

# 3 Day Radar Observer (Rivers)

## COURSE DESCRIPTION

This course provides training in the basic theory and operational use of marine radar to maintain situational awareness; the methods used to determine a contacts range, bearing, CPA, time to CPA, course and speed; how to determine own ship's course and speed changes to avoid collision; maintaining a navigational plot, and the proper use of operational controls to obtain an optimal display and performance of the set. The course includes a discussion of the Rules of the Road as they relate to the use of radar.

## COURSE APPROVAL

This is a USCG approved course. The student successfully completing this course will have satisfied the licensing requirements of 46 CFR 10.209, 46 CFR 10.305 (c)(3), and 46 CFR 10.480 for endorsement as Radar Observer (Rivers).COURSE SCHEDULE

	Day 1	Day 2	Day 3
<b>Morning</b>	Introduction, Legal aspects of Radar and USCG Regulations	Collision Avoidance [Visual Techniques]	Radar Operation and Navigation practice
	Radar and the Navigation Rules		
	Fundamental Theory [Basic Radar Principles, Constants and Components]		
	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>
<b>Afternoon</b>	Marine Radar Performance specification	The Use of Radar in Navigation	Review and final assessment [Theory]
	Setting up and maintaining displays		Review and final assessment [Practical]
	Fundamental Theory [Factors Affecting Radar Performance]		Course Critique

## COURSE REQUIREMENTS

Mariners entering this course should have some bridge watching experience and a fundamental knowledge of navigation.

An examination is given on the last day of the course. It will comprise a written section and a practical section. The written section covers radar fundamentals. The practical section is given in a simulator. It covers basic radar navigation position fixing and the analysis of radar contacts using radar to determine risk of collision and to decide what action should be taken.