

### **About the Course**

The Small Vessel Maritime Radiological and Nuclear Detection Operations Course (SV-RND), as part of the National Association of State Boating Law Administrators (NASBLA) Boat Operations and Training (BOAT) Program, was developed in coordination with the United States (U.S.) Department of Homeland Security (DHS) Domestic Nuclear Detection Office (DNDO), in support of the Global Nuclear Detection Architecture (GNDA).

DNDO's mission is to reduce the risk of nuclear terrorism against the U.S. by continuously improving capabilities to deter, respond to, and attribute attacks, in coordination with domestic and international partners. DNDO provides support to stakeholder agencies in establishing the Radiological and Nuclear Detection (RND) programs through its Operations Support Directorate (OSD).

Participation in this training supports national security by increasing awareness in operational, planning, and programmatic capabilities for steady state, enhanced steady state, and search requirements in nuclear detection for Federal, state, and local law enforcement and public safety professionals.

## **Course Purpose**

The SV-RND Course is designed to elevate and enhance the RND capabilities of officers, agencies and regions to conduct steady state, enhanced steady state, and search operations on the waters of the United States, through a review of RND fundamentals and equipment, and development of operational procedures and response methods.

## **Method of Delivery/Course Structure**

The course is exportable and delivered to the location of the host agency and the venue of their choice. This allows students to practice in the area they operate in, and on the vessels they operate on. The course is delivered using "team teaching" as the model, where all instructors are engaged in every module within the course, so that students get multiple views and experiences to support and enhance the learning environment. This course consists of instructor lecture, which will be aided (and assessed) by slide presentations, class interaction, practical exercises, a knowledge test and final exam. The instructor will emphasize student interaction and discussion throughout the course to ensure that the information taught is being understood and can be applied in a real-world environment.





#### **Class Size/Student to Instructor Ratio**

The minimum class size is 12 students, the maximum number is 20. Instructors for each class will meet a maximum of 4 students per instructor for each class (4 to 1 Student to Instructor Ratio.)

## **Student Course Requirements**

Students are required to bring the RND equipment assigned or issued to them for this course, including but not limited to pagers, RIID's, and Backpacks. Students will be required to bring appropriate foul weather gear for the area and time of the training, appropriate personal flotation device for the environment at the time of the training with consideration of air and water temperature, and appropriate clothing to conduct the exercises during the week.

## **Host Agency Facility and Material Requirements**

In order to deliver the course, a classroom area will have to be provided that will seat at tables up to 40 people.

Additionally, the classroom will require a projector a screen, a whiteboard and/or easel boards with paper, writing instruments, power cords, sound speakers, bathroom facilities, and dock space for vessels in close proximity to the classroom.



Additionally, agencies and departments will be required to provide a vessel for the students that will be attending (ideal ratio of one vessel for every 4 students) in order for them to learn how to apply the skills on the vessels that they will be operating on, and in their area of operation.

The host agency is also required to provide controlled source material. Coordination of this requirement will be made through the NASBLA BOAT Program Manager assigned to the SV-RND courses.

### **Materials Provided**

Each student will be provided a "Student Handbook" complete with every slide and some reference material they can use for future application. Additionally, students who would like copies of the modules will be allowed access to the "Instructor Portal" to facilitate the sharing of information. Within 30 days of completion of the course, students will be provided a certificate from NASBLA's National Headquarters in Lexington, KY and will be entered into the national database of trained BOAT Crew Members.



### Criteria Performance Standard

Upon successful completion of the course, the student will demonstrate mastery of each of the objectives outlined in each module through a compilation of measures including objective testing, scenario review, class discussion, practical activities and homework.

### **Course Cost**

The fee for the three day/24 hour course is \$23,500 for up to 20 students, and covers all instructor costs (travel, per diem, fees, etc.,) administrative costs (certificates, database entry, etc.,) and materials (student handbooks, practical exercise materials, etc.) Course with under 20 students will be quoted on a case-by-case basis with a minimum requirement of 12 students. Note that payment or an appropriate purchase order is required 45 days prior to the convening date of the class in order to conduct the necessary planning and logistics coordination need to deliver the course on the desired date.

#### **CONTACT INFORMATION:**

NASBLA Boat Operations and Training (BOAT) Program (o) 859.225.9487 (e) info@nasbla.org (w) www.nasbla.org/BOAT

### Course Breakdown

The M-RND Course is a three day, 24 hours course, designed for maritime law enforcement officers who have been trained and issued RND equipment.

Through review of RND principles, operation of equipment, and application exercises on the water, officers will enhance their capability to detect sources on and around the maritime environment.

Module One: Threats, Pathways, and

Suspect Indicators

Using all available intelligence and information sources, students will be able to name and describe various threat groups, threat pathways, and types of



radiological/nuclear (RN) weapons terrorists or other entities could use against United States.

Module Two: RND Fundamentals

Students will be able to identify Basic radiological terms, forms of radiation, biological effects, ways to reduce risk (ALARA), sources of background, commonly encountered radiation, and four screening tools well suited in maritime environments.



Module Three: Sources and Equipment

Students will list and explain the four classifications of radioactive sources and name at least two radiation detection instruments commonly used on the maritime environment.

Module Four: Reachback

This module will enable the student to articulate the need for Reachback, process to be used, and information to be provided when using Reachback.

Module Five: RND Alarm Response

The student will be able to perform Primary Screening and Secondary Inspection processes in a maritime environment.

Module Six: Mobile Maritime RND Operations

Given pierside and underway radiation/nuclear situation, the student will be able to demonstrate proper procedures to detect, verify, locate, measure, and identify suspected RN source.

Module 7 Maritime Safety/Tactical Positioning and Awareness

Students will demonstrate ability to conduct steady state, enhanced steady state, search/surge operations utilizing RND capabilities to isolate and adjudicate alarms.

**NOTE:** Course Schedule is subject to change at each delivery and is dependent on weather, facility, platform, equipment, circumstances and/or student complications, and left to the discretion of the Lead Instructor.