

ROYAL AUSTRALIAN NAVY

# SEA POWER

## SOUNDINGS



Issue 38, 2021

## **The Fiji Navy and UNCLOS : The challenge of climate change**

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### Introduction

The Republic of Fiji Navy (RFN) was established as the Royal Fiji Military Forces Naval Division on 25 July 1975 to protect the maritime zones of the recently independent Fiji, and soon after the United Nations convened the third conference on the law of the sea in 1973 which would culminate with the adoption of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982. The Government of Fiji had recognised that maritime zones were a source of wealth and power and the primary roles of the naval division, with an initial fleet of three former US Navy minesweepers, were dedicated to upholding the law of the sea. The RFN took on a myriad of other roles throughout the years to support the nation, which amongst others included coordinating and carrying out maritime search and rescue, hydrographic surveys, reef blasting to enable government access to the islands, medical evacuation, operating the national maritime surveillance and rescue coordination centre, and manning of the national coastal radio station.

Throughout the years whilst upholding UNCLOS, the RFN had been supporting Fiji's border agencies dealing with drug trafficking, infringements related to immigration and customs law, and infringements of national fisheries laws in coastal and offshore fisheries, especially illegal, unreported and unregulated (IUU) fishing. The major threat that is rapidly emerging is climate change, which affects the whole maritime environment and has direct impacts on the maritime limits and the resources prescribed in UNCLOS. Climate change is a threat multiplier because of its ability to intersect with other factors to contribute to security problems. Also, for island nations such as Fiji, climate change gives rise to extreme weather disturbances that cause coastal infrastructure damage and reduced access to potable water. Moreover, sea level rise is a direct threat to the existence of low islands and coastal villages. Major economic activities such as tourism and the fishing industry are dependent on a steady climate and healthy marine ecology. Climate change cannot be addressed individually but has to be a collective action that spreads across global, regional, national, agency and individual efforts. The RFN needs to be relevant in the collective effort and prepare itself to handle the disasters that arise out of climate change.

In this paper I reflect on the formation of the RFN, and I explain the relevance of UNCLOS to Fiji and the RFN. While there are many threats possible to maritime security, the paper will focus primarily on climate change, which is a conspicuous threat to the maritime limits and resources upon which Fiji depends for wealth and prosperity. I will explore the current and predicted effects of climate change on coastal and maritime states such as Fiji. I will then highlight national efforts as part of global and regional cooperation to address the challenge of climate change along with the overarching government documents that will guide the RFN's approaches to position itself as part of the required collective effort. Recommended approaches by the RFN will be discussed and shortfalls highlighted. In conclusion, the paper restates the central place of UNCLOS.



*HMAS Glenelg and RFNS Savenaca sail in-company in the waters between Fiji and Vanuatu as part of Operation Island Chief. Photographer: Republic of Fiji Navy.*

### **Formation and evolution of the Fijian Navy**

The Third United Nations Conference on the Law of the Sea (UNCLOS III) was convened in New York in 1973 to discuss the rights and obligations in relation to the world's oceans. The Conference culminated with the United Nations Convention on the Law of the Sea (UNCLOS) being adopted in 1982.<sup>1</sup> When discussions on the international law of the sea commenced in 1973, Fiji was without a naval force. The Fiji Royal Navy Volunteer Reserve (FRNVR) had been disbanded on 14 June 1959 after Operation Grapple, the British nuclear weapons tests conducted in the Christmas Islands in the years 1957–1958.<sup>2</sup> In 1957, 39 members of the FRNVR, after passage from Fiji aboard the Royal New Zealand Navy (RNZN) frigates *Rotoiti* and *Pukaki*, witnessed the first three nuclear tests carried out in Malden Island whilst embarked aboard the Royal Navy light fleet aircraft carrier, *Warrior*.<sup>3</sup>





The Fiji Royal Navy Volunteer Reserve boasted an illustrious heritage. Two members, Able Seaman Savenaca Naulumatua and Able Seaman Timo Puamau, had died in action onboard HMNZS *Leander* in the Battle of Kolombangara on 13 July 1943.<sup>4</sup> The FRNVR had succeeded the Fiji Naval Volunteer Force (FNVF) when the latter had become a reserve of the Royal Navy in February 1942 under the administration of the RNZN. The FNVF was formed by the government in Fiji at the commencement of World War Two and had volunteers from the colony of Fiji seeing active service in all theatres of the war.<sup>5</sup> Prior to 1911, the Australian squadron of the Royal Navy had offered oversight to the naval affairs of the colony.<sup>6</sup> Fiji's first naval force, formed by the prominent Fijian high chief Ratu Seru Cakobau in 1870, was disbanded when Fiji was ceded to Great Britain on 10 October 1874.<sup>7</sup>

In 1968, the British Government announced that British forces east of Suez would be pulled out by 1971. The Royal Navy, which had overseen the maritime defence of Fiji for almost a century, would be based halfway round the world. Fiji, which had gained independence from Great Britain on 10 October 1970, would have to secure the exclusive economic zone (EEZ) to be proposed at UNCLOS III.

The Prime Minister of Fiji, Ratu Sir Kamisese Mara, was in favour of a naval force, and there was public support for a navy being needed. The US ambassador to Fiji informed the Government of Fiji of the availability of US Navy ships that were soon to be decommissioned. These ships were to form the nucleus of the RFN, which was established on 25 July 1975. On its inception, 72 personnel were selected for recruitment with induction training on the RNZN training ship, *Inverell*. Shortly after this time, 62 personnel were sent to Seattle in the United States and returned with the former US Navy Redwing-class minesweepers, *Vireo* and *Warbler*. The two ships were then commissioned into the RFN as Her Majesty's Fiji Ship (HMFS) *Kula* and HMFS *Kiro* respectively.

Highlighting the significance of the establishment of the RFN, Ratu Mara at the official commissioning ceremony in Suva, stated, "For an island nation like ours, a naval squadron is not a luxury. It is a necessity." The former USS *Woodpecker* was the third ship to arrive a few months later in 1976 and was commissioned as HMFS *Kikau*. The three ships soon entered into a phase of EEZ patrolling and training that commenced with the RNZN and the Royal Australian Navy (RAN).

The Government of Fiji enacted the Marine Spaces Act through Acts No. 18 of 1977 and No. 15 of 1978, which set forth Fiji's maritime limits.<sup>8</sup> From 1978, RFN patrols were conducted under the Marine Spaces Act and training onboard the patrol boats was focused on that legislation.<sup>9</sup>

The role of the RFN in maintaining territorial sovereignty quickly included hydrographic survey when the Fiji Hydrographic Department was transferred from the Fiji Marine Department in 1976. Three years later, in September 1979, the survey ship HMFS *Ruve* was commissioned into the RFN.<sup>10</sup> After hydrographic survey, the RFN developed a diving capability in order to deal with munitions left over from the World War Two.



These remnants are concentrated around the waters in the vicinity of the two main airfields of Nausori and Nadi. The RNZN provided training support to the divers who also created boat passages by blasting reefs in order to enable government to access and provide services to the outer islands that were difficult to approach.<sup>11</sup>

This reef blasting was carried out in the days when environmental concerns and laws were less stringent than in current times. The RFN was also expected to support Fiji in fulfilling her international obligations at sea under the Safety of Life at Sea (SOLAS) convention by providing maritime search and rescue (SAR). Also, the Navy supported the government in carrying out humanitarian assistance and disaster relief on the outer islands in the aftermath of natural disasters. An important task was to carry out medical evacuations from the outer islands for the Ministry of Health.<sup>12</sup>

In the following decades, the roles of the RFN expanded and called for a maritime surveillance centre (MSC), included in the modern headquarters building commissioned on 27 July 1995 by the Australian Chief of Naval Staff, VADM R.G. Taylor at RFNS *Stanley Brown*, the main naval base in Suva. Maritime SAR for the Fiji SAR region was coordinated at the MSC until 2017 when the national Rescue Coordination Centre came into being. At this time, the MSC was rebranded as the Fiji Maritime Surveillance and Rescue Coordination Centre. Furthermore, the role of manning Fiji's national coastal radio station (Suva radio 3DP), which broadcasts maritime safety information to vessels within Fiji waters, was adopted by the RFN in 2010.<sup>13</sup>

The adoption of UNCLOS in 1982 with enforcement from 1994 resulted in the Pacific states being given responsibilities for huge maritime jurisdictions.<sup>14</sup> Fiji, understanding the significance of the Convention, was among the first signatories.<sup>15</sup> Australia, recognising that the securing of regional security would be enabled by the Pacific Island countries having the capability to patrol their own maritime jurisdictions, introduced the Pacific Patrol Boat (PPB) Programme during the Fourteenth South Pacific Forum in Canberra on 29–30 August 1983.<sup>16</sup>

Regional defense relationships with Fiji were suspended after the first military coup in 1987. Fiji declared herself a republic and adopted an independent foreign policy. Two oil-rig tenders were procured from the USA in 1988 and commissioned as Republic of Fiji Navy Ships (RFNS) *Levuka* and *Lautoka*.

Fiji acquired four Dabur-class patrol boats from Israel in 1992 and, in 1994, after regional defence relationships had been restored, received *Kula*, the first of its three PPBs which were replaced and renamed after the three minesweepers that had formed the first naval fleet.<sup>17</sup> From 1982, UNCLOS and the Marine Spaces Act were the two big agreements or sets of laws that allowed the RFN to do its work.<sup>18</sup>



From 2006 to 2013, Fiji defence relationships with its “traditional” regional security partners were suspended and Fiji maintained a non-aligned foreign policy which enabled relationships to be built with China and Russia. The highlight of these relationships, in addition to training and handing over of equipment, was the provision of the survey ship RFNS *Kacau*, which was handed over on 21 December 2018 by the People’s Republic of China.<sup>19</sup> On 5 December 2019, the Government of the Republic of Korea handed over the survey ship RFNS *Volasiga* as part of the Official Developing Assistance project with the Korean Hydrographic and Oceanographic Agency titled “Reinforcing the capacity for responding to climate change in Fiji”.<sup>20</sup>



*Republic of Fiji Navy Ship Kikau departs HMAS Coonawarra to participate in the sea phase of Exercise Kakadu 2018. Photographer: SBLT Max Logan.*

UNCLOS gave sovereign rights in various degrees to coastal states over five zones of the sea; namely, the internal waters, the territorial sea, the contiguous zone, the EEZ and the high seas.<sup>21</sup> In spite of the myriad responsibilities undertaken by the RFN for the government, UNCLOS continues to be the driver of Fiji’s maritime strategies and directions, as the greatest threat to every small Pacific Island country is the threat to its ocean, coastal and marine resources. The primary roles of the RFN are very much structured around the requirements and rules set by the law of the sea.





Constabulary duties deriving from the law of the sea offer a small economy like Fiji a strong justification for the expense of maintaining a navy.<sup>22</sup> But the RFN undertakes much other valuable work. Since her formation in 1975, the RFN has provided the critical role of managing security challenges and controlling threats to maritime security,<sup>23</sup> but the greatest security challenge is unconventional.

In 1992, that threat to maritime security was acknowledged globally when the United Nations Framework Convention on Climate Change was signed in Rio de Janeiro. Uncontrolled greenhouse gas (GHG) emissions are creating the biggest threat facing all nations of the world: climate change. For island nations dependent on the sea, the acidification of the ocean by the carbon dioxide component of GHG emissions has an effect on both fish and coral reefs. The threat to maritime security in any coastal state has never been greater. For the RFN, the responsibility becomes even more pressing as GHG emissions cause ocean levels to rise. Rising sea levels are significant since they impact adversely on Fiji's maritime zones, as these zones are designated under the UNCLOS.

### **Advent of climate change as a threat**

Climate change is defined by the Intergovernmental Panel on Climate Change (IPCC) as “A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external factors or to persistent anthropogenic changes in the composition of the atmosphere or in land use.”<sup>24</sup>

The Climate Change 2021 report by the IPCC highlighted that every inhabited region across the globe is already being affected, with human influence contributing to many observed changes in weather and climate extremes. The report highlights that the scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries and in some respects much longer. For example, atmospheric CO<sub>2</sub> concentrations in 2019 were higher than at any time in at least 2 million years, and concentrations of CH<sub>4</sub> and N<sub>2</sub>O were higher than at any time in at least 800,000 years. The report also points out that global surface temperature has increased faster since 1970 than in any other 50-year period over at least the last 2,000 years. Temperatures during the most recent decade (2011–2020) exceed those of the most recent multi-century warm period, around 6,500 years ago. The report observed that in 2011–2020, annual average Arctic sea ice area reached its lowest level since at least 1850; the global mean sea level has risen faster since 1900 than over any preceding century in at least the last 3,000 years and the global ocean has warmed faster over the past century than since the end of the last deglacial transition around 11,000 years ago.<sup>25</sup> The World Meteorological Organization's publication *State of the Global Climate 2020* reports that despite the temporary reduction in emissions in 2020 related to measures taken in response to COVID-19, concentrations of the major GHGs, i.e. CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, continued to increase, and 2020 was one of the three warmest years on record with temperatures on 20 June 2020 reaching 38°C at Verkhoyansk in the Russian Federation, the highest recorded temperature anywhere north of the Arctic Circle.<sup>26</sup>





In every region across the globe, climate change is conspicuous in weather and climate extremes such as heatwaves, heavy precipitation, droughts and tropical cyclones. Of special note, the evidence of human influence has strengthened since 2013.<sup>27</sup> Over the next 20–30 years, if global temperatures increase 2°C, likely effects are an increase in mean sea-surface temperature, extreme heat, precipitation and flooding, an increase in the relative sea level, coastal flooding and erosion, and increased ocean acidity.<sup>28</sup>

Climate change is a threat multiplier because it exacerbates other threats such as extreme weather disturbances, coastal infrastructure damage and reduced access to potable water; and, for atoll islands and coastal villages, climate-related sea-level rise is an existential threat.<sup>29</sup> The *World Risk Report of 2020* listed Oceania first in terms of disaster risk. Fiji was ranked 15 out of 181 countries with the highest risk, behind her neighbouring countries Vanuatu and Tonga that occupied the first and second positions respectively.<sup>30</sup>

The impact of weather extremes cannot be underestimated. In 2016, Tropical Cyclone Winston, the most intense tropical cyclone on record to make landfall in the Southern Hemisphere, caused devastation in Fiji amounting to F\$2 billion, or 20% of Fiji's GDP.<sup>31</sup> The acidification of the ocean due to the high buildup of CO<sub>2</sub> gases affects reefs and shellfish. Reefs play an important role in maintaining a healthy marine ecology along the coasts whilst shellfish are a major source of food in the daily lives of rural coastal dwellers and islanders. These impacts on marine ecology, along with the disturbance of the ideal tropical climate necessary for the popular “sun, sand and sea” enticement to visitors, affect the tourism industry which was the highest foreign exchange earner for Fiji in 2019 with earnings of over F\$2 billion.<sup>32</sup> The effects of climate change will also have a direct impact on the fisheries industry, a major economic activity contributing 1% to Fiji's GDP in 2019.<sup>33</sup>

### **National approaches to climate change**

Climate change cannot be addressed individually but has to be addressed collectively as it involves the ocean which transcends borders and maritime zones of coastal countries.<sup>34</sup> Fiji has been at the forefront of the global effort in addressing climate change, holding presidency of the 2017 United Nations Climate Change Conference (COP 23), marking the first time a small island developing state assumed presidency of the negotiations.<sup>35</sup> In 2019, Fiji was part of the Pacific nations at the 50th Pacific Island Forum (PIF) held in Tuvalu which issued the Kainaki II Declaration, a strong collective statement to the international community to step-up actions to mitigate climate change and increase support for Pacific-led initiatives on resilience.<sup>36</sup> In 2018, along with other members of the PIF including Australia, Fiji signed the Boe Declaration, which articulated that “climate change remains the single greatest threat to the livelihoods, security and wellbeing of the peoples of the Pacific”.<sup>37</sup> Fiji in 2010, at the Tarawa Climate Change Conference in Kiribati, adopted the Ambo Declaration that highlights the need for urgent support and action in countries most vulnerable to climate change.<sup>38</sup> The nation had also ratified the Kyoto Protocol in 1998 and was the first country to ratify the Paris Climate Accord on 22 April 2016.<sup>39</sup>



Fiji has signed up to international initiatives, enacted legislation, and launched national action to build adaptability and resilience. In 2007, the Fiji Cabinet endorsed the National Climate Change Policy Framework which consequently led to the introduction of Fiji's first national climate change policy in 2012. The Environment and Climate Adaptation Levy (ECAL) Act introduced in 2015 is a combination of taxes on prescribed services, items and income to fund selected projects in the national budget that deal with protection of the natural environment, reduction of carbon footprint, and adaptation of the economy, communities and infrastructure to the worsening impacts of climate change. Fiji was the first country to issue a sovereign green bond in 2017 to raise funds dedicated to climate mitigation, adaptation and other environmentally friendly projects.<sup>40</sup> The guiding vision, principles, institutional arrangements, approaches and objectives for tackling climate change issues in Fiji are described in Fiji's National Climate Change Policy 2018–2030 which is the nation's first national climate change policy since the Paris Climate Accord.<sup>41</sup> In 2019, Fiji launched the Climate Relocation and Displaced Peoples Trust Fund for Communities and Infrastructure, the world's first relocation fund for people displaced by climate change.<sup>42</sup>

On 28 January 2021, the nation was the first small island developing state to sign an Emission Reductions Payment Agreement with the Forest Carbon Partnership Facility, a global partnership housed at the World Bank.<sup>43</sup>

### **National guidelines to the Fijian Navy for addressing climate change**

Section 131(2) of the 2013 Constitution of the Republic of Fiji, in its designation of the role of the Republic of Fiji Military Forces (RFMF), delegates to the RFMF the responsibility for ensuring at all times the wellbeing of Fiji and all Fijians.<sup>44</sup> The Fiji Government's National Development Plan 2017 (NDP 17) direction for national security is that, apart from the traditional security challenges, focus will also be placed on protecting Fijians from environmental risks and natural disasters.<sup>45</sup> As Fiji is an archipelago with about 110 of its 332 islands inhabited, a significant number of people are more vulnerable to the effects of climate change because they live in the outer islands or the rural communities of the larger islands. For disaster-risk management in rural and maritime areas, NDP 17 identified 830 vulnerable communities at risk from climate-related events who need to be relocated.<sup>46</sup> NDP 17 goals includes building resilient communities, and the policies to achieve this goal include strengthening understanding of the impacts of climate change and disasters in order to better plan for recovery and long-term development. The strategies offered by the NDP 17 include developing comprehensive assessment frameworks, including adoption of the damage and loss assessment methodology along with institutionalising a mechanism to collect and analyse hazard, vulnerability and exposure data. The strategies also include encouraging collaboration with development partners and tertiary institutions in researching priority areas of climate change and disaster risk reduction and developing hazard maps and models for all potential hazards (including sea level rise, storm surge, flood and tsunami).<sup>47</sup> Fiji's National Climate Change Policy 2018–2030 (NCCP) in its pathway to achieve visions and strategies identifies that Fiji has to carry out capacity development in data availability, analytical capacity, risk communications and awareness.<sup>48</sup>



The NCCP encourages public and private sector engagement and alignment in its woven approach to address climate change and pushes for a climate-ready workforce.<sup>49</sup>

### **Recommendations for the Fijian Navy**

The RFN must provide maritime security. The Navy will do this through protection of marine resources and by maintaining control in the maritime limits assigned by UNCLOS. The RFN will also offer advice to government. The ability to provide support and advice to government in addressing the impacts of climate change is only developed by having a proper understanding of the challenge and having acknowledgement as being a competent authority on climate change by the nation as well as outside the nation. Additionally, the RFN will support the stability of the Fiji nation. The ability to provide services for internal stability when climate change induced events impact the vulnerable coastlines and islands is vital to ensure maritime security is maintained.

It is vital that the RFN understands the signs of maritime resource scarcity and environmental degradation. In order to have control of the sea and ensure maritime security is maintained when the maritime domain is threatened by climate change, there has to be thorough scientific understanding of the entire maritime environment. This understanding is enabled by having data-gathering capability. The capability is developed and enhanced through collaboration with tertiary education institutions in researching priority areas of climate change and disaster risk reduction. Collaboration with defence partners for professional climate change related scientific training also develops the capability. The two naval branches that can be developed are the hydrographic branch and the diving branch. The hydrographic branch should incorporate oceanography amongst its roles and explore other projects with other partner agencies such as the current tidal gauge project with the Korean Hydrographic and Oceanographic Agency. The capabilities of the diving branch are to be developed to carry out research dives in support of institutions carrying out research on effects of climate change on marine ecology. The RFN can request government consideration of funding from climate levy funds to support it in projects that are carried out in collaboration with established research entities.

The RFN might be a constructive voice, speaking for Fiji and for the region and arguing for action to defend against climate change. For climate change, remaining silent only exacerbates an existential threat..

In broad terms, in 2019, the G20 countries accounted for 78% of the total GHG emissions,<sup>50</sup> and lagged behind the glide slope requisite to the Paris Accord goal of limiting warming to below 2°C.<sup>51</sup> Encouraging environmentally friendly policies needs an authoritative voice, and the RFN might exercise such a voice, a voice informed by practical experience.

Alongside advocacy, the RFN when out on patrols in Fiji's maritime domain carries out anchorages in the outer islands and coastlines of the rural areas of the bigger islands. The Navy has first-hand experience of the environment, the scale and scope of environmental degradation and the dependence of the people on the maritime economy.



Women, who in most Fijian coastal villages and islands carry out fishing for daily food needs, become powerful advocates for climate change if fully aware of the detrimental effect that climate change will have on their family lives. Raising the awareness of young people and children through advocating activities is a crucial step towards the collaborative action that is required. The collective action by the RFN would support government in its efforts of ensuring that communities can adapt to the current and future consequences of climate change that are already inevitable; and also persuade the industrialised nations to adopt the actions necessary to prevent climate change.

The increased risk of climate change induced events including cyclones, sea surges and floods will increase humanitarian disasters where livelihoods and human habitat are affected. In line with the current government designated role of providing humanitarian and disaster relief (HADR), the RFN will have to enhance HADR capability and put together plans for all disaster scenarios that are expected from impacts of climate change in the maritime domain.

This enhancing of capability supports the RFMF to be the “strategic reserve to government” where the RFMF develops in limited form capabilities that mirror government capabilities used in emergencies affecting safety of human lives.<sup>52</sup> The RFMF’s capabilities will be utilised when government capabilities are overwhelmed, such as the use of RFMF personnel and capabilities in the current COVID-19 pandemic, where the RFMF contributed significantly across the range of activities needed to contain and mitigate the virus. For the RFN, the absence of landing-craft capability will limit its ability to provide reserves or complement national efforts when required in any HADR situation. As climate change increases the probability and severity of disasters, it is essential that a landing craft is procured or requested from Australia or from other international defence partners. In addition, the RFN should designate a cadre of its own naval officers to start writing plans for worst-case maritime disaster scenarios occurring on the coasts and remote islands, to be tested and refined in Table Top Exercises and the annual Navy exercises with scenarios inserted into the patrol boat work-ups.

### **Conclusion**

The major reason for the formation of the RFN was the nation recognising the importance of protecting its maritime zones and the valuable resources within them, as laid out in the law of the sea which in 1982 was formalized in the terms of the UNCLOS. The evolution of the Fiji Navy from 1975 till today was shaped by its role under UNCLOS and its role of maintenance of maritime security along with responsibilities delegated by the government for national development and stability including fulfilling international maritime law obligations.

Climate change is the most dangerous threat that the world is currently facing and its impacts on coastal zones of any nation will be devastating. Sea level rise will have implications for the physical and legal status of the sea and maritime zones.





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Climate change impacts marine resources and natural environments and this consequently affects, amongst other things, food security and stability of major economic activities that Fiji depends on. Its intersection with other factors contributes to and exacerbates security problems that affect the wellbeing of Fiji and its people.

The RFN has to be part of the collective national, regional and global effort against economic activities creating climate change. It has to be prepared to support and advise government when the impacts of climate change affect the nation. The ratification and entry into force of UNCLOS consolidated the role of the RFN, and which continues to be vitally significant to this day. The climate threat has immense ramifications within UNCLOS and, as Fiji's national agency responsible for upholding UNCLOS, the RFN is obliged to address the challenge of climate change.



*HMAS Adelaide sails past Tamarama as she returns to her homeport of Fleet Base East, Sydney, New South Wales*  
*Photographer: LSIS Tara Byrne.*



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