

# The Norwegian Search and Rescue Service



*Norway is a long, narrow country extending far above the Arctic Circle, with a harsh climate and unforgiving seas which can present formidable challenges to the SAR Service.*

The Norwegian Search and Rescue (SAR) Service is a fully integrated set of services directed by a joint coordinating organization responsible for all types of rescue operations (sea, land and air). These services are performed through a cooperative effort involving government agencies, voluntary organizations and private enterprise.

## What is the Norwegian SAR Service?

*The term SAR Service designates operations organized by the authorities when effort is promptly initiated to rescue people from death or injury in the event of serious accidents not dealt with by specially established bodies or under special measures.*



JUSTIS- OG POLITIDEPARTEMENTET

*Ministry of Justice and Police*



*The Norwegian SAR is organized under the Ministry of Justice and Police. Day-to-day responsibility is exercised by the Department of Civil Emergency and Rescue Planning from its offices in the Government Administration Complex.*



## LETTER FROM THE MINISTER OF JUSTICE

### *The effort to save lives*

As Minister of Justice and Police, I am ultimately in charge of the overall coordination of the Norwegian SAR Service. This is a demanding, yet meaningful task. There is a broad political consensus to maintain the high priority of an effective SAR service. In many parts of Norway, the climate is harsh and unforgiving, and many activities can suddenly make prompt lifesaving action necessary. We must therefore ensure that we have a SAR service capable of helping people in distress in the face of any contingency.

It is the responsibility of the Ministry of Justice to ensure that all types of rescue operations are organized and managed as effectively as possible, but no single institution can do this job alone. Cooperation between government agencies and private companies and organizations is therefore of crucial importance. Many people are involved in this national cooperative effort to save lives.

The basis of today's publicly-organized SAR service was established in 1970, and it is widely agreed that the system works well. Our goal for the future must be to continue its development. The SAR service depends on the best technology available and on the highest standards of competence. The widespread participation of highly-qualified volunteers is unique to the Norwegian SAR Service, and deserves our continued support. Moreover, we have international obligations to meet by taking active part in global SAR cooperation.

In the time ahead, we will meet increasingly higher degrees of internationalization and reliance on technological resources. Modern telecommunications, computer systems and satellite technology will give us more effective emergency communications, faster decision making and better information and control. But as indispensable as these aids may be, they are still only aids. Our prime resource is the people involved in the SAR service.

I hope that all who would like to become better acquainted with the Norwegian SAR Service will find this information booklet useful. The SAR Service is based on solidarity and a high regard for human life, two fundamental building blocks of Norwegian society.

In conclusion, I will take this opportunity to thank all who participate in SAR services. Your efforts deserve our highest respect!

Yours sincerely,

Odd Einar Dørum  
Minister of Justice and Police

• **FACTS ABOUT NORWAY**

**Population**

4,5 million

**Land area**

Total land area (including the island of Jan Mayen and the Svalbard archipelago) is 386,975 sq. km. Mainland Norway is 323,895 sq. km., the Svalbard archipelago 62,700 and Jan Mayen 380 sq. km.

**Coastline**

Disregarding bays and fjords, the mainland coastline is 2,650 km long. With bays and fjords included, it is 21,189 km long. Island coastlines comprise another 33,597 km. By comparison, the earth’s circumference at the equator is approximately 40,000 km.

**Distances**

A straight line from the mainland’s southernmost tip (Lindesnes) to its northernmost tip (Kinnarodden) is 1,752 km, roughly equal to the distance between Oslo and Rome. Norway's greatest width is 430 km, and at the narrowest point it is only 6.3 km wide.

The Norwegian mainland stretches from the 58th to the 71st north parallel. The north end of the Svalbard archipelago is 81° north. Norway’s westernmost point is as far west as Amsterdam and its easternmost point is 100 km farther east than Alexandria, Egypt.



*Published by:*  
THE ROYAL MINISTRY  
OF JUSTICE AND POLICE,  
DEPARTMENT OF CIVIL  
EMERGENCY AND RESCUE PLANNING, 2002

*Our thanks go to:*  
Representatives of government agencies, voluntary  
organizations and private companies which have  
contributed materials, information and advice.

*Layout and makeup:* Morten Hernæs,  
PDC Tangen  
*Repro and printing:* PDC Tangen

*Registered SAR operations conducted by both  
Rescue Coordination Centres in 1971 and 2001*

Type of operation	RCC Southern Norway		RCC Northern Norway	
	1971	2001	1971	2001
Sea	131	1367	56	328
Land	45	718	15	194
Air	13	97	7	19
Ambulance	0	330	76	289
Other	0	150	13	1279
Total	189	2662	167	2136

• **GEOGRAPHIC AREAS OF RESPONSIBILITY**

The area served by the Norwegian SAR Service is roughly equivalent to the Norwegian Flight Information Region (FIR) defined by the ICAO, with some modification in the North Sea to take account of the oil installations there. The southernmost point is at 57°N and the northernmost point at 82°N. The boundary to the west is chiefly defined by the Greenwich Meridian, and the easternmost boundary is off the coast of Varanger, 31 degrees 43 minutes east. The distance from the 57th to 82nd parallel is 2,778 km (1,500 nautical miles). This is longer than the distance from the US-Canadian border to the US-Mexican border of the Gulf of Mexico (2,550 km/1,380 nautical mi.).





## • BACKGROUND

Norway is a sparsely populated land stretching far to the north. Its geographical character varies widely, from the idyllic countryside of the southeast and the mild climate of the southern coast, to the spectacular fjords of western Norway and the high mountains of south-central Norway. Then there is northern Norway, the land of the Midnight Sun, with mountains, fjords and barren wastelands. The short summer can be warm, sunny and mild, but winter is dark and stormy, with violent winds and bitter cold.

Temperatures range from 35°C in summer to -50°C in winter. Ice and heavy snowfall can be a problem, and along some parts of the coast, storm winds can reach hurricane speeds. Some of the world's most forbidding seas are found off Norway's coast, with violent storms, freezing temperatures as well as rain, snow and fog. The North Sea sees some of the world's heaviest sea traffic, but in the Arctic Ocean, the Barents Sea and the waters surrounding Svalbard, ships are few and far between.

Most of the challenges dealt with by the Norwegian SAR Service arise out of:

- The rugged topography and harsh climate, with extensive unpopulated areas on land and long distances at sea.
- Heavy coastal shipping traffic
- Extensive commercial fishing
- Gigantic offshore oil and gas installations, with frequent personnel and supply transport



*An alpine rescue team at work.*

PHOTO: AAK/INDUSTRISEIKRING



PHOTO: NSSR

*The Society for Sea Rescue is a humanitarian organization which has operated along the coast for over 100 years. This photo shows a Colin Archer rescue boat of former times.*

- Heavy industrial activity in certain parts of the country
- Extensive transport activity on land, often in mountainous areas and under difficult weather conditions
- Substantial tourism and recreational activity on land and sea, often in difficult terrain or under demanding weather conditions
- Natural disasters due to floods, high winds, landslides and avalanches

Norwegians have learned to cope with these problems, and major disasters are relatively rare in Norway. Nonetheless, the SAR Service must always be ready for action. Well into the 20th century, search and rescue services were based on private initiatives. Voluntary service, solidarity and neighbours helping neighbours provided the foundation of all rescue services on land and sea. Norway's first organized rescue service was the result of a private initiative which led to the founding of the Norwegian Society for Sea Rescue in 1891. Public authorities eventually got involved, but by the 1950s it had become clear that the public agencies, voluntary organizations and private companies taking part in SAR operations were struggling under the lack of coordination and clear lines of responsibility.

In 1959, a government commission issued a proposal for coordinating SAR resources, and in 1970 two Joint Rescue Coordination Centres were established, one in Bodø and the other near Stavanger (Sola). Rescue Sub-centres were also established in each police district around the country. A modern, professional rescue helicopter service was established at the same time.

Modern society cannot function without effective SAR services, but one of the most fundamental aspects of our service is the fact that it typifies two of the fundamental building blocks of our culture:

**Respect for human life and solidarity  
in time of need.**

## • MAIN PRINCIPLES

The Norwegian SAR Service is a nationwide effort in which many contribute. All resources – whether national, county, local, commercial or private – suitable for immediate deployment for the saving of lives, are registered, trained and mobilized for duty in a public SAR service.

In Norway, “search and rescue service” is an official designation denoting immediate response to an emergency to rescue persons from death or injury. Action to save property, production or the environment is not part of the Norwegian SAR Service’s mission, nor is preventive action within its scope of activity. However, experiences gained from SAR operations are systemized and shared with those responsible for prevention.

The principle of the **cooperative organization** is a prominent feature of the Norwegian SAR Service. In its Report No. 86 to the Parliament (1961-62), the Government emphasized that all government agencies must contribute whatever resources are both appropriate and available to SAR operations. When the current SAR Service was formed in 1970, all relevant government, commercial and voluntary agencies expressed their willingness to be included in this service. The cooperative model is based on a consensual relationship.

All government agencies involved in SAR operations pay their own expenses from their ordinary budgets. Commercial enterprises are paid according to normal market rates. Voluntary organizations are reimbursed for direct outlays according to a schedule of rates. There are also a few highly-effective professional operations, such as the Air Force’s SAR helicopter squadron, which maintain a constant high state of alertness in order to respond quickly to emergencies.

The Norwegian SAR Service maintains an **integrated coordination structure**, which means that each joint rescue coordination centre is prepared to handle land, sea or air operations, rescue operations on offshore oil or gas installations, as well as operations requiring international cooperation. This gives us a cost-effective, highly efficient system with little competition for resources and the best possible vantage point for supervision and command. This arrangement is unique in the world.

The **collective SAR management** at the two rescue coordination centres and the rescue sub-centres, consisting of representatives from a number of government agencies together with the local chief of police, who is in overall command, leads and coordinates search and rescue operations within their respective areas.

These principles, as well as the structure of the SAR service, are formulated in the Royal Decree of 4 July 1980. The coordination respon-



PHOTO: BJØRN HAUGERUD

*Medical institutions and ambulance services play a prominent role in many rescue operations. The AMK centres at the hospitals are responsible for the day-to-day management of ambulance services.*



PHOTO: NORSKE REDNINGSHUNDER

*A rescue dog and its master, from the Norwegian Rescue Dogs, searching for people buried in an avalanche.*



PHOTO: DSB

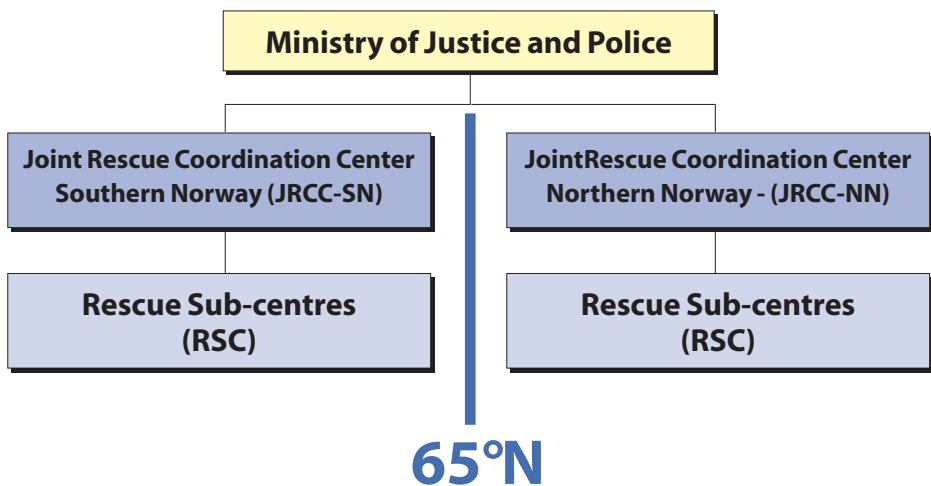
*The police takes command at the scene of an emergency. The police has the responsibility for coordination at the scene of emergency.*

sibilities of the police in accident and disaster situations in which human life or health are endangered are defined in Section 27 of the Police Act of 4 August 1995. We also find important provisions regarding search, rescue and ambulance operations in the Penal Code, the Civil Defence Act, the Home Guard Act, health and social security legislation, the Medical Practitioners Act, the Fire Protection Act, the Maritime Act, the Petroleum Act and the Coast Guard Act.



## • THE SEARCH AND RESCUE ORGANIZATION

### Search and Rescue Service – *organizational chart*



The *Ministry of Justice and police* is responsible for the *administrative coordination* of Norway's SAR services. Operational coordination of the subordinate Rescue Sub-centres (RSCs) is handled by the police districts and the district under the Governor of Svalbard. The Air Traffic Control Service has specific duties which they carry out in the initial stage of an alarm from an aircraft in distress.

Ministerial responsibility for SAR is handled by the Rescue Service Unit in the Ministry's Department of Civil Emergency and Rescue Planning, which was created in 1996.

Norway is divided into two SAR regions, one in the north and one in the south. The division at sea is at 65°N latitude, and the division on land is defined by the boundary between the Helgeland and Nord-Trøndelag police districts, which in turn follows the county line between Nord-Trøndelag and Nordland counties. The JRCCs for the two regions are located in Bodø

in the north and Stavanger (Sola) in the south.

The chiefs of police in Rogaland and Salten are the centre chairmen, heading a joint rescue headship: the rescue management. In addition to the the chief of police it consists of representatives from the Navy, the Air Force, the Air Traffic Service, Telenor (coast radio) and the Health Authorities plus advisors.

The RCCs also have permanently employed personnel for the day-to-day running of the centres and their manning around the clock. Each centre has a general manager, two SAR inspectors, 13 rescue controllers and up to two clerical assistants. A minimum of two rescue controllers are on duty round the clock. They deal with alarms and coordinate operations.

The rescue controllers are recruited from various professions, such as the Navy, the Air Force, the Air Traffic Service, the merchant marine (officers), coast radio, civil aviation and the police.

## Rescue Sub-centre (RSC)

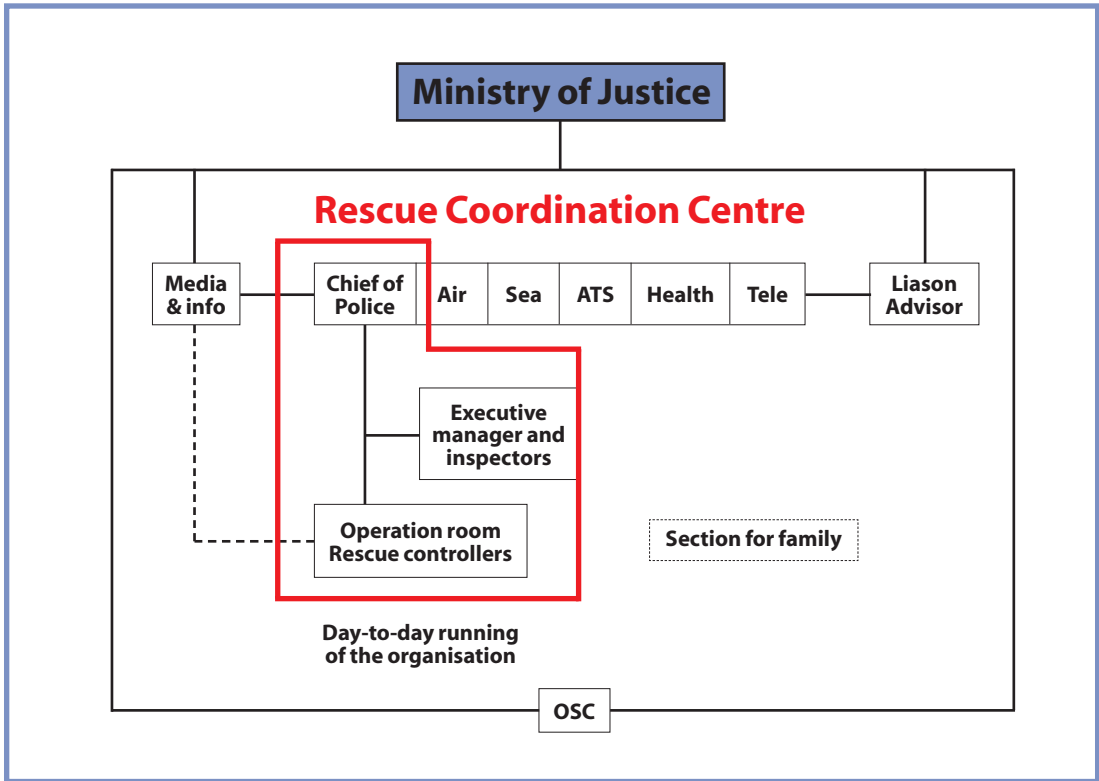
**The Rescue Sub-centres form the SAR management under the direction of the chief of police or his deputy**

**The SAR management consists of representatives from:**

- Fire department
- Medical authorities
- Pilot Service
- Port Authority
- Armed forces
- Telenor
- Air Traffic Service (ATS)
- Civil Defence
- Voluntary organizations

*The police chief may call in other experts as the situation requires.*





*Operations room at JRCC-NN, Bodo*

PHOTO: HRS N-N



*One of the new control and communication desks at JRCC-SN, Stavanger.  
Both JRCCs are now equipped with modern computers and state-of-the-art communication systems.*

PHOTO: BJØRN HALGERUD

A number of alarms are received directly by the JRCCs, but most are relayed through the nearest RSC. All alarms are to be reported to the JRCC, even though the RSC may respond on its own, take whatever steps are necessary and lead operations until the JRCC may decide to take over.

In the event of major accidents, the JRCC mobilizes additional personnel. The SAR management is called in, together with extra rescue controllers as well as professional information officers. The JRCCs have highly flexible staff structures which may be augmented swiftly as needed according to predefined plans.

The JRCCs work according to overall plans, and they are equipped with modern computer systems and other advanced equipment, as well as a well-developed, high-capacity communications system. In the 1980s they were also linked up to international satellite-based emergency communication and alerting systems. In return, they have accepted additional coordination duties in connection with emergencies in distant ocean areas.

The RCCs have two “extensions”: the units of the air traffic service (which handle reporting and communication functions for aircraft in dis-

tress) and the coastal radio stations (which monitor maritime distress frequencies and provide communications for emergencies at sea). There are now 9 coastal radio stations manned round the clock at Tjøme, Farsund, Rogaland, Bergen, Florø, Ørlandet, Bodø, Vardø and Svalbard.

There is one RSC in each of Norway’s 27 mainland police districts as well as one on Svalbard (21 under RCC-SN and 7 under RCC-NN). SAR management at each RSC consists of representatives from relevant local agencies as well as the district chief of police, who is in overall command. All RSCs are manned by police officers and whatever advisers are necessary according to the situation.

When an operation is initiated, the RSC normally appoints a local on scene coordinator according to specific procedures. Police, fire department and medical authorities will normally be an important part of the team. In rural districts, the local sheriff’s officer, whose knowledge of the area is a valuable asset, will usually act as on scene commander.

Emergency Medical Communications Centres (AMK) are established at hospitals as part of the medical alert system. These centres are manned 24 hours a day by health personnel who coordinate the various medical transport services (land, sea and air ambulances). AMK personnel direct the necessary ambulance resources to the scene of the emergency and monitor their part of the operation.

PHOTO: NORSK RADIORELÆ LIGA



*Ham radio operators provide assistance in rescue operations.*

*The Norwegian Air Ambulance works under the supervision of the National Air Ambulance Service, and has flown BO-105 helicopters on missions for over 20 years.*



PHOTO: BJØRN HAUGERUD





*A Sea King helicopter from the 330 Squadron*

The 12 Westland Sea King helicopters, most of them purchased by the the Ministry of Justice, of the 330 Squadron are considered the major lifesaving resource of the SAR services. Since its creation in 1973, the 330 has lived up to its motto, "Making the oceans safe", by flying over 20,000 rescue and ambulance missions over sea and land. A large number of people have been rescued or received other types of assistance. 747 ambulance flights and 237 rescue missions were flown in 1997. The 330 originally operated from Sola, Ørland, Bodø and Banak, but one helicopter was also stationed outside Ålesund (Vigra) from 1995 to 1998, and another at Rygge since 1999.

The Sea King is specially designed for sea SAR operations, though it also performs quite well over land. With an operating radius of 230 nautical miles, it can evacuate 19 people and remain airborne for over 6 hours. Its automatic hover system enables it to make pickups in darkness and rough weather. The Sea King is also provided with good communication and navigation equipment, as well as detection instruments for locating people in distress. At least one Sea King at each base is always available for the exclusive use of SAR Service, and is ready for immediate response to emergencies at all times. All of these aircraft have recently been through an extensive programme of modernization.

## • RESOURCES

Important government institutions involved in the day-to-day effort to save lives include the various medical and ambulance services, the National Air Ambulance Service, local fire departments and the police.

The armed forces also have an established role to play in providing extensive services to civilian authorities in peacetime as long as it does not detract from their other duties.

The Civil Defence is primarily concerned with responding to wartime emergencies, but the emerging international political situation and current security policy have allowed the Civil Defence to develop a stronger peacetime orientation.

The Norwegian Society for Sea Rescue (Sea Rescue Society), with over 100 years of

humanitarian service, is Norway's oldest SAR organization.

One central element in the Norwegian SAR Service is the large number of voluntary organizations that take part. The ability of these organizations to field, on short notice, large numbers of personnel who are both trained for the situation and familiar with the terrain, makes them a valuable asset, particularly in search operations in forested and mountainous areas. Other groups have special training in communication, shore rescues, rescues in steep and slippery terrain, cave rescues and searches using dogs or light aircraft. The approximate 25,000 members of these organizations provide an estimated 2–3 million hours of free service each year.

# The major units involved

## Police

The RSCs in each of Norway's 28 police districts, 388 Sheriff districts and the district administered by the Governor of Svalbard are in charge of operational coordination. The police is well equipped with vehicles, light rescue equipment and communications facilities.

## Medical institutions and ambulance Service

The 600 ambulances and 50 sea ambulances located throughout the country provide speedy transport to hospitals for injured persons who require prompt emergency medical treatment.

## National Air Ambulance Service

Aircraft from 11 helicopter bases and 7 fixed-wing bases also fly severely injured persons to hospitals for prompt treatment. The air ambulance services treat and transport 10,000 persons each year.

## Municipal Fire Departments

390 municipal fire departments respond to fire alarms, road, railway, aircraft and industrial accidents.

## Air Force

In addition to its Sea King helicopters, the Norwegian Air Force also has transport helicopters, Coast Guard Helicopters, transport planes, patrol aircraft and combat aircraft stationed, ready to take part in SAR operations.

## Navy/Coast Guard

Naval vessels, especially those of the Coast Guard, play a pivotal role in SAR operations at sea. The Coast guard's three

*The Civil Defence also makes a substantial contribution to peacetime rescue operations.*

large Nordkapp-class vessels carry helicopters.

## Army/Home Guard

Army and Home Guard units all over the country have a good range of equipment and large numbers of people at their disposal.

## Civil Defence

Extensive personnel and equipment resources may be mobilized at short notice in the event of disasters or major accidents in any part of the country. The 115 voluntary response units are particularly important.

## The Airport Fire and Crash Rescue Service

Rapid-response fire-fighting vehicles and boats are maintained at airports to respond to air crashes and other accidents.

## Industrial Civil Defence

Emergency response teams maintained by 1,250 companies all around the country.

## Offshore oil operators

Emergency response capabilities on fixed and mobile oil and gas installations.

## The Norwegian Society for Sea Rescue

Maintains 30 vessels stationed along the entire coast for SAR operations and for providing other types of assistance at sea. 400,000 people have been assisted so far.

## Civilian helicopter companies

100 registered Norwegian helicopters operated by a number of different companies may be called out for various types of SAR missions throughout the country. Airlift AS operates a helicopter rescue service on Svalbard.

*The Oslo Fire and Rescue Department's mobile rescue unit.*



PHOTO: D58

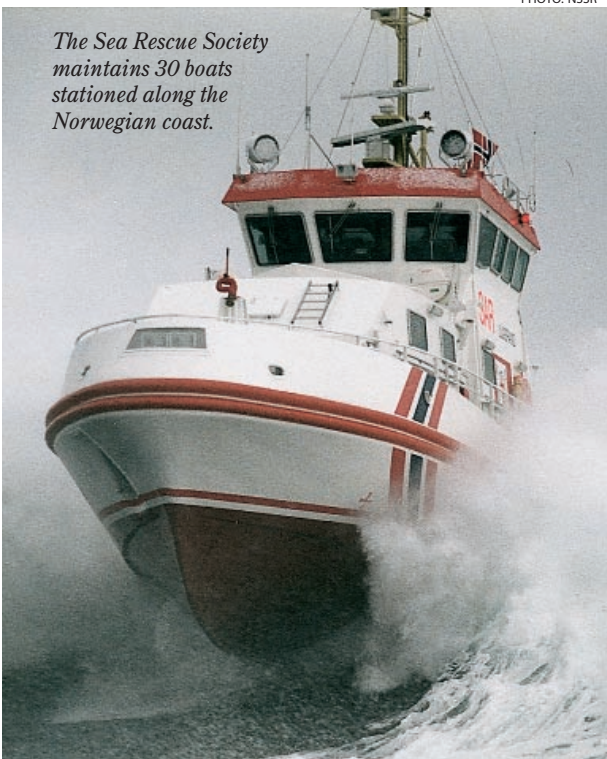


PHOTO: BJØRN HÅLEGENUD



PHOTO: NSSR

*The Sea Rescue Society maintains 30 boats stationed along the Norwegian coast.*



### Alpine rescue groups

8 groups with 200 qualified mountain climbers around the country are able to bring injured persons out of inaccessible places on their own or in conjunction with helicopters.

### The Norwegian Speleological Society

The 150 members of this society are trained to bring injured persons out of caves.

### The Norwegian Aero Club

250 pilots in 29 local clubs may be mobilized for search operations in southern Norway.

### The Norwegian Red Cross

With 12,000 members and 325 rescue teams, the Norwegian Red Cross is prepared to render first-aid services and take part in search operations, beach rescues, rescues in rugged, insecure terrain and in other situations.

### The Norwegian People's Aid

2000 trained personnel in 72 first-aid teams

*The Norwegian Aero Club flies airborne search missions in small aircraft.*

PHOTO: NAK



*Bell helicopters from the Norwegian Air Force have taken part in rescue operations for over 30 years. This photo shows a Bell 412.*

PHOTO: FRM

perform much the same services as the Red Cross rescue teams.

### Norwegian Rescue Dogs

95 trained avalanche dogs, 84 tracking dogs and 8 dogs trained for searches in ruins take part in various types of search operations throughout the country.

### The Norwegian Radio Relay League

With 3500 members organized in 80 groups, this organization can provide communication assistance to police and other rescue groups.

### Miscellaneous resources

Merchant marine and fishing vessels often take part in rescue operations. The Coast Directorate, the Directorate of Fisheries and the Norwegian Pollution Control Authority (SFT) maintain vessels all along the coast. The Norwegian Geotechnical Institute and The Norwegian Meteorological Institute provides expert advice in a range of situations.

*A civilian Super Puma helicopter.*

PHOTO: HELIKOPTER SERVICE





## • NOTIFICATION AND OPERATIONAL PROCEDURES

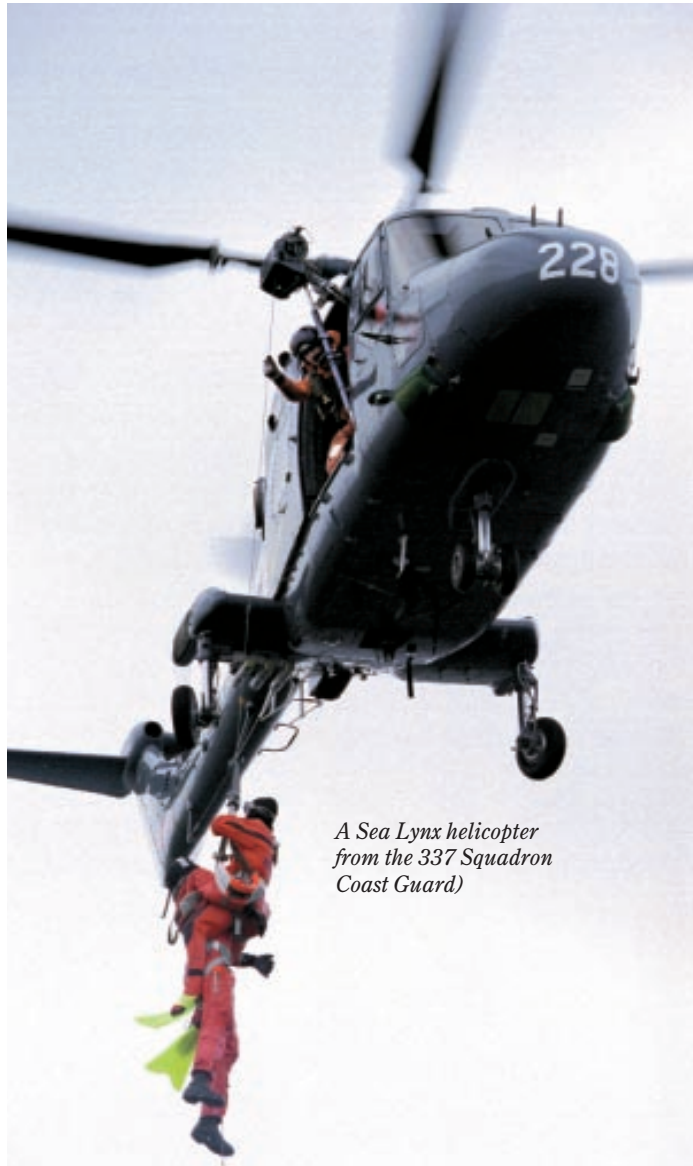
One of the SAR Service's basic tenets is that a rapid response is an effective response. The chances of surviving an emergency situation shrink quickly with the passing minutes. People must know who to notify in an emergency and how to get in touch with the rescue centres.

Methods of communication vary according to the place and the situation, but there are a few general guidelines which apply to all situations:

- I Anyone with reason to believe that an accident has occurred or that anyone is in immediate danger must contact one of the rescue centres (JRCC, RSC, AMK, Fire) or other emergency reporting service.
- II The information provided must be reasonably clear and complete in order for the rescue centre to take appropriate action.

Accidents and hazardous situations may generally be avoided by taking reasonable care and showing plain common sense. Norwegian liability laws contain provisions for holding anyone liable whose negligent actions provoke an emergency response, though the Parliament (Storting) and the Ministry of Justice have both indicated that these provisions are to be invoked only in the event of "gross negligence".

Norwegian law and the international regulations laid down by the UN's International Civil Aviation Organization (ICAO) establish obligations to monitor aeronautical emergency frequencies and to alert the



*A Sea Lynx helicopter from the 337 Squadron Coast Guard)*

PHOTO: FRM

appropriate authorities of distress calls. All Norwegian-registered aircraft are required to carry an emergency locator transmitter (ELT) which is activated automatically in the event of crashes. The COSPAS-SARSAT satellite warning system to which Norway is linked detects signals from these transmitters and fixes their positions.

Maritime distress calls are dealt with according to the regulations laid down by the International Maritime Organization (IMO).

*Units from the Airport Fire and Crash Rescue Service at Gardermoen.*



PHOTO: BRANNMANNEN

Norwegian coastal radio stations and ships monitor international maritime emergency frequencies. Vessels above a certain size are required to carry an emergency position-indicating radio beacon (EPIRB) which may be activated manually or automatically in the event that a ship goes down. Signals from these radio beacons are detected in the same way as signals from transmitters aboard aircraft. INMARSAT, an international satellite-based system for maritime communications in which Norway participates, may also be used to transmit emergency communications and distress ALERTS.

Mobile telephones are an unreliable means of sending distress calls at sea. The maritime VHF system (channel 16) is the only system which provides a reliable means for sending distress calls and reporting emergencies. Accidents and emergencies on land are generally reported via the ordinary telephone system. Police (RSCs) are reached by dialling 112. The corresponding phone numbers for fire and ambulance are 110 and 113. In populated areas, mobile phones are useful and save lives, but off the beaten track their coverage is limited.

False alarms create problems for SAR services. Deliberate false alarms are a punishable offence.

Once the SAR service has been notified, the operation must be conducted promptly and effectively according to established rules, authorizations and procedures. Operational command is organized on three levels:

- I On-the-scene operational direction and coordination - On-scene coordination (OSC)
- II Coordination of resources by Rescue Sub-centre (RSC)
- III Top-level coordination of entire operation by Rescue Coordination Centre (RCC) at Sola or Bodø in the event of large or prolonged operations which require major resources and top-level expertise.

In most operations, only the first two levels of management are necessary. An RCC seldom assumes direct management of an operation. Its normal role is to monitor the situation, advise and obtain the necessary specialist resources. Land operations and minor inshore operations will normally be handled by the RSC's. SAR at sea, aircraft SAR and accidents on offshore oil installations are led by one of the JRCC's, particularly where operations involve international collaboration.

In such cases, an on-scene coordinator (OSC Sea/Air) will often be designated to guide vessels and aircraft on the scene of an accident or a search area. Air Force surveillance aircraft as well as large naval or Coast Guard vessels are well-suited for these tasks.

Air and Sea SAR operations must follow an extensive and complicated set of international procedures established by ICAO and IMO and IAMSAR international Aeronautical and Maritime Search and Rescue manuals.

Land rescue operations are organized in compliance with guidelines established by the Ministry of Justice describing how RSCs and OSCs are to function. For large operations, the on-scene commander from the local police will be assisted by a police officer in charge of public order, a fire officer in charge of fire control and a medical officer in charge of medical treatment.

Information and psychological care are also important elements in these operations. Information responsibilities involve information to families of victims and information to the news media, political officials, special interest groups and the general public. Procedures have been established for information dissemination by JRCCs and RSCs (OSC's). In the event of major accidents, hot lines are generally set up where families of victims may obtain information. Considerable emphasis is now placed on the psychological needs of survivors, families and rescue personnel, with crisis psychiatrists and clergy available for personal counselling.

*A comforting shoulder is important after a dramatic rescue.*



PHOTO: BRANNMANNEN



## • TRAINING, EXERCISES AND EXPENSES



PHOTO: JAN HELGE GULLIKSEN A Red Cross Rescue Team.

Most institutions which take part in rescue operations provide training programmes for their personnel.

Police officers receive crisis management training as part of their Police College education. SAR theory and practice at both RSC and OSC levels are an integral part of standard police education. Basic education is followed up with various types of advanced training programmes.

*The police frequently coordinates land SAR operations. They also have some light equipment and vehicles.*



PHOTO: JUSTISDEPARTEMENTET







*A first-aid team from the Norwegian people's Aid on winter duty in the mountains.*

PHOTO: NORSK FOLKEHJELP SANITET

Newly appointed JRCC controllers undergo a programme of training in Norway and abroad and must pass a final examination before receiving authorization.

Both JRCCs and RSCs have to run exercises on a regular basis. The Ministry of Justice and Police has prepared guidelines for various types of exercises which normally involve a number of cooperating partners.

Other agencies and institutions run their own exercises

*The Army has extensive resources available for SAR missions if needed.*



PHOTO: FRM







as well as taking part in joint exercises.

Norway has an cost-efficient SAR organization, which keeps public funding down to a few hundred million kroner.

Cooperative and voluntary efforts are what make this possible. All government agencies which assist in SAR operations pay their own expenses from their own funds. Voluntary organizations receive no payment for their services, but



PHOTO: NORGES GROTTEFORBUND

*Volunteers in cave rescue training.*

*The Coast Guard is active in sea SAR operations. The photo shows a Norkapp-class vessel in the icy waters off Svalbard.*



PHOTO: FRM





*This Air Force Orion aircraft can handle searches and OSC functions. (On Scene Coordination)*

PHOTO: FRM

they are reimbursed for their direct outlays.

Some earmarked government funding is necessary for the maintenance of a few key units to ensure the smooth functioning of the entire organization.

Operation of the JRCCs (including the COSPAS-SARSAT Local User Terminal in Tromsø) cost NOK 36,7 million in 2002. Refunds to voluntary organizations and payment for commercial resources cost NOK 5,2 million. The voluntary organi-



zations also receive approximately NOK 4,6 million in annual support payments. New equipment cost NOK 6.9 million, and

Telenor is paid NOK 56 million for operating the coastal radio stations' emergency and safety services. The Ministry of Fisheries contributes NOK 50 million to the Rescue Society (Lifeboat). The 330 Squadron (Sea Kings) costs the Ministry of Defence NOK 191,896,000 per year to run, and the National Air Ambulance Service costs NOK 312 million per year.

*Cooperation between a number of rescue units and organizations during an exercise. All public agencies pay their own expenses.*



PHOTO: BJØRN HAUGERUD



## • INTERNATIONAL COOPERATION

International SAR cooperation has no eye for national borders. SAR services are cross-border efforts which generate contact, trust and cooperation across national boundaries.

Air and ship traffic are both international in character, and both require international SAR measures. Norway's offshore oil industry operates in close proximity to those of other countries, and cooperation with other national authorities in emergency situations is a natural consequence. The same applies to SAR cooperation with our neighbours along Norway's land borders. Help is provided without regard to boundary lines or recovery of expenses.

Efforts are coordinated through conferences, joint planning, joint exercises and regional and bilateral agreements, and the main principles for cooperation are based on international conventions.

The ICAO and IMO conventions to which Norway is party provide the basic ground rules for air and sea SAR operations. Norway has also signed various types of SAR agreements with the UK, Denmark, Sweden, Finland and Russia.

The Norwegian SAR Service takes part in a number of international exercises every year. All types of sea, air and land exercises are run with our neighbours. The pattern of exercise

varies from year to year, though NATO's "Bright Eye" rescue exercises adhere to a permanent programme. The Norwegian RCCs have taken part since 1973.

The new "Partnership for Peace" programme includes SAR exercises conducted jointly with Naval and Air Force units from participating countries.

Joint rescue exercises are also run with Russia in the Barents Sea.

Satellites are an extremely useful resource in detecting emergency radio signals and fixing their locations. For over 15 years, Norway has taken part in the COSPAS-SARSAT system based on US and Russian satellites in low polar orbits. A Local User Terminal in Tromsø takes down signals detected by the satellites and via a direct link notifies the JRCC-NN in Bodø, which takes the appropriate action. The LUT in Tromsø covers an area extending from the North Pole to the Mediterranean Sea and from Labrador to deep in Siberia. The Norwegian SAR Service has agreements with SAR authorities in Denmark, Estonia, Finland, Iceland, Latvia, Lithuania and Sweden to relay all COSPAS-SARSAT distress signals detected by the LUT in Tromsø to the competent authority of the country within whose SAR region the signals originate.

*A Russian helicopter has landed on a Norwegian Coast Guard vessel during a Russian-Norwegian exercise.*

PHOTO: KV NORD





PHOTO: CNES

The COSPAS-SARSAT satellite warning system has saved many lives all over the world.

Substantial rescue resources are placed on Norway's offshore oil fields. This photo is from the Statfjord field.

PHOTO: HELIKOPTERSERVICE





# The Search and Rescue Service's coordinating bodies

## ADMINISTRATIVE COORDINATION

## PHONE

## FAX

MINISTRY OF JUSTICE

DEPARTMENT OF CIVIL EMERGENCY AND RESCUE PLANNING

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## OPERATIONAL COORDINATION

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e-mail: [mailto@jrcc-bodo.no](mailto:mailto@jrcc-bodo.no)

## Rescue Sub-centres

Oslo	Haugaland og
Østfold	Sunnhordland
Follo	Hordaland
Romerike	Sogn og Fjordane
Hedmark	Sunnmøre
Gudbrandsdal	Nordmøre
Vestoppland	og Romsdal
Nordre Buskerud	Sør-Trøndelag
Søndre Buskerud	Nord-Trøndelag
Asker og Bærum	Helgeland
Vestfold	Salten
Telemark	Midtre Hålogaland
Agder	Troms
Rogaland	Vestfinnmark
	Østfinnmark
	Svalbard

## Rescue Helicopters



Rescue Sub-centres are organized in each mainland police district and in the governor's district on Svalbard.

## NØDTELEFON EMERGENCIES

Speak slowly and carefully,  
providing information in is order:

- 1 Municipality and address
- 2 Phone number you are ringing from
- 3 Describe the situation



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