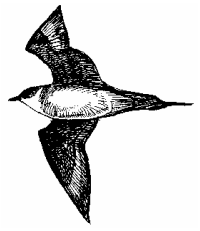


- Environmental Impact Assessment in Ny-Ålesund
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Ny-Ålesund Newsletter

May 1997

Environmental Impact Assessment to be carried out in Ny-Ålesund

Monitoring activities and scientific research in Ny-Ålesund have experienced a six-fold increase in volume since the middle 1980's. Further expansion already underway, there is an urgent need to carry out a strategic environmental impact assessment (EIA) of the various human activities in the area. A Ny-Ålesund EIA has now been initiated by the research institutions present in Ny-Ålesund.

The project is coordinated by the Norwegian Polar Institute in close cooperation with the British Antarctic Survey, which has considerable experience with environmental management of polar research stations. The project will involve all of the institutions which have permanent research activities in Ny-Ålesund.

The purpose of the EIA is to recommend actions to reduce human impacts to a minimum level and, to the extent possible, maintain the qualities of the Ny-Ålesund area as an undisturbed reference area suitable for a wide spectrum of scientific research and environmental monitoring.

The rapid growth of monitoring activities and scientific research in Ny-Ålesund since the mid 80's is reflected in a number of new buildings and the upgrade of local transport infrastructure such as the roads, the harbor, and the airport. In the same period, there has also been a substantial growth in the number of tourists visiting Ny-Ålesund and the Kongsfjord area.

Today, there is an inherent conflict between the increasing levels of human activity and local development, and the role of Ny-Ålesund as a scientific reference area for studying ecosystems in a near pristine state. The research carried out in Ny-Ålesund focuses on studies of natural ecosystems and on a high arctic environment that is free of human influence. At the same time it is a declared goal of the Norwegian government that Svalbard shall gain recognition as one of the best preserved wilderness regions in the world.

The objective of the EIA is to produce a basis for future management of the Ny-Ålesund area with respect to research, monitoring, environment, development, and other activities, and to assist with the compliance to the new area management regulations that must soon be adopted.

The impact assessments will be organized as a series of individually issued reports on subjects such as air pollution, energy use and supply, solid waste, sewage, accidental spills, impacts on tundra, and conflicts between research and monitoring activities. The results of these studies will be summarized in the main EIA report, with priorities and recommendations for action. The report is scheduled for publication in late 1997.

The EIA will serve the following purposes:

- Assess the environmental impacts caused by human activities in the area between Engelsbukta and Kapp Guisnez.
- Assess the impacts from human activities on scientific research and monitoring projects in the same geographical area.
- Assess the conflicts between various scientific research and monitoring projects in the same geographical area.
- Recommend actions to reduce these impacts to a minimum level and, to the extent possible, maintain and restore the qualities of the Ny-Ålesund area as an undisturbed reference area suitable for a wide spectrum of environmental monitoring and scientific research.

Inauguration of Italian Research Station

The Italian Arctic Station *Dirigibile Italia* was officially inaugurated in Ny-Ålesund on May 15, 1997. Research activities within a wide range of scientific disciplines will be carried out at the station, and the activities will be coordinated by the Italian Research Council; *Consiglio Nazionale delle Ricerche* (CNR).

Italy has quite young experience in polar activities. Part of the experience derives from the research activity that has been performed during the last ten years in the framework of the Italian National Research Program in Antarctica. The interest of Italy in arctic science is therefore strongly related to its effort in Antarctica. The PNRA (National Antarctic Program) gives a unique possibility to compare and integrate studies on the phenomena which take place in polar regions, and which are highly relevant to understanding changes in the global climate, the environment and biological resources.

Another important research facility in an extreme environment is the *High Altitude Laboratory* located in the Himalayan Range of Nepal at 5050m altitude.

CNR is a member of ICSU (International Council of Scientific Unions), SCAR (Scientific Committee on Antarctic Research), and ESF (European Science Foundation).

A preliminary overview of the research activity that will be carried out at *Dirigibile Italia* is found on CNR's homepage: www.polar.rm.cnr.it

SvalRak Sounding Rocket Launch Facility in Ny-Ålesund

A launch facility for scientific sounding-rockets, *SvalRak*, will be constructed in Ny-Ålesund this summer. The Norwegian Space Centre (NSC), through its Andøya Rocket Range (ARR), will be responsible for the facility. The first campaign is scheduled for November 1997.

Svalbard is well suited for studies of the arctic middle atmosphere and the ionosphere. Its geomagnetic location and existing infrastructure favors sounding-rocket and balloon experiments.

SvalRak's main scientific potential is for experiments related to studies of magnetic CUSP, CLEFT, and CAP, as well as for reference missions related to European, Japanese, and US satellites.

A sounding rocket launch facility on Svalbard allows sounding-rockets to be launched both parallel and perpendicular to the Earth's magnetic field (B_z) and also launches directly into the polar CUSP and CLEFT regions.

The high geographic latitude and high geomagnetic latitude, makes Svalbard ideal for studies of dayside aurora towards a dark sky and magnetospheric boundary layer processes. This is the only easily accessible location in the world for such studies.

SvalRak services will be offered both to existing users of ARR and to new users who wish to conduct rocket and balloon studies in polar regions. It will be operated as a part of ARR and as an extension of its present services.

The first campaign will consist of one or two Norwegian rockets configured by the University Studies at Svalbard (UNIS), the Norwegian Defense Research Establishment and the University of Tromsø. In addition two rockets will be launched for the North American Space Administration (NASA). This campaign is scheduled for November 1997.

The Japanese research organization ISRO plans to launch one rocket for the 1998/99 season. NSC has received permission to launch a maximum of four rockets every two years.

For more information on *SvalRak*, point your internet browser to: www.spacecentre.no

1st Edition of *Ny-Ålesund Newsletter*

The *Ny-Ålesund Newsletter* is a newsletter for the Ny-Ålesund research community, published by the Ny-Ålesund Science Managers Committee (NySMAC).

NySMAC's main responsibility is to enhance cooperation and coordination among research activities in the Ny-Ålesund area. The Committee also ensures that present and planned research is not in conflict with environmental laws and regulations, and provides advice regarding the administration of research activities, and the construction and maintenance of infrastructure in the Ny-Ålesund area.

NySMAC includes representatives from all of the institutions which have permanent research activities in Ny-Ålesund. The secretariat is based in Longyearbyen, Svalbard.

Ny-Ålesund Newsletter will be published twice yearly.

Ny-Ålesund

Large Scale Facility

In order to attract new polar research activities from Europe to Ny-Ålesund, a "large-scale facility", The Ny-Ålesund LSF, has been established to give easier access to European scientists who wish to do environmental research in the Arctic.

The Norwegian Polar Institute (NP) is the coordinator of The Ny-Ålesund LSF, which represents a consortium between NP, the Alfred Wegener Institute (AWI), the Norwegian Mapping Authority (NMA), and the Norwegian Institute for Air Research (NILU).

Research teams from member states of the European Community or associated states are eligible to benefit under the contract, and they have access to the following research facilities in Ny-Ålesund:

- Atmospheric Climate Research and Biological Research Facilities (NP).
- Atmospheric Air Research Facility (NP/NILU).
- Ozone/Stratospheric and Climate Research Facilities (AWI).
- Space Geodetic Research Facility (NMA).

Access is provided free of charge and includes all infrastructural, logistical, technical and scientific support. The selected programs are granted travel and subsistence costs for field campaigns or laboratory work of up to 2 months duration, or shorter visits involving the installation of automated instruments for 3-12 months operation.

For further information about the Ny-Ålesund LSF, see the homepage at: www.npolar.no/nyaa-lsf

Ny-Ålesund Diary

JUNE

- Norwegian Space Centre (*SvalRak*): Construction of integration hall and launcher pad at Rabben.

- New Ny-Ålesund power station: Start of construction work.
- June 19: First call of the coastal liner *Hurtigruta*.

JULY

- July 24-August 7: *Svalbardkurset*. Workshop arranged by the Norwegian University of Science and Technology (NTNU) and the Norwegian Polar Institute.

AUGUST

- August 23: NySMAC-seminar: Strategic Environmental Impact Assessment for Ny-Ålesund.
- August 24: 7th NySMAC meeting.
- August 25-29: Network for Detection of Stratospheric Change (NDSC) Steering Committee Meeting. Hosted by Alfred Wegener Institute.
- August 29: Visit by the Nordic Council of Ministers of Environment. This is part of the Ministerial Meeting program, which takes place in Longyearbyen August 27-29. The meeting will be hosted by the Norwegian Ministry for the Environment.

Calendar of Arctic Meetings

Network for Detection of Stratospheric Change (NDSC)

August 25-29, 1997, Ny-Ålesund. E-mail: otto.schrems@awi-bremerhaven.de

Fourth European Workshop on Stratospheric Ozone

September 22-26, 1997, Schliersee, Germany. E-mail: general@ozone-sec.ch.cam.ac.uk
www.ozone-sec.ch.cam.ac.uk/eorcu/schliersee1.html

Svalbard Goose Symposium

September 23-26, 1997, the Norwegian Polar Institute, Oslo, Norway. Local Organizing Committee: Fridtjof Mehlum.

International Arctic Fox Meeting (IAFM)

October 1997, Longyearbyen, Svalbard. E-mail: fuglei@lby.npolar.no

WMO/ICSU/IOC World Climate Research Programme (WCRP):

Conference on Polar Processes and Global Climate

November 3-6, 1997, Rosario Resort, Orcas Island, Washington, USA. Local Organizing Committee: Prof. Dennis Lettenmaier. E-mail: lettenma@ce.washington.edu

For a comprehensive listing of published meetings look at the
International Survey of Arctic Meetings at
www.npolar.no/iasc/sam.htm

Staff News

Norwegian Mapping Authority (NMA):

Engineer **Helge Geir Digre** began his one year appointment in Ny-Ålesund in late May. **David Holland** arrives early July for a one year extension of his appointment.

Koldewey Station (AWI):

Bodo Wichura has been appointed Station Manager for 13 months from February 1997. **Jens Warming** is currently functioning as station engineer. Warming will be replaced by **Christine Weinzierl** in August 1997.

Norwegian Research Station (NP):

Lars Edin Svaasand, optical engineer, and **Geir Arne Nesttun**, logistic technician, are appointed for one year from February 1997. **Monica Sund** works as research assistant until September 1, 1997.

National Institute of Polar Research (NIPR):

Prof. **Yoshiyuki Fujii** has been assigned the title of Director of the Arctic Environment Research Center in Japan from April 1, 1997.

Publications

Research in Svalbard 1997

Published by the Norwegian Polar Institute, 1997. *Research in Svalbard* is an annual project catalogue which contains a summary of research activities that are planned to be conducted in or around Svalbard. The contents of the 1997 edition is also available for query from this web address: **www.npolar.no/ris** This is an online database which provides you with an overview of the different research activities that are now underway, and also gives detailed information about specific projects.

Atmospheric Research in Ny-Ålesund

Proceedings from the 3rd NySMAC Seminar, April 9-11, 1997. The publication is available from NILU.

NILU's Atmospheric Research in Ny-Ålesund

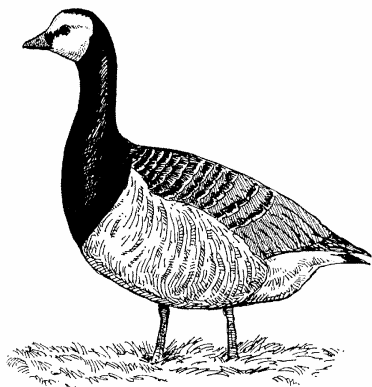
By Harald J. Beine, 1997. The publication is available from NILU.

AERC Newsletter vol. 2

This newsletter includes news of Japanese Arctic research projects and other news of potential interest and novelty to international readers. The publication covers the entire arctic in principle, but the majority of the articles concerns Ny-Ålesund. Subscriptions should be addressed to this e-mail address: arctic@nipr.ac.jp

The Ny-Ålesund Safety Guide

By Nick Cox, NERC. This NySMAC publication is an introduction to safety in Ny-Ålesund and its surroundings. The guide is obtainable from the Norwegian Research Station in Ny-Ålesund or from the NySMAC Secretariat in Longyearbyen. All permanent research stations in Ny-Ålesund also stock copies of the *Ny-Ålesund Safety Guide*.



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