

Communications Support Overview, McMurdo Station

OP-M-576

Revision 0

Approved by [REDACTED]

Posting Date 7/19/05

*Active Divisions/Departments
McMurdo Communications Operations (Mac Ops)*

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Purpose

This document provides an introduction to the Communications support capabilities at McMurdo Station.

Scope/Applicability

This document is a general reference only. For detailed information about Communications Operators' duties, refer to *OP-M-576a: Communications Operator Guide, McMurdo Station*

Terms and Definitions

Call Sign

An abbreviated term or phrase used in radio communication to address an organization or individual – for example: “Mac Ops” is the call sign for the McMurdo Station Operations Center.

Flight Tracking

System of charting the progress of an aircraft mission by recording periodic aircrew location reports and the time they were received.

Grantee

An individual conducting scientific investigation under a grant from the National Science Foundation

HF

High Frequency – 3 to 30 MHz

MHz

Abbreviation for Megahertz – an indicator of radio frequency. 1 MHz equals one million cycles-per-second

Iridium

Department of Defense satellite network used for telephone and some data communications when geosynchronous satellite service is unavailable.

IT

Information Technology the division responsible for computer and communications systems

Mac Ops

Radio call sign for the Operations Center at McMurdo Station

MHz

Megahertz – a measure of cyclic frequency. 1 MHz equals one million cycles per second.

Radio Phone Patch

System for relaying an incoming radio message to a remote party via telephone

USAP

The United States Antarctic Program - Umbrella agency under which all United States sponsored Antarctic research is conducted.

VHF

Very High Frequency - 30 to 300 MHz.

Responsibilities

Communications Operator

The Communications Operator utilizes radio, satellite, and other communications equipment to support communications needs for USAP participants (including grantees and support personnel) by tracking field party activity, responding to distress calls, and keeping accurate documentation of events.

Station Communications Supervisor

The Station Communications Supervisor oversees the operations and personnel of Communications Operations activities at McMurdo Station and assists the Communications Operations Supervisor with long term goals and initiatives.

IT Systems Supervisor

The IT Systems Supervisor manages policies, procedures and long range planning initiatives for McMurdo Station.

Discussion

McMurdo Station hosts several communications systems, including local and off-continent telephone, radio-telephone, HF and VHF radio, and satellite communications. Communications *Operators* report through the McMurdo Area Directorate and are responsible for using the various systems to provide operational support for field personnel. Technical support for these systems is provided by Communications *Technicians* (IT/Communications division). During the austral summer, McMurdo Communications Operations, known by call sign *Mac Ops*, provides the following support 24 hours a day, seven days a week:

Daily Tasking

- Provide HF and VHF radio communications support.
- Monitor HF propagation conditions and communications quality.
- Process Iridium calls for field camps, South Pole Station, and aircraft.
- Provide HF and VHF radio phone-patch capabilities.
- Maintain work center documentation, including logs and reports.
- Ensure the secure storage and back up of communications records.
- Provide flight-tracking support for fixed-wing and helicopter operations.
- Coordinate Search-and-Rescue and emergency communications.
- Monitor daily status of field camp movement.
- Track field parties traveling within the McMurdo Station area.
- Pass weather, flight, and safety information, as needed.

For a complete description of Communications Operators' duties, refer to RPSC document *OP-M-576a: Communications Operations Guide, McMurdo Station.*

References

USAP Communications Plan

Records

Record Identification, Format, & Owner	Active Location Storage, Protection, & Retrieval	Facility Storage, Protection & Retrieval	Retention Time (Active and/or Facilities Storage)	Ultimate Disposition
Mac Log, Active File: Electronic, Facilities File: CDROM IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	Denver HQ, Retrieved by IT System Services Supervisor	Active – end of season Facilities - 3 years	Active – Erase Facilities Destroy
Mac Notes, Active File: Electronic, Facilities File: CDROM IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	Denver HQ, Retrieved by IT System Services Supervisor	Active – end of season Facilities - 3 years	Active – Erase Facilities Destroy
McMurdo Regional Travel Log, Hard Copy, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	Active - 1 year	Destroy
Daily Aircraft Events Worksheet,	Mac Ops, No special protection,	N/A	End of Season	Destroy

Hard Copy, IT System Services Supervisor	Retrieved by Comms Operator			
Message/Conference Request Log, Hard Copy, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	End of Season	Destroy
Field Party Status Board, Grease board, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	Updated Daily	Erase
Daily Field Camp Report, Electronic, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	End of Season	Erase
Vehicle-Supported Camp Muster, Electronic, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	End of Season	Erase
TEAC Media Disks, Electronic, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	1 week	Erase
Pre-Field Comms Briefing Forms, Hard Copy, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	End of Season	Destroy
SARMC Mission Log, Hard Copy, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	End of Season	Destroy

Camp Change Slips, Hard Copy, IT System Services Supervisor	Mac Ops, No special protection, Retrieved by Comms Operator	N/A	1 Day	Destroy
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Attachments, Appendices

OP-M-576a Communications Operations Guide, McMurdo Station