

VIII. Transportation & Comms

Section VIII details the number and type transportation facilities and communications equipment for use within the Antarctic treaty area.

Surface, Marine, and Air Transportation Vehicles

McMurdo Station

Truck, (light and heavy)	177
Carrier, Personnel and Cargo (tracked and wheeled)	43
Trailer, (tracked and wheeled)	39
Front-end loader, bucket and forklift	45
Forklift, warehouse	20
Motor toboggans	90
Crane	2
Road grader	4
Roller	4
Tractor, crawler	25
Tractor, wheeled	2
Sweeper, magnet	1
Snow plane	6
Truck, fire, pumper	8
Trencher	2
Aircraft, LC-130	6
Helicopters, Aerospatiale AS-350B-2	3
Helicopters, Bell 212	1
Scraper	2
Backhoe	2

Amundsen-Scott South Pole Station

Cranes	3
Front Loader, tracked	7
Motor Toboggans	2
Personnel Carrier	5
Snow Plane	2
Tractor Crawler	3
Truck, light and heavy	2
Trencher	1

Palmer Station

Front-loader (wheeled)	2
Motor toboggans	2
Crane, wheel mounted	1
Boats, rubber (Zodiac)	16
Forklift, all terrain	1
Telescopic material handler	1
Vehicle, all terrain, 4-wheel	2

Description of Communications Facilities

Note: For information on frequencies, see attached Comms forms (Attachment A). The following projects are contemplated for the FY99-2000 season in Antarctica.

McMurdo Station

1. Support DMSP/MGS T-1 satellite communications channel implementation.
2. Receive and install 2 additional refurbished AN/FRT-83 transmitters.
3. Install GOES-3 terminal, ATS-3 terminal, and VoIP telephone at Byrd Surface Camp.

4. Support construction of long-wire HF antenna.
5. Install stub tower and antennas on Crater Hill, antennas at T-Site in support of SPAWAR ATC and weather projects.
6. Install fiber optics cable to Arrival Heights B-197 and Telecom NZ earth station.
7. Monitor performance of all IT systems and facilities at Y2K date transition.

South Pole Station

1. Connect the DASI telescope and supporting buildings to station communications and networking services.
2. Provide telephone and LAN connectivity to the AMANDA project portable buildings.
3. Install a high speed subnet to support large data file transfers for the AMANDA project and provide connectivity to current station systems.
4. Monitor performance of all IT systems and facilities at Y2K date transition.

Palmer Station

1. Monitor performance of all IT systems and facilities at Y2K date transition.

Description of Airfields

McMurdo Station

Air Facilities

1. Williams Field - 10,000 ft. and 8,000 ft. skiways on ice shelf.
2. 10,000 ft. and 8,000 ft. ice runways (on annual sea ice)

3. Helicopter landing pad.

Crash Equipment

1. Two Canadian Foremost Chieftains, 1200 gallons AFFF (ea)
2. Two Nodwell Flex-Trac equipped with 1350 lb. PKP, 200 gallon AFFF
3. One Nodwell Flex-Trac equipped with 3,000 lb. PKP
4. Seven 150 lb. PKP sled-mounted extinguisher on the flight line
5. Two 3,000 lb. PKP sled-mounted extinguishers at the heli-pad
6. One Pumper/Tanker, 3,400 gallons of water.
7. Two Pumpers, 750 gallons (H2O), 1000 GPM

Navigation Aids

1. Precision (course & glide slope) Approach Radar (PAR) and Approach Surveillance Radar (ASR) on primary landing runways, AN/FPN-36 radar.
2. AN/TRN-26 TACAN.
3. AN/URN-25 TACAN
4. T-1109/GRT-22 UHF radio beacon.
5. Terminal Approach Control Radar (GPN-27)
6. Precision Approach Path Indicator (PAPI)
7. Mobile Microwave Landing System (MMLS).

Amundsen-Scott South Pole Station

Air Facilities

14,000 ft. skiway

Crash Equipment

Three 350 lb. dry chemical units

Navigation Aids

1. PAR and ASR radar, AN/FPN-36.
2. AN/URN-25 TACAN.
3. T-1109/GRT-22 UHF beacon.

Palmer Station

Air Facilities

None. Open field landings on glacier possible.

Crash Equipment

None

Navigation Aids

T-1109/GRT-22 UHF beacon.

Marble Point Camp

Air Facilities

One helicopter landing pad.

Crash Equipment

1. One 350 lb. dry chemical unit.
2. One 150 lb. dry chemical unit (PKP).

Navigation Aids

None.