

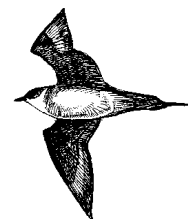
## News

- **Ny-Ålesund LSF**
- **Year 2000: Symposium and Seminar hosted by NIPR**
- **The new research station in operation**

## Columns

- **Ny-Ålesund Diary and Calendar of Arctic Meetings**
- **Staff News and Publications**
- **Contact Addresses**

# Ny-Ålesund Newsletter



5<sup>th</sup> edition  
May 1999

## New ambient air monitoring station at Zeppelinfjellet

The Norwegian Polar Institute as the owner and the Norwegian Institute for Air Research (NILU) as the principal user will build a new ambient air monitoring station on the top of Zeppelinfjellet. The Norwegian Ministry for Environment will take the main financing of the building. Statsbygg Nord, the governmental Norwegian construction office, will supervise planning and construction of the new station. The new station facilities will provide a considerable improvement for the daily research work done at Zeppelinfjellet. The total flat will be increased from about 60 m<sup>2</sup> to 140 m<sup>2</sup>. Thus, the double working space will be available for the various sampling and research work intended to be carried out at the atmospheric research monitoring station. The main users of the station, namely NILU and MISU (Meteorological Institute, Stockholm University), will have their own research laboratories especially designed for their specific needs. MISU will

partly finance their own room, funded by 'Knut och Alice Wallenbergs Stiftelse'. In addition, a clean room, totally separated from the other facilities by an airlock, will provide the highest standard possible for the international year-around ambient air measurement programs. The whole station will be equipped with a highly sophisticated contamination free air conditioning system providing good internal working conditions, which is necessary for the automated scientific sampling and measuring devices. A state-of-the-art telecommunication system will provide continuous online access from institutes. The new research station on the Zeppelin mountain represent a strong Norwegian effort to keep Ny-Ålesund at the top of the international research facilities. The old buildings will be taken down presumably at the end of July. The start of the construction work for the new research station is expected for end of august

## 30<sup>th</sup> Anniversary of the Trans-Arctic Expedition

**29 May 1969 Wally Herbert and his group completed the 464 days' sledge journey from Alaska to Spitsbergen via the North Pole.**

Wally Herbert has had a successful career as a historian but is best known for leading a daring expedition across the Arctic Circle in 1969. Setting out from Barrow, Alaska, on dog sledges, Herbert and three other Britons companions reached the North Pole on April 6<sup>th</sup>, 1969, and then continued to Svalbard, covering 6,118 km. This was the first successful surface

crossing of the Arctic Ocean. Those of you staying in Ny-Ålesund in the seventies, might remember two of dogs from the expedition. The last dog, Sennep, lived until 1978.

Wally Herbert was invited by Kings Bay to be guest of honour at Ny-Ålesund for the 17<sup>th</sup> May celebrations this year. He showed his film "Noose of Laurels" and gave a lecture with slides. He was very touched by the warm welcome he and his daughter Kari received at Ny-Ålesund and the interest in his famous expedition.



## The new research station in operation

The construction of the new research station was finalised in March and is now in operation. The official inauguration of the new station will take place in the middle of August

Next edition of Newsletter will contain full coverage of the opening.

News

## Second International Symposium on Environmental Research in the Arctic and Fifth Ny-Ålesund Scientific Seminar

### Organized by jointly

National Institute of Polar Research, Tokyo (NIPR), Ny-Ålesund Science Manager Committee (NySMAC) and Ny-Ålesund Large Scale Facility, European Union (NyLSF)

### Objectives

The second international symposium on environmental research in the Arctic and the fifth Ny-Ålesund scientific seminar will be held jointly at the National Institute of Polar Research, 23 to 25 February 2000. The symposium will provide the platform to discuss the Arctic research based on the results recently obtained among scientists of all nationalities.

NIPR started research activities in the Arctic in 1990, when the Arctic Environment Research Center was established in NIPR. The first International Symposium was held in 1995 with the particular goal to promote Arctic research in terms of global environment. In the last five years a great amount of new information and knowledge have been accumulated in the society, and sufficient material is now available for discussion.

The purpose of the annual Ny-Ålesund Scientific Seminar is to promote scientific exchange to stimulate interaction and further cooperation between all scientists active in Ny-Ålesund. This seminar is jointly organized by the Ny-Ålesund Science Managers Committee and the EU-sponsored Large Scale Facility "Ny-Ålesund Arctic Environmental Research Facility".

The Symposium and the Seminar are jointly organized in order to provide a unique opportunity for exchange between scientists active in Ny-Ålesund and those working in other geographical areas of the Arctic. All scientists active in the Arctic are encouraged to present their work. The joint Symposium Committee expects to have both original papers and review talks.

## Super-conducting gravimeter

In September, a super-conducting gravimeter will be installed at the Space Geodetic Observatory of the Norwegian Mapping Authority. This gravimeter is provided by Mizusawa Astrogeodetic Observatory of Japan (which is part of the National Astronomical Observatory of Japan) and will be operated in Ny-Ålesund for at least six years. The instrument is able to record temporal gravity variations with an extremely high precision. Due to its long-term stability, it allows to study a variety of geophysical phenomena at time scales of up to several years. The list of phenomena include for example long-period seismic, Earth tides, oceanic, atmospheric and glacial loading, and polar motion.

The building for the instrument is under construction and will be completed before the end of August. The instrument is expected to arrive around September 13. For the installation, both a representative of the producer (GWR Instruments, San Diego, USA) and the responsible Japanese scientists from Mizusawa will be present.

## Change of personnel at NMA

After Leif Morten Tangen left as station manager, the Norwegian Mapping Authority (NMA) has engaged Helge Geir Digre as new station manager for the Space Geodetic Observatory. In addition to being station manager, he will continue to be responsible for the mechanics of the

observatory. Leif Morten Tangen was responsible for the RF-electronics. To replace his competence in RF-electronics, NMA has engaged Roar Kihle who arrived in Ny-Ålesund 26 April 1999. Tom Pettersen, who has a permanent position at NMA's facilities in Hønefoss, is in Ny-Ålesund for a three months period as operator. This stay takes place under the rotation agreement, in which one full position of an operators is covered by four persons of the permanent staff at NMA's institute in Hønefoss.

## Ny-Ålesund LSF

During 1999, the Ny-Ålesund LSF Secretariat is hosted by NILU at Kjeller, with Guri Krigsvoll as Program Secretary. A new proposal for continued operation of the Ny-Ålesund LSF program for the period 2000 - 2003 is being prepared for the new 5th framework programme of the EU. Since the start for the program in 1996, a total of approximately 120 European researchers and 60 projects have received grants from the Ny-Ålesund LSF. The Ny-Ålesund LSF contract will finalise in April 2000, and the activity will be concluded with a Ny-Ålesund LSF workshop in April 2000. No new general announcement of opportunities will be issued under the existing contract, but interested new European research teams and scientists are welcome to contact the secretariat for information about possible opportunities and applications.

## 10<sup>th</sup> NySMAC Meeting

The tenth Ny-Ålesund Science Managers Committee meeting took place at the STARESO oceanographic and underwater scientific field station (<http://www.stareso.com/staresouk.html>) outside Calvi, Corsica, France. The charming and inspiring venue was chosen based partly on member opinions regarding geographical location but mainly to give NySMAC an opportunity to visit a marine laboratory with facilities and activities similar (albeit in a different climate) to the marine laboratory discussed for Ny-Ålesund. The visit to the laboratory did provide some input for the future discussions regarding planning and concept of organisation.

The NySMAC committee meeting was as usual frank but friendly and with a very constructive attitude.

The deliberations regarding new constructions and changes included the power station cleaning module, the Ny-Ålesund land use plan, the new Norwegian research station, Zeppelinfjellet, the marine laboratory, a balloon launch facility and the new mess building. The need for a power station cleaning module will be investigated further to provide solid scientifically for guidance regarding the level of investment required. The land use plan is now approved and will ensure that changes in Ny-Ålesund will not alter the atmosphere of the village during the coming years. The new Norwegian research station is of course already in use although the official inauguration will occur in August 1999. The Zeppelinfjellet station is described thoroughly in a separate article in the present Newsletter. The marine laboratory (scheduled for 2001) and balloon launch facility still lie in the future although the balloon facility lies closer in time.

An important discussion was held regarding the issues of alternative energy use and energy conservation. It is important that everyone lives up to the guidelines for how to behave in Ny-Ålesund. The station managers have an overall responsibility to inform and educate those belonging to the respective stations. Kings Bay AS aim to reach the goals through motivation, monitoring and documented results. The guidelines for energy conservation are provided in a brochure. This is a most important issue for maintaining Ny-Ålesund as a research station of high scientific quality over time; in particular for environmental monitoring research. These are issues that everyone should consider whenever they have opportunities to make choices between instruments or methods with different energy demands. It is prudent to choose the least energy demanding route. We can, and should, all help in this regard. It is a way of thinking that should prevail at all times in Ny-Ålesund!

Dr. Ito of NIPR invited the 12th NySMAC meeting (the 11th is scheduled for Ny-Ålesund, October 11-13, 1999) to Tokyo February 21-22, 2000. The Ny-Ålesund seminar will follow immediately afterwards (see the separate seminar presentation). NySMAC is very pleased and grateful for this offer by NIPR.

The NySMAC chairman election lead to my re-election. Being elected to such a position is an honour and obligation. Being re-elected is a further responsibility. I am humbled by the confidence expressed by the member through the election. During the coming months I will present some ideas for how to make NySMAC an even better organisation for promoting Ny-Ålesund as a scientific platform of high international quality and also how to stimulate further scientific co-operation and exchange between the scientists present in Ny-Ålesund. Everyone is invited to submit ideas to stimulate new ideas for NySMAC, if you have constructive ideas regarding how Ny-Ålesund can be developed please bring them forth through your institutions representative or in lieu of such directly to the chairman ([kim@misu.su.se](mailto:kim@misu.su.se))!

*Kim Holmén*  
NySMAC chairman

## What can be seen in Ny-Ålesund Museum

*by Per Kyrre Reymert*

**The museum, 'Ny-Ålesund By- og Gruvemuseum', opened in the summer of 1989 – and it has never been closed. The museum shows the history of the settlement and its coal.**

The main exhibition is situated on the ground floor storeroom of the old shop from 1917. The exhibitions presents the mining up to its end in 1963, including a reconstruction of a coal-mine with miners, a collection of claim signs, geological information, the everyday and social life of families and miners with sports, orchestra, outdoor life, the theatre group, the ladies society, the school, among others.

In an adjoining room artefacts from the settlements hospital are laid out as a reconstruction of a surgeons office with a dentists chair and drill. Some space is given to Roald Amundsen's use of Ny-Ålesund as the starting point of his flying expeditions to the North Pole in 1925 and 1926.

The museum has two buildings close by the exhibition room. One is a small wooden hut reconstructed to what it looked like when it was used as a workers living quarters in 1917, the year Ny-Ålesund founded. The other started out as the first one but it was enlarged and used as a family home up to 1963. It is now presented as such with stove, furniture, kitchen utensils, children's toy etc.

You can visit the Ny-Ålesund museum and the old buildings at any time you like - it is never closed.

### Next edition of Newsletter:

- Waste management for Ny-Ålesund
- Development in traffic to Ny-Ålesund 1997-1998

## Calendar of Arctic Meetings

April 2000: **Ny-Ålesund LSF Workshop**

For a comprehensive list of published meetings, look at Survey of Arctic Meetings:

<http://www.iasc.no/sam.htm>

which contain information on all international arctic meetings

## Staff News

**Alfred Wegener Institute (AWI):**

**Dirk Römermann**, Station Manager, was substituted by **Thomas Schmidt** on 12 April.

**Norwegian Institute for Air Research (NILU):**

**Ivan C. Burkow** has taken over as NILU's representative after **Harry Beine**.

**Norwegian Mapping Authority (NMA):**

**Helge Geir Digre** is engaged as station manager replacing **Leif Morten Tangen**.

## Publications

H. J. Beine, A. Dahlbak, J. B. Ørbæk, **Measurements of J(NO<sub>2</sub>) at Ny-Ålesund, Svalbard**. Accepted for publication, *J. Geophys. Res.*, March 29, 1999.

H. J. Beine, **Measurements of CO in the high Arctic**. In press, *Chemosphere*, 1999.

**Research in Svalbard 1999**

A yearly information bulletin based on contributions from scientists working in Svalbard. Available from Svalbard Science Forum and on <http://www.npolar.no/ris/>

**Ny-Ålesund - International Research at 79°N**

3<sup>rd</sup> revised edition. Published by the Norwegian Institute in co-operation with Kings Bay AS.

**The Ny-Ålesund Safety Guide**

By Nick Cox, NERC (2<sup>nd</sup> edition 1998)  
This NySMAC publication is an introduction to safety in Ny-Ålesund and its surroundings. The guide is obtainable in Ny-Ålesund from Kings Bay AS and NP Research Station.

**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*, links to the homepages of the NySMAC member institutions and a *Ny-Ålesund Publication List*.

**Environmental impact assessment - Ny-Ålesund international scientific research and monitoring station, Svalbard**

By J. Shears, F. Theisen, A. Bjørndal and S. Norris, 1998. NP: Meddelelser no. 157

## Contact Addresses

**Alfred Wegener Institute (AWI)**

Koldewey Station, N-9173 Ny-Ålesund  
Tel: +47 79 02 71 14  
Fax: +47 79 02 71 32  
E-mail: [manager@awi-koldewey.no](mailto:manager@awi-koldewey.no)  
<http://www.awi-bremerhaven.de>

**Kings Bay AS (KB)**

N-9173 Ny-Ålesund  
Tel: +47 79 02 71 11  
Fax: +47 79 02 71 13  
E-mail: [direktor@kbkc.no](mailto:direktor@kbkc.no)

**National Institute of Polar Research (NIPR)**

Rabben, N-9173 Ny-Ålesund  
Tel: +47 79 02 71 07  
Fax: +47 79 02 70 05

Tokyo address:

National Institute of Polar Research  
1-9-10, Kaga, Itabashi-ku  
Tokyo 173, Japan  
Tel: +81 33962 4742  
Fax: +81 33962 5701  
E-mail: [arctic@nipr.ac.jp](mailto:arctic@nipr.ac.jp)

**Natural Environment Research Council (NERC)**

Harland House, N-9173 Ny-Ålesund  
Tel: +47 79 02 70 11  
Fax: +47 79 02 70 22  
E-mail: [nc@bas.ac.uk](mailto:nc@bas.ac.uk)  
<http://www.nerc.ac.uk>

UK address:

National Environment Research Council  
Polaris House  
North Star Avenue  
Swindon, SN2 1EU, UK  
Tel: +44 1793 411 500  
Fax: +44 1793 411 691

**Norwegian Mapping Authority (NMA)**

Ny-Ålesund Geodetic Observatory  
N-9173 Ny-Ålesund  
Tel: +47 79 02 70 10  
Fax: +47 79 02 71 48  
E-mail: [vlbi@gdiv.statkart.no](mailto:vlbi@gdiv.statkart.no)  
<http://www.statkart.no/skgd/nyaales>

**Norwegian Institute for Air Research (NILU)**

The Polar Environmental Centre  
N-9296 Tromsø  
Tel: +47 77 75 03 75  
Fax: +47 77 75 03 76  
E-mail: [ivan.c.burkow@nilu.no](mailto:ivan.c.burkow@nilu.no)  
<http://www.nilu.no>

**Consiglio Nazionale delle Ricerche (CNR)**

Dirigibile Italia  
N-9173, Ny-Ålesund  
Tel: +47 79 02 71 45  
Fax: +47 79 02 71 51  
E-mail: [baseartico@ntserver.iaa.mlib.cnr.it](mailto:baseartico@ntserver.iaa.mlib.cnr.it)  
<http://www.polar.rm.cnr.it>

Italy address:

CNR-DCAS  
Segreteria Tecnico-Scientifica  
per il Programma Antartide  
Viale Marx 15  
00137 Roma, Italy  
Tel: +39 6 860 90307/508

Fax: +39 6 860 90360  
E-mail: [morbidon@dcas.cnr.it](mailto:morbidon@dcas.cnr.it)

**Stockholm University**

Dept. of Meteorology (MISU)  
Arrhenius Laboratory  
S-10691, Sweden  
Tel: +46 8 16 43 52  
Fax: +46 8 15 92 95  
E-mail: [kim@misu.su.se](mailto:kim@misu.su.se)  
<http://www.misu.su.se>

**Norwegian Space Centre (NSC)**

SvalRak, Andøya Rocket Range  
PO Box 54, N-8480 Andenes  
Tel: +47 76 14 16 44  
Fax: +47 76 14 18 57  
E-mail: [ivar@rocketrange.no](mailto:ivar@rocketrange.no)  
<http://www.spacecentre.no>

**Norwegian Research Station**

Norwegian Polar Institute (NP)  
N-9173 Ny-Ålesund  
Tel: +47 79 02 71 15  
Fax: +47 79 02 70 02  
E-mail: [npf@nyaal.npolar.no](mailto:npf@nyaal.npolar.no)  
<http://www.npolar.no>

**NySMAC**

c/o Norwegian Polar Institute Svalbard  
PO Box 505, N-9171 Longyearbyen  
Tel: +47 79 02 26 00  
Fax: +47 79 02 26 04  
E-mail: [nysmac@lby.npolar.no](mailto:nysmac@lby.npolar.no)  
<http://www.lby.npolar.no/nysmac/>

**Next edition of Ny-Ålesund Newsletter: November 1999. Contributions should be sent to NySMAC by 1 October.**

**Editor: Marit Raak Pettersen**

