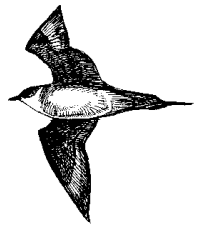


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Ny-Ålesund Newsletter

2nd edition
Nov. 1997

NY-ÅLESUND ENVIRONMENTAL IMPACT ASSESSMENT:

NY-ÅLESUND MISSION STATEMENT AND ENVIRONMENTAL ACTION PLAN ADOPTED

The practical implementation of the key recommendations in the *Ny-Ålesund Environmental Impact Assessment* (EIA) was examined at a one-day workshop held in Ny-Ålesund on 23 August 1997. The workshop discussions entailed the adoption of a “*Ny-Ålesund Mission Statement*” and “*Environmental Action Plan for Ny-Ålesund*” by the Ny-Ålesund Science Managers Committee (NySMAC).

All NySMAC members and observers were invited to the EIA-workshop. Twenty-two people attended from six different countries, representing ten different organisations. There was an excellent exchange of information and ideas between the various stakeholders present.

The major achievements of the workshop were NySMAC's adoption of a “Mission Statement” for Ny-Ålesund, which sets out seven guiding principles for the operation and development of the station, and an “Environmental Action Plan for Ny-Ålesund”, which prioritises the actions needed to be taken to reduce impacts and conflicts (see figures). NySMAC also adopted the majority of the detailed recommendations required to implement the action plan.

NY-ÅLESUND MISSION STATEMENT

Adopted by Ny-Ålesund Science Managers Committee, 24 August 1997

The mission of Ny-Ålesund, Svalbard, is to:

1. serve as an international station for scientific research and monitoring;
2. encourage international scientific co-operation;
3. give priority to scientific research and monitoring that is dependent on the near-pristine environment or unique qualities of the Ny-Ålesund area, in particular research related to long-range pollution, climate change, and polar ecology;
4. preserve the near-pristine environment of the Brøgger Peninsula and the Kongsfjorden area, as well as the cultural heritage of Ny-Ålesund;
5. keep local human environmental impacts at the lowest possible level so as not to jeopardise scientific research and monitoring;
6. give scientific research and monitoring priority over other local human activities, such as tourism and commercial fishing;
7. be a prime example of the sustainable operation and development of a research station in the polar regions.

The success of the station will be judged on its scientific merits and achievements.

ENVIRONMENTAL ACTION PLAN FOR NY-ÅLESUND: TEN MAJOR RECOMMENDATIONS

1. General measures:
 - Agree on an upper limit for the activity and number of people at the station.
 - Distribute information to visitors before arrival on how to behave in Ny-Ålesund.
 - Increase and improve information flow to all parties concerning planned activities in Ny-Ålesund.
2. Stabilise and reduce local emissions.
3. Protect flora and fauna from damage.
4. Reduce the number and size of tour ships calling at the station.
5. Establish Kongsfjorden as a marine science area and ban commercial fishing.
6. Incorporate the key results of the EIA into the Land Use Plan.
7. Improve waste management.
8. Employ a senior scientific/environmental manager at the station.
9. Prevent fuel spills and establish a station contingency plan.
10. Introduce stricter control over activities.

News

Final EIA report to be published in March 1998

The next and final stage of the Ny-Ålesund Environmental Impact Assessment (EIA) is to prepare and write a summary report based on the results of the technical studies and the input from the EIA workshop. The summary report is scheduled for publication in early March 1998.

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 EIA involves all of the institutions which have permanent research activities in Ny-Ålesund.

First *SvalRak* campaign: 15 November 1997

The construction the Norwegian Space Centre's launch facility for scientific sounding-rockets in Ny-Ålesund, *SvalRak*, has been completed. The inauguration ceremony was held on November 15, which was also the opening day of the first campaign.

The campaign consist of three rocket launches: one rocket instrumented by the University Studies at Svalbard (UNIS), and two by NASA, USA. In addition, a miniature experiment called *MiniDusty* will be launched on behalf of the University of Tromsø. The actual launch dates depend on the weather conditions.

All the experiments are directed towards the study of particles and plasma, and other processes related to the Aurora in the Polar Cusp.

NDSC Steering Committee meeting in Ny-Ålesund

The Steering Committee of the *Global Network for the Detection for Stratospheric Change* (NDSC) held it's 8th meeting in Ny-Ålesund 25-27 August. The fact that the Steering Committee decided to meet in Ny-Ålesund this year, confirms the station's importance as a leading international research site.

VLBI facility included in the CORE networks

Since regular observations for NDSC started in Ny-Ålesund in 1992, the station has become the primary arctic NDSC-site along with the observatories in Thule, Greenland and Eureka, Canada.

The main topics of the Steering Committee meeting were the NDSC station reporting procedures and procedures for quality assurance of data products. The meeting also exchanged views on the status of the NDSC data centre, and the future of NDSC activities. Because of its long-term programme, NDSC is recognised as a powerful tool for the validation of satellite-retrieved products. The arctic NDSC sites are specified as anchor validation sites for the *Stratospheric Aerosol and Gas Experiment III* (SAGE III) on board the METEOR satellite, which is scheduled for launching in August 1998.

The stratospheric monitoring programme in Ny-Ålesund is conducted by Alfred Wegener Institute (AWI) in co-operation with the University of Bremen and the Norwegian Institute for Air Research (NILU). Other primary stations and complementary sites of this global network are mostly located in mid- and subtropical areas, and in southern polar latitudes.

NDSC was established in 1989 and created the essential basis for the monitoring of the state of the stratosphere, at a time when significant anthropogenic changes were becoming apparent. The long-term measurements in Ny-Ålesund provide important information for a better understanding of the stratospheric chemical and physical processes.

The Ny-Ålesund observatory is supported by national bodies and international organisations including the European Union, the International Ozone Commission, the United Nations Environmental Programme (UNEP), and the World Meteorological Organisation (WMO).

NILU: Continuous in-situ measurements of trace gases

NILU started this summer with continuous in-situ measurements of methane (CH₄), and will continue the carbon monoxide (CO) measurement programme in November.

Concern about global climate change, and possible future management of the problem is the driving force behind these two projects. The anthropogenic influence on these trace species is large, but natural cycles are involved as well. The aim of this work is to understand what determines the atmospheric burden of these trace gases, and to monitor, identify, and better understand trends.

Ny-Ålesund Geodetic Observatory continues to participate in international geodetic sessions. This year the VLBI facility (Very Long Baseline Interferometry) is included in the CORE networks (Continuous Observations of the Rotation of the Earth). The CORE programmes will evolve over the period 1997-2001. The

data can be used to address numerous Earth science research areas across a broad spectrum of disciplines.

NEOS (National Earth Orientation Service) and EUROP sessions will be regularly observed this year as they have been in the past years. The purpose of NEOS is also to observe the rotation of the Earth, while data from EUROP sessions are used to look closer at tectonic plate motion and land uplift.

Ny-Ålesund LSF: Project proposals for 1998 welcomed

Thirty-five European research projects received grants from the Ny-Ålesund Large Scale Facility Programme (LSF) in 1996 and 1997. The LSF secretariat is currently in the process of completing the third selection of projects. The call for project proposals for the 1998 season will soon be announced.

Interested European scientists are welcome to submit project proposals within the research fields of the facility by February 1998. The Ny-Ålesund LSF also encourages LSF-supported users to join the Ny-Ålesund seminar in Ravello, Italy, in March, and to present results from their projects under the framework of the multidisciplinary aims of the conference.

For more information about Ny-Ålesund LSF, research fields, eligibility criteria, application procedures etc., please see the webpage at <http://www.npolar.no/nyaa-lsf>.

Ny-Ålesund EIA on the Internet

Information about the Ny-Ålesund Environmental Impact Assessment (EIA) is available on this Internet address: <http://www.lby.npolar.no/insyn/rappor ter/ny-aalesund/ny-aal>.

The presentation includes examples of thematic maps produced by the Norwegian Polar Institute for the assessment. The maps can be downloaded as jpeg- files. The homepage will be updated as the EIA process develops, new in-

formation is gathered, reports are produced and maps are updated.

The EIA homepage is part of an Internet-based information system created by the Norwegian Polar Institute for persons and institutions working with environmental management on Svalbard. Except for the Ny-Ålesund EIA pages, the information system is in Norwegian.

Ny-Ålesund Diary

November 1997

- November 15: Official inauguration of *SvalRak*.
- November 17-December 12: First *SvalRak* campaign.

December 1997

- Dr. Harry Beine (NILU) will give an invited talk at the American Geophysical Union's fall meeting in San Francisco on "CO measurements in the high-Arctic".
- December 5: Dr. Kim Holmén, NySMAC Chairman, will give an invited speech at the KBKC Christmas Dinner in Oslo.

March 1998

- Publication of the report "Ny-Ålesund Environmental Impact Assessment" by NySMAC.
- March 4: 8th NySMAC-meeting, Ravello, Italy.
- March 5-6: Ny-Ålesund seminar, Ravello, Italy: "The Arctic and Global Change: Multidisciplinary Approach and International Efforts at Ny-Ålesund".

Calendar of Arctic Meetings

The Arctic and Global Change: Multidisciplinary Approach and International Efforts at Ny-Ålesund

5-6 March 1998, Ravello, Italy. Organised by the Italian National Research Council in co-operation with NySMAC and the Ny-Ålesund Large Scale Facility (Ny-Ålesund LSF). Local Organising Committee: Dr. Ruggero Casacchia. E-mail: rcasak@gioconda.polar.rm.cnr.it

Presentations will include scientific results within the framework of international projects carried out in Ny-Ålesund. One session will be dedicated to projects supported by the Ny-Ålesund Large Scale Facility.

For a comprehensive listing of published meetings, look at the International Survey of Arctic Meetings at <http://www.npolar.no/iasec/sam.htm>

Staff News

Kings Bay Kull Compani A/S (KBKC):
Kaare Sveen, Assistant Director, began his two-year appointment on 15 September, replacing **Torkel Sjoner**. **Ingar Rishovd** left his position as Operation and Project Director on 11 October.

Norwegian Mapping Authority (NMA):
 Senior Engineer **Gunn Marit Hernes** will take a leave of absence for one year from 1 December. Station Manager **Leif Morten Tangen** will partly cover her position. **Øyvind Krogsæther** arrives in early January for a 6-month contract.

Norwegian Polar Institute (NP):
Jan Erling Haugland has been appointed Director of NP's Svalbard Division for three years from September 1997, replacing **Bjørn Frantzen**. **Einar Darre Kaarbø** succeeded **Tor Ivan Karlsen** as Operational Engineer for two years from 1 July. Station Manager **Aanon Grimnes** took leave on November 3, and was replaced by **Sverre Thon**.

Publications

The 12th Working Meeting on European VLBI for Geodesy and Astrometry

Proceedings of the international meeting in Hønefoss, Norway, 12-13 September 1997. Two reports regarding the VLBI activity in Ny-Ålesund are included in the proceedings: "Ny-Ålesund Geodetic Observatory, Station Report 1996-1997" and "Analysis of Tectonic Motion for the Ny-Ålesund VLBI Station". The publication is available from the Norwegian Mapping Authority.

NySMAC Internet Homepage:

<http://www.lby.npolar.no/nysmac/>
 As well as a general introduction to Ny-Ålesund and to the work of NySMAC, this site contains the complete contents of the *Ny-Ålesund Newsletter* and links to the home-pages of the NySMAC member institutions. A *Ny-Ålesund Publication List* will also appear on this site.

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.

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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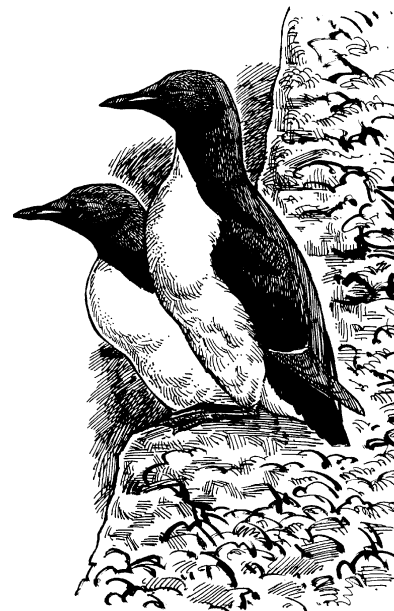
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