

Patient Transport and Medical Evacuation Procedures

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I Purpose

These procedures have been developed to ensure that:

1. Medical personnel understand the purpose and need for medical evacuations and use the medevac system appropriately
2. Resources are efficiently coordinated to facilitate a medevac
3. All affected agencies and groups are appropriately contacted and kept informed.

II Scope/Applicability

This procedure is geared toward the USAP healthcare personnel: providers' at all three USAP clinics in Antarctica, as well as personnel who help coordinate in New Zealand and the United States. Flight operations will be controlled according to policies and procedures established by Support Forces Antarctica (SFA), RPSC Station Directorates, and other agencies that operate aircraft and execute these evacuations.

A Patient Transport or Medical Evacuation is appropriate when USAP medical capabilities at that location cannot provide the diagnosis, care, or treatment that a patient may need to sustain his/her life or health. The system should not be used to facilitate elective or non-essential medical care or treatment. These procedures address the transportation and medical care that arise in the following situations:

1. Patients from South Pole Station or field camps who need air transport to McMurdo Station for further medical evaluation or treatment. These patients may or may not require transportation continuing to New Zealand.
2. Patients at McMurdo Station who require transportation to New Zealand or to the United States for further evaluation or treatment.

Patients at Palmer Station or Peninsula Area camps who require evacuation are not tracked through the same numbering system, and will be handled by the Palmer Station Physician and Station Manager, in coordination with RPSC Medical and transportation assets, on a case-by-

case basis. Similar feedback is required, and is outlined in Procedure Palmer Station Medical Standard Operating Procedures and Protocols, ME-P-100.

Specific Search and Rescue (SAR) operational and response procedures are not contained within this procedure, but are maintained by the SAR team.

III Terms and Definitions

There are three levels of medical transportation, two of which are considered Medical Evacuation (Medevac), and the third is identified as a Patient Transport. It is important to understand that each category carries varying degrees of response and resource commitment. For that reason it is essential that the term “Medevac” NOT be used without the categorical qualifier of “URGENT” or “PRIORITY”. The classification is driven by the immediacy in which the patient needs to receive more comprehensive medical attention and the resources required to care for the patient during and after transport. Patient Transports are tracked and reported separately from Medevacs, specifically to avoid the level of visibility and resource commitment, so the two should not be confused.

Urgent Medevac

This is the highest category of Medevac, and indicates that the patient requires transport AS SOON AS POSSIBLE, even if there is no scheduled flight. This may include diversion of resources – including aircraft – from other missions to meet the time frames needed to provide appropriate care. This classification will typically be reserved for patients who are unstable, have a high risk of deteriorating, or run a significant risk to life, limb or function if not given definitive care. Urgent Medevacs require attending medical care during transportation and ambulance support in McMurdo Station and Christchurch, New Zealand.

Priority Medevac

This is the lower urgency of Medevac, and indicates that the patient requires transport on the NEXT SCHEDULED FLIGHT. Resources will not be diverted, but the Priority Medevac may displace scheduled passengers or cargo to make room for patient, medical attendant(s), and/or medical equipment and supplies. This category is used whenever the patient requires special medical handling, such as medical attendant or medical equipment, to provide care en

route, or ambulance support at either end of the flight. Specific arrangements will be made on a case-by-case basis as determined by the McMurdo Clinic Physician in consultation with the Flight Surgeon, Medical Director, UTMB, or other care providers.

Patient Transport

This category refers to air transportation of a patient on a NEXT AVAILABLE SEAT basis. It is not considered a Medevac, and is numbered and tracked separately through a similar system. These patients are flying for medical reasons, but **DO NOT REQUIRE ANY SPECIAL MEDICAL HANDLING** en route. This designation is **NOT** used if the patient has a medical attendant, requires medical equipment en route, or needs ambulance support at either end of the flight. Taxi service, assistance with carrying bags, or appointment scheduling are appropriate. These patients typically are sent to Christchurch, New Zealand for further diagnostic tests or treatment that cannot be done at McMurdo or South Pole Stations. Or they are re-deploying early for medical reasons and returning to the US for a condition that has caused an NPQ status. Patients will be evaluated in Christchurch for PQ status before deciding whether they can return to Antarctica.

IV Responsibilities

RPSC Medical Director (or delegate)

Sets and enforces medical policy for Patient Transport and Medevac operations, in coordination with NSF and SFA. Provides supervision and oversight of on-ice physicians and patient care. Authorizes the Medevac or Patient Transport requested by the on-ice doctors. Collects and analyzes medevac case summaries and data for periodic and annual reports and for continuous improvement of the healthcare system. The RPSC Medical Director is also the authority to re-certify a patient's Physical Qualification (PQ) status for return to Antarctica after Medevac or transport, or designate NPQ (Not Physically Qualified) status to prevent return because of a patient's medical condition.

University of Texas Medical Branch (UTMB) Physician

Medical services at USAP Stations are enhanced by University of Texas Medical Branch (UTMB) telemedicine services that provide consultation with all specialties, 24 hours per day seven days per week. When video teleconferencing is necessary, contact the Medical Director to assist in the set-up. See the Consulting with UTMB SOP for instructions on contacting UTMB and for setting up and using the Polycom unit. The Communications Technician and Network Administrator on station are also trained to use the unit and can be of assistance.

McMurdo Clinic Lead Physician

The McMurdo Lead Physician determines the NEED for a Patient Transport or Medevac, in consultation with the RPSC Medical Director or UTMB, as well as determining the category and priority. Note that this is different from the authority to DIRECT a medical evacuation. The authority to direct the use of aircraft rests with the NSF Representative, Antarctica. The Lead Physician consults with the RPSC Medical Director, notifies the authorities of the need based upon best medical judgment, and the operational authorities balance the need with operational considerations. The Lead Physician will focus on providing the best possible care to the patient(s) within existing constraints, including allocation of medical resources, assignment of Medevac attendant, and coordination with transport timing.

The Lead Physician will involve and seek input from appropriate resources for each case. These may include the Flight Surgeon, other physicians on station, the RPSC Medical Director, University of Texas Medical Branch (UTMB), other medical staff at the station or other stations. When time allows and the nature of the case warrants, telemedicine consultation is used to avoid the need for transport, or to clarify the need and arrange follow-up care. This is particularly relevant in psychological diagnoses, where the lack of psychological counseling services on site can be filled by consultation with the RPSC Psychology Consultant, telemedicine video conferencing, or other Raytheon resources.

Responsibility also includes follow-up documentation and summary reports on medevac cases to the RPSC Medical Director. End-of-season reports should provide a summary of lessons learned on improving the medevac system, as well as equipment and personnel recommendations.

Other Healthcare Provider

If different than the Lead Physician, the healthcare provider treating the patient will notify the McMurdo Lead Physician that he/she has identified a medevac or patient transport need. This provider cannot initiate an official request for a medevac, and so will relay this information. However, if urgency or lack of communication connections warrant, he/she should coordinate whatever transportation assets are available, take care of the patient needs first, and then follow with notification to the Lead Physician when appropriate. An example would be a field-camp Emergency Medical Technician sending an urgent patient to McMurdo Station on an available helicopter, without waiting for radio contact first.

This also applies to the South Pole Physician, who will make local arrangements to manifest patients requiring transport to McMurdo Station, providing information as time and connectivity allow, and then the McMurdo Lead Physician will follow with the official Medevac or Patient Transport message. The RPSC Medical Director will also be briefed as soon as possible.

McMurdo Lead Nurse

The Lead Nurse is the primary medical contact within the McMurdo Clinic to coordinate smooth operation of the medical transport system, including supervision of the Flight Nurse or other staff as needed. Coordination of individual Medevac or Patient Transport cases may be delegated as appropriate.

At the beginning of each season, the Lead Nurse will establish contact with key players in the system, and ensure the E-mail Administrator updates the Medevac e-mail distribution list and verifies delivery with a test message. The system is tested periodically during the season to ensure all addresses remain current and working.

RPSC Flight Nurse

The RPSC Flight Nurse is specifically trained (CFRN or equivalent) and hired to manage in-flight care and other issues associated with Medevacs. Therefore, he/she is the primary candidate for accompanying a patient on Medevac. However, the Lead Physician will evaluate each case on the needs of the patient(s) and the manpower available, and assign duties as appropriate.

The Flight Nurse is responsible for maintaining medevac equipment and ensuring that supplies are ready at all times, to include working with logistics representatives for ordering

supplies, and recommending equipment upgrades and replacements to the RPSC Health Services Manager. He/she also ensures that any equipment taken from station on a flight is returned promptly.

SFA Flight Surgeon

The Flight Surgeon is the Support Force Antarctica (SFA) senior representative in the clinic. He/she will assist the coordination of medical and military efforts in support of the Medevac, as needed. If the patient is a military service member, the Flight Surgeon or Augmentee will ensure that all military status tracking and notifications are met, which are not covered in this procedure. The Flight Surgeon should also highlight concerns and provide input to the Lead Physician to ensure optimal care of the patient before, during, and after flight.

If the Flight Surgeon is selected as the appropriate medical attendant to accompany a Medevac patient, he/she must first obtain orders from the Commander, SFA, for authorization to leave McMurdo Station, and ensure any personnel tracking requirements are met.

RPSC Human Resources and Finance

The Human Resources (HR) representative at McMurdo Station will coordinate administrative/personnel status tracking and send out an HR message to ensure associated agencies are notified. This includes the finance status and issuing travel funds as appropriate.

The South Pole HR/Finance may issue travel funds, and so will coordinate status and any activities with the McMurdo counterparts for any patient from South Pole.

Commander, Support Forces Antarctica

Has command authority over all military assets and operations, to include military aircraft and flight crews, and execution of Medevac missions.

NSF Representative, Antarctica

Has the authority to divert aircraft or other resources from planned missions to emergency needs, such as Medevacs (see definition of Urgent Medevac).

McMurdo Area Directorate/Station Manager

Provides operational coordination of the medevac system so that medical personnel can focus on care of the patient. Offer personal assistance and/or Chaplain services and make arrangements according to Participants request.

V Sequence of Events - MEDEVAC

The sequence of the following steps may be adjusted to meet needs of individual patients and situations. Each step is explained in the next section.

1. Healthcare Provider identifies the need for a Medevac to the McMurdo Lead Physician.
2. The McMurdo Lead Physician discusses the case with the RPSC Medical Director or UTMB to authorize the request for a Medevac, as time allows.
3. McMurdo Lead Physician calls initial notification to the McMurdo Area Directorate or Station Manager.
4. McMurdo Area Directorate notifies operational agencies to start preparations (aircraft, etc.).
5. McMurdo Lead Physician sends the Medevac electronic message (e-mail)
6. Treating physician or Lead Physician Coordinates with the receiving physician, and NZ Medical Coordinator. Staff prepares patient for transport.
7. Administrative coordination by RPSC Area Directorate and Human Resources.
8. The Medevac is conducted by flight operations.
9. Medical Attendant hands off patient to receiving physician and returns equipment.
10. Christchurch Medical Coordinator provides feedback to the treating physician. The McMurdo Lead Physician completes chart documentation and provides a case summary to the RPSC Medical Director.
11. RPSC Medical Director collects information and determines PQ Status for return to Antarctica or redeployment.

VI Sequence of Events – PATIENT TRANSPORT

The sequence of events for Patient Transports is similar to Medevacs, but requires less coordination because of the lack of urgency and fewer resources required. Some of the steps may be deleted, if not applicable to the case, or adjusted to meet the needs of individual patients and situations. Each step is explained in the next section.

1. Healthcare Provider identifies the need for a Patient Transport to the McMurdo Lead Physician.
2. The McMurdo Lead Physician discusses the case with the RPSC Medical Director or UTMB to authorize the Patient Transport
3. McMurdo Lead Physician sends the Patient Transport electronic message (e-mail).
4. Treating physician or Lead Physician coordinates with the receiving physician and NZ Medical Coordinator (scheduling appointments). All Medical Transports for testing and/or issues relating to the PQ process require notification to the Supervisor, Medical Processing and the New Zealand Medical Coordinator. Transport will not occur until NZ Medical Coordinator identifies an appointment date. NZ Medical Coordinator will make transport arrangements through ATO.
5. Administrative Coordination by McMurdo Area Directorate/Station Manager and Human Resources. Assistance will include offering personal assistance and/or Chaplain services and make arrangements according to Participants request.
6. The Patient Transport is conducted by flight operations.
7. Christchurch Medical Coordinator provides feedback to the treating physician and the Supervisor, Medical Processing for PQ issues. The McMurdo Lead Physician completes chart documentation and provides a case summary to the RPSC Medical Director. Changes to the deployment/redeployment date must be approved by the NZ Medical Coordinator and coordinated with the Supervisor, Medical Processing.
8. When the patient is cleared by the Physician, either verbally or in writing, to travel/work, the patient will be returned to the Ice upon completion of scheduled

appointment. In accordance with DS-A-140, no PTO/LWOP is authorized during Medical Transport.

- 9 RPSC Medical Director and/or Supervisor, Medical Processing collects information and determines PQ status for return to Antarctica or redeployment. The Supervisor, Medical Processing is notified of individuals PQ/NPQ status and this information is documented in PTS and in the patients chart. The Supervisor, Medical Processing is then responsible for notifying the NZ Medical Coordinator, DSG and HR of the PQ/NPQ status and movement is initiated for return to the Ice or back to CONUS.

VII PROCEDURE

Provider Identifies Patient Need to the McMurdo Lead Physician

(Medevac step 1 / Patient Transport step 1)

From South Pole:

The South Pole Physician has authority to determine the need for Medevac or Patient Transport within the community. He/she should discuss the case with the RPSC Medical Director, UTMB Telemedicine consultants, New Zealand Medical Liaison, or McMurdo on-duty physician, if time and communications permit. He/she will send an electronic notification similar to the template in appendix B, to the RPSC Medical Director, McMurdo Lead Physician, the South Pole Area Directorate/Station Manager, and the South Pole Station Support Supervisor. The Physician coordinates patient transportation from the South Pole to McMurdo directly with the Station Support Supervisor, using whatever transportation assets are available and appropriate (LC-130, Twin Otter, or other) and arranges for the medical support of the patient during the flight to McMurdo Station. The McMurdo Lead Physician will then send the official, "part A" Medevac or Patient Transport message to the e-mail group, confirming this action and assigning a sequence number within the Medevac Log.

If there is no transport on site, and a plane must be sent from McMurdo, then the South Pole Physician will coordinate directly with the McMurdo Lead Physician for urgency, attendant,

and medical equipment needs. The medical support for the patient will be sent from McMurdo Clinic utilizing the McMurdo medevac team and equipment. The McMurdo Lead Physician will initiate the official medevac sequence, and notify the McMurdo Area Directorate/Station Manager to make the necessary operational arrangements to get a plane sent in an appropriate time frame.

The South Pole Station Support Supervisor will NOT indicate that a passenger is a Patient Transport or Medevac on the APA (Advance Passenger Advisory). The South Pole HR/Finance Representative will notify the McMurdo HR Representative and McMurdo Finance Representative of the status of the distribution of travel funds and HR paperwork. The South Pole Station Support Supervisor will coordinate with the South Pole Physician to ensure the patient's belongings (personal bags, passport and ECW gear) are collected in time for their flight.

The South Pole Physician prepares a case summary for the McMurdo Lead Physician, with a copy to the RPSC Medical Director. In turn, they will receive a discharge summary after treatment is completed at McMurdo or the eventual patient destination.

From Field Camps or Other Remote Locations

The Camp will call McMurdo Station and be patched through to the McMurdo Lead Physician, or other on-call physician, to notify of obvious or potential need for Medevac via Iridium phone or Radio. Iridium is the preferred communication medium because it allows privacy. Although the radio and patched communication is not necessarily via secured means, those involved in the communication are authorized to discuss otherwise patient confidential information as is required to facilitate appropriate measures of care. This communication can precede, be coincident with, or come after notification of the Search and Rescue (SAR) team – depending on the urgency of the particular situation.

Although the camp cannot initiate the Medevac sequence, operational considerations may dictate transporting the patient on available aircraft before the McMurdo Lead Physician can become involved. In such cases, information will be sent afterwards, and the Lead Physician will send a confirming “part A” Medevac message assigning a sequence number, and proceed with the remaining steps.

NOTE: Transportation to McMurdo for routine but unplanned medical or dental care does not constitute a Medevac. A routine call to the McMurdo Clinic may be appropriate to

establish an appointment. However, if the patient needs to leave the Continent for an appointment, this is considered a Patient Transport.

Within the McMurdo Response Community

The treating provider, whether Flight Surgeon or RPSC staff, will identify a patient need to the Lead Physician, and the Lead Physician will coordinate with the RPSC Medical Director/UTMB and determine the need and category of Medevac or Patient Transport and consult the Flight Surgeon on any flight medicine issues. When the determination is in dispute, the decision of the McMurdo Lead Physician will prevail. This does not preclude the initial treating physician or physician assistant (PA) from remaining the primary caregiver for a patient.

McMurdo Lead Physician Discusses Case with RPSC Medical Director to Authorize Medevac

(Medevac step 2 / Patient Transport step 2)

The RPSC Medical Director provides control and continuity to ensure all treatment options are considered, and that evacuations are not upgraded unnecessarily. UTMB telemedicine and local capabilities should be used, instead of evacuation, whenever appropriate. However there should be no delay evacuation of urgent patients if there is a delay in reaching the RPSC Medical Director. The Medical Director will help arrange any telemedicine consultations or support needed, as well as alert RPSC and NSF contacts if needed.

McMurdo Lead Physician Calls Initial Notice to McMurdo Area Directorate/Station Manager

(Medevac step 3 / normally not needed in Patient Transport)

As quickly as possible, the McMurdo Area Directorate/Station Manager should be notified by telephone and provided as much of the following information as available (update when more is determined). This allows the McMurdo Area Directorate/Station Manager the maximum amount of time to respond, coordinate all the necessary resources, and manage administrative operations.

1. Patient Name
2. Patient Organization

3. Category of Patient (see definitions)
4. Name of Escort if Established (see discussion below)
5. If urgent – When will the Patient be Ready for Transport (e.g. Patient is ready for transport pending aircraft availability; patient will be ready for transport in XX hours).
NOTE: In the best of conditions it may take up to 2 to 3 hours for an aircraft to be prepared (i.e. configured for a littered patient, fueled, flight crew organized). During that time USAP operators will attempt to identify and muster personnel scheduled for redeployment and get them on the aircraft. It should be indicated if additional time can be allotted for this to occur without jeopardizing patient care. Conversely, it should be noted if the nature of the injury or illness is such that it would be ill advised to allow routine passengers.

McMurdo Area Directorate/Station Manager Notifies Agencies to Start Preparations

(Medevac step 4 / normally not needed in Patient Transport)

The McMurdo Area Directorate/Station Manager will contact the following personnel and advise of the need to ready aircraft or other preparations. After this, they maintain contact with the Clinic to assist in any administrative coordination so that the medical personnel can focus on care of the patient.

NSF Representative, Antarctica - if urgent, may authorize diversion of aircraft or other USAP assets.

Support Forces Antarctica Commander (SFA) – coordinates military aircraft availability, crew schedules. They will also inform to higher military commands if needed.

NSF Station Manager - coordinates other USAP assets as required).

Director, NZ Operations - coordinates aircraft movement if other than McMurdo aircraft are used, and alerts the NZ Medical Coordinator of the pending operation.

McMurdo Lead Physician sends Electronic Notification

(Medevac step 5 / Patient Transport step 3)

Early into the medevac evolution, the McMurdo Lead Physician (or designee) will send out a standard format electronic message to the “Medevac” e-mail group listed on the McMurdo e-

mail address book. This action should not be allowed to interrupt caring for the patient, and for Urgent Medevacs may be completed after the patient has departed Antarctica. The Medevac e-mail list comprises those individuals who have a role in the preparation, transportation, care, and management of the patient. The McMurdo Area Directorate/Station Manager determines who may be added to this list. The E-mail Administrator updates the members at the beginning of each season, and sends a test message to ensure all addresses are receiving properly. A listing of usual members on this list is provided at Appendix A.

NOTE: Because this message goes to so many agencies that have some role in managing Medevacs, it has been designed to exclude medically confidential information. Therefore, any additional people who have a reasonable need to know may be added to the “Medevac List” address at the discretion of the McMurdo Area Directorate/Station Manager.

The electronic medevac message will use the standard format, shown in Appendix B. This template can be found on the Medical drive of the McMurdo Station computer network at: J:\Administrative\MEDEVAC- Patient transport\. This is a key document to notify and track medevac and patient transport operations, so it should be completed carefully as explained in detail below. If there is need to issue the message before all information is complete, or if any item changes, re-send the entire message as “revised”. The number of people notified for a Patient Transport is less than the number for a Medevac and has been reduced to people who need to participate in the transport in order to prevent undue confuse with a notification for a Medevac.

Subject Line –The subject line of a Medevac or Patient Transport message identifies the notification as a Medevac or Patient Transport and the date. The specific category, per the definitions in Section III, should be included.

Medevac Number – a sequential number, initiated at the beginning of the winter season, for each operational season. A separate number sequence is used for Patient Transports vs. Medevacs. For any medevac originating at South Pole or other remote location, and traveling to McMurdo, the medevac number is followed by the letter “A”. If the same patient is subsequently sent on to Christchurch, New Zealand, the medevac number would remain as originally assigned but is followed by a “B”. Patients may have an “A” medevac and only require McMurdo Clinic treatment; therefore there may be no corresponding “B” message. A log of messages should be maintained for the season to ensure the sequence is consistent. At the end of the season, the log should be forwarded to the Health Services Manager for reports and archiving. A copy of the log is kept on the Medical Drive at McMurdo for reference for the following season’s staff.

Patient Name: Last name, first name and middle initial of Patient. The full legal name to match their passport should be used, if known.

Organization: The employing organization (see listings in the Patient Tracking Database) or science event number to whom the patient is assigned. Similarly, national Antarctic program affiliations where appropriate (e.g. Antarctica New Zealand, Italian Antarctic Program, etc.) or “Civilian” for non-governmental activity personnel such as tourists should be indicated.

Category: For a Medevac, the patient is classified in one of the three categories, defined in section III:

Urgent (as soon as possible)

Priority (next scheduled flight)

This is not necessary for a **Patient Transport**

Condition: Patient is classified as to his/her relative medical status varying from stable to critical. This is not necessary for a Patient Transport.

Status: The patient is classified relative to his/her ability to be transported varying from ambulatory (i.e. able to walk under his/her own power, with or without assistance) to litter – indicating patient will be transported in a litter. For a Patient Transport, it is important to describe any problems related to ambulation so the Load Master is aware of seating requirements or special handling in case of an emergency.

Attendant: For a Medevac, then the NAME and POSITION of the person(s) who will be attending the patient en route should be provided. If undecided when sending out the message, then a “revised” message after the attendant has been assigned should be sent.

NOTE: Generally the attendant will be from the RPSC medical staff UNLESS the skills of the Air National Guard (ANG) staff are best suited to tend to the particular needs of the patient or unless the medevac happens to coincide with the normally scheduled redeployment of the ANG staff member. If the ANG Flight Surgeon is the most appropriate to serve as attendant, the McMurdo Area Directorate/Station Manager must be notified so that the SFA Commander can prepare the necessary Flight Surgeon orders. This is not necessary for a Patient Transport

ICD 9 Code: References the International Classification of Diseases corresponding to the particular patient condition. Use of ICD code rather than naming the diagnosis helps protect the patient’s privacy for non-medical personnel. A more general category may be used rather than a specific code, since specifics will be provided separately to the New Zealand Medical

Liaison and Medical Director in a case summary. This is not necessary for a Patient Transport, to minimize medical information distributed to non-medical agencies.

From: Indicates the location (station or camp) that the patient will come from.

To: Describes the flight destination of the patient. If the patient is being sent to McMurdo Station for additional diagnosis and treatment, McMurdo would be the destination for the “Part A” transport, although eventual transport to New Zealand may be required with Christchurch as the “Part B” destination.

Disposition: Describes the desired course of action for patient care (e.g. admit to hospital; specialist consultation, evaluation in McMurdo, etc.) and anticipated status afterwards (e.g. return to Antarctica, send to US, evaluate for PQ status). Often the final disposition is not known, but listed as “evaluate to determine....”

McMurdo Ambulance: State yes or no, whether the patient requires ambulance support to/from the McMurdo airfield. This is not necessary for a Patient Transport.

NZ Ambulance Requirements: The New Zealand Ambulance Status should be stated as defined in the chart below. The service requires a pre-notification status according to their standard coding system. This is not necessary for a Patient Transport.

	STATUS ZERO	STATUS ONE	STATUS TWO	STATUS THREE	STATUS FOUR
Patient Condition	Deceased	Critical Extreme	Serious Moderate	Moderate	Minor
Stability	-	Unstable	Unstable	Stable	Stable
Potential to Deteriorate	-	Obvious	Probable	Unlikely	None
Special Criteria	-	Under CPR GCS<9, Hemorrhage, Airway Obstructed, Assisted Respirations, Syst. BP < 90 or P>130 or <50	Not Under CPR GCS<9	-	-

Treating Physician or Lead Physician Coordinates with Receiving Physicians, Christchurch Medical Coordinator, and Staff prepares Patient for Transport

(Medevac step 6 / Patient Transport step 4)

The Christchurch Medical Liaison (Dr. Jonathan Pascoe, alternate Dr. Cohen, at Ilam Medical Center) can be reached at (NZ phone) 03-351-6198 or (fax) 03-351-7265. The Medical Liaison is responsible for coordinating all USAP patient care while in New Zealand, including initial contact with New Zealand medical professionals. He/she will make arrangements with the appropriate specialty for consultations, appointments, and procedures. The Medical Liaison is also responsible for appropriate-level ambulance support and making arrangements for patient admission to the Christchurch Hospital.

The Lead Physician or treating physician will coordinate directly with the Christchurch Medical Liaison or other physician receiving the patient. Normally this includes a phone discussion on the condition and treatment requirements, and an e-mail case summary. A copy of medical records and digital x-rays is sent with the patient. The RPSC Medical Director should be copied on the case summaries. The Christchurch Medical Liaison will notify the Christchurch Medical Coordinator about the patient status and receiving physicians at the hospital. The Medical Coordinator will advise of flight delays, revising appointments and schedules as necessary, and notifying receiving physicians of actual arrival times.

Clinic Staff should avoid calling the airfield directly, to allow flight crews to prepare the aircraft. Likewise, administrative organizations should avoid phoning the Clinic so that they can focus on caring for the patient and assembling all of the medical supplies, medications and equipment needed during transit. However, calling the ambulance or taxi service is appropriate to coordinate configuration and timing to the airfield. The Medical Attendant must be given time to pack bags and prepare for the trip, so most patient preparation is handled by other Clinic staff. A checklist of "Process for Preparing for Medevac with Medical Attendant" is maintained in the SAR locker to assist (attached Appendix C). The Patient and Attendant MUST have their passport ready to present upon arrival in New Zealand. The Lead Nurse or delegated staff member will:

1. Call the Firehouse to arrange ambulance transportation for a littered patient (#2555)
2. Call Movement Control Center (MCC) to arrange pick up of any supplies and equipment (Oxygen tank, Medevac equipment including drugs and bags) and give name of the Medical Attendant. (#2258)

3. Check with the Flight Surgeon or Augmentee on proper plane configuration for a litter or other special patient needs. The Augmentee may travel to the runway to verify proper set-up of the unitron, litter configuration, or other equipment.
4. Assemble a copy of the patient chart (do not send originals) and x-rays if needed, to go with the patient.
5. Ensures the patient is physically ready for transport, such as securing IV lines with coban, placing the litter on the gurney, wrapping the patient in a sleeping bag or Dr. Down wrap when transport arrives, etc.

Patient Transport individuals generally prepare themselves the same as any northbound passenger, including packing belongings, attending bag-drag, and checking out with Housing.

NOTE: If a patient is urgently transported or otherwise unable to pack their belongings, then Housing will arrange to pack and ship his/her cold weather gear to the CDC, and his/her personal items to their home.

Administrative Coordination by McMurdo Area Directorate/Station Manager and Human Resources

(Medevac step 7 / Patient Transport step 3)

The McMurdo Area Directorate/Station Manager or designee coordinates administrative details to ensure Medical staff and Flight Crews can focus on their roles. As such, they will gather status and information, and relay as needed. Coordination may include:

Air Ops: Will provide status and availability of aircraft. To be notified when patient transport has commenced. Air Ops will communicate with the aircrew – Medical staff are not to communicate directly with the aircrew.

MCC (Movement Control Center): Will properly manifest patient and attendant. The need to transport medical and personal gear other than by ambulance should be communicated.

HR (Human Resources): Ensure they have proper HR status. This information is essential for change in employment status, activation of insurance benefits, notification of family members, etc.

SFA Commander or NSF Representative: Determine aircraft availability and use. The Medical Lead Physician declares the NEED for a Medevac, while the operational managers direct the EXECUTION of the operation.

NOTE: Any outside (media, family members, etc) requests for information pertaining to any particular patient or Medevac will be directed to the NSF Representative.

Human Resources must update the HR status and pay status in the Personnel Tracking System (PTS) if a patient leaves the continent. They also verify payment issues for medical care (i.e. Worker's Comp or self-pay). Finance provides any travel funds authorized for the patient or attendant, either before flight or in Christchurch. The McMurdo HR Coordinator has a separate Medevac (Transport) message they send to involved parties to ensure administrative actions will be completed.

The Christchurch Medical Coordinator assists in making any required appointments, as well as hotel arrangements for medical attendant (and patient when not in the hospital). He/she also acts as key coordinator in planning return flights to Antarctica for the attendant (and patient if medically cleared).

The Manager, Terminal Operations in Christchurch, New Zealand will also coordinate with ambulance service for timing of arrival, and access to the airfield.

Medevac or Patient Transport conducted by Flight Operations

(Medevac step 8 / Patient Transport step 6)

The Commander, Support Forces Antarctica, is responsible for the conduct of all military aircraft flights, to include Medevacs and Patient Transports. While in route, the medical attendant will keep the flight crew apprised of the patient status and any medical needs, and the aircraft Commander will make any operational decisions or adjustments.

Attendant Hands Off Patient to Receiving Physician and Returns Equipment

(Medevac step 9)

The Medical Attendant will stay with the patient until appropriately handed off to the receiving physician, or admission to the Christchurch Hospital. This may happen at the ambulance pickup at the airfield, but often will require the Medical Attendant to go to the Christchurch Hospital and check in the patient to update the receiving physician on status, and provide copies of relevant medical records of the patient. The Medical Attendant should

ensure that the receiving physician has the contact details for the Christchurch Medical Liaison and Medical Coordinator to enable feedback on status, evaluation or treatment.

Medical equipment from the flight should NOT go on the ambulance to the hospital if at all possible – transfer the patient to ambulance equipment. The equipment should be turned over to the Cargo Coordinator at the Air Cargo Yard (ACY), Christchurch Airport, letting him/her know what the items are, for priority transport back to the McMurdo Clinic. The equipment will be sent on the next southbound flight as special cargo, regardless of whether the attendant is on that plane. If medical equipment (ventilator, IV pump, etc.) must stay with the patient all the way to the hospital, the Attendant is responsible to keep track and ensure it is returned to the McMurdo Clinic expeditiously.

Medevac Documentation and Feedback

(Medevac step 10 / Patient Transport step 7)

In addition to maintaining a file of all Medevac and Patient Transport e-mail messages, the cases should be tracked in the logs located in the Medevac and Patient Transport directories, respectively, on the Medical J:\ drive on the McMurdo Station computer network. This helps ensure the sequence is maintained properly, and can be referenced later. All Medevacs and Patient Transports must be noted on the Patient Tracking Database, either as part of the patient visit or a separate entry.

It is important to get feedback on the final outcome of all tests or procedures done in New Zealand, even if the patient does not return to Antarctica. Whenever possible, obtain feedback on care completed in the US as well. A sample letter to the treating physician is provided at Appendix D. The Christchurch Medical Coordinator will update all involved parties daily about status and actions on a Medevac patient in Christchurch, in coordination with the Medical Liaison. When feedback is received, a copy is placed in the Medical Record. If feedback cannot be obtained, a note of this is placed in the medical record. The final disposition or case resolution (and any PQ change) should be documented on the Medevac or Patient Transport log.

The RPSC Medical Director should be updated on the disposition or other information subsequent to the original case summary. Any case where UTMB telemedicine consultation or capabilities were used to supplement on-ice capabilities is highlighted so that the RPSC Medical Director can use this information to improve the Medical Screening system, as well as to evaluate potential future clinic capabilities.

Provide Input to Update PQ Status

(Medevac step 11 / Patient Transport step 8)

The RPSC Medical Director is the authority to re-verify physical qualification (PQ) after any change in status, such as Patient Transport or Medevac. Clinic Staff forward data and recommendations to the Medical Director, and the Christchurch Medical Coordinator forwards information on treatment or testing done in New Zealand. The Medical Director makes a PQ re-verification or NPQ determination, and informs the Supervisor of Medical Screening in Denver who enters PQ status in the PTS database. The Christchurch Medical Coordinator is responsible for ensuring PQ status before a patient is allowed to return to Antarctica, or coordinating their disposition to return to the US.

Other Coordination

The Christchurch Medical Coordinator will arrange the transport and medical care of a civilian patient from New Zealand to the United States.

Raytheon uses AIG for insurance coverage, so they should be involved in arranging any medical transport requiring medical assistance from New Zealand to the US. AIGIS will arrange for medical escort or Medevac transportation for New Zealand to the United States in some cases.

AIGIS: 1-800-626-2427 [REDACTED]

When an escort is not required, but a flight upgrade is advised by the Lead Physician, the Christchurch Medical Coordinator will obtain necessary documentation and liaise with the Denver DSG Office. This can provide special assistance for the patient throughout the return flight.

For military personnel requiring medical escort back to the United States, individual organizational assets may be utilized or the military patient evacuation system can be used through the Global Patient Movement Regulation Center (DSN 576 6241/4939). The Flight Surgeon and SFA Commander will coordinate these arrangements.

VIII WINTER MEDEVACS

McMurdo and South Pole Stations terminate air transportation during the Winter Season; however winter access is sometimes available on an emergency basis. This is a risky and expensive proposition, and should only be considered for cases where on-ice capabilities are insufficient to save life, limb or function. The preferred option is to seek specialty consultation and assistance via UTMB telemedicine, and avoid winter evacuation. If an urgent need drives a winter evacuation operation, then less severe patients (such as Patient Transports) may be included on a space-available basis, even if they would not have warranted the actions on their own.

Winter Medevacs must be authorized by the NSF (Director, Office of Polar Programs), as well as the operational agency flying the operation (USTRANSCOM for Military aircraft). Flight operations will take a direct coordinating role. The RPSC Medical Director and Raytheon Corporate Medical Director will be involved in confirming the urgency of medical need, in consultation with the treating physician and UTMB physician specialists in the US.

The South Pole Physician or McMurdo Lead Physician initiates the process in the same way as summer Medevacs, with consultation with the RPSC Medical Director and notification of the respective Winter Station Manager.. The RPSC Program Manager will assemble the team required for planning a winter operation. The team will include key players from the Station, RPSC HQ, Raytheon Medical, NSF Office of Polar Programs, and Support Forces Antarctica. NSF will consider the operational risks against the patient's medical risks and decide whether and how to proceed with a winter Medevac, on a case by case basis.

IX Records

Patient Transport or Medevac E-mail Messages

Record ID - electronic e-mail message and/or attachment, by medevac number sequential for each Contract Year.

Owner – Medical Director, RPSC Medical Division.

Format – Electronic (CD-Rom backup after 12 months)

Storage- Up to 3 years storage locally at McMurdo on Medical (limited access) drive of the computer network. In Denver, 7-year storage on CD-ROM backup disks in files of Health Services Manager. Hard-copy printouts in Patient Medical Charts, filed alphabetically in Medical Screening Office.

Retrieval - Access limited to RPSC Medical Director and designated medical staff. Forwarding for data analysis will include removal of patient name or identifying data, except for qualified medical reviewer.

Retention Time - 3-years local at McMurdo Clinic, 7 years in DHQ archive CD-ROM, 7 years past last active entry in Patient Medical Chart.

Disposition - McMurdo electronic files deleted after 3 years. Denver HQ CD-ROM archives destroyed after 7 years. Patient Medical Charts destroyed by shredding after inactive for 7 years.

Patient Transport and Medevac Case Summaries

Record ID - electronic e-mail message and/or attachments, by medevac number sequential for each Contract Year.

Owner – RPSC Medical Director, Denver.

Format – Electronic (CD-Rom backup after 12 months)

Storage - Up to 3 years storage locally at McMurdo on Medical (limited access) drive of the computer network. In Denver, 7-year storage on CD-ROM backup disks in files of RPSC Medical Director. Hard-copy printouts in Patient Medical Charts, filed alphabetically in Medical Screening Office.

Retrieval - Contains privacy-protected information. Access limited to designated medical staff. May be reviewed by qualified medical reviewer.

Retention Time - 3-years local at McMurdo Clinic, 7 years in DHQ archive CD-ROM, 7 years past last active entry in Patient Medical Chart.

Disposition - McMurdo electronic files deleted after 3 years. Denver HQ CD-ROM archives destroyed after 7 years. Patient Medical Charts destroyed by shredding after inactive for 7 years.

Patient Transport and Medevac Logs

Record ID - electronic Excel file for each Contract Year.

Owner – RPSC Medical Director, Denver.

Format – Electronic (CD-Rom backup after 12 months)

Storage - Up to 3 years storage locally at McMurdo on Medical (limited access) drive of the computer network. In Denver, 7-year storage on CD-ROM backup disks in files of RPSC Medical Director. Hard-copy printouts in Patient Medical Charts, filed alphabetically in Medical Screening Office.

Retrieval - Contains privacy-protected information. Access limited to designated medical staff. Forwarding for data analysis or use in statistical reports will include removal of patient name or identifying data.

Retention Time - 3-years local at McMurdo Clinic, 7 years in DHQ archive CD-ROM.

Disposition - Statistical information will be retained indefinitely by NSF Safety and Health Officer, for historical record and data analysis.

Appendix A

Medevac E-mail Recipients

McMurdo addresses:

- NSF Representative
- NSF Station Manager
- RPSC McMurdo Area Directorate/Station Manager
- Commander, SFA
- SFA First Sergeant
- SFA Flight Surgeon
- SFA Operations Officer
- ATO Air Services Rep, McMurdo Station
- ATO Manager
- ATO Load Planner
- Movement Control Center (MCC), McMurdo Station
- Human Resources, McMurdo Station
- Finance, McMurdo Station
- Fire Department Dispatcher, McMurdo Station
- Fire Chief, McMurdo Station
- EH&S Coordinator, McMurdo Station

Christchurch, New Zealand addresses:

- NSF Representative, New Zealand
- Director, Raytheon New Zealand
- Christchurch Medical Coordinator
- Christchurch Medical Liaison and Alternate (Dr. Pascoe and Dr. Cohen)
- SFA Flight Sergeant
- SFA Shift Leader

RPSC Headquarters addresses:

- RPSC Program Manager
- RPSC Medical Director
- Health Services Manager
- Medical Processing Supervisor
- RPSC EH&S Director
- RPSC Health and Safety Manager.
- Human Resources representative for Workers Compensation

NSF Office of Polar Programs addresses:

- Health and Safety Officer
- Safety and Health Associate Program Manager

Patient Transport E-mail Recipients

McMurdo addresses:

- NSF Representative
- NSF Station Manager
- RPSC McMurdo Area Director
- Commander, SFA
- SFA First Sergeant
- SFA Flight Surgeon
- SFA Operations Officer
- Movement Control Center (MCC), McMurdo Station
- Human Resources, McMurdo Station
- Finance, McMurdo Station

Christchurch, New Zealand addresses:

- Christchurch Medical Coordinator
- Christchurch Medical Liaison and Alternate (Dr. Pascoe and Dr. Cohen)
- SFA Flight Sergeant
- SFA Shift Leader

RPSC Headquarters addresses:

- RPSC Medical Director
- Health Services Manager
- Medical Processing Supervisor
- Human Resources representative for Workers Compensation

NSF Office of Polar Programs addresses:

- Health and Safety Officer
- Safety and Health Associate Program Manager

NOTE: Because this message goes to so many agencies that have some role in managing Medevacs, it has been designed to exclude medically confidential information. Therefore, any additional people that have a reasonable need to know can be added to the “Medevac List” address at the discretion of the RPSC McMurdo Area Directorate/Station Manager.

Appendix B

Electronic Message Template for Patient Transport

NOTIFICATION OF PATIENT TRANSPORT

[date]

ID number: XXX
Patient name
Organization: [RPSC, NSF, etc.]
Status:
From: McMurdo
To: Christchurch
Disposition:

Electronic Message Template for Medevac

NOTIFICATION OF MEDEVAC

[date]

ID number: XXX
Patient name
Organization: [RPSC, NSF, etc.]
Category: [urgent or priority]
Condition:
Status:
Attendant: [Last, First, MI – Position]
ICD9 code:
From:
To:
Disposition:
McMurdo Ambulance:
NZ Ambulance:

Appendix C

Process for Preparing for Medevac with Medical Attendant

1. Notify medical attendant needed to accompany patient. REMINDER: Bring passport, ECW gear.
2. Generate medevac e-message.
3. Arrange for transportation of patient and baggage-confirm times. If litter patient, call Firehouse x2555. If ambulatory patient, call MCC Supervisor x2258.
4. Contact MCC x2258 to set up time to pick up equipment.
5. Appointed personnel, arrange for rigging of aircraft.
6. Gather/pre-flight check, equipment needed for pick up, and place by the front door.
 - a. H-Tank (regulator, wrench)
 - b. Unitron
 - c. 1 green litter- for equipment
 - d. Contingency Bag 1 & 2.
 - e. Infection Control Bag.
7. Gather/inventory equipment to take on medevac.
 - a. I.V. pump-if applicable.
 - b. Suction-if applicable.
 - c. Life-pak-if applicable.
 - d. Intubation Kit-if applicable
 - e. Bag Valve Mask-if applicable.
 - f. Medication Kit-narcotics.
 - g. Additional I.V. fluids, specific to patient needs-if applicable.
8. Gather patient bags- ECW Gear (Label them with patient's name). Have patient passport readily available for Customs.
9. Inform medical attendant of transport time.
10. Medical Attendant briefed re: patient status.
11. Initial patient evaluation complete.
12. Ensure all IV lines are securely taped.
13. Place blanket/sleeping bag on litter.
14. Place patient on litter for transport, apply litter straps.
15. Patient record copied and given to medical attendant.
16. Medical attendant has personal overnight bag, ECW gear, passport, money, credit card, ID.

17. Ensure patient belongings accompany patient on flight.
18. Ear protection for patient as well as medical attendant.
19. Post Flight: Medical attendant inventory/stow equipment. Assure all equipment has been returned.

Appendix D

Treatment Feedback Letter Example

On Raytheon Company letterhead:

Date

To

Address

Dear Dr.

[NAME] has been treated at McMurdo Station in Antarctica for [CONDITION] and will be following up with you for further treatment. The clinic records of the treatment are being sent to facilitate the follow up care. If further information is needed, please contact the Medical Director at Raytheon Polar Services Company (RPSC). In order to complete [NAME] record, please send a case summary of the follow up care to the Medical Director at the address above.

Case summaries are very helpful to RPSC in determining the clinic capabilities necessary to provide care to the participants of the United States Antarctic Program. A review is conducted of the care provided in Antarctica and the care that was necessary after departure, in order to develop systems and improve equipment to meet the health care needs of the participants.

Thank you for your assistance.

Sincerely,

[Doctor, etc]

Raytheon Polar Services Company is authorized to release my medical records for further medical care and to receive the medical records of that care.

_____ [Patient Signature/date]