

Fiona Stanley Hospital

Heliport Procedure

Emergency Management Unit

Document Number	FSH-SIM-PRO-0028	
Document Handle	1763	
Document Location	OnBase – FM Corporate Services – Procedure	

Document Control

Version	Description of Revision	Date	Prepared By	Approved By
1.0	First release	Nov 2012	Mirco Hallas	Joe Boyle
1.1	Removal of Distribution List and quality check.	Oct 2013	Erin de Waal	
1.2	Update after several reviews	May 2014 June 2014	Mirco Hallas Jerry Barrett	
1.3	Update of entire content	Oct 2014	Jerry Barrett	
1.4	Update, aircraft type	Nov 2014	Jerry Barrett	
1.5	Update Heliport opening	Dec 2014	Jerry Barrett	
1.6	Final edit prior to publishing (requires formatting)	Feb 2015	Danny Kay	
1.7	Format and styles applied Also edited throughout for readability and consistency of terminology	Feb 2015	David Gryguc	
1.8	Feedback from Rob Stewart, Paul Mark and Mirco Hallas incorporated	Feb 2015	Danny Kay	
1.9	OSH review	Feb 2015	Jason Linford	
2.0	Processed and published	Feb 2015	David Gryguc	Nigel Myhill
2.1	Incorporated changes recommended by DFES, ED and Jerry Barrett as well as updated Stakeholder Contacts	Feb 2015	Danny Kay	
3.0	Processed and published	Feb 2015	David Gryguc	Nigel Myhill
3.1	Additional information on Eye Wash Station, P.O.L. Spill Kit, SJAA Equipment and Stakeholder Contacts	Mar 2015	Danny Kay Jerry Barrett	
4.0	Processed and published	Mar 2015	David Gryguc	Nigel Myhill
4.1	Adjustment to 3.4	Mar 2015	Jerry Barrett	
4.2	Update of entire content	June 2017	Jeremy Richardson	Tony Dennis
5.0	Processed and published	July 2017	Krystal Miller	
5.1	Updated maps, terminology, and Stakeholder contacts	July 2018	Jeremy Richardson	Victoria Taylor- McCann
5.2	Updated 7.2.7 & added 7.2A	August 2018	Joel Marks	EPDMC
6.0	Processed and Published	Sept 2018	Krystal Miller	Rad De Luca
6.1	Review and Update	Sept 2020	Karl Gill	Rad De Luca
7.0	Processed and Published	Sept 2020	Rachael Cross	
7.1	Minor updates	Sept 2020	Sophie White	Rad De Luca
8.0	Processed and Published	Sept 2020	Rachael Cross	

1763 FSH-SIM-PRO-0028 Version: 12.0 Approved: Mar 2022 Page 2 of 62

8.1	Review of the entire content, addition of the 'Requirement to complete Heliport Induction'	Dec 2021	Piyush	
9.0	Processed and Published	Dec 2021	Tanya Burridge	Rad De Luca
10.0	Processed and Published	Dec 2021	Tanya Burridge	Rad De Luca
10.1	Review and update – Introduction of RFDS	Mar 2022	Piyush / DPMU	Rad De Luca
11.0	Processed and Published	Mar 2022	Piyush / DPMU	Rad De Luca
12.0	Processed and Published	Mar 2022	Piyush / DPMU	Rad De Luca

Table of Contents

1	Purp	ose		C
2	Scop	oe		6
3	Gove	ernance		6
4			nents	
7	4.1		ments	
	4.2		uments	
	4.3		on	
	4.4	, ,	//I	
	4.5			
5		•	port	
J	5.1		ροιτ	
	5.1 5.2			
	5.2		city	
		• .	·	
	5.4		licopter types	
	5.5		S	
	5.6	5.6.1	Lifts	
	5.7		LIIS	
	5.1	5.7.1	Foreign Object Debris (FOD)	
		5.7.2	Other equipment	
		5.7.3	Rotor downdraft	
		5.7.4	Rotor Droop	
		5.7.5	Aircraft Type Specific Issues & Hazards	
	5.8			
	5.9 Drainage System			
	5.10 Emergency systems			
	5.11	Access and E	Egress	17
		5.11.1	ED Retrieval Team access	
		5.11.2	Non-team access during heliport operations	
c	Com	5.11.3	Access at all other times	
6				
	6.1		Paramedic / Attending Clinician contact	
	6.2 Flight crew contact			
	6.3		munications	
7				
	7.1		t Flowchart	
	7.2		management	
		7.2.1	ED Clinical Staff	_
		7.2.2	SIMS Control Room	
		7.2.3 7.2.4	FSH HelpdeskHeliport Landing Officer	
		7.2.4 7.2.5	Heliport Landing Assistant	
		7.2.6	ED Porters	
		7.2.7	ED Clinical Heliport Retrieval Team	
	7.3		to complete Heliport Induction	
	7.4	7.4 Patients transported by Rescue 651, Rescue 652, Polair 61 and Polair 62 to be given priority		
	7.5		actise landings	
	7.6	Exercises		22

8	Airborne and Transit		
	8.1	Establishing a 'Green Deck'	22
	8.2	Issues arising	23
9	Appr	oach and Landing	23
	9.1	Heliport briefing	
	9.2	Normal landings	
	9.3	Hot landings / Rotors Running	
	9.4	Helicopter standing on heliport	
	9.5	Multiple landings within a short time	
10	Patie	ent Transfer	24
	10.1	General safety	25
	10.2	Handover of patient	
	10.3	Multiple patients	
	10.4	Heliport Retrieval Trolley's	
11	Depa	arture	26
	11.1	Helicopter departure	26
	11.2	Closing the heliport	
12	Eme	rgency Procedures	26
	12.1	Code Blue	26
	12.2	Code Orange	26
		12.2.1 Primary Evacuation route	
		12.2.2 Secondary Evacuation route	
	12.3	Emergency and Abnormal Landings	
	12.4	Fire on the Heliport	
	12.5	Loss of Vision / Foreign Bodies in the Eye(s)	
	12.6	Staff Injury	31
	12.7	Equipment over the Edge of the Building	32
	12.8	P.O.L (Petrol, Oil, Lubricant) Spill Kit	32

1 Purpose

The purpose of this document is to outline the procedures that personnel are to follow when accessing the Fiona Stanley Hospital (FSH) heliport area.

2 Scope

This procedure is to be used by all Helicopter Operators, FSH staff and any other personnel when accessing the heliport area. No personnel are permitted to access the heliport area unless trained and authorised to do so.

3 Governance

The FSH Emergency Preparedness Disaster and Management Committee (EPDMC) are responsible for the governance of the FSH Heliport.

The Emergency Management Unit (EMU) are responsible for ensuring that these procedures are reviewed and updated at least annually, developing and facilitating training to all relevant personnel, ensuring the heliport is kept in an operational state of readiness at all times, organising drills and exercises in relation to the heliport, and communicating information to the relevant stakeholders (with the assistance of SIMS) regarding the heliport.

SIMS are responsible for ensuring the heliport is in an operational ready state and for coordinating all landings.

Estates are responsible for all inspections and maintenance of all infrastructure associated with the heliport.

4 Associated documents

The following documents are associated with this procedure.

4.1 Internal documents

The following internal documents are associated with this procedure.

Table 1: Associated Internal Documents

Document Number	Document Name	Document Handle
FSH-SIM-SVS-0001	Safety and Incident Management Service Plan	1649
FSH-SIM-MGT-0002	Security Management Plan	1370760
FSH-SIM-PRO-0015	SIMS Incident Reporting Procedure	1761
FSH-OSH-MGT-0001	Health and Safety Plan	1836
FSH-ED-GUI-0016	Emergency Department Heliport Retrieval SOP	

4.2 External documents

The following external documents are associated with this procedure.

1763 FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 6 of 62
-----------------------	---------------	--------------------	--------------

Table 2: Associated External Documents

Document Number/Reference	Document Name

4.3 Key legislation

The FSH heliport will comply with all applicable standards and directives issued by the Civil Aviation Safety Authority (CASA).

Where standards do not exist for hospital heliports, guidance will be sought from CASA and International Civil Aviation Organisation (ICAO) documents.

Key legislation, standards and guidelines applicable to this Procedure include, but are not limited to, the following.

Table 3: Key Legislation, Standards and Guidelines

Key Legislation / Standard / Guideline
Civil Aviation Act 1988
Civil Aviation Regulations 1988 (166)
Civil Aviation Safety regulations 1998
CASA Manual of Standards Part 139
CASA CAAP 92-2 Guidelines for the establishment and operation of Helicopter Landing Sites
Volume II of Annex 14, Heliports, to the Convention on International Civil Aviation
International Civil Aviation Organisation (ICAO) Heliport Manual (Doc 9261)
Occupational Safety & Health Act 1984
Occupational Safety & Health Regulations 1996
Code of Practice (WA) Prevention of Falls in the Workplace

4.4 Terms

The following terms are used in this document.

Table 4: Terms

Term	Description
Abnormal landing	When an aircraft lands causing damage to the aircraft; or in an uncontrolled manner
Agility	The integrated workplace management system used to raise, track and resolve service requests
AlbacMat	An emergency rescue mat designed to slide over all types of surfaces
Baton phone	A Cisco portable IP phone which is handed between staff on duty (like a baton) in order that there is always someone in possession of the phone to receive calls
Bat phone	Priority one pre-alert phone located in ED

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 7 of 62	
------	------------------	---------------	--------------------	--------------	--

Term	Description
Emergency landing	When a landing must occur because of impending or actual failure of an aircraft system or systems
Heliport	The marked area on level 9, south east section of Building B
Heliport area	The entire outside area of level 9 south east section of Building B
Heliport reception area	The area on level 9 at the entrance to the heliport area
HOOT CNM	Fulfils the position of the Hospital Incident Command (HIC) after hours.
Hot landing / rotors turning	The status of the rotors as turning during helicopter loading / unloading
Lift lobby	The area on level 9 to access the lifts
Night	From 30 minutes prior to sunset until 15 minutes after sunrise.
Non-operational heliport	The status of the heliport if work is being carried out that causes the inability to land a helicopter at any time.
Normal landing	The status of the rotors as not turning during helicopter loading / unloading
Operational heliport	The default status of the heliport
Ramp	The access route to the heliport from the heliport reception area
Retrieval team	Trained personnel required for the retrieval of the patient from the helicopter
Retrieval Team Leader	The most senior clinical member of the Retrieval Team and leader of the team during patient retrievals from the heliport

4.5 Acronyms

The following acronyms are used in this document.

Table 5: Acronyms

Acronym	Description
AFFF	Aqueous Film Forming Foam
CASA	Civil Aviation Safety Authority
CCP	Critical Care Paramedic
DFES	Department of Fire and Emergency Services
ED	Emergency Department
EPDMC	Emergency Preparedness and Disaster Management Committee
EMU	Emergency Management Unit
ERHS	Emergency Rescue Helicopter Service
ERT	Emergency Response Team
ETA	Estimated Time of Arrival
FATO	Final Approach and Take-off area
FOD	Foreign Object Debris.
FSH	Fiona Stanley Hospital
HIC	Hospital Incident Commander
HLA	Helicopter Landing Assistant

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 8 of 62

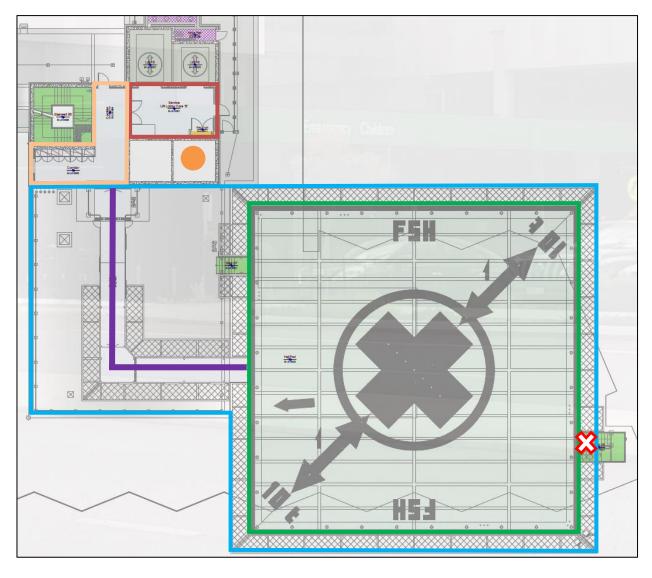
Acronym	Description
HLO	Helicopter Landing Officer
HOOT CNM	Hospital Out Of-hours Team Clinical Nurse Manager
HRT	Health Response Team
MLW	Maximum Landing Weight
MTOW	Maximum Take-Off Weight
PPE	Personal Protective Equipment
RAAF	Royal Australian Air Force
RFDS	Royal Flying Doctor Service
SAR	Search and Rescue
SIMS	Safety and Incident Management Service
SJA	St John Ambulance
TLOF	Touch down and Lift-off area
WAPOL	Western Australia Police

5 Details of the heliport

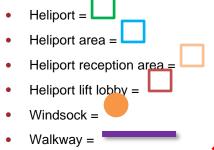
5.1 Location

The FSH heliport is located on the south eastern corner, level 9 of Building B (Main Hospital).

Figure 1: Marked up diagram of the heliport area



The following terms are used in this document, with the corresponding areas marked in the picture above:





Secondary evacuation route =

Figure 2: Heliport and surrounding buildings



The best approach to the heliport is from 45° NE -225° SW direction.

The heliport is within the Jandakot Air Traffic Control zone.

5.2 Dimensions

The marked heliport is 27m x 27m.

5.3 Weight capacity

- Safe Working Load (SWL) = 10 tonnes.
- Maximum landing weight (MLW) = 10 tonnes.
- Maximum take-off weight (MTOW) = 10 tonnes.

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 11 of 62
------	------------------	---------------	--------------------	---------------

5.4 Approved helicopter types

Only twin engine helicopters weighing 10,000kg or less are approved to land at the FSH heliport. In the unlikely event that a single engine helicopter requests to land due to a patient emergency, they are to be advised to land at Jandakot and to call an ambulance.

The following lists some of the different types of helicopters that could land at FSH:

- Bell 412EP Huey ERHS: Rescue 651 and 652; RAAF SAR Pearce: Chopper 63 and 64 (Utilised when S-76 U/S).
- BK117(C2) EC145 RFDS: FLYDOC645: FLYDOC646
- Kawasaki Bolkow BK117 (B2) WAPOL: Polair 61.
- Eurocopter AS365 N3 + Dauphin WAPOL: Polair 62; DFES.
- Sikorsky S-76 RAAF SAR Pearce: Chopper 63 and 64.
- MBB Bolkow 105 LS DFES.
- Sikorsky MH-60R Seahawk*, Sikorsky S-70A-9 Blackhawk, MRH-90 Taipan* Defence Force.

5.5 Default status

The default status of the FSH heliport is 'Operational'. Details for declaring the heliport 'Non-Operational' and the notification process to be followed can be found in Appendix C.

5.6 Maintenance

Estates are responsible for conducting inspections, testing and maintenance of all infrastructures associated with the heliport within a reasonable time frame. All scheduled inspections and maintenance is to be communicated to the EMU via email who will inform all relevant stakeholders. Any unscheduled maintenance is to be communicated to the EMU (during business hours) on 6152 2956 or the SIMS Team Leader (after hours) on 6152 2233 who will inform all relevant stakeholders. If any inspection or maintenance cannot be conducted in a way that would allow a helicopter to land within 15 minutes notice, the heliport is to be declared non-operational as per Appendix C.

5.6.1 Lifts

Core B lifts 15 and 16 are the designated 'Priority' lifts for use with the heliport. Where possible, any maintenance required on Core B will be conducted in a way that neither of these lifts will be non-operational at the same time. If a situation arises that causes both lifts to be deemed non-operational and the time frame for getting them back to an operational state will exceed 15 minutes or is unknown, the heliport is to be declared non-operational as per Appendix C.

5.6.1.1 Priority Recall function

If the Priority Recall function is non-operational on the Core B lifts, the following process is to be followed:

1 SIMS Team Leader to inform ED Medical Shift Coordinator of non-functionality of Priority Recall function and to arrange for the Retrieval Team to be at the Core B lifts Lower Ground 15 minutes prior to landing.

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 12 of 62

^{*} Load weight must not exceed 10,000kg

- 2 Lift 15 or 16 to be placed into fire mode by SIMS Officer.
- 3 SIMS Officer to take designated HLO to the heliport lift area.
- 4 SIMS Officer is to take lift to the Lower Ground to pick-up the Retrieval Team at the designated time.
- 5 SIMS Officer to take retrieval team to Heliport lift lobby and leave lift in place.
- 6 SIMS Officer to take retrieval team, CCP / attending clinician and patient to required floor. Once at floor SIMS Officer to stay with lift and wait for retrieval team and CCP / attending clinician to return them to Heliport lift lobby.
- 7 Once retrieval team and CCP / attending clinician have vacated the lift, SIMS Officer to immediately return lift back to normal mode.

5.7 Hazards

5.7.1 Foreign Object Debris (FOD)

FOD on and around the heliport can be displaced and sent large distances by rotor downwash. If an object passes through the rotor disk or into the engine intake, it can damage or destroy the rotors or engine and can be accelerated to extreme speeds in any direction. This could result in destruction of the helicopter and / or cause injury / loss of life to personnel on the heliport, adjacent rooftops or even on the ground. All personnel accessing the heliport have a responsibility to ensure that any objects dropped are picked up immediately. No objects are to be left loose when an aircraft is approaching or departing the heliport. No attempt should be made to grab or chase an object that is blown away.

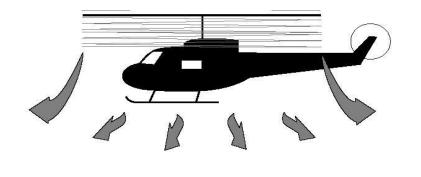
A formal FOD check will be conducted by the HLO before and after all helicopter operations. A daily FOD check will be conducted by a SIMS patrol officer each shift.

5.7.2 Other equipment

Prior to entering the heliport area, consideration should be given on the effects of wind on any equipment, clothing or items to be taken out. Small light items should be secured to avoid them being blown away; all bags should be closed; and all clothing should be secure and appropriate (e.g. scarves and hats not to be worn).

5.7.3 Rotor downdraft

Rotor downdraft is very strong. It is possible for debris / dust to be blown up and to strike heliport staff in the face and eyes causing damage. Eye protection must be worn at all times when on the heliport deck when the rotor blade is turning. Because of the downdraft force, no equipment or trolley(s) should be on the Heliport Area when the aircraft is hovering or under power.

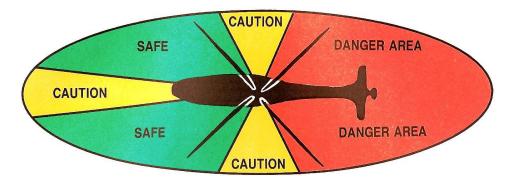


5.7.4 Rotor Droop

Helicopter blades may lower considerably depending on the model and prevailing conditions. No approach to the helicopter should occur unless escorted by the pilot or crew. All staff going out to the heliport must stay on the defined walkway, as outlined in the safety video or briefing.

5.7.5 Aircraft Type Specific Issues & Hazards

Some aircraft require different approach procedures. Never approach aircraft unless indicated by a crew and / or escorted by its crew. It is imperative that members of the Retrieval Team make themselves familiar with the type of aircraft they are about to unload by either watching the safety videos or receiving a verbal brief from the HLO. Approach the helicopter from the 3 or 9 o'clock positions only. Do not cross in front or behind of any helicopter unless accompanied by crew. The helicopter crew will inform you as to the side required to collect the patient.



5.7.5.1 Bell 412EP Huey

The Bell 412EP Huey unloads from the right hand (pilot) side of the aircraft. Depending on how the pilot lands, this could be on the opposite side of the entry ramp.

5.7.5.2 Kawasaki Bolkow BK117 (B2) & BK117 (C2) - EC145

The BK117 (B2) unloads from the rear.

5.7.5.3 Eurocopter AS365 N3 + Dauphin

The Dauphin unloads from either the left or right hand side.

	1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 14 of 62
--	------	------------------	---------------	--------------------	---------------

5.7.5.4 Sikorsky S-76

The S-76 unloads from either the left or right hand side.

5.7.5.5 MBB Bolkow 105 LS

The MBB Bolkow 105 LS accommodates 4 seated people. As such it would only be utilised as a last resort. It unloads from either the left or right side.

5.7.5.6 Defence Force

The Defence Force operates 3 different types of helicopters; Sikorsky MH-60R Seahawk, Sikorsky S-70A-9 Blackhawk, and the MRH-90 Taipan. Defence Force helicopters may be operated at night using night vision devices, so may land with little or no visible external lighting.

5.7.5.6.1 Sikorsky MH-60R Seahawk

The Seahawk unloads from either the left or right hand side.

5.7.5.6.2 Sikorsky S-70A-9 Blackhawk

The Blackhawk unloads from either the left or right hand side.

5.7.5.6.3 MRH-90 Taipan

The Taipan unloads from either the left or right hand side or from the rear via a ramp.

5.8 Lighting

The following lighting is utilised on the heliport for all landings and night time access and is checked twice daily and prior to any landings:

- 36 green perimeter lights.
- 4 green FATO lights.
- 7 green TLOF lights.
- 4 low level flood lights on the SE corner of the pad and 2 high level flood lights located on top of the heliport reception area and heliport lift lobby building on the NW corner to illuminate the heliport. These lights are positioned in a way as not to interfere with landings.
- The windsock (located on the roof of the heliport reception area) is illuminated with 4 white external lights on top and 2 white internal lights. There is also a red anti-collision light on top of the windsock.
- Multiple red anti-collision lights on the SW and NE approaches of the building.
- Ramp lights to illuminate the ramp.

The lighting is controlled via the lighting panel in the heliport reception area with the ramp lights controlled via a 3 button light switch. The default position for the lighting is:

- Spare down
- Windsock and Obstructions Lights up
- Floodlights High Level up

		1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 15 of 62
--	--	------	------------------	---------------	--------------------	---------------

- Floodlights Low Level down
- Perimeter 3 high
- Aiming Point 3 high

To activate the lights the switch at the bottom of the panel is to be turned from 'All Lights Off – Excl Nav / Windsock' to 'Manual Override – All Lights On'. To activate the ramp lights, press all three buttons. A blue light on the button will light up to indicate the ramp lights are on.



5.9 Drainage System

The FSH heliport has a drainage system capable of channelling hydrocarbon polluted run-off into a specially adapted bunted drainage tank and rain water to drain into the designated normal run off area for the hospital. The default position of this system is 'storm water'. Whenever a helicopter landing is anticipated this switch is to be manually turned to 'Hydrocarbon' in order to isolate the contaminated waste water in the special tank and not allow it to taint the normal drainage waste water.



5.10 Emergency systems

In the event of a fire on the heliport during operations, there are 2 AFFF monitors which are activated via the manual call point inside the heliport reception area by the HLO. This will also alert DFES via the Direct Brigade Alarm system.

5.11 Access and Egress

Internal access to the heliport lift lobby and heliport reception area will be via Core B lifts 15 and 16. Only authorised personnel have access to the heliport reception area. If this area is closed upon arrival, wait inside the heliport lift lobby until the HLO authorises entry into the heliport reception area.

5.11.1 ED Retrieval Team access

As a prerequisite, all ED retrieval team members will have received training in heliport procedures prior to accessing the heliport area (see Appendix E). All ED retrieval team members will be authorised to access the heliport lift lobby using the Priority Recall function on the Core B lifts.

5.11.2 Non-team access during heliport operations

The HLO is responsible for the heliport area security and staff behaviour during heliport operations. All staff must follow the instructions of the HLO. Only personnel with a valid reason for being present will be allowed within the heliport reception area during heliport operations. No personnel are to access the heliport area without the approval of the HLO; or access the heliport without approval from the helicopter crew. Any personnel accessing the heliport area must be escorted by the HLA, a member of the helicopter crew, SIMS personnel, or EMU personnel.

5.11.3 Access at all other times

It is understood that other staff may require access to the heliport, primarily for maintenance work. Personnel must liaise with the EMU (during business hours) on 6152 2956 or SIMS (after hours) on 6152 2233 to obtain access to the heliport area, and must vacate the area immediately (with any equipment) on direction of EMU or SIMS staff.

6 Communications

The following section outlines the contact details for helicopter crew and operators to utilise when contacting FSH.

6.1 Critical Care Paramedic / Attending Clinician contact

ED Clinical Staff: Primary – 6152 5297 (ED Bat Phone 24/7).

Secondary - 6152 7642 (ED Medical Shift Coordinator

baton phone 24/7).

Secondary back up - 6152 7643 (ED Nursing Shift

Coordinator baton phone 24/7).

6.2 Flight crew contact

SIMS Control Room (monitored 24/7): Primary – 6152 2233.

1763 FSH-SIM-PRO-0028 Version: 12.0 Approved: Mar 2022 Page 17 of 62
--

Heliport (manned once initial contact is made): Secondary – 6152 9175.

Tertiary – marine band VHF channel 72 (manned once initial contact is made).

6.3 General communications

All general issues relating to the FSH heliport are to be communicated to the EMU via email FSH.HeliportOperation@health.wa.gov.au.

7 Initial contact

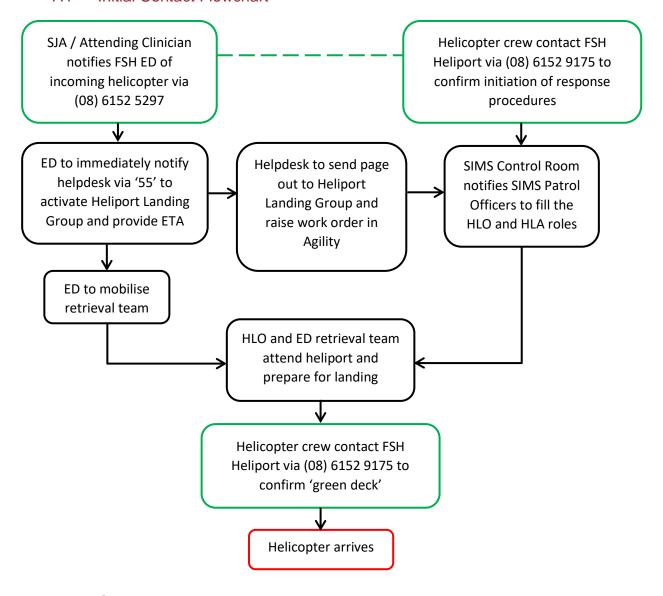
The heliports primary use will be for the transferring of patients to FSH. It is anticipated that it may also be utilised for other purposes such as the collection / drop-off of equipment and / or personnel (e.g. Health Response Teams (HRT), organ transplants, etc.). Notification of all heliport operations is to be communicated as per the 'Initial Contact Flowchart' in section 7.1.

For all arrivals the helicopter pilot will initiate contact with the FSH heliport directly in order to confirm that the heliport processes have been activated and to update the original ETA if required. If a new ETA has been provided, the HLO will contact the ED Medical Shift Coordinator to advise of new ETA, as well as the FSH Helpdesk via '55' and request a new page be sent out to the Heliport Landing Group with the updated ETA.

All communications between the FSH Heliport and the helicopter crew is to be initiated by the helicopter crew with the exception of the HLO becoming aware of any issues that the helicopter crew need to be made aware of immediately. This is due to the helicopter crew conducting critical pre-landing checks.

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 18 of 62
------	------------------	---------------	--------------------	---------------

7.1 Initial Contact Flowchart



7.2 Operational management

The below information is a brief outline of the individual roles during Heliport operations. Refer to Appendix A for detailed staff action cards.

7.2.1 ED Clinical Staff

- Receives notification of all incoming patient transfers via the ED bat phone. Must be Estimated Time of Arrival (time format), not Estimated Time Inbound (minutes away).
- Determine if FSH can accept the patient and confirm / decline this to the aircrew.
- Clarify clinical information and ETA.
- Initiate notification cascade via '55' call.
- Mobilise the ED Porter and if required, the ED Clinical Heliport Retrieval Team.

7.2.2 SIMS Control Room

Acts as the initial contact point for helicopter crews contacting the heliport.

		1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 19 of 62
--	--	------	------------------	---------------	--------------------	---------------

- Assigns SIMS Patrol Officers to the roles of HLO and, if operational requirements allow HI A
- Initiates notification cascade via '55' for all practise landings with no clinical involvement.
- Escalates any concerns raised by the HLO and HLA as required.
- Logs all relevant information in the Agility work order.
- Assists in activation of Emergency Procedures as requested by the HLO.
- If HLA role is not activated and operational requirements allow, monitor the arrival and departure of the helicopter via CCTV.

7.2.3 FSH Helpdesk

- Enter details of helicopter arrival into Agility.
- Sends out paging notification to Heliport Landing Group when requested by ED / HLO / SIMS.

7.2.4 Heliport Landing Officer

- Responsible for opening and closing the heliport during heliport operations.
- Communicates with the pilot regarding the heliport operational status including confirming a 'green deck'.
- Provides safety brief to all personnel present in the heliport reception area.
- Controls access to the heliport area.
- Activation of the manual call point in the event of an emergency.
- Activation of the Emergency Procedures in the event of an emergency.

7.2.5 Heliport Landing Assistant

The Helicopter Landing Assistant is activated where SIMS operational requirements allow.

- Assists the HLO in opening and closing the heliport during heliport operations.
- Monitors the arrival and departure of the helicopter via CCTV.

7.2.6 ED Porters

- Assists with patient transfer onto designated heliport trolley.
- Transports heliport trolley to designated bay in ED or destination ward for direct admission patients.
- Returns heliport trolley to the heliport and makes it operationally ready for the next landing.

7.2.7 ED Clinical Heliport Retrieval Team

- Will only deploy a response team for Priority 1 calls, multiple patients, multiple landings, hot landings, or when requested by the aircrew. For all Priority 2 and below landings, the aircrew will unload and deliver the patient to the clinical team.
- If responding, stands by in the Heliport reception area unless directed otherwise by the HLO.

- Assumes clinical responsibility for the patient upon formal handover from the CCP/attending clinician at the destination ward, unless otherwise stipulated within this procedure or by agreement between the CCP/attending clinician and the destination ward
- Escorts patient to designated ED bay or destination ward for direct admission patients.

7.3 Requirement to complete Heliport Induction

As a requirement to participate in facilitating an aircraft arrival and being an effective part of the retrieval team at Fiona Stanley Hospital, everyone involved in a Helipad arrival will be expected to attend the Helipad lobby prior to the Aircraft landing to receive their Heliport safety induction.

This induction is facilitated by the SIMS Patrol Officer who assumes the role of the Helipad Landing Officer (HLO) during a Heliport arrival. When you attend the Heliport lobby, the HLO will provide you with a high visibility tabard to wear that will identify you as the part of the retrieval team.

The HLO will then conduct a safety briefing using the following 2 videos that will be played through the Helipad workstation –

- Heliport safety video Localised safety briefing for the FSH Heliport.
- Aircraft specific safety video Safety instructions on how to safely work around the aircraft.

If the workstation is not available, the HLO will verbally provide you with the safety briefing. It is essential to remember that the HLO is responsible for a safe and smooth hospital response to accommodate an incoming heliport landing. Therefore, all retrieval team members are to follow all directions given by the HLO during the entire landing process.

Once the safety briefing is conducted, all retrieval team members will be provided with a sign in register to declare that they have participated in the induction and are thoroughly familiar with the contents of the induction.

Please note that if retrieval team members do not attend the induction prior to the landing, they will not be allowed on the Helipad by the HLO.

7.4 Patients transported by Rescue 651, Rescue 652, Polair 61 and Polair 62 to be given priority

In recognition of their use as a state-wide resource, patients transported to Fiona Stanley Hospital by Rescue 651, Rescue 652, Polair 61 or Polair 62 are to be handed over to Fiona Stanley Clinical Staff upon reaching the destination ward. If the destination ward is the Emergency Department, the patient upon triage becomes the responsibility of Fiona Stanley Hospital clinical staff to increase the helicopters availability.

7.5 Training / practise landings

FSH recognises that pilots require regular training and practice landings on a variety of heliports. Providers of rotor wing retrieval services are welcome to use the FSH heliport for training purposes, provided the following points are adhered to:

 For training landings, aircrew are to contact SIMS on 6152 9175 and arrange a suitable time for the practice landing.

|--|

- There are no time restrictions for landings.
- Helicopter retrieval service operators are asked to give as much advance notice as possible so that SIMS can factor the landing into their working day.
- Helicopter retrieval service operators must be aware that the negotiated landing time will need to be flexible due to the nature of the SIMS work.
- Pilots are requested to call SIMS 30 minutes before landing to confirm they are able to initiate response procedures. Failure of the SIMS to answer the phone would indicate their inability to respond.
- The practice landing will be conducted between the SIMS Officers and the aircrew. Once
 the SIMS Officers have a landing time they will contact the ED Medical Coordinator on
 6152 5297 to inform them of the practice landing time.

It is important to encourage interaction between the aircrew and FSH employees; this will ensure good training and team building and staff that are familiar with landing procedures. Where practise landings are scheduled, SIMS are to enquire with the aircrew as to the possibility of clinical staff involvement and provide as much notice as possible to clinical staff to consider attending.

7.6 Exercises

Notifications for all exercises that may utilise the FSH heliport are to be communicated to the FSH EMU at least 1 week prior to the date of the exercise via email to FSH.HeliportOperation@health.wa.gov.au. The EMU will then inform all relevant stakeholders listed in Appendix F of the exercise. This is to ensure the heliport is available for use and that adequate personnel are available to assist.

8 Airborne and Transit

8.1 Establishing a 'Green Deck'

Upon the HLO arriving at the heliport, a formal FOD and safety check shall be conducted utilising the check list in Appendix G. This will include a walk around of the heliport area, with any item(s) collected and disposed of in the FOD bin located within the heliport reception area. All lighting systems will be switched on and visually checked.

In extreme weather conditions where the safety of a person on the heliport may be affected, the HLO will consult with the helicopter crew. A decision will then be made whether to proceed with the landing or not. Wind speeds, wet weather and visibility are to be considered when making that decision. The below table is to be referred to when deciding if it is safe to proceed with the retrieval or not.

Wind Speed	Guideline
Less than 28 knots	Usually safe to proceed
Between 28 and 32 knots	The HLO and Retrieval Team Leader should proceed onto the platform to risk assess staff safety issues
Over 32 knots	Usually not safe to proceed

1763 FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 22 of 62
-----------------------	---------------	--------------------	---------------

A 'green deck' is declared when the heliport is confirmed clear of obstacles, equipment, FOD, personnel and any other items or issues (i.e. weather) that may interfere with the safety of the helicopter landing, and the HLO is positioned next to the manual call point. The helicopter pilot will either call or radio to confirm a 'green deck'. The HLO will answer with the following "[Helicopter call sign] this is FSH Heliport, you have a green deck, I say again you have a green deck. Wind speed is xxx knots, from an xxx direction."

8.2 Issues arising

If any issues or concerns are identified by the HLO, they are to contact the helicopter crew immediately via the aircraft mobile for that particular helicopter listed in Appendix A and inform them of the situation. The pilot will then make the final decision whether to continue with landing or to divert to another hospital or to Jandakot and the patient transferred by road ambulance.

9 Approach and Landing

Once a 'green deck' has been declared, all personnel are to remain in the heliport reception area and are not permitted to enter the heliport area until the helicopter crew have given the all clear to approach the aircraft (usually thumbs up). The HLO is to remain inside the heliport reception area at the manual call point ready to activate it if required whilst heliport operations are being conducted.

9.1 Heliport briefing

All personnel involved in any helicopter landing must report to the heliport reception area at least 10 minutes prior to landing to receive a safety brief from the HLO. The briefing consists of 2 videos each approx. 3 mins in length. All personnel must watch the videos prior to entering the heliport area.

In the event of the videos not being available, the HLO will give a verbal safety brief to all personnel as per Appendix D.

In addition to ensuring all personnel have received the safety briefing, the HLO must also ensure that:

- All loose items are secure (clothing, stethoscopes, name badges, bags zipped or securely closed etc.).
- All personnel have enclosed footwear.
- Any personnel who have not received formal training are identified and are being supervised and accompanying trained personnel.
- All personnel entering the heliport area are wearing a high visibility vest with appropriate designation.
- Where required for a hot landing, all personnel are wearing eye and ear protection.

Personnel are required to abide by the above at all times and to follow the instructions of the HLO.

9.2 Normal landings

Once the aircraft has touched down a crew member will signal the HLO (usually thumbs up) that it is safe to approach the helicopter. The HLO will then open the door to allow the Porters to enter the heliport area.

1763 F	SH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 23 of 62
--------	-----------------	---------------	--------------------	---------------

9.3 Hot landings / Rotors Running

In the event of a hot landing / rotors running the helicopter crew will conduct the patient unloading, unless prior arrangements have been made. Any personnel accessing the heliport area during a hot landing / rotors running must wear eye and ear protection prior to entering. All loose items of clothing and equipment (such as hats, scarves, stethoscopes etc.) must be removed and left in the heliport reception area. Once the aircraft has touched down a crew member will escort the retrieval tem to the helicopter.

9.4 Helicopter standing on heliport

Where possible, the heliport should not be left unattended at any time while a helicopter is on the pad. No person shall enter a helicopter without the pilot or crew member's express permission. A trained HLO is to be present at all times whilst the heliport is open. If the SIMS Patrol Officer needs to leave to attend to another emergency, then the heliport reception area will be locked and take-off delayed until a trained HLO is present, unless the helicopter is retasked for a Primary or Rescue task, in which case the aircrew will be responsible for ensuring the heliport is clear and it is safe for them to depart.

9.5 Multiple landings within a short time

Where two or more helicopters are inbound within a short time frame, the following options are available.

- 1 The first helicopter lands and handover of the patient is conducted on the heliport. The helicopter and crew then take off and the second helicopter lands. The decision for this option will be made in consultation with the ED Medical Coordinator and the CCP / attending clinician.
- 2 If the first helicopter patient is required to be escorted to the ED for a full handover and / or retrieval of equipment, the CCP / attending clinician will escort the patient. The helicopter can then vacate the heliport and either circle until the second helicopter unloads and departs, or the CCP / attending clinician arranges for alternative transport arrangements.
- 3 If the patient in either helicopter is suitable for road transport, then that helicopter can be directed to Jandakot and road transport can be arranged.
- In an event where 2 or more helicopters are on approach to FSH heliport, decisions concerning the priority access will always be based on patient acuity. Decision to provide the priority access will be made by the ED Medical Coordinator and the HLO will be responsible for facilitating this decision operationally.
- 5 Generally, ERHS as a primary care retrievals service will take priority over RFDS inter hospital secondary patient transfers on approach. In the event where ERHS is on approach and a RFDS helicopter is already on FSH Helipad, every effort will be made to clear the deck to allow ERHS to land.

10 Patient Transfer

The transfer of the patient from the helicopter to the heliport trolley will be the responsibility of the CCP / attending clinician and / or helicopter crew. They will lead all patient movements and the removal of all equipment from the helicopter.

1763 FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 24 of 62
-----------------------	---------------	--------------------	---------------

10.1 General safety

Safety instructions from the helicopter crew are to be obeyed at all times when working around the helicopter. All staff must wear closed-in shoes and designated safety vests, and in the case of a hot landing, ear and eye protection, when on the heliport area.

10.2 Handover of patient

Handover of the patient from the CCP / attending clinician to the clinical staff will generally be conducted in ED or on the admitting ward. If the ED Clinical Heliport Retrieval Team is required to respond to the heliport, the patient will be handed over in the heliport reception area.

10.3 Multiple patients

In the case that there are 2 or more patients, in addition to the ED Clinical Heliport retrieval Team, an extra nurse (if requested) and porter will be required per patient. The second retrieval trolley will be utilised in this instance. The order of unloading the patients will be at the direction of the CCP / attending clinician and / or helicopter crew.

10.4 Heliport Retrieval Trolley's

The primary trolley to be used for all patient transfers will be the FSH Retrieval Trolley (figure 3), located in the heliport reception area.

Figure 3: Primary Retrieval Trolley



For multiple patients and patients in basket stretchers, the THT2 Retrieval Trolley, (figure 4), will be utilised. This trolley is located in the heliport lift lobby.

Figure 4: Secondary (THT2) Retrieval trolley



For RFDS patient transfer landings, the FSH Retrieval trolley is not required as the patient will be transferred using an Aircraft trolley.

11 Departure

11.1 Helicopter departure

The HLO must be present prior to, and during the departure of the helicopter. Prior to departure, the helicopter crew and HLO will ensure the heliport is clear of equipment and personnel. Once cleared, no personnel are to access the heliport.

11.2 Closing the heliport

Once the helicopter has departed, the HLO will conduct a final check of the pad, ensure all lights are switched off, and all PPE and equipment is returned and stored correctly. They will then ensure that the doors between the heliport reception area and the heliport lift lobby are closed and secured.

12 Emergency Procedures

In the event of an emergency, the HLO will assume the role of Area Warden. All personnel are to follow their instructions at all times.

12.1 Code Blue

In the event of a Code Blue, the standard notification process is to be followed.

12.2 Code Orange

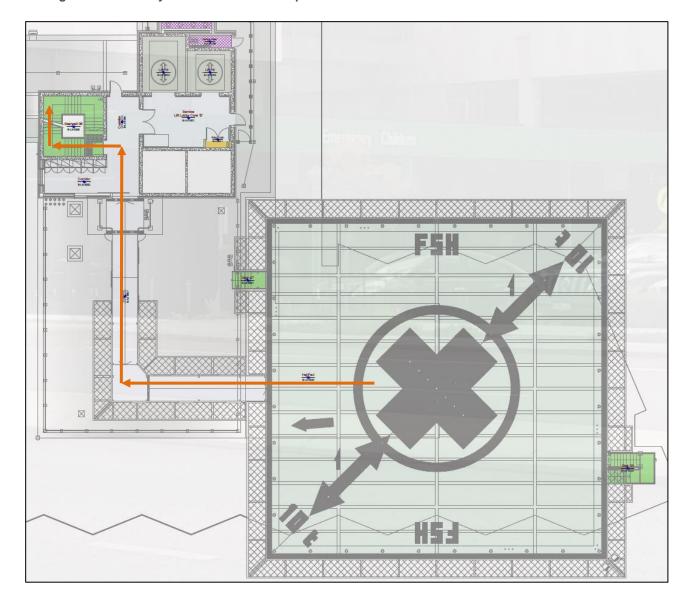
Should the need arise to evacuate, follow instructions from the HLO. The HLO will escort all personnel to the muster point on level 7. For the evacuation of any non-ambulant patients from the heliport area, there are three AlbacMats located in the first locker.

1763 FSH-SII	M-PRO-0028 Version: 12.0	Approved: Mar 2022	Page 26 of 62
--------------	--------------------------	--------------------	---------------

12.2.1 Primary Evacuation route

In the event of an evacuation, the primary evacuation route (figure 5) is via the internal stairwell in the heliport reception area down to Level 7, Ward 7B Allied Health Therapy room (figure 6).

Figure 5: Primary Evacuation Route Heliport area



Heliport Assembly Area

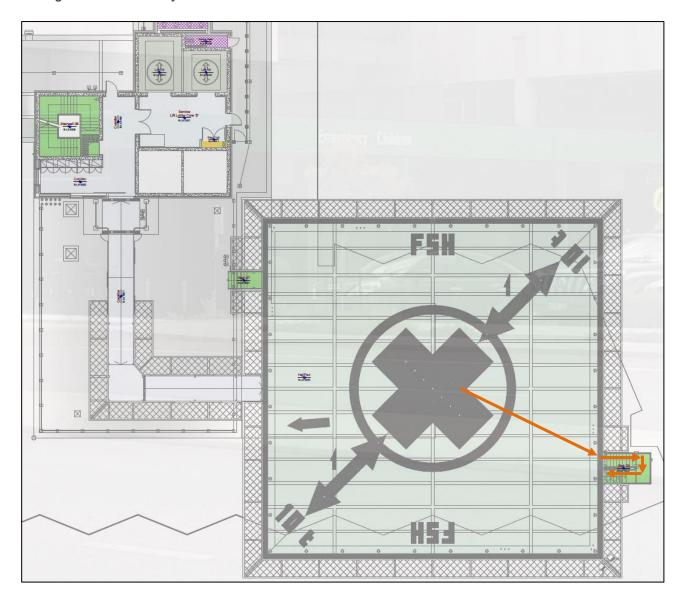
Figure 6: Primary Evacuation route and muster point Level 7

12.2.2 Secondary Evacuation route

If the primary evacuation route is inaccessible, the secondary evacuation route is via the external stairway on the eastern side of the heliport (figure 7) down to level 8 and via the internal stairwell in the plant room (figure 8) to Level 7, Ward 7B Allied Health Therapy room (figure 9).

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 28 of 62
------	------------------	---------------	--------------------	---------------

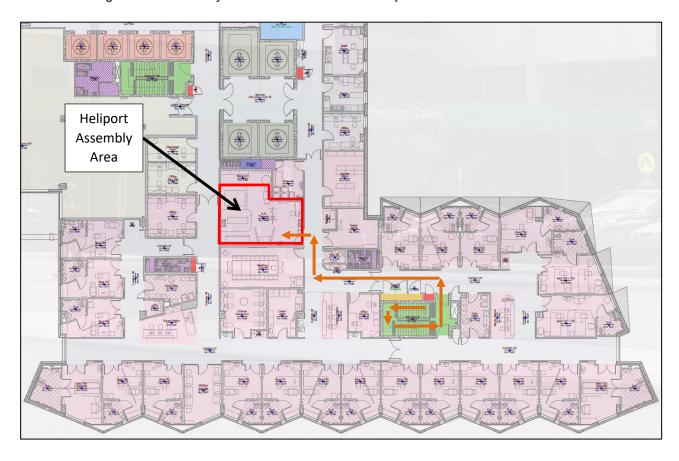
Figure 7: Secondary Evacuation route



SNIGO STATE OF THE PROPERTY OF

Figure 8: Secondary Evacuation route Level 8





12.3 Emergency and Abnormal Landings

On notification of an impending emergency landing, all personnel within the heliport area are to leave immediately.

In the event of an impending declared emergency landing or actual abnormal landing:

- Under the direction of the HLO all personnel are to move beyond the heliport reception area into the internal stairwell and muster on the landing at level 8.
- The SIMS Control Room will observe the landing on CCTV and pass on information to the HLO including: advising once the helicopter has landed; if it safe to enter; the need to leave the area immediately etc. If required, the HLO will activate the manual call point inside the heliport reception area only if it is safe to enter.
- All personnel are to remain in the internal stairwell until the aircraft has landed and shut down.
- Once advised by SIMS Control Room that it is safe to re-enter, the HLO will enter the heliport reception area and assess the situation from behind the windows and door.
- Only under the direction of the helicopter crew, and if safe to do so, hospital staff may assist as required.

If the situation is unsafe or there is no direction from the helicopter crew, all personnel are to remain in the internal stairwell and await the ERT and DFES if safe to do so.

12.4 Fire on the Heliport

In the event of a fire on the heliport, the HLO will assume the role of Area Warden and:

- Direct all personnel from the platform and ramp back into the heliport reception area.
- Activate the manual call point to ensure DFES are alerted. This action also triggers the AFFF monitors.
- Arrange for '55' to be called to confirm the emergency.
- Direct the HLA to escort all personnel down the internal stairwell to the muster point.
- Monitor the safety of the environment and follow the instructions of the ERT.
- Upon arrival of DFES, provide a hand over to them.

12.5 Loss of Vision / Foreign Bodies in the Eye(s)

In the event of loss of vision / foreign bodies in the eye(s), the affected person is to immediately stop and sit down where they are and await assistance. The affected person is to be assisted away from the aircraft into the heliport reception area, where they can have their eyes washed using the small eye wash station located on the wall above the scoop stretcher.

Once used, the incident must be reported to the OSH team using the hazard reporting form located on the FSH Hub. The EMU must be informed (<u>FSH.EMU@health.wa.gov.au</u>) if any contents are used from this box.

12.6 Staff Injury

All injured persons must move away from the helicopter to a safe area if possible and await assistance if required. If you see someone else who is injured, do not approach them if it means putting yourself in danger.

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 31 of 62

If a person's injury is in any way disabling, call '55' to activate a Code Blue response. If the injured person is on the deck of the heliport and a helicopter is operating (rotors turning), the HLA will ask the pilot to shut down so that appropriate medical aid can be provided. All injuries must be reported in accordance with Occupational Safety and Health requirements as described in the Health and Safety Plan (FSH-OSH-MGT-0001).

12.7 Equipment over the Edge of the Building

If any object goes over the edge of the building at any time, immediately notify the HLO (during helicopter operations) or SIMS (all other times) about the nature of the item and in which direction it was lost. FSH Occupational Safety and Health must also be notified and an incident report completed. SIMS will attempt to locate the item and determine the extent of any damage.

12.8 P.O.L (Petrol, Oil, Lubricant) Spill Kit

It is expected that some hydrocarbon leakage will be evident following a landing. If the leak is small and does not pose a threat of spreading across the pad, notify Estates via Agility to manage the spillage. The spillage must be noted on the checklist including the work order number.

In the unlikely event of a large spill occurring, a small spill kit is located in the FSH Heliport. This kit is to be used by the HLO / HLA to contain any spillages that poses a threat of spreading across the pad. The HLO will contact the helpdesk to raise a Code Yellow and stand by the manual call point, ready to activate in the case of fire. DFES will be contacted as required in addition to managing the assessment of the spill. No access to the heliport area should occur other than to contain the spill until DFES arrive. Once DFES have declared the area safe, Estates will be responsible for the removal and disposal of the spillage.



Heliport Procedure

This page left intentionally blank

Appendix A. Action Cards

Heli	port Activation ED Clinical Staff Action Card		
1.	Receive notification of incoming patient via helicopter on the ED bat phone.		
2.	Determine if FSH can accept patient (Multi-system trauma patient goes to Royal Perth Hospital).		
3.	Once patient is accepted, clarify clinical information and ETA.		
4.	Immediately dial '55' to activate the Heliport Landing Group.		
	Activate ED Porter and Resuscitation / Trauma team via ED public address system.		
5.	If Priority 1 patient, multiple patients or landings, or hot landings, activate the ED Clinical Heliport Retrieval Team, ED Porter and Resuscitation / Trauma team via public address system:		
	 Heliport Retrieval Doctor Heliport Retrieval Nurse ED Porter with defibrillator and intra-hospital transfer bag 		
	ED admission: Resuscitation / Trauma team to prepare designated ED bay and equipment to receive patient.		
6.	Non-ED specialty admission: If patient is for direct admission under non-ED specialty, ED Shift Coordinator contacts the relevant specialty to confirm patient destination and bed ready.		



Heliport Procedure

This page left intentionally blank

Hel	eliport Activation SI	IMS Control Room	Action Card
1.	Receive request to activate the updated of the ETA, contact the to page to Heliport Landing Gr	ne HLO and advise of new	
2.	Immediately dial '55' to activate Heliport Landing Group for all landings with no clinical involvement.		
3.	Assign SIMS Patrol Officers to HLO and, if operational requirements allow HLA role, advise which aircraft is inbound for ongoing communications.		
4.	If HLA role is not activated and and departure of the helicopte	•	s allow, monitor the arrival
5.	Escalate any concerns raised	by the HLO as required.	
6.	Assist in activation of Emerger	ncy Procedures as reques	ted by the HLO.
7.	Log information in the Agility w	vork order.	



Heli	port Activation	FSH Helpdesk	Action Card			
1.	Upon receiving notification out paging notification to He		r details into Agility and send			
2.	Upon notification of updated ETA, send out paging notification to Heliport Land Group.		ification to Heliport Landing			
	Note: If Helpdesk receive the initial notification they are to transfer the call to the ED Bat phone Ext. 25297.					



Heli	port Activation Heliport Landing Officer Action Card — SIMS Patrol Officer
1.	Proceed to the heliport lift lobby utilizing Core B lift by using the Priority override function.
2.	Open all equipment storage shelves.
3.	Don orange HLO Hi-Vis vest.
4.	Ensure Marine radio is operational (switched on, on Channel 72 and volume turned up) for pilot communications.
5.	Complete 'Pre-landing' section of heliport safety checklist if it safe to enter heliport area (check wind speed and weather conditions).
6.	Complete Safety briefings for all personnel participating in the landing as appropriate for the aircraft.
7.	Complete 'Briefing' section of the heliport safety checklist.
8.	Upon being contacted by the pilot, confirm 'Green Deck' by stating "[Helicopter call sign] this is FSH Heliport, you have a green deck, I say again you have a green deck. Wind speed is xxx knots, from an xxx direction". Request total number of persons on board. Complete 'Communication' section of heliport safety checklist.
9.	Observe landing standing next to the manual call point. Activate emergency procedures if required. Complete the 'Landing' section of the heliport safety checklist.
10.	Once given the all clear from the pilot, turn on ramp lights and open door to allow crew to collect trolley. Remain next to the manual call point to activate emergency procedures if required.
11.	Call the destination ward and advise them that the retrieval team has left the Heliport and are in transit for the ward. (Use the 'FSH Internal Contact List' placed on the HLO resources wall).
12.	Observe departure standing next to the manual call point. Activate emergency procedures if required. Complete the 'Departure' section of the heliport safety checklist.
13.	Complete 'Post Departure' and 'Closing the heliport' section of heliport safety checklist. If any hydrocarbon leaks are present, contact helpdesk to raise a work order for Estates to attend and clean.
14.	Return to the SIMS Office; email the completed checklist and any issues reported to the EMU.

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 40 of 62



Heli	iport Activation Heliport Landing Assistant - SIMS Patrol Officer	Action Card				
This	position is utilized where operational requirements allow					
1.	Proceed to the heliport lift lobby utilizing Core B lift by using the Priority override function.					
2.	Open all equipment storage shelves.					
3.	Don orange HLA Hi-Vis vest.					
4.	Assist HLO in completing the heliport safety checklist as directed.					
5.	Attend heliport safety briefing.					
6.	Monitor the arrival and departure of the helicopter via CCTV.					
7.	Assist the HLO in completing the remaining sections of the heliport safety checklist.					
8.	Complete any other duties as directed by the HLO.					



Heli	port Activation ED Clinical Heliport Retrieval Team Action Card
1.	Upon notification of clinical attendance to heliport, proceed to ED handover room.
2.	Collect heliport radios and perform a radio check.
3.	Collect Intra-hospital transfer bag, defibrillator, triage form and any other additional equipment required.
4.	Proceed to ED handover room and complete required checks of all equipment.
5.	Proceed to the heliport lift lobby utilising Core B lift by using the Priority override function. Upon arriving to heliport lift lobby release lift by pressing the doors close button.
6.	Attend safety briefing.
7.	Prepare required equipment if necessary.
8.	Receive handover form the CCP / RFDS / attending medic where required.
9.	Escort patient to accepting area and provide handover if required.
10.	Upon handover, ensure all equipment is in an operational ready state and store for next call. Report any issues to the ED Medical / Nursing Shift Coordinator.



Heli	port Activation ED Porter Action Card
1.	Upon notification of inbound helicopter, collect O2 cylinder and proceed to the heliport lift lobby utilizing Core B lift by using the Priority override function. Upon arriving at heliport lift lobby, do not release the lift.
2.	Don yellow Retrieval Team Hi-Vis vest.
3.	Attend safety briefing.
4.	Take heliport retrieval trolley onto the heliport when instructed by the HLO.
5.	Approach the helicopter as directed by the CCP, attending medic or helicopter crew.
6.	Assist in transferring patient/s from the helicopter to the trolley and into the heliport reception area, following instructions from the helicopter crew.
7.	Assist in patient transfer to accepting area.
8.	Once patient is handed over, escort helicopter crew and return trolley back to the heliport reception area.
9.	Clean trolley and return to an operational ready state. Report any issues to the HLO.
10.	Return to normal duties.



Appendix B. Aircraft Mobiles

Rescue 651		
Aircraft Mobile	0428 400 410	
Sat Phone	+8816 2242 5412	
Rescue 652		
Aircraft Mobile	0428 400 422	
Sat Phone	+8816 4147 2896	
RFDS FLYDOC645		
Aircraft Mobile	0498 849 046	
Sat Phone	0147164460	
RFDS FLYDOC646		
Aircraft Mobile	0498 957 146	
Sat Phone	0147169419	
Police Wing		
Polair 61	0428 324 370	
Polair 62	0419 462 173	
RAAF SAR Pearce		
Chopper 63	0429 694 764	
Chopper 64	0428 814 779	

Appendix C. Non-operational heliport

SIMS are responsible for conducting daily and weekly inspections of the heliport area to ensure operational readiness. Estates are responsible for conducting regular inspections and maintenance of all infrastructure associated with the heliport.

Authority to declare

The heliport may be declared non-operational for the following reasons and authorised by the listed staff:

- Scheduled or urgent unscheduled maintenance and unresolved safety concerns that cannot be rectified in a manner that can allow a helicopter to land within 15 minutes' notice:
 - o Business Hours: EMU.
 - After Hours: Estates Maintenance Manager and / or SIMS Team Leader.
- Infrastructure issues affecting the main hospital, or other significant declared emergency situation Hospital Incident Commander, Operations Officer or Logistics Officer.
- Safety concerns by SIMS during a pad inspection (daily or weekly check, or prior to a landing):
 - Prior to a landing: HLO.
 - Business Hours: EMU.
 - After Hours: SIMS Team Leader.
- Safety concerns by a pilot or helicopter operator/s
 - o Business hours: Directed to the EMU for escalation to Estates for resolution.
 - After Hours: Directed to SIMS for escalation to Estates for resolution. If unable to be resolved, the Estates Maintenance Manager and / or SIMS Team Leader can declare the heliport nonoperational.

Notification of Immediate Non-Operational Status

When declaring the heliport non-operational, the EMU (during business hours) or the SIMS Team Leader (After Hours) must be notified by the authorising person. The notification cascade is to be as per the following:

EMU / SIMS Team Leader

The EMU / SIMS Team Leader will contact the ED Medical and Nursing Shift Coordinator and the HIC / HOOT CNM (in that order) and advise them of the situation. They will then arrange for a pager message to be sent to the Heliport Landing Group stating the reason why the pad is closed and the approximate duration. The EMU / SIMS Team Leader will then notify the following external agencies by telephone:

St John Ambulance State Operations Centre

Duty Manager (Primary): 9334 1226SOC (Secondary): 9334 1234

Email: MMOGroup@stjohnambulance.com.au

ManagerSOC@stjohnambulance.com.au

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 49 of 62
------	------------------	---------------	--------------------	---------------

CHC Australia

Jandakot Base

Office (Primary): 9414 8377Base Manager (Secondary): 0417 822 801

• Email: <u>Jandakot-bm@chcheli.com</u>

Jandakot-ops@chcheli.com

Bunbury Base

Office (Primary): 9241 7252Base Manager (Secondary): 0417 323 950

• Email: <u>Bunbury-bm@chcheli.com</u>

Bunbury-ops@chcheli.com

Pearce Base

Office (Primary): 9571 7131Base Manager (Secondary): 0447 112 093

• Email: Pearce-bm@chcheli.com

Pearce-ops@chcheli.com

Defence Force

RAAF Base Pearce

Flight Operations (Primary): 9571 7004Air Ops Coord (Secondary): 0417 181 456

• Email: <u>pea.airopscoord@defence.gov.au</u>

Police Air Wing

Ops Manager (Primary): 6595 9777On Call Manager (Secondary):0407 724 416

• Email: Police.Air.Wing@police.wa.gov.au

Royal Flying Doctor Service

Ops Centre (Primary): 9417 6388Ops Centre (Secondary): 9417 6364

Email: <u>VH-JFQ@rfdswa.com.au</u>; VH-JFV@rfdswa.com.au

Emergency Department Medical Shift Coordinator

The ED Medical Shift Coordinator will arrange for the following to be advised of the shutdown:

Duty Consultant, SCGH ED – 9346 4266

ED Duty Officer, RPH – 9224 1676

1763 FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 50 of 62
-----------------------	---------------	--------------------	---------------

ED Admitting Consultant, PCH – 6456 0010

Notification of Scheduled Maintenance / Planned Shutdown

For scheduled or planned maintenance, Estates must notify the EMU no less than 48hrs prior to the commencement of work via email at FSH.HeliportOperation@health.wa.gov.au advising of the scope of work and the estimated duration.

The EMU will notify all relevant internal and external stakeholders via email.

Operational Readiness

Once the heliport has been declared operational, the same notification process is to be followed by either the EMU (during business hours) or the SIMS Team Leader (after hours).

Appendix D. Verbal Safety Brief

To be utilised if the video brief does not work.

- 1 Ensure you follow all instructions from the HLO and / or helicopter crew.
- 2 Safety vests are to be worn at all times.
- 3 Only enter the heliport area once the HLO has given the all clear.
- 4 Keep a distance of at least 3 metres from the edge of the heliport.
- 5 Ensure all small light items and lids are secure to stop them blowing away.
- 6 Do not run on the heliport.
- 7 Ensure all loose items of equipment and clothing (such as stethoscopes, books, scarves, hats etc.) are either removed or left in the heliport reception area.
- 8 All bags are to be sealed closed.
- 9 If an item blows away, do not run to catch it; walk to pick it up if possible. If it blows over the edge, inform the HLO immediately.
- 10 Follow all instructions from the helicopter crew.
- 11 In the event of an emergency follow the directions of the HLO. In the event of an evacuation, the primary evacuation route is via the internal stairwell in the heliport reception area down to Level 7, Ward 7B Allied Health Therapy room. If the primary evacuation route is inaccessible, the secondary evacuation route is via the external stairway on the eastern side of the heliport down to level 8 and via the internal stairwell in the plant room to Level 7, Ward 7B Allied Health Therapy room.

Appendix E. Training prior to accessing the heliport

Staff accessing the heliport

Prior to being able to access the heliport area, all personnel must undergo mandatory training in safe heliport usage appropriate to their role. Once completed, they will be required to complete refresher training every year. The supervising staff / line managers of areas involved in heliport operations are responsible for organising training of their staff by contacting the EMU. The EMU will organise for staff to be enrolled in the online Heliport training package as well as organising and facilitating a physical orientation of the heliport.

Heliport training guidelines

As a guide, the following should be included in the training of personnel accessing the heliport area:

	HLO / HLA	Retrieval Teams	Observers	Specialist Support
Security and access	~	~		
Notification process	~	~		
Pre-landing				
Briefing	~	~	~	~
Appropriate footwear and clothing	>	~	>	~
Eye and ear protection	~	~	~	~
Heliport access limitations / ' no go' zones	~	~	~	~
Aircraft types and safety issues	~	~		
Normal and hot landings	~	~	~	~
Lighting systems	~			
Heliport inspection (FOD, damage, lighting etc.)	~			
Communications	~	~		
Approach and landing			·	·
Communications	~	V		
Hand signals	~			
Patient transfer			·	·
Access	~	~		
Approaching the helicopter	~	~	~	~
Trolley familiarisation	~	~		
Departure				•
Securing the heliport	~			
Visual checks	~			
Equipment / PPE storage	~			
Reporting issues	~	~	~	Y
Emergency procedures				

1763 FSH-SIM-PRO-0028 Version: 12.0 Approved: Mar 2022 Page 53 of	f 62
---	------

	HLO/HLA	Retrieval Teams	Observers	Specialist Support
Hydrocarbon spills	~			
Emergency Evacuation	~	~	~	Y
Emergency / Abnormal landing	~	~	~	~
Fire	~	~	~	Y
Loss of equipment over the edge of the heliport	~	~	•	•

Appendix F. Exercise notification

The following FSH personnel are to be notified of any exercise that involves the FSH heliport:

Emergency Management Advisor

Manager Disaster Preparedness & Management

SIMS Operations Manager

SIMS Shift Team Leader

SIMS Control Room

Head of Emergency Medicine

ED Nurse Unit Manager

Director Clinical Services

Director Operations

Senior Operations Manager - Environment Services

Senior OSH Specialist

Appendix G. Heliport Safety Checklist

Date	Ope	ned		Closed	WO Agility	#		
HLO Name	HLO Name HLA Name							
Aircraft call	Rescue 651	Rescue 652		Polair 61	Polair 62		Chopper 63	
sign	Chopper 64	DFES		FLYDOC645	FLYDOC646		Other – Specify below	W
	Call sign:	Company / Organisation	ո:					
Pilots name				# of Patients				
	Normal landing			Patient Transfer	Exercise		Practice / Training	
Landing Type	Hot landing	Response typ	е	HRT Pick-up	HRT Drop- off		Equipment Pick-up	
	Aborted			Equipment Drop-off	Personnel Pick-up		Personnel Drop-off	

Upon notification of landing	✓	×	N/ A
Proceed to heliport lift lobby			
Release lift by pressing close doors button			
Open all equipment storage shelves			
Don Hi-Vis vest (HLO / HLA)			
Ensure doors to Helipad Reception Area remain close until Pre-landing checks are complete			

	Pre landing checks		✓	×	N/ A
Check wind speed on weather station	Wind Speed (knots):	Wind direction:			
Turn drainage system from storm water	er to hydro-carbon using 455 key				
Check individual light switches for default position. Turn lighting controls to "Manual Override". Check switches for default position:		k individ	dual ligh	nt	
Spare – DOWN					
Windsock and Obstructions Lights – UP					
Floodlights High Level – UP					
Floodlights Low Level – UP					
Perimeter - 3 HIGH					
Aiming Point – 3 HIGH					

1763 FSH-SIM-PRO-0028 Version: 12.0	Approved: Mar 2022 Page 56 of 62
-------------------------------------	----------------------------------

Turn ramp lights ON					
Enter heliport area and conduct the following checks:					
• FOD					
Damage					
Safety netting integrity					
Ensure the following lights are illuminated:					
Windsock and Obstructions Lights (night-time operations only)					
High level flood lights					
Low level flood lights					
Perimeter lights					
Approach and departure lights					
Aiming point lights					
o Ramp lights					
 Ensure secondary evacuation route is clear all the way to level 8 plant room door and all lights are working. 					
Turn ramp lights OFF					
Call Paediatrics Ward 3A to ensure all persons have been removed from playground:					
• 3A NUM – 615 27678					
3A Shift Coordinator – 615 29485 (After Hours)					
Call ICU to ensure that patients have been removed from outside pods:					
Nurse Coordinator – 615 28752 (Primary contact)					
Pod 3 Coordinator – 615 72999 (Secondary contact)					
Call CCU Nurse Coordinator on 615 27618 to advise of closure of ICU outside pods due to inbound helicopter					
Call Theatres to advise of potential of strong smell of fumes upon arrival and departure of helicopter:					
• 615 26423 (Primary Contact)					
615 26424 (Secondary Contact)					
Open both doors to heliport reception area and put on magnetic holders					

Briefing	✓	×	N/ A
Note relevant information on white board (WB) including roll call			
Show safety brief video and helicopter safety video (If video is not available, use verbal safety brief located in Appendix D of the Heliport Procedures)			
Activate IELVS with heliport control screen on wall screen			
For Normal landings ensure:			

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 57 of 62
1700	1 011 01W 1 10 0020	V 0101011. 12.0	Approved. Mai 2022	1 ago 07 01 02

•	PPE is issued			
	o Safety Vests			
	 Wet weather jackets if required 			
•	All personnel are wearing enclosed footwear with non-slip soles			
•	All dangerous goods have been removed			
•	All bags are sealed			
•	Any small equipment and containers secured (stethoscopes etc.)			
For hot	landings ensure:			
•	Additional PPE is issued			
	o Safety googles			
	 Hearing protection 			
•	No protruding equipment (IV poles collapsed)			
•	No lose items of clothing (lanyards, hats, safety vest closed etc.)			
	Communication	✓	×	N/ A
Upon th	ne pilot establishing communications confirm:			
•	Number of crew and patients on board (update WB)			
•	Type of landing – normal or hot (update WB)			
•	ETA. If required dial '55' and advise Heliport Landing Group of updated time			
•	Green deck			
•	Advise weather information i.e. wind / gust speed and direction			

Landing	✓	×	N/ A
Observe landing through windows and CCTV on wall screen			
Activate relevant emergency procedures if required			
Wait for radio or hand signal from crew to proceed with retrieval			
Give go ahead to Porters to enter the heliport area, turn on ramp lights (if required) and open door to ramp			
Call the destination ward and advise them that the retrieval team has left the Heliport and are in transit for the ward. (Use the 'FSH Internal Contact List' placed on the HLO resources wall)			

Departure	✓	×	N/ A
Ensure all persons (except crew) have left the platform and ramp			
Turn off ramp lights			

Post departure checks	✓	×	N/ A
Return all PPE			

1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 58 of 62
1700	1 011 01111 1110 0020	V 0101011. 12.0	Approved. Mai 2022	1 490 00 01 02

Turn drainage system from hydro-carbon to storm water using 455 key			
Enter heliport area and conduct the following checks:			
Damage			
Safety netting integrity			
Hydrocarbon leaks			
Ensure the following lights are still operational:			
 Windsock and Obstructions Lights (night-time operations only) 			
 High level flood lights 			
Low level flood lights			
o Perimeter lights			
Approach and departure lights			
Aiming point lights			
Call paediatrics (Ward 3A) to advise all clear:			
• 3A NUM – 615 27678			
3A Shift Coordinator – 615 29485 (After Hours)			
Call ICU to advise of all clear:			
Nurse Coordinator – 615 28752 The state of the stat			
Pod 3 Coordinator – 615 72999 (Secondary Contact)			
Call CCU Nurse Coordinator on 615 27618 to advise of all clear			
Call Theatres to advise of all clear:			
Nurse Coordinator – 615 26423 (Primary contact)			
Theatres Bookings – 615 26424 (Secondary contact)			
Turn lighting controls to "All Lights Off – Excl Nav / Windsock". Check individual light switches for def	fault po	sition:	
Spare – DOWN			
Windsock and Obstructions Lights – UP			
Floodlights High Level – UP			
Floodlights Low Level – UP			
Perimeter - 3 HIGH			
Aiming Point – 3 HIGH			
Conduct full check of safety equipment:			
HLO safety vests (4)			
HLA safety vests (4)			
HLO / HLA goggles (2), earmuffs (3)			
Retrieval team leader safety vests (3)			

1705 TOTTONINT NO 0020 VCISION. 12.0 Approved. Wai 2022 Tage 05 of 02		1763	FSH-SIM-PRO-0028	Version: 12.0	Approved: Mar 2022	Page 59 of 62
---	--	------	------------------	---------------	--------------------	---------------

			•
Retrieval team safety vests (15)			
Retrieval team goggles (6), earmuffs (6)			
Wet weather jackets (13)			
AlbacMats (3)			
Closing the pad	✓	*	N/ A
Close all equipment storage shelves			
Ensure that stairwell door is secure			
Close both doors to reception area and ensure both are secure			
Ensure that lifts 15 and 16 are released from priority recall			
Record Job Closed on PDA			
Record any issues reported (i.e. hydrocarbon leaks) including the WO number or general comments in comments box below and email checklist to FSH.HeliportOperation@health.wa.gov.au			
Store the completed checklist in the 'Heliport Operations Checklist' folder in the SIMS Control Room			
Comments:			
HLO Signature			



Annex. Helicopter Operators

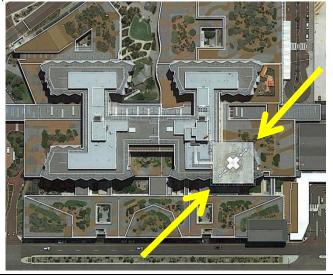
Revision Number: 6.0	Designator: YXFH
Revision Date: Jul 2019	Co-ordinates: S32° 04'14.3 E115° 50'48.0
Facility Name: Fiona Stanley Hospital	Elevation: 67m / 219.8ft above sea level
Location: Murdoch	Dimensions: 27m x 27m
Weight limit: 10,000Kg	Controlling Authority: Fiona Stanley Hospital Emergency Management Unit
Night lighting: Yes	Day / Night facility: Yes
Air Traffic Control Zone: Jandakot	Heliport Contact number (24/7): 6152 9175

Hazards:

Lift core (circled below) approx. 13 m elevation to the North West of the heliport.



The best approach to the heliport is from 45° NE -225° SW direction.



Heliport activation:

- Notification of inbound patient is via ED Bat Phone (08) 6152 5297 by SJA SOC / attending clinician
- Aircrew to contact heliport on (08) 6152 9175 to confirm heliport activation
- Aircrew to contact HLO within 5 minutes of landing to confirm 'green deck'

1763 FSH-SIM-PRO-0028 Version: 12.0 Approved: Mar 2022 Page 62 of 62
--