Forty-third meeting of the Australian National Search and Rescue Council
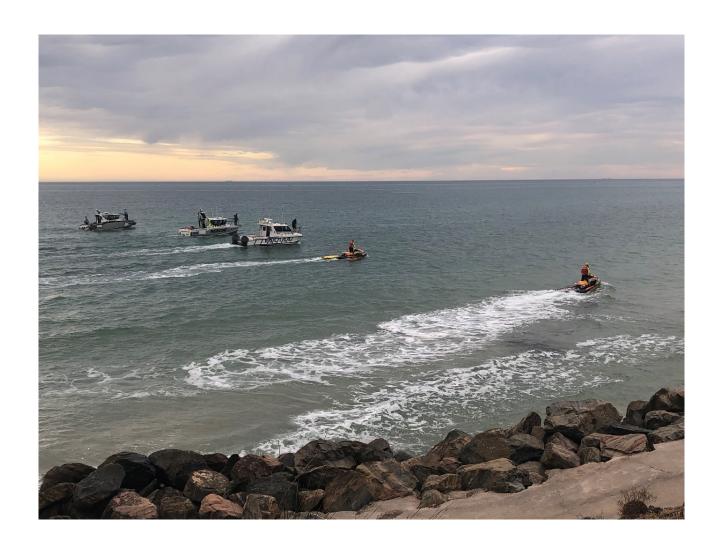
10-11 September 2019
Adelaide Oval, South Australia

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Executive Summary

The 43rd meeting of the National Search and Rescue (NATSAR) Council was held at the Adelaide Oval on 10-11 September 2019, hosted by South Australia Police and Chaired by Mark Morrow, General Manager Response, Australian Maritime Safety Authority (AMSA). Commissioner Grant Stevens, South Australia Police and Mr Mick Kinley, AMSA CEO formally opened the meeting. Local Gaurna Man and South Australia Police Officer, Mr Michael O'Brien performed a Welcome to Country.

The meeting was attended by 26 delegates from the 10 search and rescue (SAR) authorities that provide the comprehensive Australian SAR system, across more than 53 million square kilometres, and represent each of the eight state and territory police forces, the Australian Defence Force and AMSA. Eight observers from SAR partners, including the Bureau of Meteorology, National Volunteer Marine Search and Rescue Committee and New Zealand Search and Rescue Council joined the meeting to share experiences and developments. The meeting was also joined by representatives of the Civil Aviation Safety Authority (CASA) and Cobham Aviation Services to provide an update on areas of specific SAR capability.

The highlight of the meeting was an afternoon dedicated to a Strategic Thinking Session, to evaluate the Council's strategic direction and set a course for the future. The session encouraged members to consider the Council's position and actions against the role of the Council as described in the Charter, and provide an analysis on opportunities for future growth of the Council and its role in providing a nationally consistent, life-saving service.

Other topical issues discussed during the meeting included the role of SAR training in ensuring a nationally consistent approach to SAR operations, the role of complementary technologies, such as fisheries agencies Vessel Monitoring Systems (VMS), the increasing role of Remotely Piloted Aviation Systems (RPAS) or drones and developments in operational elements of SAR.

The meeting resulted in 60 outcomes that will be jointly progressed over the next 12-24 months.

The Police Dive Working Group, formed in 2019, joined the main Council meeting for the first time. The Group was established to benchmark dive rescue and recovery capabilities and, where possible, work with all jurisdictions to align future dive capability development with a nationally consistent position.

The meeting's formal event, the National Search and Rescue Awards, recognised twenty-five Award recipients who were instrumental in saving the lives of six people. The four awards, over two categories, recognised professional and non-professional efforts to save lives, and covered incidents from Queensland, NSW and Tasmania, and efforts across maritime and land environments. Full details of the Awards can be found on the AMSA website.

The National Search and Rescue Council annual meeting is hosted by the State/Territory SAR Authorities (the Police) on a rotational basis over an eight-year cycle.

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List of attendees

Representatives of NATSAR Council Member Organisations

NATSAR Council Members		
Mark Morrow	General Manager, Response (Chair)	AMSA Response
Brad Groves	General Manager, Standards	AMSA Standards
Louise Proctor	Manager, Response Policy	AMSA Standards
Julian Mitchell	Manager, AMSA Asset Capability	AMSA Response
Alan Lloyd	Manager, AMSA Response Centre	AMSA Response
Peter Kelly	A/g Chief, AMSA Response Centre	AMSA Response
Mike Wytcherley	Principal Advisor, Assets and Capability	AMSA Response
Cameron Beresford	NATSAR Council Secretariat	AMSA Standards
Kylie Archer	NATSAR Council Secretariat	AMSA Standards
Pete Fishpool	Squadron Leader	Australian Defence Force
Michelle Lomas-Travers	Sergeant	Australian Federal Police
Reginald Dwyer	Sergeant	Australian Federal Police
Stephen Hegarty	Superintendent	NSW Police Force
Paul Farquharson	Sergeant	NSW Police Force
Michael Smith	Senior Sergeant	NSW Police Force
Shaun Gill	Superintendent	Northern Territory Police
Jim Whitehead	Senior Sergeant	Queensland Police
David O'Donovan	Superintendent	South Australia Police
Jane Kluzek	Inspector	South Australia Police
Robert Gregory	Senior Sergeant	South Australia Police
Phil Grear	Senior Sergeant	South Australia Police
Steve Burk	Inspector	Tasmania Police
Matthew Drumm	Sergeant	Tasmania Police
Mark Arneil	Inspector	Victoria Police
Mark O'Rourke	Senior Sergeant	Victoria Police
Steve Scott	Senior Sergeant	WA Police

Observers		
David Campbell	Strategic Thinking Session	External (Day 1 only)
Darryl Wright	Chair	National Volunteer Marine SAR Council
Carl Van Der Meulen	Senior Advisor	NZ SAR Council
Richard Wilson	Command and Emergency Management	NZ Police
Lucie Blom	Presenter	Bureau of Meteorology
Colin Holmes	Presenter	Cobham (day 2 only)
Glenn Chapman	Presenter	Cobham (day 2 only)
Luke Gumley	RPAS presenter	CASA
Dive Group (separate room)		
Chris Mackrow	Dive Group	AFP
Bruce Adams	Dive Group	NZ
Scott Dower	Dive Group	VIC
Andy Bauer	Dive Group	QLD
Bryan Atkinson	Dive Group	NT
Ray Busby	Dive Group	NSW
Josh Lisle	Dive Group	NSW
Kevin Doecke	Dive Group	SA
Chris Williams	Dive Group	TAS

AGENDA Day 1 Tuesday, 10 September 2019

Time	Topic	Speaker	Paper
9.00am	**Formal Opening**	Mick Kinley	n/a
9.10	**1. Administration**		
	1.1 Welcome and apologies	Chair	1.1
9.15	**2. NATSAR Council Meeting Agenda**		
	2.1 Order of business and any other items	Chair	2.1
	2.2 Announcement of National SAR Award recipients	Chair	verbal
	Dive Group breakaway		
9.30	**3. SAR Operations**		
	3.1 SAR Authority Activity Reports (10mins each)	Jurisdictions	3.1
10.30	**Morning Tea - Photo**		
11.00	3.1 SAR Authority Activity Reports continued		
11.30	3.2 NATSAR Council Observer Reports (NVMSARC/NZ)	Various	3.2
12.00	3.3 Activity Summary: Annual Council Performance Report	Secretariat	3.3
12.30	**Lunch**		
1.15	**4. Strategic Thinking Session**		
	4.1 Strategic Plan / Role of SAR Authorities / IGA Review	External	verbal
3.15	**Afternoon Tea**		
	5. Significant Initiatives		
	5.1 NATSAR Manual Review/amendment schedule	AMSA/QLD	5.1
	5.2 National SAR Training Approach	AMSA	5.2
	5.2.1 National Police SAR Manager's Course Report	QLD	5.2.1
	5.3 Vessel Monitoring System Alerting Model	AMSA	5.3
	5.4 Future of NATSAR Working Groups	AMSA	5.4
	5.5 Complex maritime emergencies - AMSA's approach/plan	AMSA	5.5
	5.5.1 Planning and exercises / NZ Mass Rescue Operations	AMSA/NZ	5.5.1
4.20	**Day 1 wrap up**		
4.30	Meeting Close		
6.30pm	**National SAR Awards – Adelaide Oval**		

ADGENDA Day 2 Wednesday, 11 September 2019

Time	Topic	Speaker	Paper
8.45am	**Day 1 Recap**		
9.00	**6. SAR Capability & Technology**		
	6.1 RPAS Presentation (Guest Speakers)	AFP/CASA	verbal
	6.2 SAR Technology Working Group Report (Chair)	NSW	6.2
	6.3 Beacon Technology and national beacon disposal and collection	AMSA	6.3
	6.4 Aviation Obstruction Lighting Compatibility with NVGs	AMSA	6.4
	6.5 Direction Finding Equipment	AMSA	6.5
	6.6 Medical Evacuations	AMSA	6.6
	6.7 SAR Maritime Communications	AMSA	6.7
	6.8 Night Circle Search Technique	AMSA	6.8
	Cobham Presentation – Challenger capability update	Cobham	verbal
	6.9 BOM Update	BOM	verbal
10:30	**Morning Tea**		
11.00	**SAR Capability & Technology continued**		
1.00	**Lunch**		
1.45	**7. Public Engagement**		
	7.1 Land SAR Engagement Statistics	AMSA	7.1
	7.2 Australia and New Zealand SAR Conference (Jun 2019)	AMSA	verbal
	7.3 Aerial Search and Rescue Conference (Feb 2019)	VIC	verbal
2.45	**8. Council Administration and Development**		
	8.1 NATSAR Council Business Plan & Action Table	AMSA	8.1
	8.2 Dive Working Group Report	WG	verbal
3.15	**Afternoon Tea**		
3.30	**Council Administration and Development continued**		
	8.3 Future of the National SAR Awards	AMSA	8.3
	8.4 Other Business	AMSA	
	8.4.1 Lost Person Behaviour and Unlocated Victims of Violent Crimes	QLD	8.4.1
	8.4.2 Dementia 'Getting Home Safely' Project	QLD	8.4.2
	8.5 Next NATSAR Meeting and scheduled Teleconferences		8.5
	• Teleconference 1, Wednesday 11 December 2019		
	• Teleconference 2, Wednesday 29 April 2020		
	• Teleconference 3, Wednesday 15 July 2020		
	• NATSAR Meeting 8-9 September 2020		
4.15	**Day 2 wrap up**	**Chair**	
4.45pm	**Meeting ends and members depart**		

43rd NATSAR Council Annual Meeting Outcomes

Outlined below is a summary of the agreed outcomes from the 43rd NATSAR Council annual meeting. Subsequently, a formal letter is sent to Police Commissioners outlining the most significant outcomes. A full meeting report is provided to the Council for review and feedback ahead of the report being published.

NATSAR Council Strategic Development and Governance

1. Endorsed the NATSAR Council Performance Report, which summarises the Council's achievements against the Business Plan objectives during the 2018/19 FY period. This included an update of the key action items from the previous NATSAR Council meeting and the progress made against significant NATSAR initiatives.

2. Supported the continuation for the Secretariat to circulate the NATSAR Council Performance Report to Police Commissioners with the Statement of Meeting Outcomes from NATSAR 43.

3. Undertook a strategic thinking session to review the Council Business Plan and generate discussion regarding potential factors that may affect Australia's search and rescue strategic arrangements. Council identified a number of key topics that will assist in developing the next iteration of the strategic objectives for the Council.

4. Agreed to further workshop the strategic guidance for inclusion within the Business Plan for the 2020/21 FY period. Noted that these objectives should provide guidance and direction on SAR activity as a whole but should not prescribe specific strategic direction to individual SAR authorities.

5. Discussed the usefulness of the SAR Activity Reports provided by each agency as a tool to summarise jurisdictional capability, and the relevance of each Authority's capability to contribute to a national capability statement, updated on an annual basis and held by the Secretariat. Council agreed to amend the SAR Activity Reports to include a capability snapshot that will be used to derive a national capability statement in the future.

Action 1: Secretariat to propose to Council a plan to develop the NATSAR Council's strategic guidance for the Council for the next 2 years.

Action 2: Secretariat to draft a Capability Snapshot template and jurisdictions to provide a single point of contact to provide their agency's capability information. The information will be centrally hosted by the Secretariat and can be distributed to other government agencies as required.

National SAR Training

6. Noted the delivery of nationally consistent training in SAR was a significant discussion point amongst Council members, with particular focus on the Advanced Diploma and/or an equivalent qualification standard. Council acknowledged the importance of national consistency through joint training, however questioned whether nationally recognised qualifications are required to achieve the objective of national consistency.

7. Agreed the following outcomes in regards to the National SAR Managers Course (NATSARMC) for 2020:

    a. The NATSARMC will continue to be delivered and administered under the Queensland Police Registered Training Organisation (RTO), with Directing Staff and students nominated and provided by jurisdictions. A letter will be sent from the NATSAR Council Chair to Police Commissioners requesting nominations for both Directing Staff and students.

    b. Senior Sergeant, Jim Whitehead, Queensland Police will remain as course Director for 2020, AMSA will continue to provide the administrative support.

    c. The Directing Staff will continue to conduct a review of course content and structure following the course, with a focus on delivering national consistency.

    d. Noted that some jurisdictions have a backlog of students that are interested in completing the course and expressed interest in running jurisdiction based courses. Queensland Police confirmed that the NATSARMC can be delivered within a particular jurisdiction upon request and would be subject to the approval of the Queensland Police RTO. It was agreed that jurisdictions would continue to support the national course as well as any additional courses arranged separately with QLD Police RTO.

Action 3: Course Director and Secretariat to send a letter to the Commissioners or relevant personnel to request nominations for Directing Staff and students for the upcoming 2020 National SAR Managers Course, hosted in Canberra.

Action 4: Directing Staff to continue to conduct an annual review of the National SAR Managers Course following its delivery to ensure national consistency. Any outcomes and recommendations from the review will be presented as part of the NATSARMC update during the NATSAR Council annual meeting for visibility.

Action 5: Secretariat to support and Queensland Police RTO to consider delivering additional NATSARMC courses at a state level to service the additional backlog of students wanting to complete the Advance Diploma qualification.

NATSAR Manual

8. The proposed amendments to the NATSAR Manual were presented and discussed by Council in the following three categories:

    a. **General changes** - Minor changes to the NATSAR Manual are those that relate to updated technical details, errors and omissions within the Manual that do not change the substance of the Manual;

    b. **Major review (agreed)** - Agreed changes arising from the major review are those changes proposed by Senior Sergeant Jim Whitehead (Queensland Police), as discussed and agreed with the AMSA Response Centre; and

    c. **Major review (requires further discussion)** - Changes arising from the major review to be discussed further are those changes proposed by Senior Sergeant Whitehead that require further consultation with Council Members.

9. Agreed to implement the 'General changes' and the 'Major review (agreed)' changes, noting some amendments had already been endorsed by Council during 2019.

10. Noted the 'Major review (requires further discussion)' required further discussion with the AMSA Response Centre for final endorsement by the Council during the first teleconference in 2020.

11. Reviewed progress of the ongoing NATSAR Manual review that commenced in 2016. Discussed stakeholder feedback regarding the new Manual layout that was obtained via a survey coordinated by Senior Sergeant Jim Whitehead, QLD Police. Noted that users found the Manual difficult to navigate with the land, maritime and aviation content merged together within the same sections.

12. Agreed to separate the three sections for ease of navigation, noting that the repetition of information contained in all three sections will allow readers to only refer to one section during a SAR operation.

13. Agreed to ensure the electronic version of the Manual is formatted appropriately to facilitate easy online use.

Action 6: Secretariat to implement agreed changes to the NATSAR Manual as discussed during NATSAR 43 and update Council on progress.

Vessel Monitoring System Alerting Model

14. Agreed that Vessel Monitoring Systems (VMS) are designed and operated by fisheries agencies and have limitations to their application and use for SAR alerting purposes.

15. Acknowledged the proposed principles based model for the development of arrangements between individual SAR Authorities and Fisheries Agencies to access VMS Data and complement operational intelligence in SAR operations. Further noted existing arrangements in place in West Australia and Queensland.

16. Noted feedback from a discussion on the proposed model and agreed the need for each agency to consult internally regarding the possibility of jurisdictions endorsing the model for any future arrangements they might enter into..

Action 7: Secretariat to update the VMS model with feedback from the Council's discussion.

Action 8: NATSAR Council members to commence internal consultation once a revised VMS model has been circulated and report back to the Council on any advancements and progress.

Complex Maritime Emergencies

17. Discussed the development of a Complex Maritime Emergencies Framework, encompassing SAR (Mass Rescue Operations), maritime pollution responses and other operations that involved more than one hazard or lead agency. Council noted the previous work led by AMSA and the upcoming workshop to develop a framework. Council further noted that this framework does not replace existing national or operational arrangements but will provide a coordination framework when a complex response is required. Four Council representatives expressed interest in representing on the Complex Maritime Emergencies Planning Committee - TAS, SA, VIC and NSW.

18. Discussed the relevant agencies to attend the workshop and recommended, including but not limited to, Home Affairs, the Australian NZ Counter Terrorism Committee (ANZCTC) and NZ SAR.

19. The NZ SAR Secretariat provided an overview of the development of the NZ Mass Rescue Operations Plan and expressed interest in participating in the development of the Australian framework to promote information sharing and consistency within the region.

Action 9: AMSA to invite respective self-nominated agencies to the Complex Maritime Emergencies Workshop.

Supporting SAR Agencies and Capabilities

20. Discussed the increasing role of diverse rescue agencies in the emergency services sector, in particular volunteer groups, such as Surf Lifesaving NSW. Discussed the benefits of this arrangement in NSW and noted the importance of engaging and collaborating with these emerging volunteer groups as supporting SAR capabilities.

21. Discussed the greater involvement of complementary capabilities in SAR operations, such as canine search capabilities, including their broader use for SAR operations within different jurisdictions.

22. Agreed the importance for the Council to work closely with the relevant national bodies to ensure effective cooperation and coordination of supporting SAR agencies and capabilities (such as canine search capability and SLS NSW) in order to gain a greater understanding of national capability.

Action 10: Secretariat to investigate channels for increased collaboration with emerging volunteer agencies for further discussion at the next Council meeting.

Lost Person Behaviour and Un-located Victims of Violent Crimes

23. Noted updates on the development of the Lost Person Behaviour database, coordinated by Queensland Police, and its successful application in locating missing persons. Jurisdictions agreed to continue making entries into the Lost Person Behaviour database to further enhance its data accuracy and useability by broadening the scope of information collected. Of particular interest, the database reportedly lacks information relating to incidents from short-duration SAR operations.

24. Noted the complementary uses of the database in assisting other areas of Policing, notably homicide investigations in locating victims of violent crime.

Action 11: Members to continue to provide relevant data to the Lost Person Behaviour database with inclusion of more data relating to short-duration SAR operations; and to encourage the increased use of the database operationally.

Dementia 'Getting Home Safely' Project

25. Discussed the progress of the 'Getting Home Safely' project coordinated by Queensland Police, particularly its application for missing people with dementia, autism, and ADHD. Council noted the positive outcomes this project has delivered, particularly in locating missing persons within close proximity to their last known location.

26. Discussed jurisdictional feedback on the project's effectiveness and agreed for Council members to participate in the end-of-project questionnaire, which will be followed by a project closure report to formally wrap up the outcomes.

Action 12: Council members to participate in the 'Getting Home Safely' questionnaire that will inform the project closure report and be published on the NATSAR Council members' area for review upon completion.

Search and Rescue Technology

27. Noted the SAR Technology Working Group convened in August 2019 as the fourth convening since it was established in 2016. The meeting discussed and reviewed emerging technologies and mobile applications that may impact Australian SAR operations. Discussed the application and role of Remotely Piloted Aviation Systems (RPAS) within SAR operations, advancements to the SARMAP platform and Bureau of Meteorology (BoM) website and associated marine user services.

28. Supported the ongoing work of the SAR Technology Working Group and encouraged the group to further explore BoM push notifications as a new function in the next update of the BoM mobile application and its usefulness for operational planning purposes.

29. The Civil Aviation Safety Authority (CASA) presented on RPAS advancements, focusing on legislative and regulatory developments in the RPAS environment. Council raised concerns about regulatory restrictions on Police RPAS operations, and the use of RPAS by members of the public in proximity to SAR or other emergency operations.

30. CASA noted they are consulting with Police but would benefit from more SAR specific input.

31. Agreed to continue discussions through the SAR Technology Working Group about the use of RPAS in SAR, noting the concurrent and complimentary work of other groups, including Police and Defence, in the RPAS environment.

Action 13: SAR Technology Working Group to evaluate BoM push notifications for operational planning purposes.

Action 14: Secretariat to explore a suitable approach in establishing a Council position on RPAS use in SAR, taking into consideration the concurrent and complimentary work of other relevant RPAS groups.

Beacon Technology and National Beacon Collection and Disposal

32. Noted the new and emerging trends in the distress beacon environment, including the implications that new beacon technology can have on SAR operations, such as the new advancements on Type 1 and Type 2 Return Link Service beacons, Second Generation Beacons, Man Overboard EPIRBs and Float-Free EPIRBs.

33. Noted the updates provided on the development of a beacon collection and disposal scheme that was first presented in 2018, including the results of the 2019 Registration of Interest. AMSA will continue to advise as this progresses.

Action 15: Secretariat to provide Council with an update on a Beacon Collection and Disposal Scheme at the NATSAR 44/2020 Annual Council Meeting.

Aviation Obstruction Lighting Compatibility

34. Noted the advice given from the International Civil Aviation Organisation (ICAO) and the safety note issued by the US Federal Aviation Administration (FAA) Council, regarding aviation safety issues as a result of the incompatibility between Night Vision Goggles (NVGs) and LED lights on aviation obstruction lighting.

Direction Finding Equipment

35. Noted that AMSA progressed the procurement for alternative sources of Direction Finding Equipment suppliers and did not yield a suitable result. Agreed for AMSA to undertake further consultation with the market prior to a second tender process, and to inform Council of the outcomes from this process as it progresses.

Action 16: AMSA to advise Council on the progression of the Direction Finding equipment tender process and provide an analysis on their findings as required.

Maritime Communications

36. Noted the updates and developments within maritime communications with specific reference to the finalised updates to the Very High Frequency (VHF) channel plan, the

future of High Frequency (HF) voice monitoring and the work of the International Telecommunication Union (ITU).

37. Noted that further work will be undertaken from a State and Territory maritime radio communications perspective with the establishment of a Maritime Communications Working Group through AMSA's position on the Australia New Zealand Safe Boating Education Group (ANZSBEG) and agreed for AMSA to report back to Council on the progress of this work.

Action 17: AMSA, through their representation on ANZSBEG's Maritime Communications Working Group, to update the Council on progress made on maritime radio communication matters.

Medical Evacuations (MEDEVACs)

38. Noted the outcome from NATSAR 41 (2017) to develop an appropriate reference in the NATSAR Manual to clarify the transfer of coordination arrangements with state and territory authorities for MEDEVACS. Further noted that the wording was proposed and endorsed by the Council at NATSAR 42 (2018) and jurisdictions agreed to conduct internal consultation to ensure agreement across all SAR authorities. In April 2019 at the NATSAR Council's 2nd teleconference, the final wording was presented and Council members agreed the wording would be placed on the Amendment Schedule for approval at NATSAR 43 (2019).

39. Agreed the proposed wording for inclusion in the 2020 edition of the NATSAR Manual as per the background above.

Action 18: Secretariat to incorporate agreed wording changes outlined in NATSAR 43 Paper 6.6 regarding Medical Evacuations within the 2020 edition of the NATSAR Manual.

Night Circle Search Technique

40. Noted the presentation by Cobham Aviation Services on development in the Night Circle Search technique and the applications for Search Mission Coordinators, including its ability to improve search results for missing persons on land.

41. AMSA will continue to progress this with Cobham with the intention for subsequent guidance in the NATSAR Manual.

Action 19: AMSA to progress developing guidance on the night circle search technique for the NATSAR Manual.

Bureau of Meteorology Update

42. The Bureau of Meteorology (BOM) presented to Council on developments in forecasting and public information in relation to maritime weather. Council noted the future updates of the mobile application to include BoM push notifications which will be explored by the SAR Technology Working Group as a beneficial tool in SAR planning (refer to outcome 26).

Dive Working Group

43. Noted the first convening of the Dive Working Group, which ran concurrently with the NATSAR Council annual meeting. The chair, Ray Busby (NSW Police), reported progress to Council at the conclusion of the meeting and highlighted the value of the working group, including development of consistent best practice techniques, standardisation of Police dive capabilities, better visibility of national capability, and opportunities for potential resource sharing.

44. Noted the agreed capability benchmark developed as an outcome of the Dive Working Group meeting and undertook to distribute guidance to jurisdictions for improving initial scene management that may require dive operations.

45. Noted the work of the Dive Working Group and undertook to review the relevance of the working group on receipt of the formal report of the initial meeting.

Action 20: Chair to submit a final report following the first convening of the Dive Working Group, which will be distributed to the Council for review and further discussion regarding its position as a NATSAR initiative.

Future of NATSAR Working Groups

46. Discussed the current activities of the Council working groups, specifically the SAR Technology Working Group. Noted the value that the dedicated working group methodology brings to Council, which allows strategic items to be progressed by Council for a specific purpose via a concentrated, short-term effort.

47. Agreed to implement a standard Terms of Reference template for all future working groups, ensuring that the original decision of Council to establish a working group is recorded and the intent and value of the working group is maintained.

Action 21: Secretariat to implement a NATSAR Council Working Group Terms of Reference template to be used for future Working Group establishment.

Land SAR Engagement

48. Noted AMSA's report on 'land SAR incidents originally alerted to the AMSA Response Centre (ARC)'. It was noted that the statistics do not include all land SAR incidents, i.e. AMSA receives alerts via distress beacon but all Triple Zero calls go directly to the Police. The report therefore focuses on state/territory trends and information relating to distress beacon alerting in the land environment.

49. Endorsed jurisdictions to use these statistics and trends to inform communication and public educational material. Council further agreed to collaborate on sharing and disseminating land SAR prevention messaging, including the sharing of social media posts and education campaigns.

50. Discussed the popularity of outdoor adventure activities across Australia, many of which attract international and out of area visitors. Members agreed the need to explore

channels for broadening safety education efforts to incorporate messaging within the tourism sector to target out of area visitors.

51. Discussed state and territories approach to cost recovery for SAR and noted that SAR services are typically provided as a community service to the point that a person(s) reaches a place of safety, but that onward medical services might incur costs as per state/territory arrangements.

Action 22: Secretariat to explore channels for broadened safety education messaging to out of area visitors.

Action 23: Secretariat to facilitate the collaboration and sharing of Land SAR public engagement materials between members, including social media and safety campaigns.

National SAR Conferences

52. Discussed the attendance of Council Members at relevant industry conferences as an opportunity to promote awareness of the Australian SAR system and encourage networking opportunities in the SAR community.

53. Noted that the two NATSAR Council members on the Australia and New Zealand SAR Conference committee, in conjunction with NZ SAR, have successfully influenced the agenda and direction of that conference in recent years.

54. Council supported these efforts and agreed to consider possible attendance and presenting roles at future conferences, noting that cost can be prohibitive and conferences will be assessed on an individual basis.

Future of National SAR Awards

55. Discussed future options for the National SAR Awards event and floated the possibility of separating the National SAR Awards event from the NATSAR Council annual meeting. Noted that this might result in greater capacity to broaden the audience for the Awards event, increase nominations categories and provide greater overall recognition for recipients.

56. Agreed that scheduling the National SAR Awards event concurrently with the NATSAR meeting allows all Council Members' to attend, however may limit attendance from other significant NATSAR Council stakeholders, such as Ministers or supporting agencies.

57. Council agreed to continue to extend SAR Award invitations to relevant industry stakeholders, within the hosting jurisdiction, to further promote national recognition and broaden the profile of the Awards program.

58. Noted that several nominations for the 2019 SAR Awards were submitted for longstanding contribution to the SAR system, which highlighted an opportunity for recognition within a new category. Council agreed to adopt an additional award category to recognise outstanding contributions to the SAR system over an extended period of time.

Action 24: Secretariat to explore options to broaden the profile of the National SAR Awards event to increase its political and agency representation and submit for Council consideration.

Action 25: Secretariat to incorporate an additional award category to recognise outstanding contributions to the SAR system over an extended period of time.

Next NATSAR Council Annual Meeting

59. Discussed the annual meeting format which currently runs across two full days, opposed to one full day and two half days. It was agreed that the two different formats are favourable in certain jurisdictions and that further discussions with the hosting state will determine the format for each meeting.

60. Noted that Victoria Police is next on the annual meeting hosting rotation and the Secretariat will liaise with the Victoria Police representatives to confirm this arrangement.

Figure 1: The 43rd National Search and Rescue Council annual meeting members at Adelaide Oval, South Australia

Analysis of National Search and Rescue Activity

Each jurisdiction presented a report on SAR Activity within their state/territory. Below is a summary of key points and trends from these reports, providing a national view of SAR activity.

Trends	Comments
Causative factors	No new causative factors, however the factors below continue to impact SAR across all jurisdictions: • Dementia/mental health and other risk groups, including those with Autism Spectrum Disorder (ASD) or cognitive deficit (see Agenda Item 8.4.2 *Dementia 'Getting Home Safely' Project* from Queensland Police and the individual actions within Jurisdiction SAR Activity Reports); • Increase in despondency / suicide related incidents; • Human factors - lack of preparedness and failure to properly study and understand weather patterns and tides including low level of knowledge in relation to navigation; • Breakdown/mechanical failure/lack of fuel; • Overdue vessels; • Collisions; • Illegal smuggling, alcohol and drugs; and • Increase in adventure-based activities into the remote outdoors, e.g. hiking and bushwalking incidents.

Enhancing operational SAR capability	• Remotely Piloted Aviation Systems (RPAS) continue to develop within the Search and Rescue space. These include:
	   o The training of RPAS operators continues;
	   o RPAS are noted to assist during incidents and result in quicker recoveries; and
	   o The introduction by the ADF of the MQ-4C Triton High Altitude Long Endurance (HALE) RPAS. Although this capability will not be online until 2023-24 it will greatly improve the ADF ability to contribute long-range and long-endurance overwatch of SAR events, as well as provide real-time reporting and full-motion-video/imagery of SAR datums and events.
	• Search and Rescue exercises continue across jurisdictions. Lessons learnt and outcomes from exercises can assist to refine processes and procedures for live SAR;
	• Emerging beacon technology, including the Return Link Service (RLS) function for second generation beacons.
	• The introduction of new and upgraded assets continues to contribute and build on the search and rescue system across all jurisdictions:
	   o New P-8A Poseidon aircraft are replacing the AP-3C Orion aircraft as the ADF primary SAR assets. ADF reports high capability and tasking rates.

Trends	Comments
Collaboration with other national and international SAR agencies	- ADF SAR are coordinating relevant ADF SAR responses with Maritime Border Command; - A state SAR committee consisting of South Australian agencies is meeting bimonthly to review operational tasks and identify possible capability gaps; - A Land Search and Rescue Consultative Committee has formed from multiple NSW agencies; - There were multiple incidents in the Cocos Islands, Norfolk Islands, and Christmas Island that required multi-jurisdictional and/or multi-agency responses, and also included other SAR agencies such as volunteer services and port authorities. Thai Cave Rescue – AFP Dive Team provided crucial assistance during this event; Interoperability training with SES and Volunteer Marine Rescue activities continue to be conducted in jurisdictions, including planning and approaching lost persons; and - Pacific Islands - The ADF reported only one assistance request over the Christmas/New Year period, indicating the value of the Challenger aircraft.
Safety Programs and Community Awareness and Social Media	- The use of Facebook and social media in general to locate missing people continues to provide excellent results; - The use of Safe-T-Cam to track missing persons in a vehicle has been useful in narrowing down focus locations.; - Safety programs and community awareness continues to be active across all jurisdictions through a range of channels, including radio, television, and social media. Media campaigns continue to send strong messages in relation to search and rescue prevention, such as WA Department of Transport's '30 second challenge'; - Engagement and collaboration with external agencies, such as Scouting Australia, Surf Lifesaving, etc., provides more opportunity for regional engagement; - Survival lessons to schoolchildren have been conducted in a number of jurisdictions; - Boat shows continue to be popular events to promote and launch safety programs, including interactive activities and projects to facilitate face-to-face engagement; and - The number of land SAR operations undertaken as a result of Dementia was predominant across majority of jurisdictions.
Training	- Training and development of SAR coordinators continues, including the 2019 NATSAR Managers Course where 23 students completed the course; - Search and Rescue exercises continue to be conducted within jurisdictions, with a focus on multi-jurisdictional participation: - NSW conducted several multi-agency SAREX; and - Tabletop exercises are planned between the ADF and Maritime Border Command; and

Trends	Comments
	• The majority of jurisdictions are providing regular courses and targeted training to specific areas in order to continue to improve SAR skill sets.

Utilising technology for SAR	• Enhanced electronic mapping tools in land SAR have been deployed, for example:
	  o PolSAR (QPOL); and
	  o MapSAR (SAPOL).
	• Applications, for example:
	  o Use of the 'Collector' app for urban searches (NT POL); and
	  o Log-on / log off applications – voyage plans / vessels can be monitored in real time.
	• Increased use of RPAS and Unmanned Aerial Vehicles (UAVs):
	  o Programmes and training opportunities are noted across jurisdictions; and
	  o SAR agencies are planning for RPAS capabilities to assist in SAR operations.

Trends	Comments

National Search and Rescue Awards

Presented by the National Search and Rescue Council, the annual Australian Search and Rescue Award recognises outstanding contributions by individuals and groups to the Australian search and rescue system. To recognise the importance of both professionals and non-professionals, the award is presented in both categories along with a Commendation award. AMSA General Manager of Response and NATSAR Chair, Mark Morrow said the selfless and brave actions of this year's recipients in the face of imminent danger is nothing short of inspiring and is worthy of national recognition. The 2019 Australian Search and Rescue awards were presented to the following recipients:

Professional Search and Rescue Award – Totem Pole, Cape Hauy Tasmania rescue

- Senior Constable C Williams, Constable N Mackintosh, Paramedic E Byers, Pilot C Fahey, Senior Constable C Herbert, Constable A Oakden, Constable C Rennie, Constable P Vanderwal.

Responding to a beacon activation involving a man who suffered spinal injuries during a rock climbing expedition at Totem Pole, a 65 metre tall vertical column of rocks. The Tasmania Police rescue helicopter crew worked tirelessly through the night to move the man to a position where they were able to perform a safe winch operation.

Professional Commendation Award – Aussie Joy, Port Macquarie NSW rescue

- Port Macquarie Volunteer Marine Rescue – Garry White, Graham Gibbs, Reg McGlashan, Yolanda Bosschieter, Tony Hallett, Chris Condon, Bill Richardson, Rob Breskal, Owen Coulls, Randall Gawne, Greg Davies.

For the rescue of three men who had suffered severe injuries after their cruiser had struck rocks at 1am in the morning. The rescue involved two VMR crew who had to tread water in complete darkness and keep the spinal injury patient afloat until a rescue vessel arrived.

Non-professional Search and Rescue Award – Parson Falls, Tasmania rescue

- Athol Stuart Beer, Stewart John Geard, Craig Charles Neville, Anita Denholm, Kade Wooldrage

Five members of the public provided significant lifesaving assistance to a women who suffered significant injuries after she fell from the top of Parsons Falls, before the arrival of emergency services.

Non-professional Commendation Award – Point Vernon, QLD Catamaran rescue

- Mark Sampson

Mark Sampson swam one kilometre back to shore to seek assistance for his friend following the capsizing of their Catamaran, which forced them both into the water near Point Vernon QLD. Mark's courageous actions enable the rescue of his friend by the VMR as he clung onto the upturned vessel.

For more information about the successful nominations, visit AMSA's website to read the 2019 Australian Search and Rescue Awards media release.

Figure 2: Recipients of the 2019 Australian Search and Rescue Awards during the annual event in Adelaide, South Australia