. It is axiomatic that remains of warships and other State vessels of the past may fall within the broader term 'underwater cultural heritage' and should therefore be recovered in an archaeologically sound manner. This, however, was the subject of intense debate and disagreement. The ultimate outcome was not entirely satisfactory to a number of States, and a number abstained from voting in favour of the convention.

The starting point for the compromise reached in the UCH convention was to a "State vessel" for the purposes of the convention. Article 1(8) provides that;

> State vessels and aircraft' means warships, and other vessels or aircraft that were owned or operated by a State and used, at the time of sinking, only for governmental non-commercial purposes, that are identifiable as such, and that meet the definition of underwater cultural heritage.

Importantly, the Convention then retains the application of the principle of sovereign immunity in relation to such wrecks, providing in article 2(8) that:

> Consistent with State practice and international law, including the United Nations Convention on the Law of the Sea, nothing in this Convention shall be interpreted as modifying the rules of international law and State practice pertaining to sovereign immunities, nor any State's rights with respect to its State vessels and aircraft.

Given that the question of the abandonment and sovereign immunity of sunken warships is uncertain, this general principle simply maintains the uncertainty status quo. That said, the Convention then proceeds to set out the rights and duties of States in relation to such vessels. This resulting regime reflects the compromise reached between flags States and coastal States. Rather than focussing on simply the rights of the flag State, it was agreed that a balance would be drawn between the right of the flag State and the coastal State. As such, the

determination of these rights was dependent on the maritime zone in which the State vessel lies.

Within the territorial waters of a coastal State, the jurisdiction of the coastal State remains unquestioned, and the coastal State is simply required to inform the flag State of the discovery of a State's vessel. The coastal State is clearly recognised as having exclusive jurisdiction in its territorial waters and that there is no question of requiring the coastal State to defer to the exclusive jurisdiction of the flag State with regard to State vessels. However, it is recognised that the best way to protect the State vessel would be through co-operation between the coastal State and the flag States. As such, the information passed to the flag State concerning the discovery of the State's vessel is undertaken "with a view to cooperating on the best methods of protecting State vessels and aircraft". While the exclusive jurisdiction of the coastal State is recognised, this article must be read with the general principles. As such, it does not purport to alter the flag State's existing rights in international law. Given that these are uncertain, as exemplified in the Sea Hunt litigation, this article would not necessarily resolve any issues regarding abandonment and sovereign immunity.

On the continental shelf and exclusive economic zone, it was clear that UNCLOS did not grant the coastal State rights or duties with respect to UCH[41]. It was recognised however, that the coastal State is best placed to provide surveillance and policing measures for UCH found in these zones, and should take the position of co-ordinating States in determining how the UCH should be protected. As the coastal State did not have exclusive sovereignty in these zones, the rights of the flag State were to be given greater regard than in the territorial waters of the coastal State. The resulting balance is that no activity directed at State vessels and aircraft shall be conducted without the agreement of the flag State and the collaboration of the Coordinating State. The coastal State is however, granted the power to undertake emergency measures without the flag State's consent in order to prevent immediate danger to underwater cultural heritage, including looting.

With regard to States vessels beyond the continental shelf or exclusive economic zone, the exclusive jurisdiction of the flag State is recognised. Article 12(7) declares that; "[n]o State shall undertake or authorise activities directed as State vessels and aircraft in the Area without the consent of the flag State".

It is clear that only State vessels that have sunk more than 100 years ago are included in the Convention, and that only those State vessels that can be identified as such are subject to the State vessel regime of the Convention. Those that cannot be clearly identified as State vessels will therefore be regarded as ordinary UCH to which the Convention applies. While this does not solve the problems associated with the determination of whether a shipwreck is indeed that of a State vessel, the shifting of the onus of proof onto a State to clearly be able to identify it as such ensures that all questionable shipwrecks are included in the normal regime.

[41] See P. Fletcher-Tomenius and C. Forrest, 'The Protection of the Underwater Cultural Heritage and the Challenge to UNCLOS' (2000) 5 *Art, Antiquity and Law* 125.

It will therefore only be in exceptional circumstances that a State will claim a vessel as being a State owned vessel and subject to a differentiated regime in the Convention. This has the advantage of ensuring that the Convention has the widest possible scope, while at the same time granting States a differential protection regime for State vessels that the State may wish to deal with differently.

A number of State owned vessels are warships that have sunk in the course of battle, with the loss of service personnel. The concern is that these vessels should either not be disturbed, or if so, should be given appropriate respect. Warships that have sunk within the last 100 years will not fall within the scope of UCH, and will therefore not fall within the scope of the convention. Any attempt to protect such a vessel in international waters will have to make use of bi-lateral or a further multi-lateral treaty. Nevertheless, a great number of wrecks of the First World War will soon fall within this protective regime.

There is no doubt than the greatest achievement with regard to the protection of archaeologically, historically or culturally important State vessels is their inclusion in the protection regime afforded by the Convention. The benchmark archaeological standards set out in the Rules of the Annex will therefore be applicable to these vessel if the appropriate States resolve to undertake an excavation. The requirement that agreement is obtained by the flag State for the excavation of vessels beyond the territorial waters may also be regarded as an important contribution to the development of an *in situ* preservation regime. This is particularly so in regard to UCH on the continental shelf where it is expected a great number of UCH will be discovered in the near future due to further advancements in diving and underwater technology.

International Law and Polluting wrecks

The majority of wrecks that pose a pollution hazard and the great majority that pose a navigation hazard are likely to be found in the territorial sea of a coastal State. While the flag State may well retain ownership of sunken warships and other State vessels, and arguably be subject to the principle of sovereign immunity in some respects, access to these sites located in the territorial sea ultimately falls under coastal State control.[42] As such, the special status of the wreck does not preclude the coastal State from intervening to remove a navigational obstruction or prevent damage to the marine environment, including the ability to order owners to have wrecks removed, or if removed by State authorities, to have the cost of such removal recovered from the shipowner. Such operations have occurred on a number of occasions, including the removal of the German U-boat *UB38* by UK authorities and the removal of oil from the German warship *Blücher* by Norwegian authorities.

While coastal State have the ability to regulate wrecks within their territorial sea, the extent to which a coastal State can regulate wrecks beyond this zone has long been uncertain. The

[42] J.A. Roach and R.W. Smith, *United States Responses to Excessive Maritime Claims*, 2nd edn (The Hague, 1996) 475.

Torrey Canyon disaster in 1967 revealed certain doubts with regard to the powers of States, under public international law to take measures against a non-flag vessel on the high seas which posed a pollution risk to the State, leading to the adoption of the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969 (Intervention Convention). The Intervention Convention, it has been argued, merely codified what was already an existing customary right of coastal State action.[43] Even if this is not the case, it has also been argued that the international community's apparent acceptance of Britain's intervention in the case of the *Torrey Canyon* resulted in the emergence of a new rule of customary international law, which was "clarified and crystallised" in the Intervention Convention.[44] That certain intervention powers exist as a matter of customary international law is assumed in other conventional regimes, including UNCLOS and the 1989 Salvage Convention.[45] While such a right may have existed, the *Torrey Canyon* disaster certainly raised issues as to the *extent* of this right and highlighted the need for clarification through conventional rules.

The Intervention Convention provides that coastal States "may take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequences". The Convention does not specify precisely what measures can be taken by the coastal State, essentially limiting such action only by the principle of proportionality of the response to the hazard and by a requirement to enter into consultation with other States affected by the maritime casualty, particularly with the flag State. Nor does the Convention specifically include wrecks within its scope, though the danger may very well emanate from a wreck as a maritime casualty, including from historic wreck.

The prevailing uncertainties as to the full scope of coastal States' intervention powers were not addressed when UNCLOS was negotiated and adopted. Whilst commonly regarded as a 'constitution for the oceans', UNCLOS failed to clarify the powers of wreck removal in the jurisdictional zones beyond the 12 nm territorial sea. However, while UNCLOS does not contain any provisions which directly address wrecks, it does contain a number of articles which address the protection of the marine environment in both the EEZ and territorial sea, and some provisions which address the safety of navigation in the territorial sea. Article 221 of UNCLOS provides:

> Nothing in this Part shall prejudice the right of States … to take and enforce measures beyond the territorial sea proportionate to the actual or threatened damage to protect their coastline or related interests, including fishing, from pollution or threat of pollution

[43] A.K. Tan, *Vessel-Source Marine Pollution* (Cambridge, 2006) 182.
[44] R.R. Churchill and A.V. Lowe, *The Law of the Sea*, 3rd edn (Manchester, 1999) 355.
[45] Both treaties provide that they do not prejudice the rights of States to take intervention measures in certain circumstances. See UNCLOS Art. 221 and Salvage Convention Art. 9.

> following upon a maritime casualty ... , which may reasonably be expected to result in major harmful consequences.

Although the definition of "maritime casualty" set out in paragraph (2) of Article 221 does not refer to wreck or wrecks, it would not appear to exclude wrecks either. Article 221 does not purport to introduce new rights but instead ensures that pre-existing rights pursuant to customary and conventional international law are maintained. Importantly, it adopts a lower threshold for coastal State intervention than the Intervention Convention by not requiring that there be "a grave and imminent danger" of pollution before a coastal State can intervene.

Whilst international law therefore allows for coastal State reaction to threats emanating from wrecks, the extent of this power was uncertain. In relation to contemporary wrecks, a number of States wished to see a regime that would require shipowners to remove wrecks that posed a hazard or pollution threat, and to require shipowners to carry insurance to cover the costs of such wreck removal. This situation prompted the Netherlands and Germany, along with the UK, to champion the cause of a wreck removal treaty.[46] The resulting convention allows the coastal State to regulate the removal of a wreck located in the exclusive economic zone (EEZ) that poses a hazard to the coastal State, and is able to require the shipowner to remove the wreck or hazard at its own expense and to provide financial security for the liability for such a removal if undertaken by the coastal State. The WRC reflects similar liability and compensation regimes such as the Convention on the Carriage of Hazardous and Noxious Substances[47] and the Convention on Civil Liability for Oil Pollution Damage.

The intention of the drafters of the WRC was to deal with the problem of recent casualties, and the nature of many of the obligations imposed on shipowners cannot be applied to wrecks that sank before the Convention came into force. Importantly the convention does not apply to warships or other ships on public service, unless the flag State decides otherwise. Nevertheless, it may be argued that the rights and duties of the coastal State to deal with hazardous wrecks may be applicable to historic as well as contemporary wrecks, and might extend to warships.[48] This includes not only the right of the coastal State to intervene when an historic wreck in the EEZ (or territorial sea) poses a hazard, but also the duties imposed by the WRC upon the coastal State, such as to take all practical steps to warn mariners and other States of the nature and location of the hazard, and to mark the wreck.

Resolving the conflict

The subject of historic wrecks is usually treated as entirely distinct and separate from wreck removal.[49] Nonetheless a great many historic wrecks are potentially hazardous given their

[46] The Netherlands and Germany, in particular, have had considerable difficulties with wrecks in their offshore waters posing a navigation or pollution hazard. IMO LEG 75/6/1 ANNEX, 14 February 1997, 3.
[47] International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996, as amended, Art. 3(b).
[48] See S. Dromgoole and C. Forrest, 'The Nairobi Wreck Removal Convention 2007 and hazardous historic shipwrecks' (2011) 1 *Lloyds Maritime and Commercial Law Quarterly* 92.
[49] For example, according to Shaw, "[t]his is a separate subject since such wrecks rarely interfere with

deteriorating state and the possibility of remaining bunker fuel, munitions and dangerous cargoes still being aboard. This gives rise to difficulty in reconciling the historic value of these wrecks with the hazard they may pose.

The most obvious conflict that might arise is between the archaeological principle of *in situ* preservation and the WRC imperative to 'remove' the hazard, which may require removal or even destruction of the wreck itself. Merely because an historic wreck poses an environmental hazard does not detract from its archaeological and historical value. There is also still a duty pursuant to the UNCLOS and the UCH Convention to protect that value as far as possible, notwithstanding the hazard posed by the wreck. Removal, therefore, ought to apply to the hazard emanating from the wreck, and not necessarily the wreck itself. The WRC, for example, defines 'removal' as "any form of prevention, mitigation or elimination of the hazard created by a wreck." Removal encompasses anything from moving the wreck to another location, as in the case of *UB38*, or its full excavation and recovery, such as in the case of the Nord Stream pipeline wreck, to destruction, as appears to be the fate of the hull of the Ormen Lange wreck. Usually, however, it has meant removal of the hazard by removing the hazardous cargo or bunkers, as was the case for *HMS Royal Oak* and *USS Mississenewa*, but leaving the hull *in situ*. In the case of *HMS Royal Oak*, a particular sensitivity was the wreck's status as a war grave, resulting in some difficulty in addressing the environmental hazard while at the same time "respecting the wishes of the survivors' groups to disturb the wreck as little as possible." [50] The options available depend on a variety of factors. That the wreck may be of historic value, and possibly a gravesite, merely complicates the matter. So too does the fact that many wrecks that have been on the seabed for some decades have become part of the marine environment. While most contemporary wrecks are regarded as a form of pollution of the marine environment, historic wrecks may be an integral component of the marine environment, providing habitat for various species of fauna and flora, and important breeding grounds for fish. Whilst a pollution (or navigation) hazard, the "removal" of the wreck will need to take account of the positive as well as potential negative effects of the wreck upon the environment.

Conclusion

The greatest achievement with regard to the protection of archaeologically, historically or culturally important State vessels is their inclusion in the protection regime afforded by the UCH Convention. Failure to have included these vessels, or alternatively not to have defined these vessels narrowly, would have resulted in a substantially large proportion of archaeologically and historically important shipwrecks being excluded from the protective regime, greatly undermining its effectiveness and failing to provide a comprehensive international regime. The requirement that agreement is obtained by the flag State for the excavation of vessels beyond the territorial waters may also be regarded as an important contribution to the development of an *in situ* preservation regime. This is particularly so in

navigation nor create a risk of damage to the environment": Shaw, *supra*, fn. 1, 192.

[50] I. Oxley, 'Scapa Flow and the protection and management of Scotland's historic military shipwrecks' (2002) 76 *Antiquity*, 862, 865.

regard to UCH on the continental shelf where it is expected a great number of UCH will be discovered in the near future due to further advancements in diving and underwater technology.

Within this regime, however, a great number of uncertainties continue to prevail. The Convention fails to resolve the problem of sovereign immunity to sunken warships and precondition of ownership, and abandonment. In the context of historic wreck that pose a pollution or other threat, these uncertainties are exacerbated in trying to resolve a conflict. Much still needs to be done to unravel these complexities and provide a truly international regime for sunken historic warships, and especially those that pose a hazard.