

Michael Wadsworth et al.	Performance Results of Subnetworks Employing STANAG 4538 HF Automation
William Furman et al.	Performance of STANAG 4538 based HF Email Systems
Paul Arthur et al.	Field Trials to Investigate Automated HF Communications Capabilities Provided by STANAG 4538 (ARCS)
Håkan Bergzén	Integrating automated HF systems in IP based networks
Vivianne Jodalen et al.	Time variability of the high latitude NVIS channel
Oddbjørn Strømsnes	Lessons Learned in Interoperability and Standards Conformance Testing
Peter Green et al.	HF channel measurements
Mats Bröms et al.	Channel characteristics on two close channels at high latitude
Ralph Persson	Communications in the Digital Arena – A Vision for the Future
Isabelle Siaud	On COFDM performances of digital radio systems in AM and HF bands over multipath ionospheric channels
Andy Giefer	Digital Radio Mondiale – The Importance of Field Trials for System Design and Operation

After HF 01, a trip will be arranged to SAQ Grimeton Radio on the west coast of Sweden. Grimeton Radio has the only remaining 200 kW Alexanderson VLF alternator. Together with its antenna system and station building, it is listed as a fully operational industrial monument (www.alexander.n.se). For low-priced airfares to Sweden and back, the basic travel package will begin on Sunday afternoon August 12, returning there Sunday morning, August 19. Those going by car may join. For further details, please see HF 01 Information sheet. If interested, please check in the registration form.

Organising Committee:

Carl-Henrik Walde	SNRV and NRS (Chairman)
Åke Blomquist	SNRV and NRS
Gunnar Eklund	TietoEnator
Olov Carlsson	AerotechTelub
Bengt Lundborg	Swedish Defence Research Agency
Winnie Svensson	AerotechTelub (Secretariat)

Programme Committee:

Bengt Lundborg	Swedish Defence Research Agency (Chairman)
Håkan Bergzén	AerotechTelub (Secretary)
Lars Ahlin	Swedish Defence Research Agency
Tim Giles	Royal Institute of Technology
Karl-Arne Markström	Telia Mobile AB
Sven Åkerlund	Swedish Defence Materiel Administration



14-16 August 2001
FÅRÖ

Nordic HF Conference

14-16 August 2001
FBU Kursgård, Fårö

Invitation and provisional programme

The sixth Nordic HF conference, HF 01, will be held on Fårö in the Baltic Sea. The previous conferences have all gathered a large number of international participants. Industry will have the opportunity to display their products in the exhibition area.

We invite participants to yet another successful conference. Send registrations not later than 18 May, 2001 to HF 01, AerotechTelub, SE-351 80 Växjö, Sweden, or register at www.nordichf.cjb.net. Early registrations will guarantee your participation.

After the conference there will be a trip to Grimeton Radio SAQ and its 200 kW VLF alternator (by special registration).



The Nordic Radio Society (a foundation cooperating with SNRV, the Swedish National Committee of URSI) sponsors the 6th Nordic HF Conference: *2001 – An HF Odyssey*. 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 FBU Training Camp.

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 the hot topic of today, 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 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 of 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 HF possibly being only one of several available communications alternatives.

Mel Maundrell, Defence Evaluation and Research Agency (DERA, UK), will give an invited talk on the development of HF standards and their role in NATO.

REGISTRATION

Please register not later than 18 May. The Conference fee is SEK 9600 and for students SEK 4800 (excl VAT), which includes full board and lodging from arrival on Monday to departure on Friday. Shared quarters cannot be avoided due to the limited number of rooms. Family quarters are available. Participants using their caravans as lodging will get a discount of SEK 1800. Please see the enclosed HF 01 Information sheet and Registration form for details.

Invoice and detailed practical information will be sent upon receipt of registration. Register on our web site (no credit card payment) or to:

HF 01
AerotechTelub
SE-351 80 VÄXJÖ, Sweden
Fax: +46-470 420 42

Please visit our web site www.nordichf.cjb.net for further information, or contact Olov Carlsson (+46 470 421 49) or Winnie Svensson (+46 470 421 19, winnie.svensson@aerotechtelub.se)

The camp will be open on adjoining weekends for private use and for business meetings.

We look forward to seeing you at the HF 01 Conference on Fårö in August 2001.

Åke Blomquist
SNRV
Chairman of NRS

Carl-Henrik Walde
SNRV
Chairman of the Organising Committee

Provisional programme

Rod Macduff	Optimising efficiency of binary switched HF antenna tuner
Rod Macduff	HF-90H A Commercial-off-the-shelf HF Hopping Combat Net Radio
Karl-Arne Markström	Design and implementation aspects of remote control in HF radio networks
Donat Blagoveshchensky	Substorm Effects on High-Latitude HF Radio Paths
Donat Blagoveshchensky	A Small HF Radar "BIZON"
Dan Roesler et al.	Stanag 5066 Implementation and Application Perspectives
Frederick Raab	Electronically Tuned Class E HF Power Amplifier
Andreas Ahrens et al.	On the Probability of Undetected Error in Protocol Structures
Christoph Lange et al.	Intersymbol Interference and Interchannel Interference in Multicarrier Transmission Systems
Mel Maundrell	Development of HF Standards and their role in NATO
Laurent Soyer	HF Messenger: European trials and R&D efforts
Roald Otnes	Factors affecting the availability of medium data rate waveforms at high latitude HF channels
Achim Brakemeier et al.	Packet Dependent Waveform Construction for the HF Channel
Bjørn Jacobsen et al.	HF radio propagation at high latitudes: Observations and predictions for quiet and disturbed conditions
Nigel Davies et al.	Initial results from WHISPER, a Wideband HF Ionospheric Sounder
André Kotlowski et al.	High Data Rate 64 kbps Waveform for a Multiband Software Defined Radio
Erdem Senalp	HF Signal Strength Measurement in Turkey during the 1999 Total Solar Eclipse
Tim Giles	HF Modem Design for Extremely High Simultaneous Doppler and Delay Spreads
Tobia Carozzi	Wideband HF polarization theory and measurement technique
Erdem Senalp	NN Based SNR prediction of an HF Radio Link Using Temporal Geophysical Parameters
Jan Bergman	Measurements of the Wave Normal of Whistler Waves in the Topside Ionosphere
Michael Bova et al.	An operational guide to the use of high rate and multiple sideband HF waveforms
Brian Arbanas et al.	End-to-End, Flexible Approach to Classifying the Contents of the HF environment
Roger Karlsson	Three-Dimensional Digital Radio Receiver for the HF Band
John Nieto et al.	Does modem performance really matter on HF channels? An investigation of Serial-Tone and Parallel-Tone Waveforms
George Robertson et al.	Advance in IP data transfer over HF channels