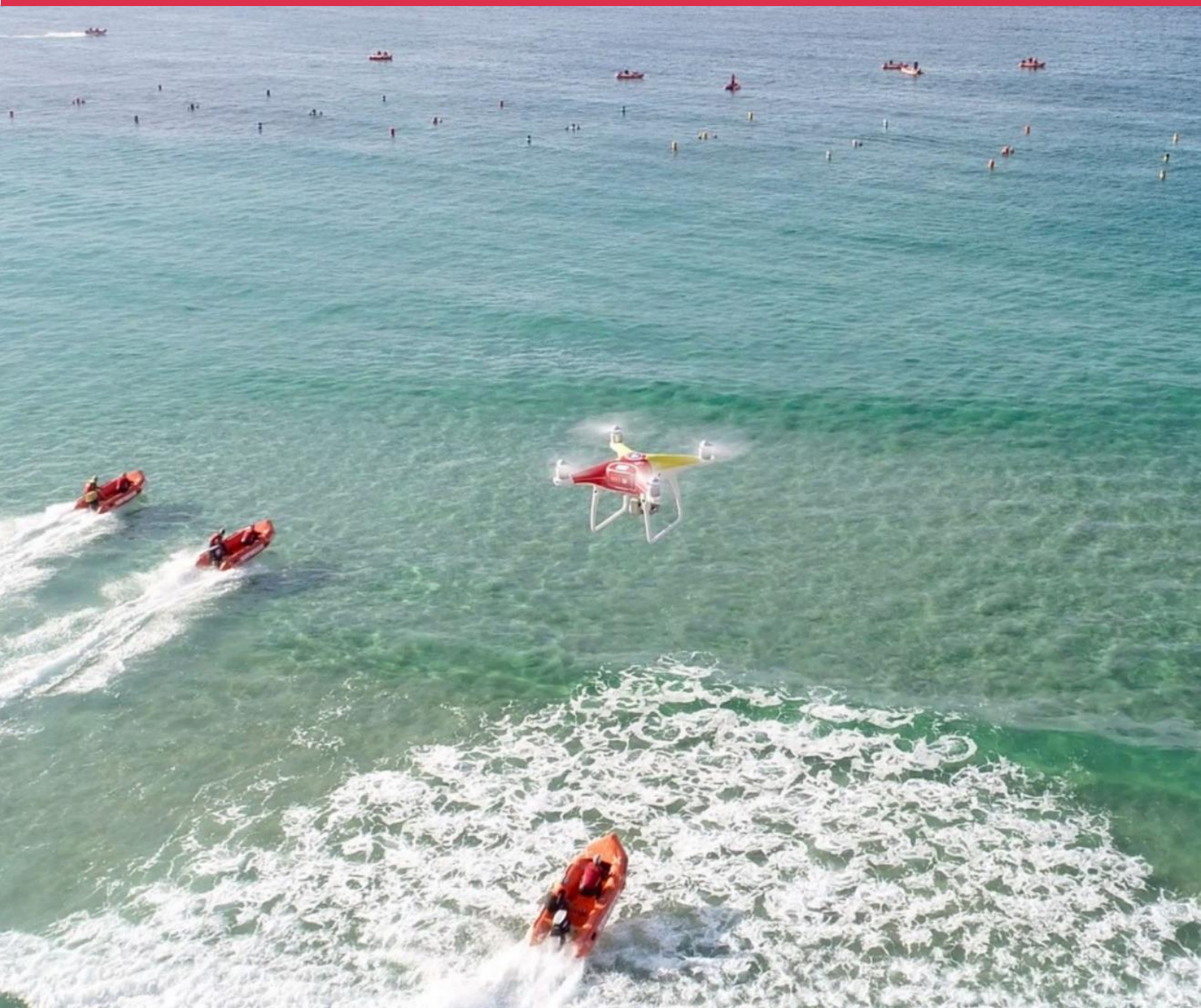


# Branch UAV Coordinator Handbook



SURF LIFE SAVING  
**NEW SOUTH WALES**

SURF LIFE SAVING  
**SERVICES**



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## 1. General

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### 1.1. Applicability

This handbook is intended to act as a guide for the Branch UAV Coordinators of Surf Life Saving NSW by detailing key instructions and procedures on their organisational relationships and responsibilities.

### 1.2. Revision Log

Date	Version	Affected Parts	Affected sections	Summary of revision	Authorised by
Aug 2020	v1.0	All	All	Initial publication	Paul Hardy
April 2023	V2.0	All	All	Reviewed in line with PD release Updated website throughout Review proficiency check responsibilities Updated Organisational relationship	Paul Hardy
July 2023	V3.0	All	All	Incorporated feedback from SLC review	Paul Hardy

### 1.3. Abbreviations

AUAVS	Australian UAV Service
CC	Carbon Copy (email term)
DoL	Director of Lifesaving
EOI	Expression of Interest
OIP	Operator's Induction Program
RePL	Remote Pilot Licence
ReOC	Remotely Piloted Aircraft Operators Certificate
RPA	Remotely Piloted Aircraft (same meaning as UAV)
RPAS	Remotely Piloted Aircraft System (same meaning as UAS)
SLSNSW	Surf Life Saving New South Wales
SLSS	Surf Life Saving Services
SOPs	Standard Operating Procedures
UAS	Unmanned Aircraft System (same meaning as RPAS)
UAV	Unmanned Aerial Vehicle (same meaning as RPA)

### 1.4. Succession Planning

On the occasion that the Branch UAV Coordinator role becomes vacant, the Branch UAV Coordinator or relevant stakeholder shall inform the Branch Director of Lifesaving and Branch President by email with a minimum of 2 weeks notice prior to their intended final day of duty. The Operations Coordinator and local UAV Supervisor shall also be informed via email CC. The Branch UAV Coordinator is to consider succession planning throughout their time in the position and make recommendations on successor candidate(s) – ideally, someone who has broad Club involvement within the Branch. Succession of a potential new UAV Coordinator should be done in consultation of the Branch Director of Lifesaving and the UAV Operations Coordinator.

### 1.5. Feedback

To continually improve the state of UAV program operations, the Branch UAV Coordinator is encouraged to obtain feedback from and provide feedback to persons at any group level, regarding any aspects of operations. Group levels and examples of aspects for feedback are listed in *Sections 1.5.1-1.5.4* below.

#### 1.5.1. Operators and Pilots

- Ease of accessing UAV equipment for operations;
- Rostering and callout response times;
- Feedback from patrols fed through operators occurring throughout normal patrol operations.

#### 1.5.2. Clubs

- How the UAVs are supporting the patrols;
- Current methods of Club and UAV equipment access;
- Access to the UAV as a resource on patrol.

#### 1.5.3. Branch

- Capabilities of the UAVs within the Support Operations group;
- How well the UAV has been utilised in searches/jobs;
- How the UAV equipment can be utilised better or further across the Branch.

#### 1.5.4. State

- Comparisons of operation methods between Branches – what is more effective and what is less effective;
- Defect reporting and current procedures for maintenance, repair and asset replacement.

## 1.6. Documents

As for all persons involved in the operation of UAVs controlled under the authority of the SLSNSW ReOC, the Branch UAV Coordinator is to ensure that all UAV operations within their Branch comply with rules and procedures detailed in the:

- SLSNSW UAV SOPs (non-ReOC)
- SLSNSW Operations Manual (ReOC)
- SLSNSW Operations Library (ReOC)

The Branch UAV Coordinator Handbook (this document) should be specifically referred to by the Branch UAV Coordinator for guidance on their roles and responsibilities.

Each UAV-operating Club should have a printed copy of the above documents stored accessibly. The most recent versions of these documents can be found on AVCRM in the documents library.

Other useful documents

- Branch UAV Coordinator Position Description
- OIP Instructor Handbook

## 2. Responsibilities

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### 2.1. Overview

The Branch UAV Coordinator is a volunteer position to support SLS UAV membership operations within their respective SLS Branch.

As per Position Description, the Branch UAV Coordinator will oversee the operation of Branch/SLSC UAV's, with Key Activities including:

- Rostering overview of all volunteer UAV Operators and Pilots within their Branch;
- Regular communication with Surf Life Saving Clubs within their Branch including asset utilisation arrangements;
- Regular communication with volunteer UAV Operators and Pilots in the effective function of UAV operations;
- Assist with maintenance logistics where required and asset storage of volunteer utilised assets;
- Ensure all media enquiries surrounding UAV operations are directed to the Media team, Media Duty Officer and/or SLSNSW State Operations Centre;
- Assistance in scheduling of training programs, recency flights and annual proficiency checks for volunteers;
- Ensure any data collection requirements are undertaken and maintained;
- Provide assistance to volunteer UAV Members and Clubs;
- Creating opportunities for UAV operations and recruitment beyond regular beach patrols by establishing a presence at branch and club events such as carnivals, ocean swims and open days;
- Ensure UAV Operators and Pilots (volunteer) comply with relevant policies and SOPs;
- Widespread promotion and recognition of the SLS UAV operations;
- Develop ongoing relationships with relevant SLSNSW Branch Presidents, Directors (Lifesaving and Education), clubs and members;

### 2.2. Maintenance, Repair and Storage Responsibilities

#### 2.2.1. Maintenance

All drones are required to undergo a minor maintenance service every 50 flight hours and a major maintenance service every 150 flight hours or once per year. Minor service involves a range of visual checks and calibration steps; D1 Store will reach out and request the Location Equipment Officer to conduct this minor service. Major service requires shipment of assets back to D1 Store or Belrose HQ – D1 will liaise with the Location Equipment Officer on this and the UAV Maintenance and Logistics Officer will organise for replacement assets to be dispatched in exchange. The Branch UAV Coordinator should note and assist the LEO with these maintenance requirements where possible.

#### 2.2.2. Repair

The Branch UAV Coordinator should assist the LEO in ensuring that all UAV assets used by SLSNSW clubs within their Branch are fit for operations and that any defective equipment are noted correctly on AVCRM and submitted for repair. This may be in collaboration with but not limited to Club UAV Officer, Local Equipment Officer and/or the local UAV Supervisor. The UAV Maintenance Officer and maintenance service provider (D1 Store) should subsequently be liaised with to manage asset repair and replacement.

### 2.2.3. Storage

Following use for volunteer operations, the Branch UAV Coordinator is responsible for the return and storage of UAV assets in the location nominated by the AUAVS Manager/Chief Remote Pilot at the beginning of the season. With approval from the AUAVS Manager/Chief Remote Pilot, this responsibility may be delegated to a nominated Club UAV Officer.

Additionally, from time to time, the UAV Operations Coordinator may request the Branch UAV Coordinator to carry out specific tasks relating to asset management, such as data flight syncing. These requests will be communicated with appropriate lead time.

## 2.3. Rostering and Training Program Responsibilities

### 2.3.1. EOIs

Volunteer expressions of interest applications are submitted on the UAV Webpage (<http://www.australianuavs.com.au/become-a-uav-pilot>) (and/or <https://www.surflifesaving.com.au/get-involved/work-for-us/become-a-uav-pilot/>) and are collated by the UAV Regulations, Development & Policy Officer who will then forward these applications to each Branch in monthly emails. Any EOIs received through other means (e.g. in person from Clubs) should be directed to apply on the UAV webpage.

### 2.3.2. UAV Operator Induction Program

The Branch UAV Coordinator is responsible for managing volunteer UAV Operator Induction Programs (OIPs) for Operator candidates within their Branch in consultation of the Branch Director of Education as agreed. Please refer to the OIP Instructor Handbook for guidelines on booking and conducting an OIP. It is typically conducted by a UAV Instructor within the Branch and includes covering the theory content, company policies and procedures, aircraft type training, operational briefings, and AVCRM workflow.

Upon completion of the OIP, the UAV Regulations, Development & Policy Officer should be informed of the candidate outcomes, process per OIP Instructor Handbook, and the Branch UAV Coordinator should begin rostering each progressing candidate to complete two probationary shifts with a delegated senior UAV Member (either Branch UAV Coordinator, UAV Instructor or Club UAV Officer).

Upon successful completion of the probationary shifts the Branch UAV Coordinator, or designated senior UAV Operator, signs off the new Pilots/Operators and then the Branch UAV Coordinator notifies the UAV Regulations, Development & Policy Officer of the outcomes.

### 2.3.3. Recency

The AUAVS defines Recency as the following.

- Recency: Pilots and Operators will need continually maintain a flight record throughout their involvement with SLSNSW and/or AUAVS. This is defined by flying one full battery every 90 days.

The Branch UAV Coordinator is responsible for ensuring all volunteer member UAV Pilots/Operators maintain recency requirements prior to any operations. A single observed battery flight is otherwise required to refresh recency.

### 2.3.4. Proficiency Check

The AUAVS defines Proficiency as the following.

- Proficiency: By the standards of SLSNSW, Pilots and Operators are required to complete an annual Proficiency Check to maintain their SLS UAV award. This is done annually and awards will expire at the end of the calendar year if the pilot/operator isn't proficient beforehand, as per standards of SLSNSW.

The Branch UAV Coordinator is responsible for ensuring all volunteer member UAV Pilots/Operators conduct annual proficiency checks prior to December 31<sup>st</sup> deadline. Both Theory and Practical components must be completed to be considered proficient for the following year. Completion of this check will help ensure members maintain the confidence and understanding of UAV operations and safety standards within SLSNSW. It will be developed as an effective learning resource and offers an opportunity to refresh operator knowledge of AUAVS Standard Operating Procedures, share lessons learnt from the previous season and briefly assess operator theoretical knowledge and practical capability.

The Proficiency Check will be developed by the UAV Regulations, Development and Policy Coordinator and ready for release by the end of August. The UAV RDP Coordinator will update the Branch UAV Coordinator on any important inclusions and/or changes to the Proficiency Check by early August. They will also request that the Branch UAV Coordinator provide a list of dates that either they, or a delegated UAV Instructor, will be available to conduct practical proficiency checks for volunteer operators. The Proficiency Check will then be released and communicated to all UAV pilots/operators by the AUAVS team. The Branch UAV Coordinator is responsible for following this communication up with all volunteer members to ensure understanding and diligence in completing on time.

Summary of Branch UAV Coordinator responsibilities for Proficiency Checks:

- Nomination of Practical Check Dates (due mid August), with support from UAV Instructor Delegates
- Nomination of UAV Instructor Delegates (due mid August), noting their background and justification for nomination if not already a proficient UAV Instructor
- Remind volunteers to complete the Proficiency Check (via emails, phone, texts, and local communication methods)
- Run Practical Checks if able, remainder supported by UAV Instructor Delegates

### 2.3.5. SurfCom – Callout Missions

Occasionally the State Duty Officer (SDO) can task UAVs to attend incidents, these taskings can only be done by the SDO however local Duty Officers may recommend to the SDO that they task a UAV. On tasking the SDO will task the Branch UAV Call Out Team, setup in SurfGuard under the branch SurfGuard entity (similar to RWC and Duty Officers).

Once the mailing list has been tasked all members on the Branch UAV Call out List / Mailing List will receive a text message asking for their availability. Pilots / Operators closest to the location would then respond to the nearest UAV location to collect equipment and then attend the incident if the equipment is not already with the Branch Duty Officer. Access to the equipment must be discussed between the Branch and Clubs similar to how Rescue Water Clubs are stored at clubs but access by a branch call out team.

Please note that the Pilot/Operator should be over 18 and it is their responsibility to ensure safe operations within the SLSNSW SOPS and UAV SOPS. Job creation and Risk Assessment in AVCRM is still required for all callout missions but may be completed post-operation for callouts of 'High' Priority in Class G airspace with sub 2kg UAVs only where there is a matter of urgency with time (ReOC operations require AVCRM job submission and approval prior to flight).



It is expected that the Branch UAV Coordinator manages this call out list and create the mailing list under the Branch Surfguard entity using the following naming convention “FNC UAV”. Once this has been done, please advise [soc@surflifesaving.com.au](mailto:soc@surflifesaving.com.au) and [uav@surflifesaving.com.au](mailto:uav@surflifesaving.com.au) and they will commence use of the call out list.

Please refer Appendix 1 within this document for a more detailed and visual guide to this process.

### **2.3.6. Club Engagement**

Club engagement is the key to integrating and expanding the UAV program within the Branch. The Branch UAV Coordinator should actively engage with Clubs in aspects such as those outlined in *Section 2.1.6. – Relationship with SLSNSW Clubs*. To make UAV operations an integrated part of each participating Club, it is important for the Branch UAV Coordinator to have a thorough awareness of all Club operations and maintain positive interactions with Club members – this also helps with the Pilot/Operator candidate recommendation process.

## **2.4. Risk Management Responsibilities**

A Risk Management process is required for any risk that has not been adequately mitigated by existing risk control measures and procedures detailed in the AVCRM Risk Assessment section of a Job submission.

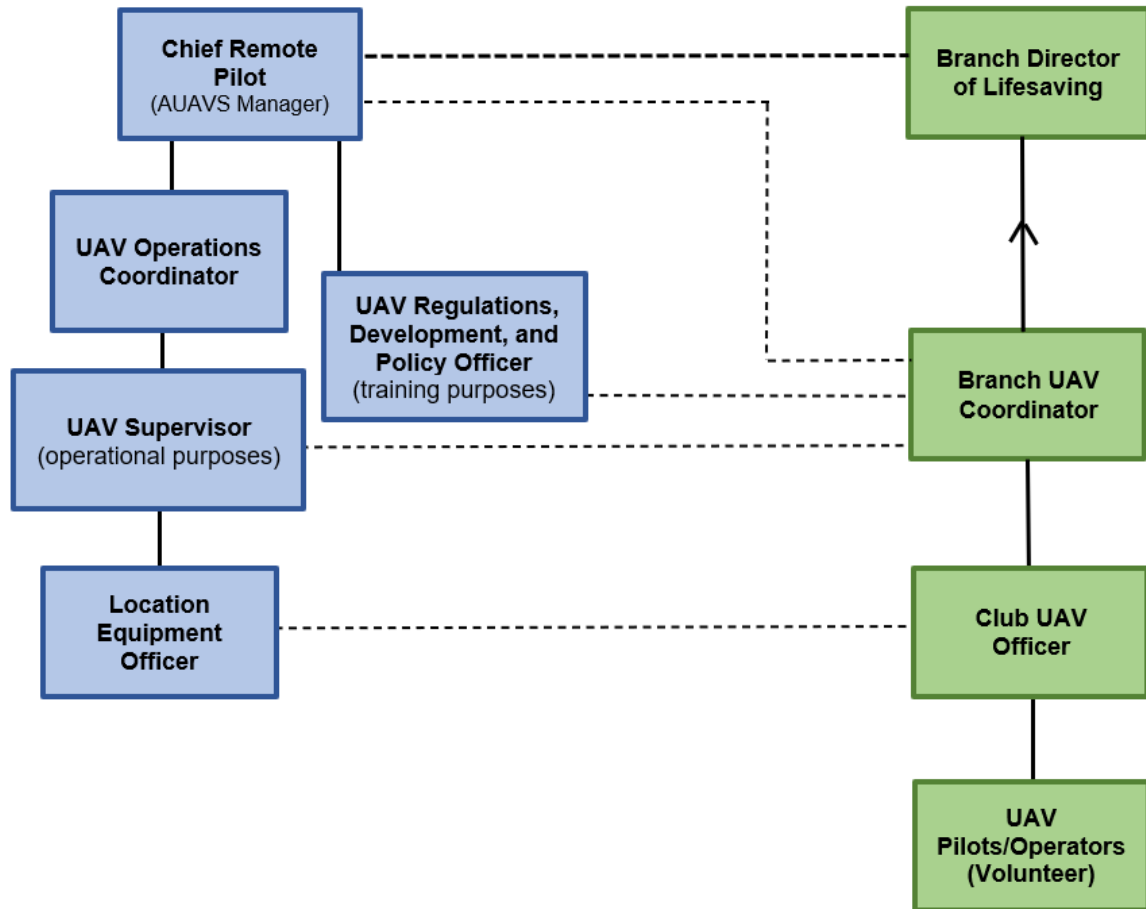
The Branch UAV Coordinator is responsible for following-up and overseeing Risk Assessments of High and Extreme category on AVCRM submitted by Pilots/Operators within their Branch. A Risk Assessment discussion should be conducted with the Branch UAV Coordinator and all persons potentially involved, prior to job commencement. The general procedure of each Risk Management is as follows:

1. Context Establishment;
2. Risk Identification;
3. Risk Analysis;
4. Risk Evaluation;
5. Risk Treatment;
6. Monitor and Review.

The full review procedure is detailed in the SLSS ReOC Operations Manual, and included in Appendix 2 within this document, which is intended for ReOC operations but should be followed as a guide too for non-ReOC operations.

### 3. Organisational Relationships

#### 3.1. Internal



##### 3.1.1. Communications with UAV Supervisors

The Branch UAV Coordinator should communicate with their local UAV Supervisor on the following matters:

- Any important updates on Branch UAV operational plans;
- Organising repair and maintenance of UAV assets;
- Changes required in UAV asset locations or numbers;
- Urgent operational requirements;
- Extensive media enquiries and media interview requests.
- Branch UAV operation plan proposals;
- Significant operational incidents.

##### 3.1.2. Communications with UAV Regulations, Development and Policy Officer

The Branch UAV Coordinator should liaise with the UAV RDP Officer on the following matters:

- New volunteer EOI's for the Branch (monthly updates from UAV RDP Officer);
- Booking in training programs (OIP), refer OIP Instructor Handbook for guidance;
- UAV Pilot/Operator succession and changes in location rostering.
- Proficiency check organising for volunteer UAV Pilots/Operators;

This correspondence should include the Branch Director of Education as CC.

### **3.1.2.1. Communications with Director of Education**

In addition to collaborating with the UAV Regulations, Development & Policy Officer, the Branch UAV Coordinator should work with the Branch's Director of Education to ensure that promotion and engagement of courses and Proficiency Check sessions can be made available to all members of the Branch.

The UAV Regulations, Development & Policy Officer, may be able to assist in the organisation of courses and proficiency sessions with trained instructors.

### **3.1.3. Reporting to Branch DoL and other Branch Officers**

The Branch Director of Lifesaving (DoL) and Branch President may want to be made aware of any significant changes or updates to UAV operations within the Branch, such as Scope of Service outline. Communications between AUAVS and Branch UAV Coordinator proposing significant change or important updates should include these persons as CC, to ensure clear mutual communication. Email CC is not required for smaller changes and updates such as minor maintenance, which can instead be reported together at Branch Board Meetings.

At the discretion and direction of the Branch DoL or President, additional person(s) with relevant roles can be included in emails e.g. Director Of Education (for UAV OIP Courses). The UAV Regulations, Development, and Policy Coordinator should be notified of these persons in writing.

### **3.1.4. Relationship with SLSNSW Clubs**

Clubs within a Branch rely on the corresponding Branch UAV Coordinator to keep them up to date with Branch plan progress for the UAV program and each Club's role, moving forward. These updates should typically be on a monthly basis, via email. Additionally, the Branch UAV Coordinator should be consistently engaging with each Club regarding UAV program promotion and recruitment. Any persons expressing interest in the UAV program should be directed to apply on the UAV webpage [www.australianuavs.com.au](http://www.australianuavs.com.au) (and/or the SLSNSW Webpage, <https://www.surflifesaving.com.au/about-us/australian-uav-service/>).

The UAV assets allocated to SLSCs are available for volunteer operator access outside of DPI periods as long as AVCRM jobs are created and AUAVS SOPs followed. It is the responsibility of the Branch UAV Coordinator to liaise with SLSCs (with collaboration of the Club UAV Officer and/or Local Equipment Officer where suited) for asset utilisation planning and arrangements for volunteer operations (be it training, patrol, emergency response) within the Branch. Please note AUAVS maintains principal and primary access to the assets as required throughout DPI periods and on an ad hoc basis for operations including Surfing events, SARs and Emergency response. It will be the responsibility of the local UAV Supervisor and/or the AUAVS Team to notify the Branch UAV Coordinator if any asset movement occurs outside of DPI operational periods.

Furthermore, the Branch UAV Coordinator should periodically check that each operating Club has a physical copy of the SOPs that is easily accessible by all UAV Operators and Pilots.

### **3.1.5. Communicating with UAV Pilots and Operators**

The Branch UAV Coordinator is the point of contact on any issues raised by volunteer UAV members within their Branch and should be contactable for inquiries about member operations. Periodic UAV operations meetings can be held, in addition to email contact, for direct updates and operational discussions.

Branch UAV Coordinator to establish a volunteer call out list if required for emergency response. Call out lists for UAV Operators/UAV Pilots should exist at Branch and SLSC levels.

## 3.2. External

### 3.2.1. Emergency Services

Occasionally, SLSNSW UAV staff and volunteers may need to cooperate with emergency services, such as NSW Police Force, to carry out an SAR operation. Emergency services oversee all assets of the overall operation and hence have higher authority than SLSNSW staff. Therefore, SLSNSW staff and volunteers should cooperate, within the extent of the SLSNSW UAV SOPs and ReOC Operations Manual & Library, under the lead of the emergency service agencies. It is the Branch UAV Coordinator's responsibility to coordinate volunteer UAV Operators and Pilots in providing this level of cooperation.

### 3.2.2. Media

From time to time, media enquiries such as interviews or television filming may arise. It is organisational policy that SLSNSW staff and volunteers do not disclose any confidential information or share any internal documents – this includes footage recorded by UAVs operated under SLSS. SLSNSW staff and volunteers who are approached by media should direct them to contact [media@surflifesaving.com.au](mailto:media@surflifesaving.com.au) and/or the Duty Media Officer on 0405 203 764 and/or the SLSNSW State Operations Centre.


### 3.2.3. General Public

As the coordinator of volunteer SLS UAV operations within their Branch, the Branch UAV Coordinator should regularly remind SLSNSW volunteers that they are representing SLSNSW whilst on duty or in uniform and therefore must not take any actions that may negatively impact the organisation. For example, a UAV Operator or Pilot on duty must not use their phone for any non-operational purpose whilst in command of a UAV. Pilots & Operators can be referred to SOPs for assistance on displaying appropriate conduct.

During conduct of duties, members of the public may interact and enquire about the operation of UAVs, such as its purpose or relation to Surf Life Saving. Staff and volunteers on duty are permitted to answer general questions of a non-confidential nature and should be encouraged to use the provided FAQ reference sheet for enquiry assistance. The Branch UAV Coordinator should ensure that each Club has sufficient printouts of these FAQ reference sheets, which can also be found on the UAV webpage. It should be noted, however, that the safe operation of UAVs always takes precedence over answering any enquiries from members of the public or media.

## Appendix 1 – SLSNSW Call Out Teams Procedures

SURF LIFE SAVING  
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# EMERGENCY SURF RESCUE CALL-OUT PROCEDURES

**Background**

Surf Life Saving NSW receive Requests for Assistance (RFA) from Emergency Services through the Surf emergency Response System.

Since 2008, Surf Life Saving NSW has maintained a dedicated phone line for 24/7 incident response. This number 13SURF is solely reserved for inbound Requests for Assistance from emergency services NSW Police, NSW Ambulance, Fire+Rescue NSW, State Emergency Service (SES).

13SURF is attended by an on-duty State Duty Officer (SDO) 24/7.

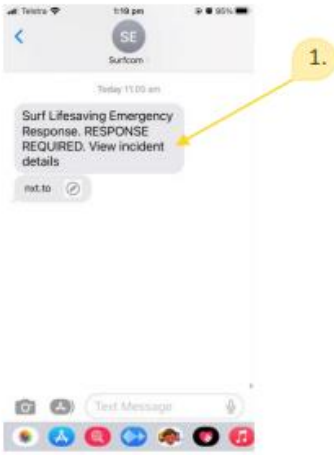
Two other 24/7 lines are also attended by the SDO where SLS members or respondents to an incident may make contact with the SLS Incident Controller;

- [\(02\) 9471 8091](tel:0294718091) (Emergency line)
- [\(02\) 9471 8092](tel:0294718092) (General line)

SLSNSW uses the Surfcom Incident Management System (Surfcom), managed by Surf Life Saving Australia (SLSA). In 2019 SLSA rolled out Incident Response Page SMS through Surfcom Management System.

Members of a Surf Life Saving call-out team (mailing groups maintained through SurfGuard) receive an SMS message including a link to the Surfcom Incident. Further updates to the System rolled out in 2022 saw these messages come from Surfcom rather than Au unidentified number.

Response Messages include default information drawn from Surfcom



1. Link to indicate response – Instructions included on next page

CALL-OUT PROCEDURES

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Current as of: 05/09/2023

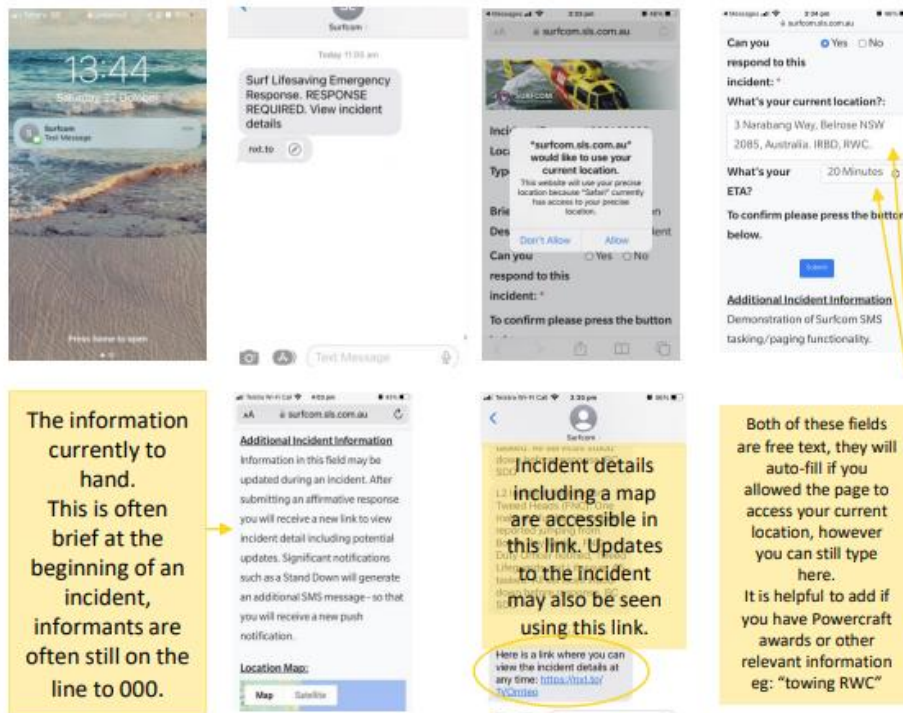
CALL-OUT RESPONSE MESSAGE

## SMS Page Response - details

Click the link received in the SMS from Surfcom to view incident detail.

This opens your default browser to a Surfcom page <https://surfcom.sls.com.au> – this is a safe link to access.

You will receive a request to use your current location. This is also safe, however the link is still able to be accessed if you select *Don't Allow* – if you do this you will need to manually update your location in the following section.



The information currently to hand. This is often brief at the beginning of an incident, informants are often still on the line to 000.

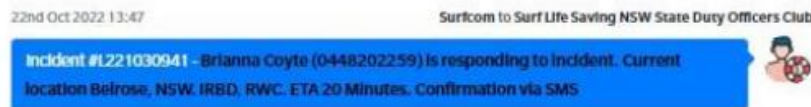
Incident details including a map are accessible in this link. Updates to the incident may also be seen using this link.

Both of these fields are free text, they will auto-fill if you allowed the page to access your current location, however you can still type here. It is helpful to add if you have Powercraft awards or other relevant information eg: "towing RWC"

**NOTE:** Any redundancy SMS will come as a normal SMS with no link from Surfcom or Surfguard.

Your response is automatically recorded in the incident log, this reduces phone traffic and the requirement to manually log affirmative response phone calls.

You are required to record an intended response to an incident with Surfcom to ensure accuracy of incident records and tracking member welfare. SMS response is preferred followed by radio and then phone notification.





# RESPONDING TO A CALL-OUT

## Responding to a Request for Assistance

If you are able to provide a response,

1. Submit your location and ETA to the SMS response message
2. Proceed to the staging point or your Surf Club in a safe manner;
  - Obey all NSW road laws - you are not exempt from prosecution if you break laws in your SLS response
3. Upon arrival at the staging point, prioritise locating a radio and turning to Surfcom on Surf Channel 3 and begin preparing rescue equipment.
4. If there is an SLS Forward Commander in attendance, usually a Duty Officer or Lifeguard Supervisor, make yourself known to the Forward Commander and await instruction.
5. If there is no Forward Commander on-site, contact Surfcom on Channel 3 or by phone [\(02\) 9471 8091](tel:0294718091) – provide Surfcom with a situational brief;
  - What is your location?
  - What are the conditions?
  - What can you see?
  - What resources are on scene?
6. Conduct a risk assessment before entering the water and/or launching any craft or UAV
7. Conduct a risk assessment at EVERY stage
8. You are not obligated to respond if it is unsafe to do so.

Your safety, and that of those around you, is your number one priority

- **Do not enter the water without notifying Surfcom or having direct supervision of a Forward Commander**
- **Do not launch a Powercraft without contact with Surfcom**
- **Do not launch a Powercraft without all appropriate PPE**
- **Do not launch a Powercraft without a radio**
- **Do not enter the water without a flotation device**
- **Do not launch any UAV without having first submitted an AVCRM job and notifying Surfcom, confirming no other aerial assets have been tasked**
- **Do not launch any UAV if rescue helicopters are on scene. Always monitor Airband radio frequency for the area, landing immediately should any piloted rescue aircraft enter the airspace**
- **Avoid calling the Forward Commander directly, keep the line clear for liaising with the SDO. SITREPS should be provided via Surfcom.**

RESPONDING TO A CALL-OUT

### Incident Priority

Incident Level	Who's involved	Incident examples
1	<b>Local resources</b> Patrols / Lifeguards A call out message is rarely sent for a Level 1 incident.	<ul style="list-style-type: none"> <li>• Lost child</li> <li>• Shark Sighting</li> <li>• First aid</li> <li>• Initial SAR for missing person</li> <li>• Ambulance assist</li> </ul>
2	<b>Deployment of additional resources beyond initial response</b> Call out teams / Support Operations/ Incident Management Team	<ul style="list-style-type: none"> <li>• Missing person/s</li> <li>• Boating incidents</li> <li>• Emergency Response Beacons</li> <li>• Incidents outside of patrol location and/or time</li> </ul>
<p><b>Level 2 incidents are our highest frequency call out group.</b> Concern for Welfare indicates an incident in the Alert phase. It is usually unconfirmed if a person is in distress.</p>		
3	<b>Multi-Agency response</b> Local Call Out Teams, NSW Police / NSW Ambulance / Fire+Rescue NSW / SES / VRA etc State/ Regional Incident Management Teams	<ul style="list-style-type: none"> <li>• CPR</li> <li>• Confirmed fatality</li> <li>• Mass Rescue (6+)</li> <li>• Shark encounter</li> <li>• Flood / Tsunami / Bush Fire</li> <li>• Major incident requiring multiple agencies such as air crash, pandemic, health events etc</li> </ul>
<p>Incidents escalate to a Level 3 only on <b>confirmation</b> of a multi-agency critical incident. Usually after initial Life Saving resources arrive on scene and provide credible intelligence back to the SOC.</p>		

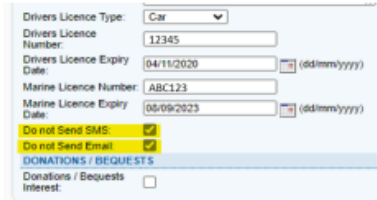
### Incidents at night

- Communications structure does not change. SDOs need the same information from the responding services. Only change is Radio Network may not be *actively* monitored.
- All comms with SDO are via phone [\(02\) 9471 8091](tel:0294718091).
- When an on scene Forward Commander is appointed, they become the central communications point with the SDO.
- Forward Commanders are still actively encouraged to prioritise Radio (Surfcom Channel) for communications with respondents after hours. This activity is recorded and can be used to provide evidence to NSW Police and/or a Coroner after the fact.
- SDO will liaise with MAC / VKG / Ambulance as needed. Duty Officers are not to bypass the State Duty Officer and contact external agencies directly.
- Overnight SDOs may work less in *Response* focus, but more so in Intelligence, Planning and Logistics to prepare for first light operations.
- Clubs/Services may be asked to assist with land based search or conduct a simple retrieval on still water depending on risk vs reward assessment.



## Surfguard Emergency Call Out Teams

- Do not change Call Out Team Mailing group names  
Periodically clubs change their ECOT mailing group to something like "22-23 Call Out Team" this drops into a menu with hundreds of other Mailing Groups and Surfcom cannot identify *which service* the Mailing group belongs to
- Ensure Call Out team members are over 18 years old
- Mailing group type is Surfcom
- Ensure Call Out Team Members do not have privacy options set in their Surfguard profile.  
Selecting these will prevent Call Out messages being received



Drivers Licence Type: Car  
 Drivers Licence Number: 12345  
 Drivers Licence Expiry Date: 04/11/2020 (dd/mm/yyyy)  
 Marine Licence Number: ABC123  
 Marine Licence Expiry Date: 05/09/2023 (dd/mm/yyyy)  
 Do not Send SMS:   
 Do not Send Email:   
 DONATIONS / REQUESTS  
 Donations / Requests Interest:

- Do not remove the contact for ON DUTY STATE DUTY OFFICER this is a redundancy solutions that allows Surfcom to monitor the success of SMS notifications

## Technical Issues

- Any redundancy SMS will come as a normal SMS with no link from Surfcom or Surfguard.
- The first point of call for any concerns should be your Club Captain or Director of Lifesaving
- [SLSA Help Portal](#)
- SLSNSW State Operations Centre  
Phone: [\(02\) 9471 8092](tel:0294718092)  
Email: [soc@surflifesaving.com.au](mailto:soc@surflifesaving.com.au)  
Subject line: Support Ticket
- Submit an [SLS IT Enhancement Suggestion](#)

## Additional Resources

- [Support Operations Emergency Call Out Teams SMS System video guide \(2020\)](#)
- Bulli Emergency Call Out Team Briefing ?
- FNC Support Ops Presentation?
- Clubs Conference Presentation

## Appendix 2 – Risk Assessment (as per AUAVS ReOC Ops Manual)

### Overview

Risk assessment is an essential part of the risk management strategy and is used to determine what risks will be tolerated, mitigated (controlled), or in some cases, avoided. The process is initiated when:

- An assumption made about risk in the Job Safety Assessment (JSA) is no longer valid
- The JSA identifies a new risk, or
- A new operation is undertaken which requires a permission, approval or exemption from CASA or other State or Federal authorities.

Figure 1 below details the safety risk management process that includes the following key areas:

- Communication and consultation;
- Establishing the context;
- Risk assessment;
- Risk treatment;
- Monitoring and review.

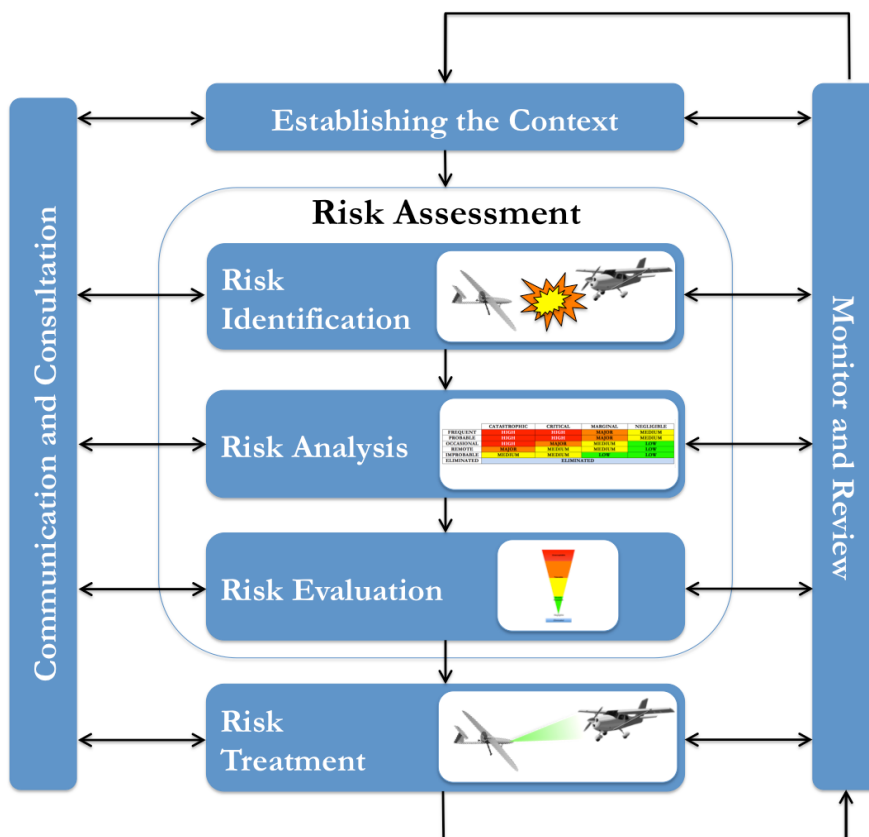


Figure 1 – The safety risk management process (Clothier, 2013)

### **Communication and Consultation:** and consult

Where possible, any person affected by a risk should be identified and consulted with at each stage of the risk management process. The consultation process requires the sharing of information and should provide the genuine opportunity for all people affected by the risk to be part of the decision-making process.

Clear, open, and transparent consultation is a key element in successful risk management practices.

### **Establishing the context:** the context

In addition to communication and consultation, the context of a risk should be established in terms of its compliance with legislative standards and operational/organisational environment. The following steps should be undertaken to establish the context:

1. **Topic Objectives** – Clearly articulate the specific objectives of the RPAS activity that will be undertaken, including locations, proposed time of operations, etc.
2. **External Environment** – Identify and consider what additional matters may need to be considered. This may include the identity of key stakeholders, legal/regulatory requirements from other State or Federal authorities, technical matters relevant to the risk, other activities or sensitivities that may impact on the risk, etc.
3. **Internal Environment** – Identify and consider if there are any special internal requirements that need to be considered, including staff training, human factors, reliability, and suitability of equipment etc.
4. **Stakeholders** – All stakeholders that may be impacted on the risk need to be identified. This may include the client, other airspace users, members of the public, public interest groups, owners, and occupiers of buildings, and Local, State or Federal authorities etc.

### **Risk Assessment - Risk Identification:** the risks

Risks need to be identified in terms of what, why and how things can arise so further analysis of the risk can be undertaken. This step should identify any risks arising from the operating environment and generate a comprehensive list of risks that could impact on those objectives.

For some activities, especially safety related activities, hazard identification is the first step when identifying risks. A 'hazard' can be a situation that poses a level of threat to life, health, property, or the environment; or a form of potentially damaging energy.

Risks can be identified using the following tools:

- Audits or physical inspections;
- Accident / incident reports;
- Brainstorming;
- Decision trees;
- History;
- Interview / focus groups;
- Personal or organisational experience;
- Scenario analysis;
- Strengths, weaknesses, opportunities, and threats (SWOT) analysis;
- Survey or questionnaires.

Some questions to ask when identifying risks:

- When, where, why, and how are the risks likely to occur?
- What is the source of each risk?
- Who is likely to be affected by the risk?

Identified risks will be documented on the Risk Control Worksheet detailed in Table 4 below.

### **Risk Assessment - Risk Analysis:**

The objective of this step is to separate the broadly acceptable risks from those risks requiring subsequent treatment. For each identified risk, the existing controls need to be analysed in terms of consequence and likelihood in the context of those controls.

A control is defined as a measure that modifies a risk i.e., reducing the consequence and / or likelihood. Controls include any policy, process, practice, device, people, or other actions which modify risk. The method of analysis to be applied will depend on the particular application, the availability of reliable data and the decision-making needs of the activity. Details on risk analysis techniques can be found in *ISO31010:2009 Risk management – Risk assessment techniques*. As appropriate, these techniques may involve the qualitative or quantitative assessment of risk.

The risk assessment matrix is an example of a qualitative tool used to assess consequence and likelihood. Consequence (Table 1) and Likelihood (Table 2) values are used to derive a Risk Rating (Table 3). The numeric rating scale should be applied consistently for each activity evaluated and the detailed consequence descriptions need to be considered in the context of the activity that is being assessed.

### **Risk Assessment - Risk Evaluation:**

An evaluation of each identified risk will be conducted to determine those risks that are acceptable and those that require further treatment. Risks that require further action will be mitigated prior to any RPAS operations. The risks that have been accepted will be noted and monitored in accordance with **'Monitor and Review'** process detailed below.

Existing controls and their effectiveness must be considered when analysing the risk to derive a Risk Rating score. Details of this risk analysis will be recorded on the Risk Control Worksheet detailed in Table 4 (below). The analysis will consider the range of potential consequences and how likely they are to occur. Consequence and likelihood are combined to produce an estimated level of risk called the Risk Rating.

### **Risk Treatment:**

In accordance with Table 3 (below), low priority risks (score <4) will be accepted and monitored. Medium risks (score <6) will be reduced to an acceptable level of risk in accordance with 'As Low as Reasonably Practicable' ALARP principles detailed below. Risks with a score of 6 or higher are not permitted to be accepted by the Chief Remote Pilot.

The ALARP criteria will be used to manage risks that have a significant safety consequence. It is acknowledged that although the cost of mitigating a risk is a consideration of the ALARP process, it is secondary to what is required by relevant legal standards and measured against what a 'reasonable person' would do to control the risk in similar circumstances. For this purpose, ALARP is the situation where risk is negligible, or at least at a level where it can be managed by routine procedures.

The importance of insurance is recognised in the risk management process and as such, the company will ensure that appropriate insurance exists for all RPAS activities that are being undertaken.

For each risk, the risk treatment(s) will be detailed in the applicable part of the Risk Control Worksheet as detailed in Table 4 (below). A new risk assessment will be conducted to determine the suitability of the risk treatment and these details, including a revised risk score, will be entered in the table.

**Monitor and Review:**

The last step in the Risk Management process is to monitor and review the effectiveness and performance of the risk treatment options, strategies, and the management system and changes which might affect it as follows:

- Each step undertaken should be documented to enable effective monitoring and review;
- Risks and the effectiveness of treatment measures need to be monitored to ensure changing circumstances do not alter the risk priorities;
- Identification, assessment, and treatments must be reviewed to ensure the risks remain relevant and continue to be managed and that any new or emerging risks are identified and managed.

**AVCRM's Customisable Safety Management Suite:**

AVCRM's Risk Module allows for the integration of all customisable likelihoods, consequences, and outcomes (as shown in Tables 1, 2, 3, 4 and 5 below). All information can be changed at any time, updated to SLSNSW's needs, so that all Pilots can correctly identify and mitigate risks associated with each particular job.

When selecting likelihoods and consequences (as shown in Table 5), the AVCRM Software will automatically display the associated descriptions (values) to allow for greater understanding of risk management.

When a risk assessment is created within the software, Pilots have quick access to the Risk Matrix and Risk Scores at the top of the page, allowing for informed decisions.

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**RISK ASSESSMENT MATRIX - LEVEL OF RISK**

**Table 1 - Consequence Values**

	Consequence					
	0	1	2	3	4	5
People	No injury	Minor injury that does not require medical treatment	Minor injury that requires first aid treatment	Serious injury causing hospitalisation or multiple medical treatment cases	Permanent injury or disability (including blinding) that may result in hospitalisation of at least one person	One or more deaths, multiple severe injuries, or permanent total disability
RPAS	Any element of the RPAS is degraded but task unaffected	A failure not serious enough to cause RPAS damage but which will result in unscheduled maintenance or repair or incomplete task	Minor RPAS damage resulting in damage to components, incomplete task, and future unavailability of RPAS	Significant RPAS damage but repairable	Complete loss of or destruction of a RPAS component (RPA, camera transmitter, sensor, etc.)	Loss of all RPAS elements
Reputation	Small delay, internal inconvenience only	May threaten an element of the service resulting in the task or objective being delayed	Risk does not violate any law and can be easily remedied. It has some effect on reputation and/or external stakeholders	Risk does not violate any law and can be easily remedied. It has some residual effect on reputation and/or external stakeholders and while reputation is damaged it is recoverable	Risk violates a law but can be remedied. It has a residual effect on reputation and/or external stakeholders and may result in damage to reputation	Risk violates a law and is unable to be remedied. It has a significant impact on reputation and/or external stakeholders and will result in loss of reputation
Cost/Property Damage	Negligible	Less than \$1,000	More than \$1,000 less than \$10,000	More than \$10,000 less than \$100,000	More than \$100,000 less than \$1,000,000	Loss or damage exceeding \$M1
Airspace	No aviation airspace safety implication	Minor breach of aviation safety regulations or RPA Area Approval	Serious issues of compliance with aviation safety regulations, RPA Area Approval or operations resulting in potential avoiding action by a crewed aircraft but no collision	Serious issue of compliance with aviation safety regulations or operations or the loss of separation resulting in the potential for a collision with a crewed aircraft, but the crewed aircraft is able to land with no serious injuries or fatalities	Potential for aviation safety incident/s involving multiple life-threatening injuries, or fatalities, to less than 10 people	Potential for multiple fatal aviation safety incidents causing multiple fatalities, to 10 or more people
Equitable access of airspace	No effect on access to airspace users	Some users of the airspace may perceive or experience airspace inequality resulting in between 5 to 10-minute delay or minor detour	Some users of the airspace may perceive or experience airspace inequality resulting in more than 10-minute delay or major detours	Most users of the airspace will experience airspace inequality resulting in long delay (>30 minutes) or major detours	All users of the airspace will experience airspace inequality resulting in long delay (>30 minutes) or major detours	Airspace users are prohibited from operating in the airspace causing significant disruptions to operations and financial cost

Table 2 – Likelihood

<b>Likelihood</b>	Almost Certain	5	>1 in 10	Is expected to occur in most circumstances
	Likely	4	1 in 10 – 100	Will probably occur
	Possible	3	1 in 100 – 1000	Might occur at some time in the future
	Unlikely	2	1 in 1000 – 10000	Could occur but considered unlikely or doubtful
	Rare	1	1 in 10000 - 100000	May occur in exceptional circumstances
	Extremely Rare	0	< 1 in 100000	Could only occur under specific conditions and extraordinary circumstances

Table 3 – Risk Rating

			<b>Consequence</b>					
			0	1	2	3	4	5
<b>Likelihood</b>	Almost Certain	5	5	6	7	8	9	10
	Likely	4	4	5	6	7	8	9
	Possible	3	3	4	5	6	7	8
	Unlikely	2	2	3	4	5	6	7
	Rare	1	1	2	3	4	5	6
	Extremely Rare	0	0	1	2	3	4	5
			<p><b>Untreated Risk Scores</b></p> <p>8,9,10 (Extreme risk) - Task is not permitted. Risk controls are required to ensure residual risk is acceptable.</p> <p>6,7 (High risk) - Task is not permitted. Risk controls are required to ensure residual risk is acceptable.</p> <p>4,5 (Medium risk) - Task may proceed, however, risk must be reduced to 'as low as reasonably practicable' (ALARP).</p> <p>1,2,3 (Low risk) - Task may proceed.</p>					

Table 4 – AVCRM Risk Register

Risk ID	SMS Strategic Themes	Title	Details	Existing Controls	Risk Rating			Additional Controls	Final Risk Rating			Options
					L (a)	C (b)	R (a+b)		L (a)	C (b)	R (a+b)	
0000004	RPA Type - All Operation Type - All Operation Area - All	Slips trips falls when operating the drone	Slips trips falls when operating the drone	Safety Boots, long sleeve shirt, pants Minimise walking throughout flight	3	2	5	Second operator (spotter) on site to prevent pilot moving and tripping Designated (pre marked) zone for pilot operation	1	2	3	Options ▾
0000003	RPA Type - All Operation Type - All Operation Area - All	Uneven takeoff/landing point	The Hazard: uneven ground for take off and landing. This risks the aircraft tipping or encountering... <a href="#">read more</a>	Drone set up on level surface (no more than 5 degrees) Extension legs for drone	4	2	6	Employ the use of a take off and landing mat. Ensure landing spot has a minimum cleared area of 5m (... <a href="#">read more</a>	1	2	3	Options ▾
0000002	RPA Type - All Operation Type - All Operation Area - All	Equipment not secured for transport	Equipment not secured prior to transport could cause damage to RPA and equipment resulting in minor... <a href="#">read more</a>	Equipment to be checked, and stowed properly for transport	3	3	6	Secure each RPA component in padded, protective cases to prevent damage in transit. Secure larger... <a href="#">read more</a>	1	3	4	Options ▾
0000001	RPA Type - All Operation Type - All Operation Area - All	Fatigue to RPA Pilot or Other Crew	The Hazard: Fatigue. The Risk: Drone operations crew suffering from fatigue whilst driving to an... <a href="#">read more</a>	Reasonable sleep prior to travel to location.	3	3	6	At least 6 - 8 hours of restful sleep prior to departure for the operation. No consumption of... <a href="#">read more</a>	1	3	4	Options ▾

Table 5 – AVCRM Risk Analysis EXAMPLES ONLY

### Risk Evaluation

**Likelihood** Unlikely ▾

1 in 1000 - 10000 instances: Could occur but considered unlikely or doubtful

**Consequence** Minor ▾

People - Minor injury that requires first aid treatment  
RPAS - Minor RPAS damage resulting in damage to components, incomplete task and future unserviceability of RPAS  
Reputation - Risk does not violate any law and can be easily remedied. It has some effect on reputation and/or external stakeholders  
Airspace - Serious issues of compliance with aviation safety regulations, RPA Area Approval or operations resulting in potential avoiding action by a manned aircraft but no collision  
Equitable access of airspace - Some users of the airspace may perceive or experience airspace inequality resulting in more than 10 minute delay or major detours

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### Risk Matrix

Likelihood	Consequence					
	0 - Almost None	1 - Insignificant	2 - Minor	3 - Moderate	4 - Major	5 - Catastrophic
5 - Almost Certain	5 - MEDIUM	6 - HIGH	7 - HIGH	8 - EXTREME	9 - EXTREME	10 - EXTREME
4 - Likely	4 - MEDIUM	5 - MEDIUM	6 - HIGH	7 - HIGH	8 - EXTREME	9 - EXTREME
3 - Possible	3 - LOW	4 - MEDIUM	5 - MEDIUM	6 - HIGH	7 - HIGH	8 - EXTREME
2 - Unlikely	2 - LOW	3 - LOW	<b>4 - MEDIUM</b>	5 - MEDIUM	6 - HIGH	7 - HIGH
1 - Rare	1 - LOW	2 - LOW	3 - LOW	4 - MEDIUM	5 - MEDIUM	6 - HIGH
0 - Extremely Rare	0 - LOW	1 - LOW	2 - LOW	3 - LOW	4 - MEDIUM	5 - MEDIUM



Final Risk Evaluation

Likelihood

Extremely Rare

<1 in 100000 instances: Could only occur under specific conditions and extraordinary circumstances

Consequence

Minor

People - Minor injury that requires first aid treatment  
 RPAS - Minor RPAS damage resulting in damage to components, incomplete task and future unserviceability of RPAS  
 Reputation - Risk does not violate any law and can be easily remedied. It has some effect on reputation and/or external stakeholders  
 Airspace - Serious issues of compliance with aviation safety regulations, RPA Area Approval or operations resulting in potential avoiding action by a manned aircraft but no collision  
 Equitable access of airspace - Some users of the airspace may perceive or experience airspace inequality resulting in more than 10 minute delay or major detours

Risk Matrix

Likelihood	Consequence					
	0 - Almost None	1 - Insignificant	2 - Minor	3 - Moderate	4 - Major	5 - Catastrophic
5 - Almost Certain	5 - MEDIUM	6 - HIGH	7 - HIGH	8 - EXTREME	9 - EXTREME	10 - EXTREME
4 - Likely	4 - MEDIUM	5 - MEDIUM	6 - HIGH	7 - HIGH	8 - EXTREME	9 - EXTREME
3 - Possible	3 - LOW	4 - MEDIUM	5 - MEDIUM	6 - HIGH	7 - HIGH	8 - EXTREME
2 - Unlikely	2 - LOW	3 - LOW	4 - MEDIUM	5 - MEDIUM	6 - HIGH	7 - HIGH
1 - Rare	1 - LOW	2 - LOW	3 - LOW	4 - MEDIUM	5 - MEDIUM	6 - HIGH
0 - Extremely Rare	0 - LOW	1 - LOW	<b>2 - LOW</b>	3 - LOW	4 - MEDIUM	5 - MEDIUM

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