



## THE REINSTATEMENT OF AUSTRALIA'S AMPHIBIOUS CAPABILITY

By LCDR Albert Moule



# Tac Talks

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## Introduction

Recently, HMA Ships Adelaide and Canberra completed Joint Warfighting Series 2019 (JWS 19) – the largest unilateral amphibious activity conducted by the ADF since 1945.

JWS 19 occurred over the period 03 May – 24 Jul 19 with Amphibious Task Group (ATG) deployed as headquarters for TE 667.1.2.2 (HMA Ships Adelaide and Canberra). Adelaide served as the amphibious command platform for the exercise, facilitating both duties as the Primary Control Ship (PCS) and control for HQATG. Adelaide remained in company with Canberra, both units collaborating closely to guarantee the delivery of continuous amphibious capability in support of exercise objectives.



A Light Landing Craft from HMAS Adelaide departs the ship for Cowley Beach in Queensland during Exercise Sea WADER 2020.  
Photographer: ABIS Sittichai Sakonpoonpol

JWS 19 served as the summative enabler for certification of the Amphibious Ready Unit (ARU) and transition into Talisman Sabre 19 (TS 19) with partner nations in a joint combined environment. JWS 19 facilitated progression of JP 2048 goals, thus providing the final objective evidence for the achievement of Operational Capability three and support of CN's recommendation for Final Operational Capability (FOC) of the LHDs. Although certification of the ARU was originally scheduled to occur through the exercise objectives of TS 17, the development and realisation of a proficient and adaptable amphibious force by the ADF and within such a diminutive timeframe should not be understated.

The strategic landscape continues to change in Asia and the Indo-Pacific region. The globe is becoming increasingly volatile and the rise of China is accelerating shifts in the balance of power. In the decade ahead, Australia is likely to face higher degrees of uncertainty and risk; and in order to prosper, Australia will need to contribute to the security and stability of the region. It is

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critically important for Australia to have a robust and proficient amphibious capability in order to safeguard our national interests, assist partner-nations in the Indo-Pacific region, contribute to wider coalition operations and assure Australia's ability to project power.

Through this article, I will reflect on the evolution of the ADF's newly reinstated amphibious capability and the achievements of JWS 19. I will also discuss the significance of the recent certification of the ARU, demonstration of combined amphibious capability in TS 19 and the importance of future amphibious capability in the strategic landscape of the Asia and the Indo-Pacific region.

## Evolution of Australia's Amphibious Capability

The ADF's initial concept of operations for redevelopment of a credible amphibious force was first derived from the Defence White Paper in 2000. Subsequent versions of the Defence White Paper resonated the necessity for a principally maritime strategic approach, while further emphasizing the requirement for an amphibious capability. The ADF sought to refine its own strategic objectives and plans for realisation of this capability, through documents such as the Defence Planning Guidance, Australian Military Strategy and Amphibious Concept of Employment. In the 19 years since this shift in strategic focus has occurred, the ADF has acquired and developed the assets required in order to make this concept a reality.

The pursuit of an adaptable force, capable of responding across the full spectrum of amphibious operations was something that had not been grasped by Australia since 1945. Although the RAN had operated numerous amphibious vessels since WW2, it was the ADF's ability to project an adaptable and sizeable sea-lift capability that had not been retained. Consequently, the knowledge, culture and enabling functions to support an amphibious capability were also lost.

The ADF has diligently pursued the development and validation of an amphibious capability; and through its progression delivered a robust, adaptable and joint deployable amphibious force. The evolution of Australia's amphibious capability over the past two decades has been a mammoth undertaking, particularly when you consider that the advancement of the amphibious capability has largely (and rapidly) occurred since the acquisition of the LHDs in 2014 and 2015.

The recent certification of the ARU and deployment of both LHDs in a coalition environment in support of TS 19 was the culmination of many years of hard work and commitment. The exercise enhanced our growing amphibious capability alongside partner nations in a joint combined environment. Although the development of our amphibious capability has yet to reach its full potential, JWS 19 showcased our proficiency and interoperability on an international stage.

## Joint Warfighting Series 19

JWS 19 was the codename of the joint exercise that consolidated Sea and Land Series Exercises in 2019. As with previous iterations, the training objectives of Sea Series centred on the projection of land and maritime forces, while satisfying the Australian Amphibious Forces (AAF) force generation (FORGEN) requirements. JWS 19 also provided the final objective evidence for the achievement of Operational Capability three and FOC of the LHDs.

Sea Horizon 19 (SH 19) was designed to certify the ATG Headquarters through conduct of an integrated joint command post and synthetic exercise. Sea Explorer (SE 19) facilitating training of the ARU in a serialised environment, which incrementally increased in complexity during the exercise. SR 19 culminated in the certification of the ARU.

Talisman Sabre is an exercise conducted biannually in Shoalwater Bay Training Area, designed to strengthen the US-AS military relationship by contributing to both partner nations strategic objectives, demonstrating RAN capability and competence in maritime warfare, both at the unit

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and individual level. The participants consisted of a Combined and Joint Task Force (CJTF 667), including a task group of 20 naval vessels (TG 667.1).



An Australian Army 40M Medium Truck disembarks a Royal Australian Navy landing craft during an amphibious landing at Kings Beach in Bowen as part of Exercise Talisman Sabre 2019. Photographer: CPL Tristan Kennedy

## Certification of the ARU

The ARU, as defined in ADDP 3.2, combines two amphibious units, a dedicated command element and landing force. The landing force comprises a Ground Combat Element (GCE), including battle group headquarters, two combat teams and enablers – Air Combat Element (ACE), including four troop lift and two medium lift helicopters, Logistics Combat Element (LCE), Amphibious Beach Team (ABT) and augmented Combat Service Support (CSS) platoon.

The certification of the ARU through execution of JWS 19 was not a stand-alone event, with Canberra and HMAS Choules certifying the ARU through Sea Series 18. This was an essential step in continuing toward achieving Operational Capability three as detailed in JP 2048 (including achievement of FOC for the LHDs). JWS 19 (through Sea Series 19) proved and verified this capability on a much larger scale – concurrently deploying two LHDs to the same area of operations and in order to execute an array of amphibious functions. It saw the unification of Land, Air and Maritime Force elements in forming the Australian Amphibious Force (TE 667.1.2) and enabling functions. TE 667.1.2 comprised both LHDs (Adelaide and Canberra) and landing forces from 2nd Battalion Royal Australian Regiment (2RAR), 7th Battalion Royal Australian Regiment (7RAR), 35th Water Transport Squadron, Marine Rotational Force – Darwin (USMC), 5th Aviation Regiment and supporting elements from the United States Marine Corps Air Combat Team (Combat Team Eagle) and 40 Commando Regiment of the United Kingdom Royal Marines.

The certification of the ARU in JWS 19 was the culmination of many years of hard work and the espousal of lessons learned from previous iterations of Sea Series. In the end, JWS 19 certified the ATG HQ, provided the training and foundation for ARU elements to execute complex

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amphibious operations across multiple beaches, certified the ARU and demonstrated the ADF's ability to execute amphibious operations as part of a combined amphibious ready Group (ARG) (i.e. through TS 19).

## Tactical Coordination of Surface Ship-to-Shore Movement

JWS 19 was both the largest Australian amphibious activity since 1945 and the first time that both LHDs had conducted amphibious operations together (and in partnership with allied nations). In order to maximise this important opportunity, both units remained adaptable and collegiate throughout the execution of all components of the exercise, whilst also upholding the ability to fix and adjust as required. A great deal of invaluable lessons and observations were made through the tactical coordination of surface ship-to-shore movement, with the below three points being the most standout.

### Command and Control

In major amphibious operations involving multiple beaches, each with multiple landing points, a Central Control Ship (CCS) will be designated in order to monitor the entire landing through subordinate Primary Control Ship (PCS). Each PCS is responsible for the management and coordination of all surface movement to/from their allocated beach. In smaller operations, such as a unilateral ADF amphibious operation, a single PCS will usually suffice as operations are across one beach, however, separate PCS can be stood up if operations are across multiple geographically displaced or defined beaches. This can be further complicated by the fact that each designated beach may require multiple lanes of operations, which may differ from other designated beaches.

Although the ADF has conducted various amphibious activities in recent years, these events have normally been as part of a combined operation or utilising assets that have not been as capable as an LHD. The increased complexity of JWS 19 was generated both through the volume and variety of assets requiring coordination, and through the additional C2 overheads required in executing large-scale amphibious operations.

For the conduct of JWS 19, Adelaide was assigned duties as PCS and Canberra assigned duties as Secondary Control Ship (SCS). For the majority of the exercise, this allocation of duties and responsibilities worked well. However there were instances where two PCS units had to be nominated in order to streamline C2 and allow for improved situational understanding at each individual beach. The requirements and benefits in nominating multiple PCS units, became undoubtedly apparent during SE 19.

### Primary Control Ship (PCS) Duties

During the initial stages of SE 19, Adelaide attempted to coordinate all surface movements to/from two geographically disjoint beaches (and from two different units). Adelaide's landing craft had been designated to execute operations on Blue Beach, with Canberra's landing craft designated to execute operations on Red Beach. As the situation unfolded, it became clear that Adelaide's ability to maintain the requisite level of C2 and situational understanding to effectively execute the Surface Assault Schedule (SAS) was not guaranteed. Adelaide encountered degraded UHF/VHF communications as a result of the extended range and topography of the allocated beaches. Meaning that as PCS, Adelaide was unable to effectively and safely direct landing craft to/from the designated beach, in addition to understanding delays, managing defects and/or coordinating real-time changes as required (including force protection coordination, casualties, changes in tasking etc.). As a result, Canberra commenced relaying information to the relevant landing craft on behalf of the PCS. At first this seemed like a practical solution, however as the operation continued, the relevant circuits became overcrowded and caused confusion concerning the delegation of authority as PCS. Adelaide and Canberra determined that the only way to

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effectively manage the flow of multiple landing craft to/from multiple beaches (when geographically displaced), was to divide the C2 responsibilities. It was determined that each unit would coordinate all landing craft to/from the beach adjacent their unit, while also providing updates to the PCS on progression of SAS serials (with PCS providing updates to HQATG) – Adelaide executing duties somewhat like a pseudo-CCS. This division of responsibility allowed each unit to easily coordinate landing craft transiting to/from each beach and proved that in future, if multiple displaced beaches are to be used during large ADF amphibious operations, then consideration should be made in allocating individual PCS (and potentially a CCS).

For the remainder of JWS 19 (i.e. SR 19 and TS 19), Adelaide and Canberra did not encounter any further situations that required the division of the PCS duty. However there were a few occasions where the designated PCS suffered either a communications or ICT fault, meaning that the PCS duty had to be promptly transferred. Adelaide and Canberra maintained sufficient situational understanding at all times throughout the execution of the SAS, meaning that either unit could swap duties if required.

## **Amphibious Interoperability & Talisman Sabre 19**

TS 19 provided Adelaide and Canberra the opportunity to integrate and work as part of a combined amphibious task group. The participation of the Japanese Maritime Self Defence Force (JMSDF) for the first time was a significant occasion, as it allowed Australia and the US to validate amphibious tactics and procedures with another close ally. Through the demonstration and synchronisation of multifaceted amphibious effects, TS 19 saw validation of the combined ARG. The JMSDF are a highly proficient and professional fighting force, whose participation in TS 19 complimented the already strong relationship that exists between Australia and the US. While many lessons were observed and embraced by all participants, the ability to deploy and coordinate effects utilising a combined joint force was remarkable. Furthermore, TS 19 sent a strong message to any nation attempting to assert dominance in the region – and that any such threatening action will not be ignored and will be met through a unified front.

## **JWS 19: Highlights, Achievements and Lessons Learned**

Adelaide and Canberra conducted numerous activities throughout JWS 19, aimed at improving both amphibious capability and LHD interoperability. There were a number of significant highlights and achievements that I would like to use this opportunity to discuss.

- The ability for Adelaide and Canberra to guarantee continuous delivery of amphibious capability and achieve exercise objectives was a colossal achievement. Both units remained at sea for the entirety of the exercise and managed all defects effectively. Although some of the landing craft suffered engineering casualties for varying periods of time, both units managed the loss in capability to effectively execute the SAS and exercise objectives as directed.
- The cooperation and commitment of all elements of TE 667.1.2.2 in coordinating a variety of different assets from across Navy, Army and Air Force was significant. JWS 19 saw the deployment and synchronisation of multiple watercraft, vehicles and aircraft, including: MRH-90 (Navy & Army), CH-47, ARH, M777, M113, ASLAV, PMV, G-Wagon, LCM-8, LLC-1E, LARC-V, Heavy Recovery Vehicle, LX120 and multiple other assets.
- The sound interoperability between the 5th Aviation Regiment, USMC, USN and coalition aviation assets through the execution of multi-deck operations allowed for further advancement in aviation interoperability.
- The ability for both LHDs to support multiple HQ functions throughout the exercise was vitally important (Adelaide with HQATG and Canberra with HQMTG). This was particularly significant as it allowed the ADF to further validate its ability to deploy a HQ while synchronising effects across multiple lines of operation. This included the fluid execution of PCS duties for the

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entirety of JWS 19 – with both LHDs also maintaining close and enduring collaboration throughout the exercise.

Despite the achievements and many positive aspects of JWS 19, there were many lessons learned, including specific aspects that should be considered for the planning and execution of future iterations of JWS and TS.

- The unavailability of ADF MRH-90 (Navy & Army) assets following a cessation of flying caused for frustration and a reduced ability to exercise aviation effects in the amphibious environment. Embarked aviation elements remained flexible and committed to restoring MRH-90 capability during the exercise, however were unsuccessful noting the extended duration of the cessation.
- An insufficient understanding of tidal windows and ability to effectively coordinate assets based on this tidal information was poor throughout JWS 19. There were many instances where loaded landing craft were deployed to the beach, only to arrive and discover that heavy wheeled or tracked vehicles were unable to traverse the 'wet gap'. This resulted in considerable delays to the SAS and required dynamic planning by HQATG and participating units to achieve planned objectives. This deficiency in beach knowledge was further compounded by participating units conducting amphibious operations at unfamiliar beaches to what had been used in past exercises. This also included the use of Non-Defence Training Areas, which resulted in similar problems due to a lack of knowledge in conditions. Although, as the exercise progressed planning staff developed a better awareness and ability to tactically exploit tidal windows and to reduce unintended delays. This is certainly an important planning factor moving forward.
- Throughout TS 19, there was a profound degree of uncertainty and confusion in the establishment, maintenance and authority of airspace control measures in the AOA. There were many instances where aircraft either intentionally disregarded control measures or transited the AOA without adequately understanding the measures in force. Although TS 19 had no catastrophic safety occurrences resulting in damage to military assets or loss of life, I assess that this was achieved through good luck rather than good management. Undoubtedly, joint air operations are inherently complex and dynamic. However ultimately they require well-established procedures in order to guarantee mission accomplishment while also reducing the possibility of unintended engagements or fratricide.
- Airspace control in the AOA is no further complicated than any other operating environment. It does however require a degree of situational understanding by participating assets, in order to understand when the AOA (and associated airspace) is active and where authority resides for control of the airspace. In future iterations, greater emphasis needs to be placed on ensuring all participating units understand the principals and procedures of Joint Airspace Control; particularly the characteristics of control within the AOA.
- The absence of a Harbour Phase and Force Integration (FIT) Training period leading into TS 19 was evident. As highlighted above, this denuded exercise staff the ability to deliver adequate briefs on safety, synchronisation and intentions of the exercise. The scope and complexity of TS has expanded beyond its original intent and as such, the implementation of a Harbour Phase and FIT program requires serious consideration (similar to RIMPAC).

## Future of Australian Amphibious Capability

The strategic landscape continues to change in Asia and the Indo-Pacific region. The globe is becoming increasingly volatile and the rise of China is accelerating shifts in the balance of power. In the decade ahead, Australia will likely face higher degrees of uncertainty and risk; and in order to prosper, Australia will need to maintain an active and leading role in the security and stability of the region.

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The requirement for Australia to build and strengthen enduring strategic ties within the region has never been more important. The ADF continues to play an important role through collaboration with international partners, regional militaries and the wider community in building these partnerships. The ADF is being reshaped and modernized in order to deliver a more capable, responsive and potent force, with a renewed focus on maritime capabilities and projection of force. The validation of Australia's amphibious capability through JWS 19 was both a momentous accomplishment for the ADF and strategic milestone for Australia.

The role that the ADF will play in safeguarding our national interests and in the delivery of strategic effects, will continue to evolve. The relevance in maintaining and further refining a robust, adaptable and proficient amphibious capability has never been so important. The Australian Government has emphasised that one of the highest foreign policy priorities over the next decade will be closer cooperation with regional partners, particularly in the Indo-Pacific region. In supporting these objectives, both LHDs will remain the cornerstone of any ADF deployment within the region to further strengthen strategic partnerships, improve combined interoperability and ensure that Australia remains the partner of choice.

## Conclusion

JWS 19 was the largest and most complex unilateral ADF amphibious activity in over 70 years. The ability for the ADF to procure, generate and validate an amphibious capability in less than 10 years has been widely understated. JWS 19 and the certification of the ARU has proven to be a significant milestone for the ADF and toward realising our amphibious objectives.

In line with the ADF's strategic direction, it is evident that many goals were achieved through the conduct of JWS 19. Nevertheless, the ADF needs to remain steadfast in its duty to maintaining a proficient and relevant amphibious capability into the future, while also working hard to refine the existing capability. JWS 19 was a vital landmark in proving the ADF's amphibious capability and in demonstrating the versatile options available to the Government of Australia. JWS 19 and more directly through TS 19, facilitated further enhancement of our emerging capability and joint interoperability with coalition partners.

In order for the Indo-Pacific region to prosper, Australia will need to maintain an active and leading role in guaranteeing the regions long-term security and prosperity. As highlighted, the role that the ADF will continue to play in safeguarding Australia's national interests and in delivering strategic effects, will continue to evolve. The requirement for a robust, flexible and highly proficient amphibious capability has never been more important. Over the next few decades, the ADF's amphibious capability will remain a vital component in both the delivery and shaping of Australia's strategic objectives and ability to positively shape our region.

## About the Author

LEUT Moule joined the RAN in 2009 and completed a variety of sea postings on Major Surface combatants, prior to graduating from PWO 54 in Apr 18. He is currently serving in HMAS Adelaide, as the Gunnery Officer, having recently completed JWS 19.

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