Mission Statement

The Critical mission of Search and Rescue Department (SAR) is to maintain the well being of all North Slope Borough residents. SAR provides safe, efficient and reliable airborne response to aero medical evacuation (medevac), search and rescue and other emergencies.

The critical nature of our mission is both demanding and potentially hazardous. SAR equipment must be maintained to the highest possible standard. SAR personnel must be trained, kept current and certified to the highest levels.

The NSB SAR team has proudly responded to more than 9,200 people in need.

(1977 – 2019)
A Unique and Challenging Environment

SAR in the Arctic

The climate of the North Slope is harsh arctic environment. Annual precipitation is light, ranging from an average of 5 inches to 11 inches, and annual snowfall of 12 inches to 63 inches. Temperature extremes range from -56 to 91°F, with average temperatures between 40 and 50°F during summer.

In Utqiaġvik, the sun does not set between May and August each summer and does not rise between November and January each winter. The daily minimum temperature is below freezing 324 days of the year. Prevailing winds are easterly and average 12 mph. The Chukchi Sea is typically ice-free from mid-June through October.

The aircraft and crews are continually challenged by adverse conditions: gravel runways, cold temperatures, and poor weather conditions including icing, ice fog, and blizzards.
SAR has four divisions: **Administration, SAR Coordination, Flight, and Maintenance** supervised by the Director to accomplish the mission statement.

**Administration Division**

Administration Forecasts and monitors department financial requirements for personnel, supplies, travel, training activities, and communications. The Division Manager oversees and manages the department’s budget ensuring accountability, also acts as the SAR coordinator in the Coordinator’s absence. Assisting with these responsibilities are the Principal Accountant and the Senior Office Specialist.

**Flight Division**

Flight Division is responsible for the coordination of flights, flight crew requirements (including all training, duty time, and on-call schedules). The Chief Pilot issues daily flight assignments and coordinates all department aircraft activity. The flights are accomplished by the Lead Pilots and Pilots for both medical evacuation and search and rescue missions.

**SAR Coordinator Division**

Coordinator is responsible for a proper response to each incident or emergency throughout the North Slope. The SAR Coordinator assists village volunteer search and rescue organizations to effectively prepare for and conduct SAR activities along with the effective use of SAR equipment to respond to each incident.

**Maintenance Division**

Maintenance personnel maintain SAR's fleet of aircraft to the highest standard possible considering industry wide practices permitted by the FAA. Competent aircraft inspections (repair, scheduled, and routine) are not only required, but also essential for airborne emergency response operations. The chief of Maintenance, the Lead and Aircraft Maintenance engineers, along side the avionic technicians, maintain the aircraft and ground support equipment of the department.
Operations Overview

All aviation operations are conducted in accordance with Code of Federal Regulations Title 14 as they relate to aircraft, specifically:

- **FAR Part 61**: Certification of pilots and instructors.
- **FAR Part 67**: Medical standards and certification
- **FAR Part 91**: General operating and flight rules.
- **FAR Part 43**: Maintenance, preventative maintenance, rebuilding, and alterations.

Operations performed under Part 91 provides the greatest ability to respond to the needs of the North Slope community.

SAR currently operates 5 aircraft.

- Bombardier Learjet 31A – Fixed Wing (1)
- Beechcraft King Air 350ER – Fixed Wing (1)
- Sikorsky S92A – Helicopter (1)
- Bell 412SP – Helicopter (2)
The Sikorsky S92 is an advanced all weather Search and Rescue platform. Used by numerous government entities for search and rescue purposes, the S92 has proven itself time and time again as a reliable rapid response helicopter in the world’s harshest conditions.

**Mission Capabilities**
- Approved for flight into known icing conditions
- Search and Rescue Auto Pilot System
- Fully compatible for Night Vision Goggle operations
- Advanced (FLIR) Forward Looking Infrared System to detect heat signatures
- 8000 lb External Load
The **Bell 412** is the rugged and dependable utility helicopter of the NSB fleet.

It excels in short range SAR support and cargo transportation.

The Bell 412 is not capable of flight in icing conditions and with its limited range is primarily used for fair weather support within 120 nautical miles of Barrow.

**Mission Capabilities**

Can accommodate:
- patients and 2 EMT’s or 9 passengers or 1200 lbs of cargo with a useful radius of up to 120 nm from Barrow.

### Aircraft Capabilities

<table>
<thead>
<tr>
<th>RANGE</th>
<th>240 nm</th>
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<tbody>
<tr>
<td>CRUISE SPEED</td>
<td>130 mph</td>
</tr>
<tr>
<td>PAYLOAD</td>
<td>1200 lbs</td>
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<tr>
<td>CONFIGURATION</td>
<td>Search and Rescue EMS Passenger / Cargo</td>
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Beechcraft King Air 350ER
Aircraft Capabilities

The **KingAir 350** is the trusted workhorse of the NSB Search and Rescue’s medical transport program. It is capable of flight to any of the North Slope Villages and then to Barrow or to Anchorage depending on the medical need of the patient. Wheels up to wheels down time from Barrow to Anchorage is approximately 180 minutes, providing life saving time critical medical transport to all North Slope communities.

**Mission Capabilities**
- Long Range SAR and Medevac Aircraft
- Capable of transporting 2 patients and 3 medical staff
- Able to operate to all village airstrips

**Approximately 200 Medivacs flown per year**
Search and Rescue Coordination

The NSB Search and Rescue oversees the rescues and searches of all 8 villages in the North Slope.

It works closely with the SAR Volunteers from each village, to provide ground support as needed.

PLB Coordination Provides:
• Assistance to Volunteer Search and Rescue Organizations
• Knowledge of the land and subsistence lifestyle skills
• Personal Locater Beacon – PLB Program

24 Hour Number

1 907 852 6111
Helping our communities – The PLB Program

Making Safer Communities

In 1992, NSB SAR began the PLB Program. From most recent years NSB SAR has accomplished a total of 380 SAR Missions.

PLB PROGRAM enables searchers to locate any individuals within a 100 ft. Radius upon activation of a PLB.

PLB Coordination provides assistance to Volunteer Search and Rescue Organizations, Knowledge of land and subsistence lifestyle skills and the Personal Locater Beacon – PLB Program.

The PLB program is entirely managed and maintained by NSBSAR and community SAR Volunteers.
Personal Locator Beacon Program

The NSB PLB program provides the North Slope community with opportunity to travel with a Personal Locator Beacon when traveling about the slope.

The program enables residents to be able to request assistance from Search and Rescue should they require it.

The PLB program enables searchers to be able to locate a person within a 100 ft Radius.

**PLB Inventory:** 432 Units

**Type:** ACR 406 Mhz
8 Villages | 8,000 Residents | 95,000 Square Miles
RCC contacts NSB SAR with PLB ID and Co-ordinates

NSB SAR dispatches the appropriate assets for the rescue
SAR Community Unified Command

Working Together

NSBSAR SAR RELEASE PROTOCOL

SAR Notification Received

- SAR Coordinator Designated
- Validate Information
- Complete SAR Release Form
- Obtain SAR Authorization

SAR Notification Received

- Pilot on Call
- Weather Check
- Aircraft Preflight
- Crew Chief/Maintenance
- Specialized Equipment
- Determine need for Spotters

2SNM of Ground Support?

- YES
  - Generate Mission Number
  - Establish GSC
  - Is Air Support Required
  - Activate SAR
  - GSC Provided SAR Release Form
  - ACTIVE SEARCH
  - PIC 30 Minute Comms with SC

- NO
  - Generate Flight Number
  - Activate SAR
  - PIC Provided SAR Release Form
  - PIC Crew Mission Brief
  - ACTIVE SEARCH
  - PIC 30 Minute Comms with SC

Override 2SNM Rule

- YES
  - TONE OUT via Police Dispatch

- NO
SAR Volunteers
The Unsung Heroes

Going Above and Beyond
Due to vast knowledge of our geographical location the eight (8) village volunteer search and rescues are incredibly helpful in ground and water response, largely because they are familiar with the environment.

Majority of the responders are subsistence hunters which has given them the irreplaceable skills, knowledge of knowing the land, what gear to use, they understand the dangers and potentially how long someone can survive. They are selflessly driven to help with the missions in part because they know someday, they may to be on the receiving end of those services. NSB SAR encourages the community's of the North Slope to sign out a PLB. It’s proven to save lives!
Community Outreach
New Projects

Goals

- Community Education
- Improved interagency coordination
- Safer Practices
- Greater PLB utilization
- Improved helicopter safety
- Improved NSBSAR and SAR Volunteer practices.
Community Outreach