



Privacy Impact Assessment
for

Rescue 21

DHS/USCG/PIA-021

July 29, 2015

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Abstract

Rescue 21 is the United States Coast Guard's (Coast Guard) advanced command, control, and direction-finding communications system. Rescue 21 replaces the National Distress and Response System and was created to accurately locate mariners in distress and save lives and property at sea and on navigable rivers. Rescue 21 also has a sub-system titled, Digital Selective Calling (DSC), which uses a Maritime Mobile Service Identity (MMSI) number to associate the boat owner and his or her location and contact information for automated distress calls. This Privacy Impact Assessment (PIA) is being conducted because Rescue 21 collects and uses personally identifiable information (PII).

Overview

Search and Rescue (SAR) is one of the Coast Guard's oldest missions. Minimizing the loss of life, injury, or property damage or loss by rendering aid to persons in distress and property in the maritime environment has always been a Coast Guard priority. Coast Guard SAR response involves multi-mission stations, cutters, aircraft, and boats linked by communications networks. The National SAR Plan divides the U.S. area of SAR responsibility into internationally recognized inland and maritime SAR regions. The Coast Guard is the Maritime SAR Coordinator. To meet this responsibility, the Coast Guard maintains SAR facilities on the East, West, and Gulf coasts; in Alaska, Hawaii, Guam, and Puerto Rico, as well as on the Great Lakes and inland U.S. waterways.

Rescue 21 is the Coast Guard's advanced command, control, and direction-finding communications system and replaces the National Distress and Response System, which had been in existence since the 1970s. The Rescue 21 radio communications system utilizes direction-finding, digital-selective calling (VHF radio) capabilities and high quality audio recording and playback to transform the efficiency of Coast Guard search and rescue operations.

The system is designed to provide a graphical representation of received audio transmissions relative to a known point on land (line of bearing) from the radio tower to the source of the received VHF radio call.

This direction-finding capability provides the Coast Guard with lines of bearing to boaters who may not be able to provide accurate positions. Rescue 21's direction-finding capability also helps identify potential hoax radio calls, preventing waste and diversion of resources needed for actual emergencies.

Rescue 21 also features high quality audio and automatically records the transmissions it receives. Coast Guard watchstanders can instantaneously replay radio calls and clarify the sound



quality with system tools that reduce background noise and amplify voices. Rescue 21 is operational along the entire Atlantic, Pacific, and Gulf coasts of the continental United States, the shores of the Great Lakes, and the coasts of Hawaii and several U.S. territories. The coastal phase of the program is operational. Modified versions of the system for Alaska and along western rivers are expected to be complete in 2017.

Features of Rescue 21 include:

- Improved ability for USCG to coordinate with federal, state, and local first responders for SAR purposes;
- Digital selective calling support, which allows mariners in distress with DSC-equipped radios to transmit, at the push of a button, their exact GPS position and vital vessel information to the Coast Guard and other DSC-equipped vessels;
- Improved clarity, recording, and playback capabilities for all communications;
- Simultaneous monitoring and relaying of information over multiple radio frequencies;
- Portable tower communications equipment for use during emergencies and natural disasters;
- Automated transmission of urgent marine information broadcasts; and
- Geographic display to assist in identifying hoax callers, conserving valuable response resources.

Digital Selective Calling (DSC)

Rescue 21 includes Digital Selective Calling (DSC), which allows mariners with DSC-capable radios that have been pre-registered with the Boat Owners Association of the United States (BoatUS) to transmit vessel information to the Coast Guard in emergencies.¹ DSC support and direction-finding capability help the Coast Guard locate and assist distressed vessels more quickly. DSC uses a Maritime Mobile Service Identity (MMSI) number to associate the boat owner and his or her contact information (i.e., boat owner name, type of boat, email and home address, and emergency contact) for automated distress calls. DSC allows the distressed boater to push a red button on his or her VHF radio and automatically send his or her information and global positioning system (GPS) location to the Coast Guard.

DSC facilitates Rescue 21 search and rescue operations by automatically transmitting contact and location information from a distressed boater to the Coast Guard. To register their

¹ Note that there is no registration requirement for Coast Guard Search and Rescue. However, BoatUS offers a service, in coordination with the Coast Guard, to facilitate search and rescue efforts of boaters opt to register for an MMSI.



vessel, boat owners provide vessel and personal information to BoatUS in exchange for a unique nine digit MMSI number. BoatUS is privately owned and operated boat owners association offering various boater safety and towing services to its members. BoatUS provides MMSI numbers free to members, however for non-members an MMSI number costs a nominal fee and includes a year of BoatUS membership. BoatUS has been authorized by both the Federal Communications Commission (FCC) and the U.S. Coast Guard to assign MMSI numbers only to vessels that meet the following criteria:

- Used for recreation only;
- Not required by law to carry a radio; and
- Do not make international voyages or communications.

Similar to a cell phone number, the MMSI is the unique calling number for a DSC VHF. It also registers the boat information in the U.S. Coast Guard's national distress database for use in emergency situations. An MMSI number is transmitted with a DSC call, like "caller ID."

BoatUS transfers boat owner and vessel information to the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) System on a weekly basis to coordinate search and rescue resources. Rescue 21 does not interface with the public in acquiring and maintaining boater information.

DSC radios have a one-button emergency transmit button that sends the vessel's unique MMSI number. Rescue 21 receives the MMSI number from the distressed boater and automatically queries MISLE for details (i.e., vessel and personal information) and presents this data to the Coast Guard watch-stander in real time. Rescue 21 is located at Coast Guard Sector Command Centers and various USCG stations. USCG watchstanders are granted user access to Rescue 21 upon reporting (with supervisor's endorsement); however, access permissions are terminated when the individual departs the command.

Section 1.0 Authorities and Other Requirements

1.1 What specific legal authorities and/or agreements permit and define the collection of information by the project in question?

The Coast Guard is authorized to collect this information and conduct this mission under the authorities of 14 U.S.C. §§ 2, 88, 674, and 676.



1.2 What Privacy Act System of Records Notice(s) (SORN(s)) apply to the information?

Information collected and used by Rescue 21 is covered by the DHS/USCG-013 Marine Information for Safety and Law Enforcement (MISLE) SORN.²

1.3 Has a system security plan been completed for the information system(s) supporting the project?

Yes, the Rescue 21 system has a FISMA identification number: USC-00766-MAJ-00766. Authority to Operate is pending the completion of this PIA.

1.4 Does a records retention schedule approved by the National Archives and Records Administration (NARA) exist?

Yes. PII that is relevant to a SAR case is only required for the duration of the active SAR event. Audio files are maintained online for 30 days on the Data Server located at each Sector facility, after 30 days the data is then archived from the Data Server to the Network Attached Storage device located in the same Sector facility.

All non-identifiable Rescue 21 SAR data may be overwritten within 30 days. All Rescue 21 records are cutoff within MISLE at the end of the calendar year in which the SAR case is closed, and then transferred to the Federal Records Center three years after cutoff. Records are transferred to NARA fifteen years after cutoff (AUTH: N1-026-06-7).

1.5 If the information is covered by the Paperwork Reduction Act (PRA), provide the OMB Control number and the agency number for the collection. If there are multiple forms, include a list in an appendix.

The PRA does not apply because Rescue 21 does not collect any information directly from the public.

² 74 FR 30305 (June 25, 2009).



Section 2.0 Characterization of the Information

2.1 Identify the information the project collects, uses, disseminates, or maintains.

DSC facilitates Rescue 21 search and rescue operations by automating the transmission of contact and location information from the distressed boater to the Coast Guard. Boat owners are not required to register for an MMSI number, however it does assist the Coast Guard during SAR operations.

Boat owners provide their vessel (type of boat) and personal information (name, home address, email, type of boat, and emergency contact) to BoatUS in exchange for a unique nine digit MMSI number. Rescue 21 leverages boat owner information collected by BoatUS and maintained by the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) System to coordinate search and rescue resources.

Rescue 21 uses the following information collected by BoatUS and maintained by MISLE:

- Maritime Mobile Service Identity (MMSI) number;
- Name;
- Address;
- Home phone number;
- Email address;
- BoatUS membership number; and
- Name of emergency contact.

2.2 What are the sources of the information and how is the information collected for the project?

The Rescue 21 system does not collect information directly from the mariner. Boaters interested in obtaining a MMSI number must apply through BoatUS. BoatUS transfers and updates the MMSI, vessel, and personal information to the Coast Guard weekly for inclusion in the MISLE database. Rescue 21 queries the MISLE database in real-time for the related MMSI data via a front-end MISLE web server and html commands and coordinates search and rescue resources for response. Automated synchronization of the MISLE and BoatUS databases are performed daily.



2.3 Does the project use information from commercial sources or publicly available data? If so, explain why and how this information is used.

No. The Coast Guard uses information submitted directly from individual mariners who register for an MMSI number from BoatUS. Rescue 21 does not enhance the boater contact and vessel information with any other commercial or publicly available information.

2.4 Discuss how accuracy of the data is ensured.

Boaters interested in obtaining a MMSI number must complete, validate, and submit an application to BoatUS. BoatUS follows up with the boater via email after 18 months to validate accuracy of the boater information on file submitted in the registration application noted in Section 2.1. Synchronization of the MISLE and BoatUS databases are performed daily. This is done via an automated process that queries the BoatUS file transfer protocol (FTP) server for the updated database file. If the file on the BoatUS FTP server is newer than the database currently in use within MISLE, the new file is downloaded and extracted into the MISLE database. This update overwrites all MISLE database entries to include new and modified records.

2.5 Privacy Impact Analysis: Related to Characterization of the Information

Privacy Risk: It is possible that information used to coordinate search and response operations may be inaccurate.

Mitigation: Boaters interested in obtaining a MMSI number must complete, validate, and submit an application to BoatUS. BoatUS follows up with the boater after 18 months to validate information on file. In the event Rescue 21 discovers erroneous information, MISLE will be contacted to advise BoatUS of the discrepancy.

Section 3.0 Uses of the Information

3.1 Describe how and why the project uses the information.

MMSI and related PII information is only used when a boater uses the Digital Selective Calling (DSC) feature of his or her radio. This feature provides Rescue 21 with the location and MMSI number of the vessel reporting a distress. The MMSI number is automatically obtained from the MISLE system and displayed to the operator. The GPS position that is transmitted by the boater allows for the graphical display on the operator's workstation of the current position of the boat in distress. The combination of MMSI information and GPS position allows the SAR



coordinator to provide fast response of CG assets. USCG watchstanders access this information when a distress signal is received in order to notify emergency contacts and coordinate the rescue.

3.2 Does the project use technology to conduct electronic searches, queries, or analyses in an electronic database to discover or locate a predictive pattern or an anomaly? If so, state how DHS plans to use such results.

No.

3.3 Are there other components with assigned roles and responsibilities within the system?

No, this database is only accessed by Coast Guard watchstanders when a distress signal is received in order to coordinate the search and rescue response.

3.4 Privacy Impact Analysis: Related to the Uses of Information

Privacy Risk: USCG watchstanders may use this information for other unauthorized purposes.

Mitigation: Rescue 21 users sign a Rules of Behavior form by which users agree to adhere to the proper use of government information and equipment when being processed for access to Rescue 21 system. Unauthorized use would result in administrative and or punitive actions.

Section 4.0 Notice

4.1 How does the project provide individuals notice prior to the collection of information? If notice is not provided, explain why not.

Rescue 21 does not collect information from individuals; notice for collection of information is provided by BoatUS and the DHS/USCG-013 Marine Information for Safety and Law Enforcement (MISLE) SORN. Current notice provided by BoatUS can be located on their website at <http://www.boatus.com/mmsi/>. Boaters are not required to register for an MMSI number from BoatUS. The Coast Guard provides SAR assistance to all mariners.



4.2 What opportunities are available for individuals to consent to uses, decline to provide information, or opt out of the project?

Individuals may choose not to provide the requested information to BoatUS. Rescue 21 does not collect information directly from the individual.

4.3 Privacy Impact Analysis: Related to Notice

Privacy Risk: Boaters may not be aware their information submitted to BoatUS is being used by the Coast Guard.

Mitigation: When a boater applies for a MMSI number, BoatUS informs him or her that his or her information is transferred to MISLE weekly and offers a robust Frequently Asked Questions page that informs BoatUS members about how their information is used by USCG.

Section 5.0 Data Retention by the project

5.1 Explain how long and for what reason the information is retained.

PII that is relevant to a SAR case is only required for the duration of the active SAR event. Audio files are maintained online for 30 days on the Data Server located at each Sector facility, after 30 days the data is then archived from the Data Server to the Network Attached Storage device located in the same Sector facility.

All non-identifiable Rescue 21 SAR data may be overwritten within 30 days. All Rescue 21 records are cutoff within MISLE at the end of the calendar year in which the SAR case is closed, and then transferred to the Federal Records Center three years after cutoff. Records are transferred to NARA fifteen years after cutoff (AUTH: N1-026-06-7).

5.2 Privacy Impact Analysis: Related to Retention

Privacy Risk: Rescue 21 may retain information for longer than is necessary to accomplish a search and rescue mission.

Mitigation: This risk is mitigated because Rescue 21 only retains information for as long as it pertains to an active SAR case before it is extracted and archived into MISLE (typically within 30 days). Per the NARA-approved records schedule, SAR data is maintained permanently. However, it is not necessary that Rescue 21 retain this information once the SAR case is closed.



Section 6.0 Information Sharing

6.1 Is information shared outside of DHS as part of the normal agency operations? If so, identify the organization(s) and how the information is accessed and how it is to be used.

Rescue 21 does not share PII outside of DHS during normal SAR operations. The Coast Guard coordinates with state and local authorities during SAR operations through MISLE.

6.2 Describe how the external sharing noted in 6.1 is compatible with the SORN noted in 1.2.

Not applicable; Rescue 21 does not share information externally.

6.3 Does the project place limitations on re-dissemination?

Not applicable; Rescue 21 does not share information externally.

6.4 Describe how the project maintains a record of any disclosures outside of the Department.

Not applicable; Rescue 21 does not share information externally.

6.5 Privacy Impact Analysis: Related to Information Sharing

Rescue 21 does not share information outside of the Coast Guard. Therefore, there is no privacy risk to information sharing.

Section 7.0 Redress

7.1 What are the procedures that allow individuals to access their information?

Individuals may contact BoatUS directly to update their MMSI information, which includes modifying their existing MMSI application and canceling their MMSI number if no longer needed.

Individuals seeking access to their data may also submit a Privacy Act request in writing to USCG, Commandant (CG-611), 2703 Martin Luther King Jr. Avenue SE, STOP 7710, Attn: Freedom of Information Act (FOIA) Coordinator, Washington, D.C. 20593-7710. Individuals may also submit a request to EFOIA@uscg.mil.



7.2 What procedures are in place to allow the subject individual to correct inaccurate or erroneous information?

Individuals should contact BoatUS or may seek to correct their information through a Privacy Act request as cited in Section 7.1 above.

7.3 How does the project notify individuals about the procedures for correcting their information?

Individuals are provided notification through this PIA and DHS/USCG-013 Marine Information for Safety and Law Enforcement SORN.

7.4 Privacy Impact Analysis: Related to Redress

Privacy Risk: There is a risk that individuals may not have the opportunity to correct, access, or amend inaccurate information maintained by USCG.

Mitigation: Boaters have an opportunity to access, correct, or amend inaccurate BoatUS information about them by contacting BoatUS directly. Boaters may also seek access to records sent to USCG from BoatUS by submitting a Freedom of Information Act or Privacy Act request.

Section 8.0 Auditing and Accountability

8.1 How does the project ensure that the information is used in accordance with stated practices in this PIA?

Rescue 21 employs automated tools to manage access to the system. Automated tools are also employed for audit collection and accountability.

8.2 Describe what privacy training is provided to users either generally or specifically relevant to the project.

All Coast Guard members are required to complete annual DHS mandated privacy and cyber awareness trainings entitled, DHS Protecting Personal Information and Federal Cyber Awareness Challenge.

8.3 What procedures are in place to determine which users may access the information and how does the project determine who has access?

Only authorized Rescue 21 system operators have “read” access to the PII associated with caller details and MMSIs. Sector Command Center supervisors determine which personnel



need access to Rescue 21 for performance of their duties. Rescue 21 system uses Advanced Encryption Standard (AES) 256 bit link encryption for communication transport. For data transport to Rescue 21 in Alaska, a two way Secure Socket Layer (SSL) connection is established to automatically exchange Department of Defense certificates for authentication in addition to standard link encryption.

8.4 How does the project review and approve information sharing agreements, MOUs, new uses of the information, new access to the system by organizations within DHS and outside?

The Rescue 21 system establishes Memoranda of Agreement and Interconnecting Security Agreements (ISA) that are signed by the Coast Guard Authorization Official or Rescue 21 Program Manager as appropriate. Rescue 21 established an ISA to capture the access to the MISLE database.

Responsible Officials

Commander John Henry
Rescue 21 System Owner (C3CEN)
U.S. Coast Guard
Department of Homeland Security

Approval Signature

Original signed PIA on file with DHS PRIV.

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