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Rickard Berg FMV
Mats Nilson SNRV, NRS, Wireless@KTH och VNL Europe AB
Karl-Arne Markström ÅF Digital Solutions AB
Marie Lindersjö Head conference hostess

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Emelie Agnedal FMV
Rolf Gustavsson FOI
Peter Johansson FOI
Dag Stranneby Örebro University

Conference Secretariat

WRAP International AB, HF 19 Office, Mobile phone: +46-70-5159467
Ljungadalsgatan 2A
SE-35246 Växjö, Sweden E-mail: info@nordichf.org

The conference fee of SEK 12 600 + VAT 3 150 (SEK 4 200 + VAT 1 050 for seniors paying out of their own pockets and for students) includes all social events as well as full board and lodging from Sunday afternoon 11 August to Wednesday afternoon 14 August. The lodging standard has been improved considerably over 33 years and rooms are comfortable but still somewhat basic, more so for late registrations. Some will have to share rooms, an excellent way to meet new friends. Registration for the conference will close 1 August 2019, but please be early as priority will be based on the date of receiving the conference fee. Companions are very welcome at SEK 2100 incl VAT (free for children <age 4, SEK 525 for youngsters 4 - <10, SEK 1050 for 10 -<16); stays on adjoining days are possible.

You are recommended to arrive at Fårö not later than Sunday afternoon August 11. HF 19 free buses will leave from Visby airport (VBY) and ferry terminal on Sunday; return transportation will catch Wednesday flights and ferries. Further information will be available on our website.

For networking outside the conference sessions we have the Rohde&Schwarz Bavarian buffet Sunday 1700-2200, the traditional sightseeing tour on Fårö, lunch music, the concert in Fårö church where the famous film director Ingmar Bergman is laid to rest, the exhibitors' party, the HF radio direction finding competition, the amateur radio station SL1HF and the banquet, Gotland style. For companions, we have plans to arrange extended bus tours to see more of Gotland. In your spare time, if any, you may visit the nearby Ingmar Bergman Center.

On Monday August 12 at 0800 sharp, HF 19 will be opened. On Wednesday August 14 at around 1400, HF 19 will close.

NRS welcomes authors, participants, exhibitors and family members to Fårö and HF 19.

Mats Nilson

Olov Carlsson



Nordic HF Conference HF 19 with Longwave Symposium LW 19

12-14 August 2019
Fårö Kursgård, Fårö

Second invitation and provisional programme

On Monday-Wednesday August 12-14 2019, the 12th Nordic HF Conference HF 19 will be held, as always in week 33 and at the usual camp on Fårö just north of Gotland in the Baltic Sea. The dates have been chosen to allow meetings in Stockholm on the following Thursday and Friday.

We suggest that you plan to arrive not later than Sunday 11. The camp will be open on weekends for private use and for business meetings. Industry will be able to exhibit their products during the conference.

You should access "My pages" on our website <https://www.nordichf.org>, register for the conference and apply for exhibition area and scholarships. Early registrations will guarantee your participation and lodging in the camp area.

You may take the opportunity to visit the rest of Gotland. The preceding week 32 is the Medieval Week, see <https://www.medeltidsveckan.se/en/>

HF 19 is organised by NRS, the Nordic Radio Society, assisted by WRAP International AB and the Swedish Defence Materiel Administration (FMV). NRS is a foundation co-operating with SNRV, the Swedish National Committee of URSI (Union Radio-Scientifique Internationale); WRAP develops and supplies software for radio spectrum management and network planning.

As always, NRS welcomes authors, participants, exhibitors and family members to Fårö. We will meet in an excellent conference theatre, in an interesting exhibition, with Internet access and an amateur station SL1HF, all in a camp near Mother Nature, well suited to you and your family.



SNRV

SVENSKA NATIONALKOMMITTÉN FÖR
RADIOVETENSKAP
THE SWEDISH NATIONAL COMMITTEE OF URSI

HF, LF and VLF systems - fields of increasing importance

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.

Topics focus on radio communication, radio location and radio navigation technology "beyond the horizon" with emphasis on HF, LF and VLF, but they also include long-haul VHF/UHF.

As at earlier HF conferences, VLF, LF and HF technology has advanced significantly, with trends towards a high degree of automation and signal processing. 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 streaming video. Wideband HF and staring receivers will be used. Automatic networking and information transparency play an increasing role to achieve full subscriber connectivity, area coverage and highly reliable communications

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 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.

We are happy to have two invited speakers: Michael Puls, Germany and Jonas von Mentzer, Sweden

INVITED PAPER

Puls and von Mentzer User Experiences and Lessons Identified concerning Military requirements and need of Interoperability in the range of HF Communications in the Maritime domain

PROVISIONAL PROGRAMME

Berg, Rickard HF-communications during a grand solar minimum

Batts, William et al A Comparison of Automated Link Establishment Techniques for Wideband HF

Furman, Willam N et al Evaluating The Propagation Characteristics of Contiguous Wideband Channels

Nieto, John et al On-Air test Results of a Wideband HF Hybrid ARQ Waveform

Markström, Karl-Arne Overview of the renewed interest in intercontinental point-to-point HF circuits aimed at reducing latency in "high-frequency trading" stock market applications

Rausta, Matti Cognitive Networked HF system (CNHF): Over the air tests

Rausta, Matti Cognitive Networked HF system (CNHF)

Deacon, Chris et al Investigation of the polarisation of 50MHz signals via sporadic E

Bernier, Jean-Yves et al Integration of IP services over high data rate HF capabilities

Jorgensen, Mark Building Resiliency with HF Networks

Sailer, Alfons et al Next Generation HF Radio: System Aspects Enabling Network Centric C4I Integration

Jodalen, Vivianne Geographical diversity to obtain better linking probability at HF channels under the disturbed high latitude ionosphere

Clarke, Russell et al HF-Skywave Reception using the Australian Nullarbor Direction Finding (DF) and Signal-Improvement (SI) System

Robb, Andrew et al HF Direction Finding Testing with Very Close Range Direct Path Signals

Pijoan, Joan Lluís Internet of Things communications for remote sensors in Antarctica using NVIS

Weberg, Lars Wireless Power Transfer and the interference situation in the LF-HF bands

Hedlund, Richard Signal processing in an airborne avalanche victim localisation system operating on 457 kHz

Wennerholm, Lucas et al Realisation of antenna pattern measurement systems using UAV

Enander, Filip On the realisability of HF communications from a very small flying platform

Markström, Karl-Arne et al Performance Limits for HF Communication Systems Using Realisable Hardware Solutions

Stenumgaard, Peter et al Interference Impact from Solar-Panel Systems on HF Communications

Warrington, E. M. et al HF radio propagation at high latitudes: observations and predictions

Kille, Steve et al Selecting HF Interleaver for Best Performance

Eder, Yehuda Dual path direct sampling architecture for Staring ALE

Johansen, Arnstein HF in the SmartPhone Age

Wickenhauser, Harald A sufficiently accurate verification attempt of an active antenna's k-factor using affordable measurement equipment.

Rauh, Sebastian et al Joint Time-Frequency Spectrum Usage Analysis and Modelling for the Short Wave

A few contributions may be added if you have recent findings; if so, please email your abstract to info@nordichf.org.

Proceedings of HF 19/LW 19 will be available on electronic media and also provided as a paperback volume. Proceedings of HF 16/LW 16 and earlier conferences will be available on electronic media. Our website will list titles and authors of all papers for Internet search and access to the topics. There will be "print on demand" facilities at the venue.

EXHIBITION, SPONSORSHIPS

For exhibition and sponsorship issues please contact Olov Carlsson olov.carlsson@wrap.se

REGISTRATION

Please create a user account and register in "My Pages" on www.nordichf.org where you will find links and practical information. Participants are registered in the order of payment.