

The conference will be held at the Fårö Training Camp, https://www.farokursgard.se/start_eng.html. Quarters are comfortable, but spartan, and shared rooms will allow participants to meet new friends. The conference fee is SEK 13000 ex VAT (SEK 4350 for seniors paying out of their own pockets and for students). It includes full board and lodging from Sunday afternoon 14 August to Wednesday afternoon 17 August. Companions are welcome; a nominal charge will be made for these and for stays on adjoining days.

Organising Committee:

Anders Wigh	Combitech AB	(HF 22 chairman)
Olov Carlsson	Nordic HF	(Chairman, retired)
Rickard Berg	FMV	
Mats Nilson	SNRV and NRS	
Karl-Arne Markström	AFRY Digital Solutions AB	
Marie Lindersjö	Head conference hostess	

Programme Committee:

Rickard Berg	FMV	(committee chairman)
Håkan Bergzén	Combitech AB	(secretary)
Karl-Arne Markström	AFRY Digital Solutions AB	
Kjell Brethack	FMV	
Jens Zander	KTH	
Rolf Gustavsson	FOI	
Peter Johansson	FOI	
Dag Stranneby	Örebro University	

Conference Secretariat:

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We hope to meet you at Fårö near Mother Nature with the large conference theatre, an interesting exhibition, amateur radio station SL1HF and free WiFi coverage all over the camp.

Participants are registered in the order of invoice payment; please be early. Our website will give you up to date and detailed information and it is also the means for submission and registration.

Mats Nilson
SNRV, NRS



Anders Wigh
HF 22 chairman

COMBITECH



Nordic HF Conference

15-17 August 2022, Fårö, Sweden

First Invitation and Call for Papers

The 13th Nordic HF conference HF 22, sponsored by the Nordic Radio Society NRS, will be held on the island of Fårö in the Baltic Sea north of Gotland in week 33, i.e. the week subsequent to the Gotland Medieval Week (www.medeltidsveckan.se).

You are recommended to arrive at Fårö not later than Sunday afternoon August 14, e.g. by HF 22 courtesy buses from Visby airport and harbour ferry terminal. In the evening, you will be served a meal (sponsorship to be defined). On Wednesday afternoon August 17, there will be return transports. For details on public buses and taxi services please see our website and/or newsletters.

The Programme Committee welcomes authors and speakers to submit abstracts not later than **15 February 2022**. The Organising Committee welcomes other participants and exhibitors (space is free if you register at least one participant) as well as sponsors.

HF 22 invited speakers will be ... (to be defined later).

You may access "My pages" (not yet opened) on our website www.nordichf.org and create a personal page to show your interest to take part in HF 22, to submit your abstracts and full papers, to apply for exhibition space and to register for the conference.

www.nordichf.org



NRS, the Nordic Radio Society is a foundation co-operating with SNRV, the Swedish National Committee of URSI (Union Radio-Scientifique Internationale). Assisted by Combitech AB and the Swedish Defence Materiel Administration (FMV), NRS invites authors, participants and exhibitors to the 13th Nordic HF conference. As before, topics focus on communications beyond the horizon with emphasis on HF, LF and VLF radio communication, radio location and radio navigation technology, but they may also include long-haul VHF/UHF.

Conferences are important venues where users, scientists, engineers and manufacturers meet and have the opportunity to discuss both needs and solutions. Since the first conference in 1986, each Nordic HF conference has gathered over 100 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.

As at earlier HF conferences, VLF, LF and HF communications technology has advanced significantly over the last years, with significant trends towards a high degree of automation and signal processing that can be cost-effectively implemented to achieve performance even in small systems. There is a significant challenge to meet user 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 as well as VHF and UHF with these networks requires developments in modulation and coding, link management and network management to be able to provide a sufficient service level to the network users. Automatic networking and information transparency play an increasing role to achieve full subscriber connectivity, area coverage and highly reliable communications, longwave and shortwave being only one of several alternatives.

Defence forces are the major professional users and defence applications are the foremost technology driver. In many cases HF, LF and VLF are the primary and sometimes the only way of providing communications in denied environments. Modern military radio communication systems are becoming more integrated in capabilities where the same software defined radio, or the C3I system, may employ use of HF, VHF and UHF in the same multiband equipment. In our modern days of advanced communication systems HF radio is even more than before important for users having needs of control of the messaging paths – no intermediate nodes or functions out of your control are required.

SNRV

SVENSKA NATIONALKOMMITTÉN FÖR RADIOVETENSKAP
THE SWEDISH NATIONAL COMMITTEE OF URSI

Topics of interest include:

- User requirements and experience
- Management and administration of networks
- VLF, LF and HF role in warfare, interoperability issues
- Interference and noise
- Spectrum regulation and usage
- Propagation studies and modelling
- Frequency management
- Network architectures
- Modulation, coding and link control
- Simulation, modelling and evaluation
- Equipment and systems for VLF/LF/HF/VHF/UHF
- Software radio concepts for VLF/LF/HF/VHF/UHF
- Wideband HF
- Staring receiver technology
- Multimedia access and applications
- Meteor scatter technology
- HF radar technology
- HF digital broadcast
- VLF, LF and HF navigation systems
- VLF, LF and HF electronic warfare
- VLF, LF and HF antenna systems
- Infrastructure: Antenna masts, shelters, platforms, cables
- Energy efficiency, power-saving methods
- 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 those that will operate the technology.

On our website www.nordichf.org, authors are invited to **submit abstracts** for papers **not later than 15 February 2022**. Notice of acceptance will be given on 15 March 2022. Print-quality papers shall be submitted on 3 May 2022. Presentation time is 20-30 minutes; please indicate the estimated length of your presentation excluding time for questions and discussions. All papers will be printed in the Conference Proceedings. Please note that the web site is the means for information, submission and registration.

Proceedings from HF 22 and earlier conferences will be made available on electronic media and also provided as a paperback volume for those who select this option when registering. Our website will list titles and authors of all papers for efficient Internet search and access to the topics.

