

## A CORVETTE BY ANY OTHER NAME

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What is a corvette? Admiral W H Smyth in his *Sailor's Word Book* of 1867, helpfully defines 'corvette' as: "Flush-decked ships, equipped with one tier of guns: fine vessels for warm climates, from admitting a free circulation of air." The *Oxford English Dictionary* agrees, noting the term's use since 1636, adding "now, a small naval escort vessel."

The term 'corvette' was quite widely used during the 19<sup>th</sup> century. It described a ship which roughly fitted between a sloop and a frigate. Royal Navy ships on the Australia Station were commonly corvettes, like the 60 m long screw corvette *HMS Pearl*, which was Flagship of the Australia Station from 1873 to 1875.



*The corvette HMS Pearl was Flagship of the Australia Station from 1873 to 1875*

One well-known Royal Navy Corvette to visit Australian waters in the 19<sup>th</sup> Century was *HMS Bacchante*. Completed in 1876, *Bacchante* was a 4,000 ton 85 m long screw-propelled ironclad which became famous for being the ship in which two grandsons of Queen Victoria both served as a midshipman. Princes George and Albert spent three years in the ship between 1879 and 1882 patrolling the British Empire. During her second visit to Australia she briefly went missing off Western Australia after a severe storm, finally turning up at Albany with a damaged rudder.

HMS *Calliope*, survivor of the 1889 storm at Apia in Samoa, was another famous “corvette”, or third class cruiser as many became known.

The classification “corvette” went out of use around the turn of the century until it was revived during the Second World War.

For many people of a certain age, the term “corvette” may today conjure up an image of HMS *Compass Rose* battling the Cruel Sea. In his novel published in 1951, Nicholas Monsarrat graphically describes life on the North Atlantic during World War II in a small warship, designed and built in a hurry to meet an urgent need, a Flower-class corvette.

Based on World War I experience, there was a perceived need for anti-submarine ships capable of coastal escort and minesweeping. The conversion of whale-catchers was considered, but among the alternatives was a proposed new design based on the whale-catcher *Southern Pride*, built by Smith’s Dock. This design became the Flower-class patrol vessel – whaler type, which was later classified as corvette. Many of these simple ships, which were built to commercial standards, were completed — 145 in the United Kingdom and ninety three in Canada. Some of these ships also served in the US Navy.



*Flower-class corvettes like HMCS Kitchener could be very uncomfortable at sea (USN)*

These small ships, originally intended as coastal escorts, were soon fighting the Battle of the Atlantic in seas for which they were really too short. Habitability was dreadful and the crews suffered greatly from fatigue and seasickness. The later twin-screw corvette design, which became the River-class frigate, was much more suited to North Atlantic conditions and the developments of this design, the Loch and Bay classes, designed for prefabricated construction, were even better and more effective anti-submarine ships. A larger corvette based on the Flower class but more suited to ocean service, was proposed by Smith’s Dock in 1942. Initially turned down by the Admiralty, a modified design was

approved in May 1943. These 76 m long ships of the Castle class were a vast improvement on the Flower class and thirty-nine ships were completed.

The influence of size on the effectiveness of warships is often overlooked in efforts to have more hulls for the available money and resources. The Flower-class corvettes, for example, were quite safe at sea but pitch and heave motions were too high for their crews to work satisfactorily. Modern seakeeping theory has been used to estimate the percentage of lost operational time due to motions in bad weather. For the Flower-class corvette the figure is 28%, for the Castle class 21%, for the River and Loch class frigates the figure is 15%. For comparison, the lost time for the post-war Type 12 design is 9% [Brown, D K (1996)]. These comparisons are as valid today as they were at the end of World War II.

The United States built a very large number of coastal and ocean escort ships during the Second World War — nearly one thousand ships of the patrol craft, patrol frigate (based on the RN River class) and destroyer escort types. The first was the patrol craft (PC), of which 286 were completed. Whilst intended for a similar coastal role, these ships were quite different in design concept from the British corvettes. Smaller in length and beam (52.7 m by 7 m) they also proved to be of limited value for ocean work and were most useful for coastal patrol and escort work. The later, slightly larger PCE was a much more efficient vessel despite a tendency to roll.



*PC546 was typical of the 286 53-metre patrol craft built in the United States during World War II (USN)*

In Australia today we are very conscious of the need to protect our maritime approaches against unwanted incursion and illegal activities. This need is not new. In the late 1930s two vessels were built for the Commonwealth to protect our northern approaches. One was a 45 foot high-speed motor launch, *Larrakia*, which, armed with a Vickers machine gun, was intended to serve as an air-sea rescue launch as well as a patrol vessel to combat illegal fishing. The other was the patrol vessel *Vigilant*. *Vigilant* was designed for the Department of Trade and Customs by the well-known naval architect Cecil Boden and built at Cockatoo Island in Sydney. She has the distinction of having been the first Australian-built ship to use aluminium as a structural material — it was used for all

superstructure forward of the funnel. *Vigilant* was 31 m long, had a maximum speed of 14.5 knots and was armed with a 3-pounder gun. She was roughly the same size as the Attack-class patrol boats of the 1960s. During the coming war she was commissioned in the RAN as HMAS *Vigilant*, then *Sleuth* and finally *Hawk* and was based in Darwin.



*The patrol vessel Vigilant during trials on Sydney Harbour in 1938*

As war approached, there was a pressing need for patrol vessels with minesweeping and anti-submarine capability for the escort of shipping in Australian waters. Initially it was thought that the need could be met by requisitioned commercial vessels like trawlers but there were unlikely to be enough. A small simple warship was designed in Australia shortly before the outbreak of war, designated a Local Defence Vessel (LDV). The preliminary design was completed in February 1939 for a ship of about 680 tons and a speed of 15.5 knots. Recognised at the time as being a bit small, particularly for anti-submarine work, the design was however seen as suitable for local construction with much of the necessary material available in Australia. Approval was given for the construction of the first ten ships in September 1939.

Cockatoo Dockyard in Sydney was designated as the lead yard for the Bathurst class LDVs and ultimately sixty of these useful little ships were built for the Royal Navy, the Royal Australian Navy and the Royal Indian Navy. All except the Indian ships were manned by the RAN and commissioned as Australian ships. The program was also instrumental in reviving the Australian shipbuilding industry.



Interestingly, the classification of the ships as Local Defence Vessels was said to cause confusion in Britain and the ships were reclassified in 1940 as Australian Minesweepers (AMS) Bathurst Class. Unofficially, however, they were called 'corvettes', although never classified as such.

The Bathurst-class ships were rather small. At 56.4 m in length they were smaller than the Flower-class corvettes and notoriously uncomfortable at sea. Like most of the war-built corvettes and small minesweepers most had very short operational lives. Some were kept in commission after the war as training ships, some were transferred to depleted allied navies but most were ultimately scrapped. A couple survive today to remind us of these small hard-worked ships.



*The Bathurst-class minesweeper HMAS Castlemaine is now a museum ship in Melbourne*

In the years following the war, major western navies concentrated on the design of new or converted anti-submarine ships capable of matching the high-speed submarine which had rendered most of the frigates and destroyer escorts built during the war obsolete. The perceived need was for ocean escorts built to designs suitable for a re-run of the Battle of the Atlantic. Some outstanding designs were developed, like the British first-rate anti-submarine frigate (FSA), the Type 12 frigate and, somewhat later, the US Patrol Frigate, which was reclassified as guided-missile frigate (FFG). Over 140 ships of both designs were ultimately built.

The new ships were expensive to build, and Britain also developed a small dedicated anti-submarine frigate intended as a convoy escort which could be built in large numbers. This was the second-rate anti-submarine frigate (FSB), or Type 14 Utility Frigate. Whilst a good anti-submarine vessel, at 1,320 tons full-load displacement with a length of 95 m, they proved once more to be rather small for ocean work. Habitability was poor and the ships were structurally weak. In later years they were employed in fisheries protection duties for which they were not suited earning the unofficial classification of Type 14 Futility Frigates.

Whilst the major navies, and those like Australia's which was part of the western allegiance, concentrated on developing forces with strong destroyer and frigate capabilities, other nations sought smaller, less expensive, warships. That demand was (and still is) largely met by commercial shipbuilders with private venture designs for 'light destroyers' or corvettes. It was to be a while before navies like the RN or RAN recognised the need for rugged, smaller warships which could be built in numbers to meet a less complex threat.

For Britain, the drivers for change were the Cod Wars, a series of confrontations with Iceland over fishing rights in the North Atlantic between 1958 and 1976. The clashes resulting from British attempts to protect trawlers fishing in areas claimed as exclusive territory by Iceland were expensive for the Royal Navy which deployed frigates on the task. Despite substantially outnumbering the Icelandic patrol vessels, some serious clashes ensued which demonstrated how unsuited Type 12 and Type 14 frigates were for close quarters encounters with small robust patrol vessels.

With lessons of the Cod wars and the adoption of 200 mile exclusive economic zones, the Royal Navy acquired a number of Island-class patrol vessels to form a Fishery Protection Squadron to patrol Atlantic fishing grounds and the oil and gas fields of the North Sea. These single-screw, 59 m long, 1,280 ton vessels had a speed of 16 knots and a complement of 35. Cheap and simple, they served the navy well for three decades and most survive today, mainly in the navy of Bangladesh.

The Island-class ships were very similar to the Flower-class corvettes and suffered from similar vices. In 1976, the RN began the design of a class of offshore patrol vessels to succeed the Island class ships. Driving factors in the design were improved seakeeping, a bit more speed, and the desire to be able to land a large helicopter like the Sea King for rescue purposes. Provision of a hangar to enable the ship to embark an organic Lynx helicopter was considered but rejected because the landing deck would then be too small for the larger aircraft and the Lynx would, in any case, likely cost more than the ship!

A length of 80 m was initially selected, but later studies suggested that 75 m would be sufficient to limit the amplitude and frequency of the ship's motions to an acceptable level outside the range most likely to cause seasickness. The bridge and accommodation were also located as close to amidships as possible.

Originally six ships were planned but only two were built — *Leeds Castle* and *Dumbarton Castle*. They were built as far as possible to commercial standards. At 75 m long with a beam of 11.5 m and draught of 3.4 m they were almost exactly the same size as the Castle-class corvettes of World War II. They were twin screw ships powered by diesels for a speed of about 20 knots and a remarkably long range of 10,000 n miles at 12 knots. They became very effective Falkland Islands guard ships and survive today as corvettes in the navy of Bangladesh.

The Island-class offshore patrol vessels were replaced early this century by three River-class OPVs which were leased from Vosper Thornycroft, their designer and builder, although subsequently purchased outright. They are 79.5 m long twin-screw ships with a speed of 20 knots and a range of 5,500 n miles. Their complement is 30 persons but, like most modern OPVs, they have additional accommodation for embarked forces or other personnel. A fourth ship was chartered from VT in 2005 to replace the two Castle-class ships in the South Atlantic. HMS *Clyde* has a slightly longer hull to accommodate a flight deck capable of handling a Merlin helicopter.

In 2013 the UK Government signed an agreement with BAE Systems to design and build three new OPVs to replace the earlier ships. These ships are intended to be capable of counter-terrorism, counter-piracy and anti-smuggling operations worldwide. They are fundamentally different from the earlier River-class. They are 90.5 m long, have a large flight deck, a top speed of 25 knots and displace around 2,000 tons. HM Ships *Forth*, *Medway* and *Trent* will be joined in due course by two more, *Tamar* and *Spey*. Whilst these ships were planned to replace the earlier River-class OPVs, it is now intended to keep them in service to meet fishery protection demands post-Brexit.

These BAE Systems-designed ships have near sisters serving in the Brazilian and Thai navies. The first Thai ship visited Sydney for the International Fleet Review in 2013 and another one was recently completed in Thailand. They are very capable small warships.



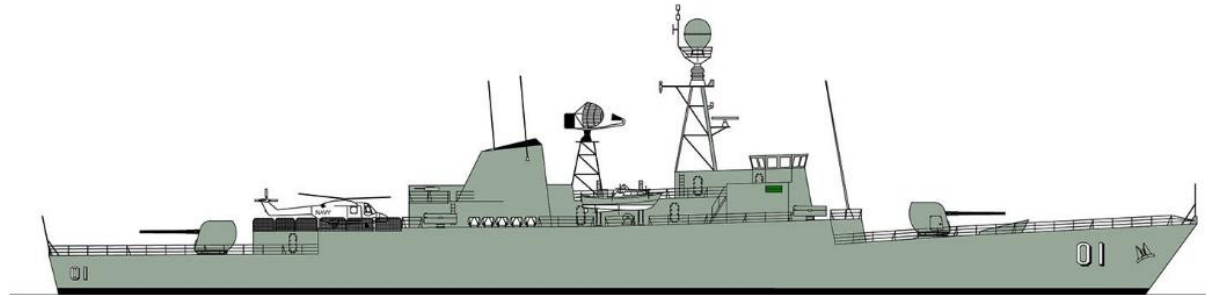
*The Thai Navy's offshore patrol vessel HTMS Krabi in Sydney Harbour during the 2013 Fleet Review*

The need for a smaller, flexible warship was brought home to the Royal Australian Navy during the Malaysia–Indonesia confrontation in the early 1960s. Australia committed destroyers, frigates and the recently-purchased Ton-class minesweepers to the Far East Strategic Reserve which became engaged in anti-insurgency patrols. These patrols were demanding and tedious with HMAS *Teal*, for example, spending only 46 of 245 days in harbour during her 1964–65 deployment.

The Ton-class ships were not designed for the type of work thrust upon them and they were expensive to maintain. This experience resulted in the re-introduction of small patrol vessels to the RAN, the Attack class, and plans for the development of an Australian light destroyer (DDL) which could be built some numbers and in variants for different roles. The DDL was initially planned to be a fast, simply armed ship smaller than the normal destroyer, at around 1,500 tons displacement, to back up patrol craft in anti-infiltration and patrol duties. Twenty ships were proposed.

During 1967 and 1968 the size of the ship grew and the DDL was seen as a replacement for the existing destroyers rather than an addition to the naval force. An embarked helicopter was also seen as being desirable. By the time the design was revealed to the intended builders, Cockatoo Dockyard and HMA Naval Dockyard Williamstown, in 1968, the ship had grown to around 2,100 tons displacement with six ships to be built, three in each yard. Discussions were held with the RN to

explore the possibility of joint development of the design but there were too few common requirements and the RAN proceeded independently. By the time the DDL project was cancelled in 1973, the ship had grown into a highly-capable general-purpose ship of 4,200 tons displacement with a length of 128.8 m, fitted with a 5-inch gun, the US Tartar (later Standard) missile and two helicopters. The DDL had become anything but a light destroyer, or corvette as it would possibly have been classified today.



*The proposed RAN Light Destroyer (DDL) as it appeared in 1968 (J Jeremy)*

Throughout the world, the small affordable warship presented market opportunities to well-established naval shipbuilders. Some very capable ships were built during the 1960s and 1970s, the Vosper Thornycroft Mk 5 frigate is a good example and very similar to the light destroyer as originally conceived for the RAN. Built for pre-revolutionary Iran, the ships had a displacement of 1,372 tons and a length of 94.5 m. With CODOG propulsion they could achieve a speed well over 30 knots.

Another private-venture design of the early 1970s was the Vickers Vedette. When this ship was conceived, in 1968, the rising cost of warships was demanding a new approach — to design smaller yet capable ships which were also adaptable to different navy's needs. The target displacement was about 1,000 tons. It was also important that the ship have a genuine ocean-going capability. The design as completed was for a small warship with a displacement of around 1,275 tons full load, length of 77 m, beam 10 m and draught up to 3.5 m. The ship could be propelled by diesels only for a maximum speed of 26 knots or with CODOG propulsion (two diesels and one gas turbine) for a maximum speed of 33 knots. The range was up to 6,000 n miles and the complement a maximum of 81.

Seakeeping ability was very important, and the Vedette's performance at sea was comparable to a Type12/Leander-class hull.

To keep the cost down, the design was based as far as possible on commercial standards. The hull structure was built of commercial grade steel, mostly transversely framed, and the superstructure was to be aluminium alloy. Overall, the life-cycle cost of a Vedette was estimated to be 35% of a Leander-class frigate.

In the early 1970s the Vedette was offered to Indonesia by a consortium comprising Vickers UK, Vickers Cockatoo Dockyard Pty Ltd in Sydney, and Brooke Marine in England. The ships were to be built by Brooke Marine and Vickers in the UK, with support from Australia, where construction proved to be too expensive. The competition was Vosper Thornycroft and a Dutch yard. Unfortunately support to the British bids from the UK Government was less imaginative than that of the Netherlands Government, and the Dutch yard won the contract.



When the DDL was cancelled, the RAN conducted a review of all available options for alternative designs, although it was clear that the main contenders capable of meeting the RAN's requirements were either a heavily-modified British Type 42 destroyer or the US patrol frigate. Nevertheless, Vickers offered the Vedette to the RAN noting how similar it was to the original concept of the DDL. The Vedette designs as developed in the UK had little commonality with existing or planned Australian weapons and equipment, so two new versions of the Vedette were designed in Australia, one without a helicopter but with the US 5-inch Mk 45 gun and US electronics, the other with an organic helicopter which took advantage of a novel hangar design.

At that time, there were divided opinions about the practicality of operating helicopters from ships of that size. Experience has shown that those concerns were unfounded.

Of course, the RAN chose the US patrol frigate which was very close in capability to the cancelled DDL and experience has shown that it was a wise choice. The Vedette faded into history after the nationalisation of the British shipbuilding industry on 1 July 1977. The design is interesting, however, when compared to the development of OPV and corvette designs in the following four decades.

Meanwhile, the RAN had built 20 Attack-class patrol boats which were unsupported by the large patrol combatant originally conceived. Whilst the Attack-class patrol boats, designed in Australia, were fine vessels, they were asked to do much more than they were originally designed for. In the mid-1970s the RAN set out to acquire a larger and more capable patrol vessel to replace them. Two companies were invited to carry out a project definition study — Brooke Marine of the UK with their 42 m patrol boat and Lurssen of Germany with their 45 m FPB 45 design. In 1978 the Brooke Marine design was selected and the lead ship, HMAS *Fremantle*, was built in Lowestoft and completed in 1980. The remaining 14 were built by NQEA in Cairns.



*The Fremantle-class patrol boat HMAS Townsville (RAN)*

The Fremantle-class patrol boats had steel hulls and aluminium superstructures, were 42 m long, displaced 250 tons and were powered by diesels for a maximum speed of 24 knots and range 2,360 n miles at 12 knots. The complement was 24.

Whilst HMAS *Fremantle* and her sister ships were a considerable improvement on the Attack class, they were still small ships for their wide-ranging role of fisheries protection, immigration, customs and drug law-enforcement operations. Plans to replace the ships were being developed in the mid-1990s when a Malaysian requirement for a patrol vessel of similar capability arose. The Australian Government agreed to support a joint acquisition with Malaysia and to provide \$12 million for initial design work for Transfield Shipbuilding (Williamstown) which was among the shipbuilders in discussions with Malaysia. A common design was subsequently agreed for an 80 m long, 1,250 ton vessel which had helicopter capability. Whilst there were suggestions that Australia would spend too much on ships which were bigger than needed if the project went ahead, the Government continued to support the Joint Patrol Vessel right up to the Malaysian decision in October 1997 to select an 1,850 ton ship offered by Blohm + Voss based on their MEKO 100 design.

Australia had nearly had a true Offshore Patrol Vessel. The design by Transfield (which became Tenix in 1997) had a length of 81.5 m, beam of 12.05 m and displacement 1,395 tons. Built entirely of steel to commercial standards, the ship was to be powered by diesels with twin screws for a maximum speed of 24 knots and a range of 3,500 n miles. Slow speed loitering was to be enabled by electric motors connected to each gear box. The complement was 84. Overall it was a fine small warship and remarkably similar to the Vickers Vedette which had been designed 20 years earlier.

Tenix subsequently built two similar ships for the Royal New Zealand Navy at Williamstown in Victoria as part of Project Protector, the RNZN's fleet renewal program in the early years of this century. HMNZ Ships *Otago* and *Wellington* were built to a design by Vard Marine, which is now part of the Fincantieri group. Ordered in July 2004, delivery of the two ships was delayed by a dispute over excess weight, finally settled in 2009. Both ships were accepted in 2010 from BAE Systems which had acquired Tenix in 2008.

*Otago* and *Wellington* are 85 m long with a beam of 14 m and displace 1,400 tons. Twin screws are driven by diesels for a speed of 22 knots and a range of 6,000 n miles. The complement is 35, or 45 with an embarked helicopter. There is also accommodation for 30 additional personnel.

Following the collapse of the joint project with Malaysia, a new project was begun in 1999 to replace the Fremantle-class vessels. After a competitive selection process, the bid by Austal and Defence Maritime Services for twelve vessels based on an enlarged version of Austal's Bay-class patrol boat was accepted in December 2003. The designs offered by industry were based on a performance specification leaving the tenderers to propose the number of vessels to meet the Commonwealth's requirements. Support and maintenance for the ships was to be provided for fifteen years after completion. Two additional vessels were ordered in 2005. The first ship, HMAS *Armidale*, was completed in June 2005 and the last, HMAS *Glenelg*, was completed in October 2007.

The Armidale-class patrol boats have an overall length of 56.8 m and a beam of 9.7 m — coincidentally almost exactly the overall dimensions of the Bathurst-class minesweepers of World War II. The Armidales are, however, entirely constructed of aluminium and displace only 300 tons. They are propelled by two diesel engines for a maximum speed of 25 knots and a range of 3,000 n miles. The complement is 29 but there is also austere accommodation for additional persons. Overall they have improved seakeeping capability over the Fremantle class, naturally, being larger and are designed to survive conditions up to sea state 9.

One of the class, *Bundaberg*, was lost by fire during refit. The boats have been worked hard and have been deployed as far away as the Philippines on counter-terrorism patrols. Maintenance of the vessels has proved challenging and there have been structural problems arising from fatigue. The class are being strengthened during major refits.

The 2009 White Paper proposed replacing the Armidale-class patrol boats and the mine warfare and hydrographic vessels with a single multi-role class of offshore combatant vessels of about 2,000 t displacement. The ships would use modular unmanned underwater systems for both mine countermeasures and hydrographic tasks. These systems were to be containerised and portable modules capable of being used in any port or loaded onto any of the offshore combatant vessels. The ships were to be able to undertake offshore and littoral warfighting roles, border protection tasks, long-range counter-terrorism and counter-piracy operations, support to Special Forces, and missions in support of security and stability in the immediate region. Embarked helicopters or UAVs were also to be considered.

By the time the 2013 Defence White paper was released, the modular multi-role offshore combatant had become a long-term objective and the Armidale class were to be replaced by a vessel of proven design as an interim measure.

Meanwhile, Austal has continued to develop their patrol vessel designs, providing the (now) Australian Border Force with eight Cape-class patrol boats, slightly larger than the Armidale-class. To supplement the Armidale-class patrol boats while waiting for their future replacement, the RAN has chartered two additional Cape-class patrol boats from the National Australia Bank. *Cape Fourcroy* and *Cape Inscription* were initially chartered for three years, but this has since been extended to five years. The ships are operated by the RAN but designated Australian Defence Vessels (ADV). Austal has also been successful with an export order for two ships for Trinidad and Tobago for delivery towards the end of 2020.



*The Cape-class patrol boat ADV Cape Fourcroy (RAN)*

Austal participated in the competition for Australia's new Offshore Patrol Vessel in association with the German shipbuilder Fassmer. The others in the competition were Damen of the Netherlands and Lürssen of Germany.

On 24 November 2017 the Government announced that the Lürssen design had been selected. The selected design, based on the Lürssen OPV80, is very similar to the Darussalam-class OPV of the Royal Brunei Navy, one of which visited Sydney for the International Fleet Review in 2013.



*Australia's new Arafura-class offshore patrol vessels will be very similar to Darussalam-class OPV of the Royal Brunei Navy, one of which, Darulaman, visited Sydney for the International Fleet Review in 2013 (RAN)*

The new Australian ships will have a length of 80 m, a beam of 13 m and draught of 4 m. With a displacement of 1,840 t they will be propelled by diesel engines driving two shafts for a maximum speed of about 20 knots and a range of 4,000 n miles. The complement will be 40, although accommodation will be provided for up to 60 persons. They will be armed with a 40 mm gun and two .50 calibre machine guns and will have an Australian-developed Saab tactical combat management system with a Saab electro-optical fire control director.

The ships will have three boats — two side-launched 8.5 m sea boats and one 10.5 m stern-launched-and-recovered sea boat. They will also have a helicopter deck, but no hangar. Whilst it may be possible to deploy a manned aircraft for short periods, perhaps a maximum of three days, it is planned that the ships will in due course support a maritime unmanned tactical aerial system, perhaps like the US MQ-8B Fire Scout unmanned aerial vehicle or the US Navy's unique vertical take-off and landing UAV currently under development.

True small warships, the roles of the RAN's OPVs will include maritime border patrol, maritime constabulary duties including interdiction, fisheries patrol, humanitarian and disaster relief, mine hunting and hydrographic survey. Given that only twelve vessels are currently planned, to replace the Armidale-class patrol boats, they are likely to be very busy ships indeed. Twenty four ships would seem to be a more appropriate number. Shortly before the last election the Prime Minister announced that three mine-hunting and/or survey vessels would be built in Western Australia. Whether they turn out to be additional OPVs remains to be seen.

The new ships will be mainly built in Western Australia by Lürssen Australia in partnership with Civmec. However, in order to partly fill the gap between the end of the Hobart-class guided missile destroyer program and the start of construction of the Hunter-class frigates, the first two OPVs are being built in Adelaide by ASC Shipbuilding, now a subsidiary company of BAE Systems Australia.

Construction of the ships began in November 2018 and a ceremonial keel-laying of the first ship, the future HMAS *Arafura*, was held in Adelaide on 10 May 2019. A keel-laying ceremony for the second ship, the future HMAS *Eyre*, was held in Adelaide on 9 April 2020. Construction of the third ship, the future HMAS *Pilbara*, began in Western Australia in March 2020.





*The keel-laying ceremony for the second of the RAN's new OPVs, the future HMAS Eyre, was held on 9 April 2020 (RAN)*

When completed, the RAN will have in service a type of small warship which is becoming very common throughout the navies of the world. Generally ranging in size between 60 and 100 m in length, these ships are usually classed as offshore patrol vessels or corvettes.

With the ever-escalating cost of modern frigates and destroyers, we are likely to see many of these small warships take their place in the navies of the world to undertake duties like those planned for the RAN ships. Whilst often described as offshore patrol vessels, the classification of corvette is becoming more common. Surely, it would be reasonable to describe our Arafura-class ships as modern corvettes, worthy successors to the small ships which proved so valuable three quarters of a century ago.

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*An edited version of this paper was published in The Navy, Vol. 82 No. 1, January–March 2020.*