

**Start: 1949 L – Stop: 2001 L**

## **National Interoperability Field Operations Guides**

### **1.1 OVERVIEW.**

Thank you, Bob. Good evening to the net. Tonight, we'll be discussing the National Interoperability Field Operations Guide (NIFOG). I will try to answer the following questions.

- a. What is the NIFOG?
- b. What type of information does the NIFOG contain?
- c. Why is it important to ACS?
- d. How do I get a copy of the NIFOG?

### **1.2 NATIONAL INTEROPERABILITY FIELD OPERATIONS GUIDE.**

The NIFOG is one of three field guides that contain useful information for ACS. The other two field guides are the Auxiliary Communications Field Operations Guide (AUXFOG) and the Florida Communications Field Operations Guide (FL Comm FOG). We'll discuss the AUXFOG and FL COM FOG in a future training session. Tonight, we'll concentrate on the NIFOG. I'll start by giving you the definition provided in the document's introduction.

"The National Interoperability Field Operations Guide (NIFOG) is a technical reference designed to support incident communications. It is a compilation of communication references and information that have been recommended by public safety practitioners across the country."

It is published by the Cybersecurity and Infrastructure Security Agency (CISA).

I don't plan to go into detail about all the information in the document; however, I do want to give you a top-level overview of its contents so you will understand why it is relevant. The document is divided into seven broad sections.

- a. **It starts off with a section called "How to use the NIFOG"**
  - (1) Common questions and answers about the document.

- (2) The FCC and National Telecommunication and Information Administration (NTIA) rules and regulations for interoperability.
- c. The next section is the heart of the document. It contains a listing of land mobile radio (LMR) frequencies that are often used in a disaster or other incidents where radio interoperability is required.
- (1) Description of ICS 205, Incident Radio Communications Plan and defines what information contained in each field of the form.
  - (2) Field programming guide for the Interoperability channels. The information is presented in table form. Each table contains channel names, frequencies, tones, and repeater offsets.
    - (a) VHF, UHF, 700 MHz, 800 MHz Interoperability frequencies.
    - (b) National Weather Service Radio Frequencies.
    - (c) Aviation and Drone frequencies.
    - (d) Coast Guard Marine channels, frequencies, and usage information.
    - (e) Business, railroad, SAR, and time standard frequencies (WWV and CHU). Also listed are the standard time telephone numbers.
    - (f) HF disaster, SHARES (SHARed RESources HF Radio Program), and amateur radio emergency frequencies.
    - (g) Multi-Use Radio Service (MURS), CB radio, Family Radio Service (FRS), and General Mobile Radio Service (GMRS) channels and frequencies.

**c. Useful References:**

This section contains a lot of phone numbers and email addresses.

- (1) Telephone numbers for DHS, FEMA, FCC, American Red Cross, and ARRL National Operations Centers.

- (2) Contact information for Cybersecurity and Infrastructure Security Agency (CISA) and FEMA regional offices, Phone numbers and email addresses.

**d. Emergency Wireless Carrier Services**

This section contains a lot of phone numbers and email addresses.

- (1) Description of FirstNet and services offered.
- (2) Contact Information and a list of services offered by T-Mobile and Verizon Emergency Response Teams.
- (3) Defense Switching Network (DSN) information.

**e. Satellite Services**

- (1) Description and regional coverage maps for M-Stat Satellite Mutual Aid Radio Talk groups.
- (2) Phone dialing instructions for Iridium, Broadband Global Area Network (BGAN), MSAT, and INMARSAT satellite systems.

**f. Information Technology**

- (1) Contact information for disaster/ crisis response organizations.
- (2) Descriptions of physical media that can be used within an IT network. Includes specification information such as maximum distances and speed information. Example the maximum distance for a CAT5 cable is 100 meters.
- (3) Wiring guidance for RJ-45, telephone, and RS-232 (DE9 and DB25) connectors.

**g. Cybersecurity**

- (1) Contact information for the FBI, FCC, US Secret Service, etc.
- (2) A list of potential scrutiny risks,
- (3) Cryptographic cipher recommendations.

Obviously, not everything in the NIFOG is applicable to the work we perform in ACS; however, a lot of the information is used to program and maintain the equipment we have in the EOC radio room, the Command Runners, and SatRunners. So, I would strongly recommend that everyone obtain a copy.

### 1.3 HOW TO GET A COPY OF THE NIFOG

The NIFOG is available in several formats. Individuals can download a PDF copy of the NIFOG directly from the CISA web site. Simply google NIFOG and look for the CISA link. CISA has also created a mobile app called eNIFOG that you can download from either the Apple App store or the Google Play (Android) site. This app works very well on your phone.

### 1.4 QUESTIONS OR COMMENTS

I'd like to pause here for a minute and ask if anyone has a comment or question about tonight's presentation. If you have a comment or question, please provide me with your call sign, slowly, clearly, and phonetically so I don't make a mistake when I respond. And then ask your question or provide me with your comment.

This is WA1RYQ.

### **ACTION - PAUSING FOR QUESTIONS**

### 1.5 CONCLUSION.

That's all I have for this week's training session. Let me conclude with a couple of reminders.

1. I strongly encourage everyone to provide comments and suggestions for future training activities. I can be contacted at WA1RYQ@ARRL.net or you can send me an email via our groups.io website.

Now with that I'll turn it back to Net Control.

1.6 QUESTIONS AND COMMENTS.

The following table contains a summary of the comments and questions provided by the membership during the presentation.

No.	Call Sign	Comments	Response
1	KJ4RUS	When you attempt to download the NIFOG, please ensure that you have the latest version. The current version is version 2.0.1.	
2	KA4EBX	<p>The NIFOG is not the authority that allows you to use all the frequencies in it. It is a reference guide only. Some of the frequencies are authorized for amateur use; however, many require a separate license or authorization to operate on. Some are federal and are included for information purposes only.</p> <p>Remember the NIFOG does not authorize anyone to use the listed frequencies.</p>	Excellent information that I will incorporate into the briefing.
		<b>No Additional Questions or comments</b>	