

# **SHOALHAVEN DISTRICT MEMORIAL HOSPITAL (SDMH)**

## **TEMPORARY HELICOPTER LANDING SITE (HLS) OPERATING PROCEDURE**

### **SHOALHAVEN EMERGENCY MANAGEMENT CENTRE (EMC) V1.2**

#### **Intent**

The Shoalhaven EMC currently hosts an HLS that was constructed for use by helicopters contracted by either the Rural Fire Service (RFS) or the State Emergency Service (SES) during fire, flood or other civil emergencies. For a period of time, it is proposed that the Shoalhaven EMC HLS will be used by NSW Ambulance contracted helicopters due to the closure of the HLS at the SDMH. The intent of this Procedure is to provide stakeholders detail of the requirements for the safe and effective conduct of a patient transfer by a NSW Ambulance helicopter at the Shoalhaven EMC HLS, 92 Albatross Rd, South Nowra.

Patient welfare needs to remain at the forefront of mind for all stakeholders in the delivery of this procedure. The Shoalhaven EMC HLS will be used until the HLS on the new SDMH is operational.

#### **Scope**

The document will provide:

- a. An overview of the Shoalhaven EMC precinct,
- b. Description of proposed landing area,
- c. Details of relevant stakeholders,
- d. Patient transfer activity detail,
- e. Responsibility Matrix,
- f. Risk Matrix, and
- g. Communications Plan and points of contact.

#### **Shoalhaven EMC Precinct**

The Shoalhaven EMC location, relative to the SDMH is shown in Image 1.



**Image 1:** Location of the Shoalhaven EMC

The Shoalhaven EMC HLS has two main operational areas illustrated in Image 2:

- a. The collocated Final Approach and Takeoff Area (FATO) and Touchdown and Lifftoff Area (TLOF) on the new concrete slab, and
- b. The grassed parking area to the east of the FATO/TLOF.

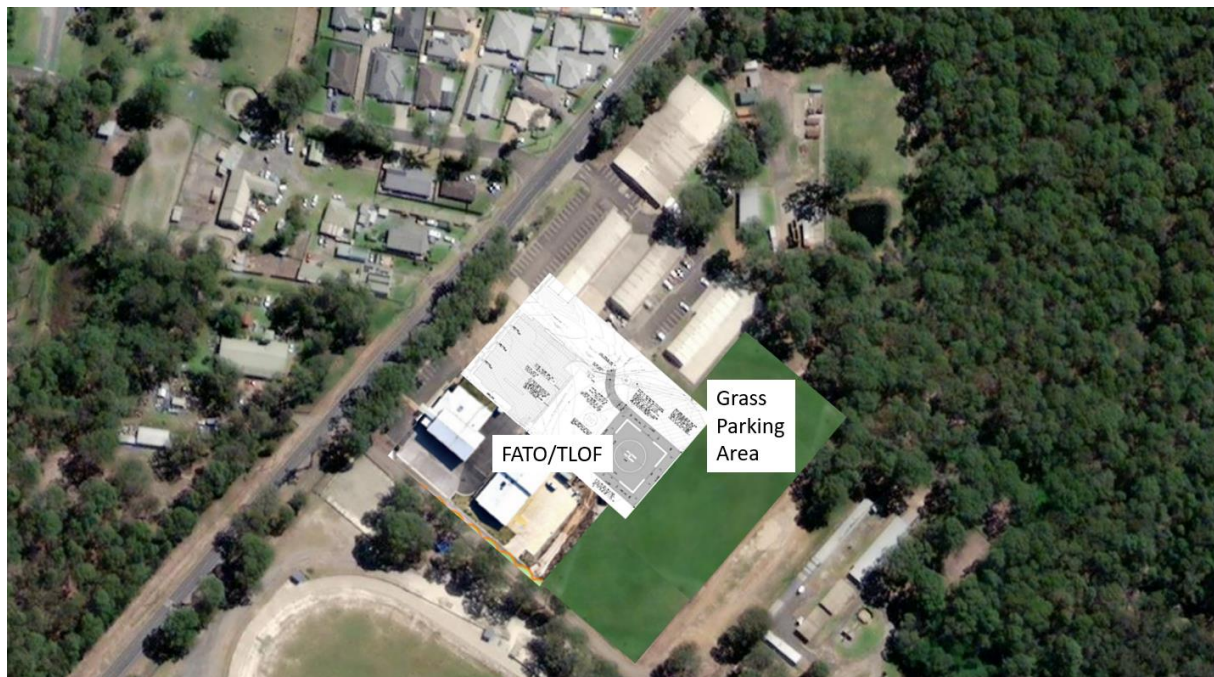
The helicopter will always approach to the FATO/TLOF. The parking area will only be used by an aircraft repositioning (by hover-taxying) from the FATO/TLOF. Likewise, for departures, the helicopter will always reposition to the FATO/TLOF. NSW Ambulance helicopters will be the predominant users of HLS by night, noting that RFS or SES owned/contracted helicopters may operate from the HLS by night at some time in the future. Unless an RFS or SES owned/contracted helicopter is unserviceable, the FATO/TLOF should almost always be available to NSW Ambulance helicopters by night.

If the Shoalhaven EMC HLS is unavailable to NSW Ambulance helicopters, they will revert to using the alternate temporary HLS at HMAS Albatross. Approval to use HMAS Albatross remains extant and this requirement is most likely to be realised during a heavy flood or fire season.

There are possible approach and departure directions to account for most wind directions. For noise abatement, easterly/south-easterly paths are preferred for all approaches and departures where possible.

If aircraft performance permits, it is highly desirable that approaches and departures by night are conducted in the easterly/south-easterly direction.

Image 2 illustrates the HLS layout with FATO/TLOF and Parking Area.



**Image 2:** HLS Layout

A scaled view of the FATO/TLOF is in Image 3 below.





**Image 3: FATO/TLOF Detail**

### Lighting

As it is a temporary site, and RFS or SES helicopters are not currently planned to operate there at night, the HLS does not have HLS lighting. Advice from Helicopter Emergency Medical Service (HEMS) operators is that it is not necessary. The HEMS operators use Night Vision Goggles (NVGs) and these will be highly effective on a very new light-coloured concrete slab when there is a substantial amount of ambient light in the vicinity from streetlights and security lights around buildings.

A floodlight will be established on the southern side of the HLS area to support patient loading and unloading. The proposed floodlight location illustrated in Image 4 is 13m south-east of an electrical control box (indicating that electrical reticulation to this area has already been achieved and therefore trenching and cabling works should not be extensive).



**Image 4: Floodlight, windsock and firefighting equipment locations**

### FATO and TLOF Location

The FATO/TLOF is located through Gate 3 behind a new car park and is surrounded by a gated fence.

### Vehicular (Road Ambulance) Access

The primary vehicular (road ambulance) approach route to the HLS is via Gate 3 which has pin-pad and swipe card access. An alternative approach route is via the southern side of the precinct via two gates within the West Nowra Rural Fire Brigade compound. The outer gate will be fitted with lock-box containing a common gate key for both gates.

The HLS gated compound will be accessed by use of a key in a lock-box attached to the gate.

The ambulance waiting area is in the outer car park abutting Albatross Rd, adjacent to the pin-pad and swipe card access post for Gate 3.

### Illuminated Wind Direction Indicator (IWDI) or Windsock

An IWDI or windsock will be erected in as shown in Image 4. It will be positioned outside the surveyed safety splay for approach and departure paths. The windsock needs to be higher than adjacent buildings so that the airflow into it is not impeded by any structure. It also requires electrical reticulation to support lighting.

### Firefighting Equipment

Firefighting equipment will be available in a container south-western corner of the FATO/TLOF, adjacent to the power control box (see Image 4).

### Crew Amenities

It is proposed that helicopter crew will have access to amenities (shelter from rain/insects, toilets, electricity etc) in the common room area of the main RFS HQ building. A key to the building will be provided in a lock box at the back door to the kitchen area for after-hours access. Alarm code details will be provided to NSW Ambulance.

The proposed general layout of the Shoalhaven EMC HLS is shown in Image 5 below:

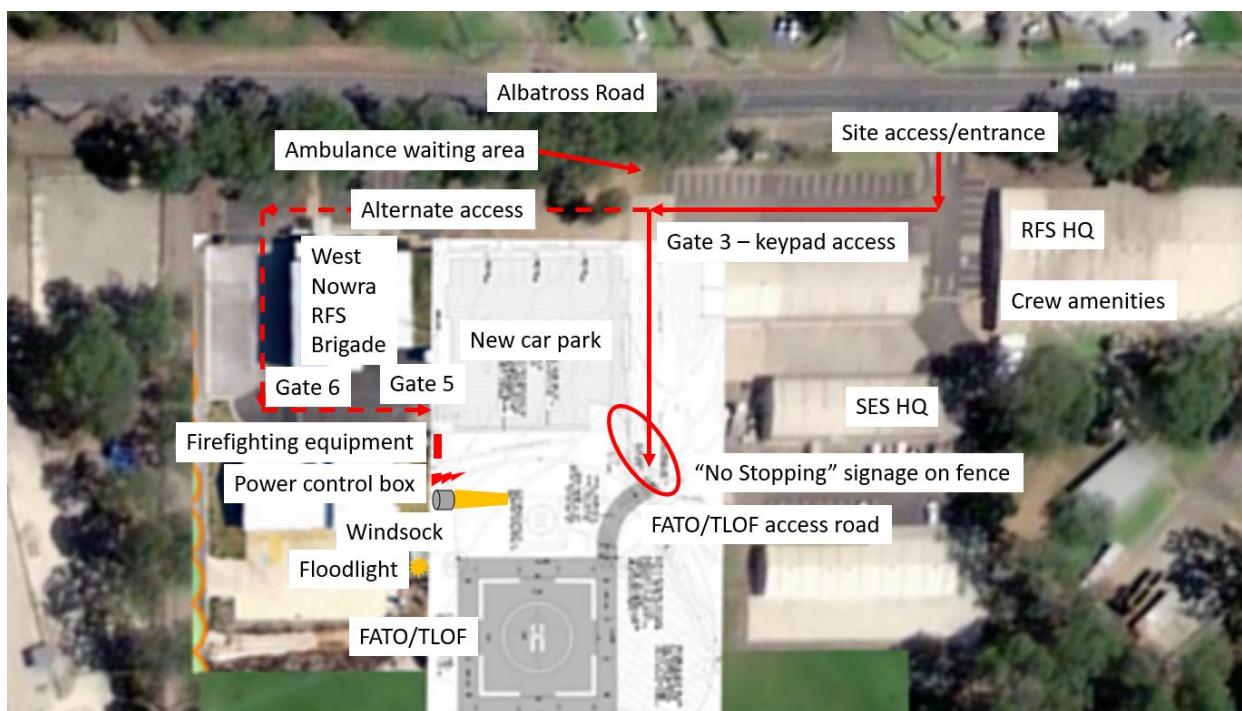


Image 5: Site Proposed Layout



## FATO and TLOF

The FATO and TLOF are coincident/concentric and are contained within the concrete slab. The concrete slab is 34m square and the extremities are coincident with the HLS minimum safety area requirement.

## HLS Approach and Departure Paths

The HLS has two potential approach and departure paths: to the east-south-east and to the north-north-west. These paths are shown in Images 6 and 7.



**Image 6:** East-South-East Approach and Departure Path



**Image 7:** North-North-West Approach and Departure Path

## HLS Obstructions

There is one HLS obstruction, a large eucalypt, that needs to either be removed or to be marked/lit for night operations. This tree can be seen in Image 7 above.

## **Stakeholders**

The stakeholders include:

- a. Shoalhaven City Council (SCC),
- b. SDMH,
- c. Shoalhaven EMC,
- d. NSW Ambulance (local),
- e. NSW Ambulance (NETS)
- f. NSW RFS,
- g. NSW SES, and
- h. NSW Ambulance (ACC).

## **Communications Plan**

NSW Ambulance is to advise the following groups of the Procedure:

- NSW Ambulance contracted helicopter operators, and
- NSW Ambulance road crews (Shoalhaven area).

The NSW Health Infrastructure (HI) Project Team for the Shoalhaven Hospital Redevelopment Project is to arrange signage in the vicinity of the HLS that warns area users to keep clear of helicopter operations. This signage should be developed in conjunction with RFS such that the messages are consistent across all types of helicopter operations.

## **Patient Transfer Activity**

Following is the process to conduct a patient outbound transfer from the FATO/TLOF:

- The Hospital will contact the ACC to request a helicopter transfer of a patient from the hospital. In some cases, the NSW Ambulance road crew will transfer a patient from a primary site direct to the HLS. The helicopter will subsequently be activated and an estimated arrival time will be provided.
- The ACC will inform RFS, during working hours (0900 – 1700, Mon – Fri) on the designated duty phone number of an inbound helicopter.
- The NSW Ambulance road vehicle will access the RFS Base and position in the ambulance waiting area to meet the helicopter.
- The NSW Ambulance road vehicle crew, if they arrive at the HLS prior to the helicopter, will carry out HLS preparation tasks. This involves unlocking the HLS gate and crew facilities.
- The NSW Ambulance helicopter will approach the FATO/TLOF, normally flying into the prevailing wind. The approach direction may be modified for noise abatement purposes.
- The NSW Ambulance helicopter will land on the FATO/TLOF, land and shut down.
- The helicopter crew will switch on the floodlight.
- After the helicopter lands the NSW Ambulance road vehicle will depart the waiting area and move through Gate 3 to the HLS.
- The NSW Ambulance road vehicle will transport the helicopter medical crew to the hospital.
- At the hospital, the medical crew will complete the patient acceptance procedure and will use the ambulance to transfer the patient and the medical crew back to the helicopter.
- The patient will be loaded into the helicopter and the helicopter will depart for the tertiary hospital location. The helicopter will normally depart into the prevailing wind.
- Prior to departure, the helicopter crew will switch off the floodlight.
- Once the helicopter has departed, the NSW Ambulance road vehicle crew will lock the HLS gate and depart the RFS base.

Following is the process to conduct a patient inbound transfer to the hospital:

- The ACC will contact the hospital to advise of a helicopter transfer of a patient to the hospital. An estimated arrival time for the helicopter will be provided.
- The ACC will inform RFS on the designated duty phone number of an inbound helicopter.
- The NSW Ambulance road vehicle will access the RFS Base and position in the ambulance waiting area to meet the helicopter.
- The NSW Ambulance road vehicle crew, if they arrive at the HLS prior to the helicopter, will carry out HLS preparation tasks. This involves unlocking the HLS gate and crew facilities.
- The NSW Ambulance helicopter will approach the FATO/TLOF, normally flying into the prevailing wind. The approach direction may be modified for noise abatement purposes.
- The NSW Ambulance helicopter will land on the FATO/TLOF, land and shut down.
- The helicopter crew will switch on the floodlight.
- After the helicopter lands the NSW Ambulance road vehicle will depart the waiting area and move through Gate 3 to the HLS.
- After the helicopter shuts down, the patient will be loaded into the NSW Ambulance road vehicle and the patient and helicopter medical crew will be transported to the hospital.
- Once the hospital has completed the patient acceptance procedure the NSW Ambulance road crew will transport the helicopter medical crew back to the helicopter.
- Once the medical crew is back aboard the helicopter, it will depart for its base location. The helicopter will normally depart into the prevailing wind.
- Prior to departure, the helicopter crew will switch off the floodlight.
- Once the helicopter has departed, the NSW Ambulance road vehicle crew will lock the HLS gate and depart the RFS base.

#### **Extended Parking by a NSW Ambulance Helicopter**

In the event that a NSW Ambulance helicopter is likely to park on the FATO/TLOF for in excess of four hours, the ACC is to advise the RFS Duty Officer of this possibility on the 24-hour number in the Communications/Points of Contact table below.

#### **Procedure Review**

This procedure will be reviewed monthly during early stages of HLS usage.

#### **Responsibility Matrix**

| Activity                                       | Responsibility     | Remarks                         |
|--|--------------------|---------------------------------|
| Notification to activate site                  | Hospital/ACC/Pilot |                                 |
| Suitability of landing site                    | Pilot              |                                 |
| Gaining access to site                         | NSW Ambulance      | Duty road crew if first arrival |
| Clearing Ambulance Parking Area                | NSW Ambulance      | Duty road crew if first arrival |
| Clearing FATO and TLOF                         | Pilot              |                                 |
| Turn on floodlights                            | Helicopter crew    |                                 |
| Transfer medical crew helicopter/hospital      | NSW Ambulance      |                                 |
| Transfer patient & crew hospital/helicopter    | NSW Ambulance      |                                 |
| Transport patient to tertiary medical facility | Pilot              |                                 |
| Secure site and lock up as applicable          | NSW Ambulance      | Duty road crew                  |

## Risk Matrix

| Risk  | Mitigation   | Remarks   |
|---|--|---|
| Community complains about helicopter noise and threatens continued HLS operations | Use easterly approach and departure path as a priority.<br>Avoid prolonged hovering. | Refer complainants to HI's complaints protocol.                                       |
| People/animals on landing area  | Keep HLS gate closed and locked.<br>Use alternative site                             | NSW Ambulance road crew assistance  |
| Landing area NOT available  | Use alternative site (HMAS Albatross)  | Need uninterrupted communications between RFS and NSWA to advise on RFS HLS activity. |
| NSW Ambulance road vehicle not available  | ACC to access other vehicle in area  | Need to include Ambulance in HLS activation process                                   |

## Communications/Points of Contact

| Organisation             | Number                            | Remarks                         |
|--------------------------|-----------------------------------|---------------------------------|
| Shoalhaven Hospital      | 02-44213111                       | Hospital switch                 |
| ACC                      | 02-95532222                       | Contact with helicopter         |
| RFS Shoalhaven           | 02-44244424                       | During normal work hours        |
| RFS 24-hour Duty Officer | 02-91237137 (Not for publication) | Parking in excess of four hours |
| RFS State HQ Switch      | 02-87415555                       | Administration                  |

## Helicopter Safety

Once the helicopter lands on the ground, DO NOT approach the helicopter until the rotors have stopped moving AND the crew signals for the ambulance to approach. Always follow helicopter crew directions.

## Safety Around Helicopters

The primary **DANGER ZONE** is at the rear of the helicopter. Under no circumstances is the helicopter to be approached from the rear or a departure from the aircraft made to the rear, as indicated in the red area below. See [Figure below](#).

