



17-19 AUGUST 2010

FÅRÖ

Nordic HF Conference with Longwave Symposium LW 10

17-19 August 2010
Fårö Kursgård, Fårö

First Invitation and Call for Papers

The Nordic Radio Society invites authors, exhibitors and participants to the 9th 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 **14 February 2010**, by using the abstract submission form on our web site, www.nordichf.org.

The international longwave symposium LW 10 covers VLF and LF.



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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 9th Nordic HF conference, combined with a longwave symposium LW 10. 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 multi-media 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 and 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 plan for two keynote speakers covering LF and HF respectively. When confirmed, authors and titles will be put on the HF 10 website.

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 for 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 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 14 February 2010**. Notice of acceptance will be given 10 March 2010. Print-quality papers shall be submitted 2 May 2010. 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. Abstracts are submitted on the web site.

The full Proceedings of HF 10/LW 10 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.

For registration, use the enclosed form or the form on the Nordic HF web site. There you may also request exhibition space.

Current information is available at www.nordichf.org.

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 12600 (SEK 4200 for students and pensioners) 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:

Carl-Henrik Walde	SNRV and NRS (Chairman)
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The Nordic Radio Society welcomes authors, participants, exhibitors and family members to Fårö and HF 10. 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 form are enclosed. In your own interest, please register early!

The HF 10 website www.nordichf.org will give you up to date information.

Mats Nilson
SNRV
Chairman of NRS

Carl-Henrik Walde
SNRV
Chairman of the Organising Committee