



<b>Title:</b>	RDH: Helipad Operations Procedure		
<b>Type</b>	Procedure Nursing Resource Co- Ordinator	<b>Approved by</b>	Dr Didier Palmer RDH Emergency Medicine & Aerial Medical Retrieval Service Director
<b>Department Author</b>	Jeanette Cripps	<b>Service Position</b>	Service Director
DEPARTMENT OF HEALTH			

## Procedure

# RDH: Helipad Operations Procedure

### Target Audience

#### Areas applicable :

Careflight Medical retrieval team, Helicopter crew and Logistics Co-ordination Unit.  
RDH Nursing Resource Co-ordinators.  
RDH Security officers.  
RDH Staff who have completed the Patient Transport Vehicle and Helipad Retrieval Training Course.

### Aim

The safe and timely retrieval and transport of patients from the RDH Helipad to the receiving unit.

### Personnel able to perform procedures

Medical retrieval team and helicopter crew and Logistics Coordination Unit.  
RDH Nursing Resource Co-ordinators.  
RDH Security officers.  
RDH Staff who have completed the Patient Transport Vehicle and Helipad Retrieval Training Course.

### Definitions

**Retrieval team:** The aero-medical crew, usually consisting of a Careflight nurse and doctor, but may involve other staff as required.

**Air crewman:** Trained member of aircraft crew who accepts responsibility for safety, equipment personnel and vehicle movements around the body of the aircraft.

**ETA:** Estimated time of arrival

**NRC:** Nursing Resource Co-ordinator

**PTV:** Patient transport vehicle

**PCA:** Patient care assistant

**SJA:** St John's Ambulance

**Receiving unit:** Unit receiving the patient. e.g. Emergency department. Intensive Care unit.

**NVG:** Night vision goggles

**Cold load/Unload:** Aircraft engines are off and the rotor blades are stationary

**Hot load/ Unload:** Loading or unloading of persons and/or equipment whilst the rotor blades are still turning, usually with the engines running.

**FOD:** Foreign object debris- Any restrained item that could become airborne in helicopter downdraft.

**LCU:** Careflight Logistic Coordination Unit who coordinate the aero medical retrievals

### Equipment

Patient transport vehicle  
Safety goggles and reflector vest  
Full oxygen cylinder  
Landing lights



## Procedure

### Flight Planning

CareFlight LCU	Prior to commencing Flight or once airborne outbound	Contacts RDH switchboard on 89228888 and requests to speak with the NRC to notify intention to use helipad and approximate ETA. Switchboard connects helicopter crew to NRC to provide: Brief patient synopsis, special requirements and current ETA.
NRC	On notification	Checks availability of PTV - if unavailable, book SJA. Notifies Security, PCA Team leader of the receiving unit
Security	On notification	Scouts the helipad and clears area for FOD. Positions landing lights and notifies NRC of same.
PCA	On notification	Checks PTV and equipment.
Team Leader	On notification	Check staffing requirements and bed allocation.

### Pre - Arrival

CareFlight Helicopter Crew	At scene of retrieval or once airborne inbound	Crew contacts NRC with accurate ETA. Where possible 30 minutes advance notice will be given
NRC	On notification	Notifies the following staff with accurate ETA: Security PCA Team leader of the receiving unit

### Arrival

Security	10 mins prior to ETA	Attends helipad. Ensures no new obstacles or hazards present. Sets out and turns on portable lighting Clears all persons from the helipad to a distance of 50m (outside the gate).
PCA	10 mins prior to ETA	Attends Helipad. Parks PTV outside the gate with all windows and doors closed and headlights off. Assumes role of the security officer if they are unable to attend.
All ground staff	On landing	Remain 50m from the landing zone (outside the gate) until the helicopter has landed, the engines off, rotor blades are stationary and you are signalled to enter the pad. No ground staff are permitted to enter the helipad whilst the engines are running and the rotor turning without being fully escorted to and from the helicopter by the air crewman. All ground staff must follow the direction of the air crewman/pilot around the helicopter.



## Helicopter on the pad

Air crew	After shutdown	Signals for staff to enter the helipad. Coordinates the movement of the PTV to the edge of the helipad. Remain with the helicopter and secure the helipad
Security	After shutdown	If required elsewhere, are clear to leave the helipad
Retrieval team	After shutdown	Co-ordinates the transfer of the patient from the helicopter to the PTV, loading of the patient and transfer of the patient to the receiving unit.
Take off	All ground staff	Clear the area to 50m (outside the gate) when the air crew ask. Security or PCA to lock helipad gate.

## Additional Information

### Departmental responsibilities

#### CareFlight LCU and Helicopter Crew

- Provide earliest possible notification of impending use of the helipad
- Confirm ETA when known.
- Ensure the NRC is notified if the case is cancelled or delayed.

#### Retrieval team

- Maintains responsibility for patient care until clinical handover has occurred with the receiving unit.
- Responsible for all unloading in the exceptional event of a hot unload.

#### NRC

- Ensure availability of the PTV and if unavailable, co-ordinate with LCU the activation of SJA.
- Ensure Security, PCA and the team leader of the receiving unit are aware of the retrieval and confirmed ETA.

#### Security

- On initial notification, scours helipad for FOD, positions landing lights and notifies NRC of same.
- 10 mins prior to confirmed ETA, ensures no new obstacles or potential risks.
- Assumes overall responsibility for ensuring the helipad is secure until helicopter has landed.

#### PCA

- Checks PTV and collects necessary equipment.
- Drives PTV to the helipad.
- Assists the retrieval team with patient transfer from the helicopter to the PTV.
- Drives PTV to ED.
- Assists the retrieval team with the transfer of the patient to the receiving unit.
- Assists in returning the retrieval team and their equipment to the helipad.
- Secures the helipad gate in the absence of the security officer.



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## DEPARTMENT OF HEALTH

### Air crew

- Maintain safety of personnel and equipment on the helipad once the helicopter has landed.
- Maintain security of the helipad (for the purpose of helicopter safety) once the helicopter has landed (in the absence of the security officer).

### Radio Frequencies

- 467.725 Tx
- 458.225 Rx
- CTC ss 103.5

### Helicopter Safety Briefing

- The pilot in command has overall responsibility for the helicopter operation.
- Always wear the supplied personal protective equipment- safety vest, eye and ear protection.
- Ground personnel should maintain a 50 metre clearance from the helicopter landing zone during landing and take-off.
- Ground personnel should not move under the arc of the main rotor until engines have shut down, the rotors are stationary and the approval to approach the helicopter has been given by the pilot/ air crewman.
- Helicopters generate a large downdraft which can stir up dust and particles and result in eye damage. During landing/take-off, ground personnel should turn their head away from the aircraft and shield their eyes. If blinded by dust, sit down and await assistance.
- Security personnel should check and clear the landing zone of FOD. Foreign objects on the ground can be dislodged and sent large distances at great speed by the down wash. Entry into the engine intake, or impact with the rotor can cause rotor or engine destruction or acceleration of the object to extreme speeds resulting in personal injury to the ground staff.
- The air crewman has responsibility for movements under the arc of the rotor. Follow their directions.
- Approach all helicopters via corridors at 3 and 9 o'clock from the body of the machine to avoid lethal rotor strike.
- Never approach any helicopter from the rear to avoid lethal tail rotor strike.
- Stretchers and equipment must be carried horizontally to and from the helicopter with 2 people at each end for long or heavy items.
- No equipment or baggage should be loaded onto the helicopter without the knowledge and consent of the pilot in command.
- Smoking is not permitted within 50 metres of the helicopter when medical gases are being used or the aircraft refuelled.
- An Ambulance or health vehicle parked close to an area where a helicopter will land must have all doors and windows closed.
- The CareFlight helicopter crew utilise NVG to land the helicopter during night operations. Torches and headlights do not assist the crew and may reduce vision.
- Only helicopter crew are to operate the helicopter doors.
- Remain alert and follow the directions of the crew.

The helicopter should be shut down for all loading and unloading. In extreme circumstances, at the discretion of the pilot, a "hot load/unload" may occur.

In this situation, the following procedures must be adhered to:

- Approach may only occur after the pilot has given approval via the air crewman.
- All staff will be escorted to and from the helicopter by the air crewman, expect that you may be physically held on to by the crewman – as due to engine noise you will not be able to hear voice directions.



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- Approach all helicopters via corridors at 3 and 9 o'clock from the body of the machine to avoid lethal rotor strike.
- Never approach any helicopter from the rear to avoid lethal tail rotor strike.
- Only move stretchers to the helicopter under the guidance of the air crewman, if this is to be the case – remove all linen and pillows from stretcher. OR instead unload the patient on the helicopter stretcher, move the patient to an area clear of the helicopters down draft and then perform the transfer. All bedding should be left in the transport vehicle or well clear of the aircraft wash.
- Patients and staff positioned close to the helicopter landing area should be covered to avoid particle and dust intrusion to wounds and eyes. Turn your back to the aircraft when landing or taking off to avoid injury.
- Remove caps, eyeglasses and any loose items that could become airborne in rotor down draft.
- If, when approaching or departing the helicopter a person is injured, immediately stand still or sit down and await assistance.
- Keep head low when entering the arc of the main rotor.

### Associated Documents

[NTAMS: Bariatric Aero-medical Transport](#)

### Key Legislation, Acts & Standards

[NT Workplace Health and Safety Act – 1<sup>st</sup> March 2011](#)

[NT Workplace Health and Safety Regulations – 29<sup>th</sup> November 2010](#)

CASA guidelines

### Author / Contributors

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