



MS. TRACY CARROLL
Navy Cyber Forces N82



High Frequency Communications Systems Concept of Operations (CONOPS)

Discussion at BLOS Comms Working Group
and
HF Industry Association

12 – 13 February 2014



Purpose

To provide the Fleet with updated guidance and operational concepts that revitalize the use of the High Frequency (HF) spectrum and address requirements for use of current and future tools and capabilities.

This CONOPS will enable resource sponsors, program managers, operational planners, and Fleet activities by providing the information necessary to understand when to use, how to optimally implement, and to understand concepts for efficient employment of HF Communications in challenging environments; including enterprise network reach-back.

Additionally, the CONOPS details will aid system and application developers in creating the programs and investigating the technology necessary to sustain the effect of the CONOPS beyond the current development planning cycles.



Problem

- What are the problems this CONOPS should help solve?

Issue

Diminished use of HF in normal Fleet ship and shore operations and exercises

HF equipment age and inventory reductions since the 1990's

Employment of HF as DoD Information Networks reach back

Operational HF use in LOS/BLOS diminished

Reliance on HF as contingency in challenging environments

Use of HF with NATO, Allied and Coalition partners

Importance of HF Modernization Programs

Improved ability to pass IP data within HF spectrum

Develop a roadmap to emerging technology and solutions



What if...

- What happens if we ignore and don't provide CONOPS?

Result

Continue to ineffectively provide HF as contingency – without addressing the challenges

Place HF centric programs at risk; HF Modernization, etc.

Diminish HF resource allocation (man, train, equip)

Undefined requirements result in loss of access to current mission improvement tools (technology)

Undefined roadmaps result in loss or delay of access to future mission improvements (processes or technology)



Scope

- Objective: Develop CONOPS that shapes the return to prominence the use of HF communication systems use for maritime forces
 - Hybrid of technical and non-technical CONOPS
- Outcomes:
 - Define HF use in degraded environments to support all mission types
 - Restore HF Training and Exercises
 - Trigger HF Modernization
 - Improve existing capabilities afloat and ashore
 - Discover potential new features that will reach IOC within development cycle
- Audience: Operational Commanders, NATO/Allied/Coalition Forces, across mission communities, program and development offices
- Author: NAVCYBERFOR N8



Use & Follow-on

- CONOPS validated through experimentation & exercises
 - Use vignettes for exercise planning
 - Periodic tailored exercises
 - Revise routine training events
 - Mission focused training updated
- Development of a new capability/technology/system
 - Shore interface for IP
 - Higher IP data rates
 - Polar coverage
- Development of tactics and doctrine
 - Environment specific
- Updates to programs, training, schools, etc...



Contact Information

Primary

Max A. Willey

Director, Space and Transport Systems Requirements

(757) 203-3354

max.a.willey@navy.mil

Alternate

Tracy Carroll

Space and Transport Systems Requirements Action Officer

(757) 203-3353

tracy.carroll@navy.mil