The conference will be held at the Fårö Training Camp. Quarters are comfortable but spartan, and shared quarters will allow participants to meet new friends. A conference fee of SEK 11600 (SEK 5800 for students) will be charged, including full board and lodging from Monday to Friday. Accompanying family members are welcome, and a nominal charge will be made for these and for stays on adjoining weekends. Participants are registered in the order of invoice payment.

Organising Committee:

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Karl-Arne Markström

Gunnar Eklund

Olov Carlsson

Winnie Svensson

SNRV and NRS (Chairman) Försvarsutbildarna Telemar Scandinavia AB Saab Communication Saab Communication (Secretariat)

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The Nordic Radio Society welcomes authors, participants, exhibitors and family members to Fårö and HF 07. We will meet in an excellent conference theatre, in an interesting exhibition with full Internet access and in a camp near Mother Nature, well suited to you and your family.

Information sheet and registration forms are enclosed. In your own interest, please apply early!

The HF 07 website www.nordichf.org will give you up to date information.

Ale Blomquist

Åke Blomquist SNRV Chairman of NRS



Carl-Henrik Walde SNRV Chairman of the Organising Committee



# **Nordic HF Conference** with Longwave Symposium LW 07

14-16 (17) August 2007 Fårö Kursgård, Fårö

## **First Invitation and Call for Papers**

The Nordic Radio Society invites authors, exhibitors and participants to the 8th Nordic HF conference to be held on Fårö in the Baltic Sea north of Gotland.

The Programme Committee welcomes authors and speakers to submit abstracts not later than 15 February 2007, by using the abstract submission form on our web site, www.nordichf.org.

An international longwave meeting is well overdue and we will include LW 07 covering VLF and LF. If needed, some sessions may be held on Friday morning, 17 August.



Nordic Radio Society



### FÅRÖ

### HF, LF and VLF systems - fields of increasing importance

NRS, the Nordic Radio Society (a foundation co-operating with SNRV, the Swedish National Committee of URSI), invites authors and participants to the 8th Nordic HF conference, this time combined with a longwave symposium LW 07. Topics focus on communications beyond the horizon, with emphasis on HF, LF and VLF radio. The use of these as information bearers in other types of applications is also of interest. Since the first conference in 1986, each Nordic HF conference has gathered around 150 participants, who have enjoyed the relaxed atmosphere and stimulating company of colleagues in the informal setting provided by the unique nature of Fårö and the Fårö Training Camp.

VLF, LF and HF communications technology has advanced significantly over the last few years, with significant trends towards a higher degree of automation and signal processing that now can be cost-effectively implemented to achieve affordable performance even in small systems. Mobile Internet is pervasive, however the radio environment and especially HF does not provide the distortion-free high bandwidth channel of an optical fibre. There is a significant challenge to meet users' expectations of affordable communications anywhere, anytime. High capacity multimedia networks carry not only analogue voice and data messages in a store-and-forward manner, but also digitised high quality voice, streaming data and even streaming video. Integration with VLF, LF and HF with these networks requires developments in modulation and coding, link management and network management to be able to provide a service level acceptable by the network users. Automatic networking aspects and information transparency play an increasing role to achieve full subscriber connectivity, area coverage and highly reliable communications with longwave and shortwave systems possibly being only one of several available communications alternatives.

In many applications HF, LF, VLF are the primary and sometimes the only way of providing communications. Defence forces are the major professional users of these as far as numbers are concerned, and defence applications are the technology driver.

We are happy to announce three invited speakers:

**Eric Koski** from Harris will give an overview of the concept of software defined radio with emphasis on the US JTRS programme. Technical aspects, such as the software architecture, waveform development, test programme and challenges will be described as well as the programme aspects, such as aim, current status, hurdles, and the future.

**Bob Nash**, well-known consultant in the longwave field, will be the keynote speaker on longwave issues giving a historical background as well as state-of-the-art technology.

**Samuel Ritchie** from The Commission of Communications Regulation of Ireland will talk about the status and trends in HF spectrum management and spectrum usage.

Topics of interest include:

- User requirements and experience
- Management and administration of communication networks
- Interoperability issues
- VLF, LF and HF role in network centric warfare
- Propagation studies and modelling
- Interference and noise
- Modulation, coding and link control
- Network architectures
- Equipment and systems
- Software radio concepts för VLF/LF/HF
- Multimedia access and applications
- HF radar
- HF digital broadcast
- Electronic warfare
- Simulation, modelling and evaluation
- Amateur radio techniques and systems

We emphasise the importance of contributions from users, either as experience from the operation of existing systems or as requirements for new systems. Technology is not self-sufficient – there has to be a demand from the organisations that in the end actually will operate the fancy technology. Conferences are important venues where users, scientists, engineers and manufacturers meet and have the opportunity to discuss both needs and solutions.

Authors are invited to submit abstracts for papers **not later than 15 February 2007**. Notice of acceptance will be given 10 March 2007, with print-quality papers to be submitted 1 May 2007. Presentation time is 20–30 minutes; please indicate the estimated length of your presentation (excluding the time for questions and discussions). The conference language is English, and all papers are to be printed in the Conference Proceedings. The full Proceedings of HF 07/LW 07 and the earlier conferences will be available on CD-ROM. The Nordic HF web site lists titles and authors of all papers to ensure efficient Internet search and access to the topics. Use the enclosed form, or the form on the Nordic HF web site, for conference registration and request for exhibition space. Abstracts are submitted on the web site. Current information is available at the following web site: **www.nordichf.org**.