



# NSB Search and Rescue Department

Mission Statement



## 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 91F, with average temperatures between 40 and 50F during summer.

In Utqiagvik, 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.

# NSB Search and Rescue Department

Divisions and Duties



**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 with the avionics 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.

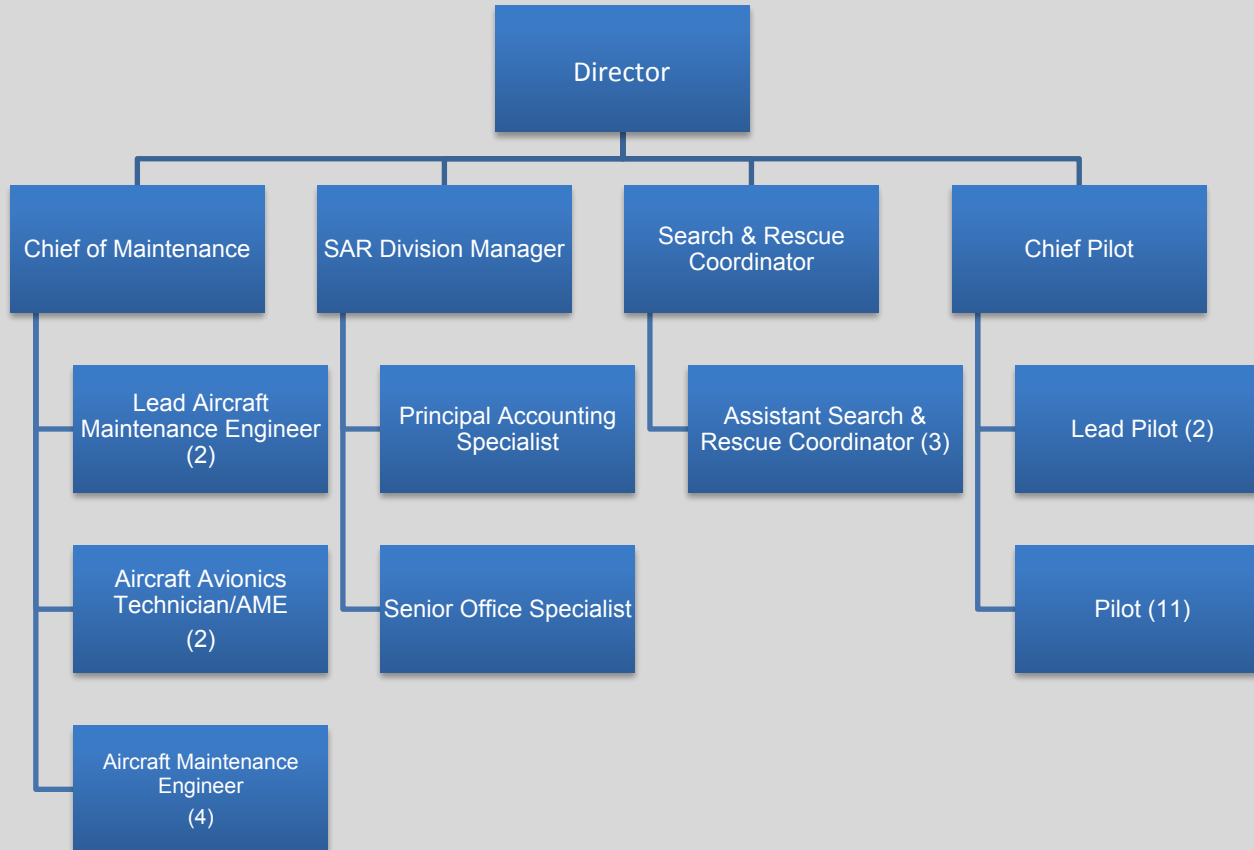
Operations performed under Part 91 provides the greatest ability to respond to the needs of the North Slope community.

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)**

# NSB Search and Rescue Department Overview

## Organization Chart





# Sikorsky 92A

Aircraft Capabilities



RANGE	CRUISE SPEED	PAYLOAD	CONFIGURATION
240 nm	150 mph	3500 lbs Full Fuel	Search and Rescue EMS Passenger / Cargo

The **Sikorsky S92** is an advanced all weather Search and Rescue platform.

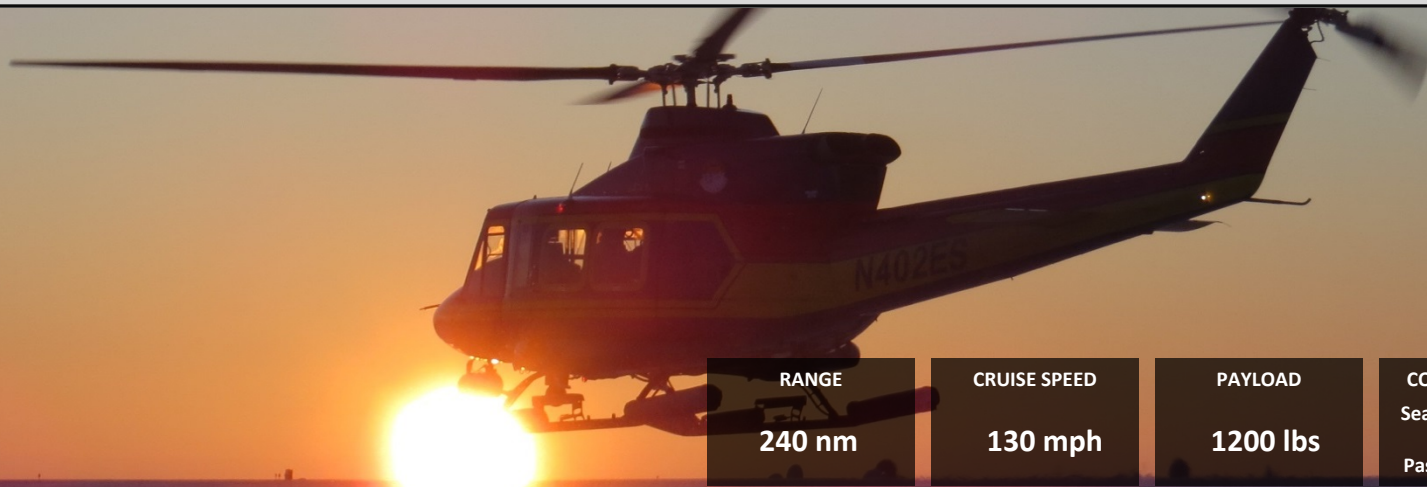
Used by numerous government entities for search and rescue purposes, the S92 has proven itself time and time again as a reliable rapid response helicopter in the worlds harshest conditions

## 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

# Bell 412SP

Aircraft Capabilities



RANGE

240 nm

CRUISE SPEED

130 mph

PAYLOAD

1200 lbs

CONFIGURATION

Search and Rescue  
EMS  
Passenger / Cargo

The **Bell 412** is the rugged and dependable utility helicopter of the NSB fleet.

It excels and short range SAR support and cargo transportation.

The Bell 412 is not capable of flight in icing conditions and with it's 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.



# Beechcraft King Air 350ER

Aircraft Capabilities



RANGE

2500 nm

CRUISE SPEED

300 mph

PAYLOAD

1900 lbs

CONFIGURATION

Search and Rescue  
EMS  
Passenger / Cargo

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**

# NSB Search and Rescue Department

SAR Coordination



## 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 Locator 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 Locator Beacon – PLB Program.

The PLB program is entirely managed and maintained by NSBSAR and community SAR Volunteers.

# NSB Search and Rescue Department

PLB Program Support



## 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**

# NSB SAR Coverage Area

Map

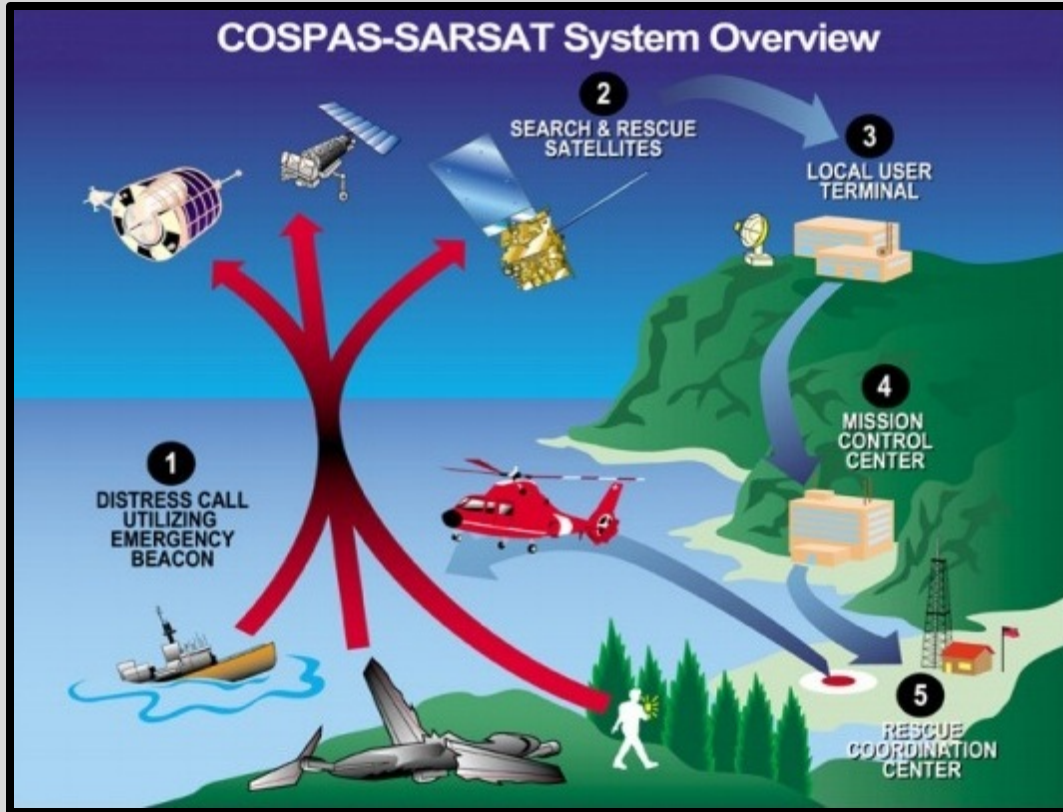


**8 Villages | 8,000 Residents | 95,000 Square Miles**



# NSB Search and Rescue Department

PLB Overview – Basic Operational Principles



RCC contacts NSB SAR with PLB ID and Co-ordinates

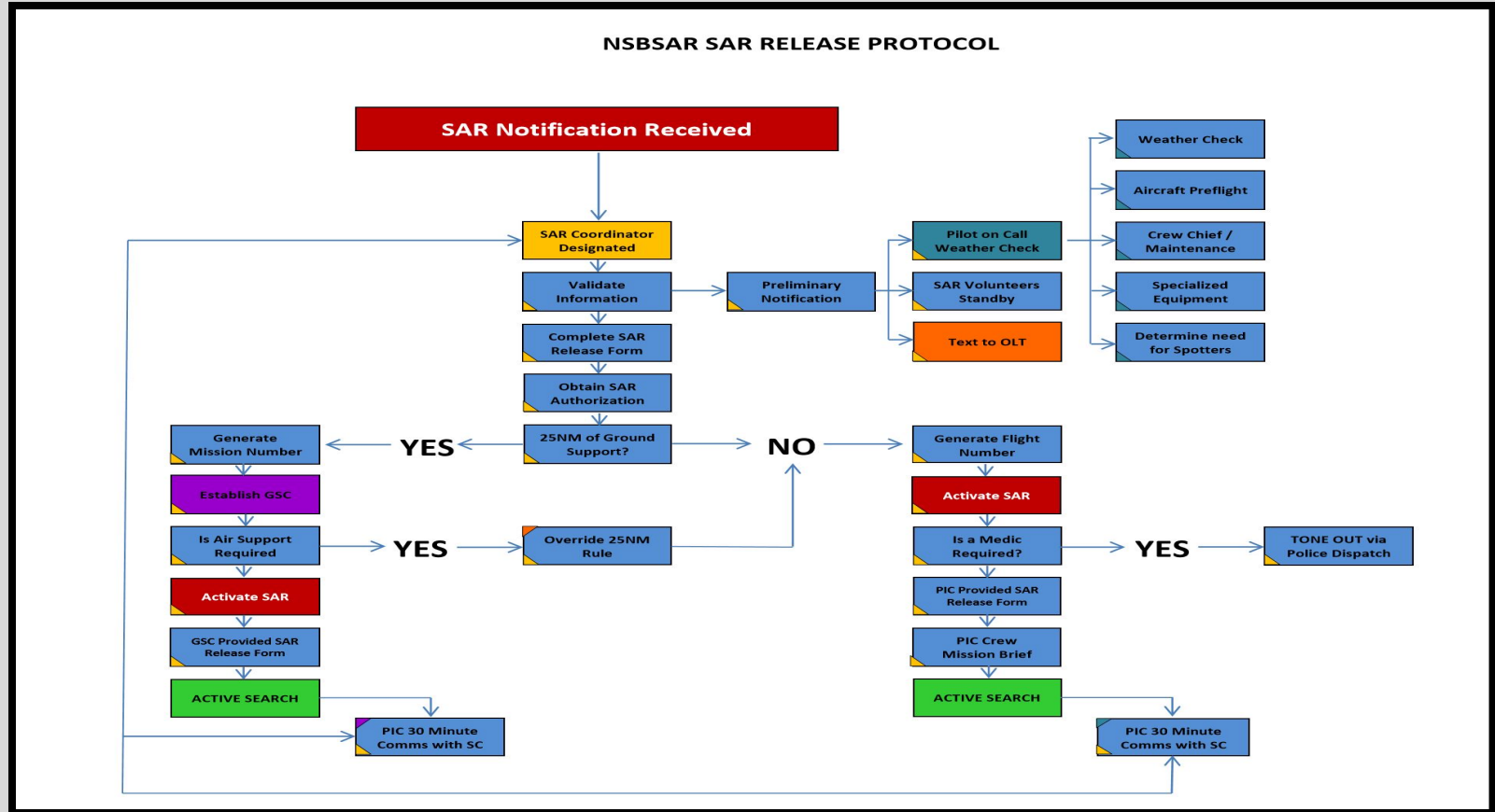


NSB SAR dispatches the appropriate assets for the rescue



# SAR Community Unified Command

Working Together



# SAR Volunteers

The Unsung Heros



## 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

Home Activating a SAR Quick Links EMPLOYEE LOGIN

## Goals

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

### News Feed

**5**  
01, 2019

Welcome to the NSBSAR Community Outreach Site  
January 5th, 2019 | Comments Off

The NSBSAR Community Outreach Site is designed to streamline aviation safety related information to the North Slope community and facilitate improved communication processes between the NSBSAR aviation department, NSB rescue agencies, NSBSAR Volunteers and community [...]

# NSB Search and Rescue

Collaboration



## Community Outreach





