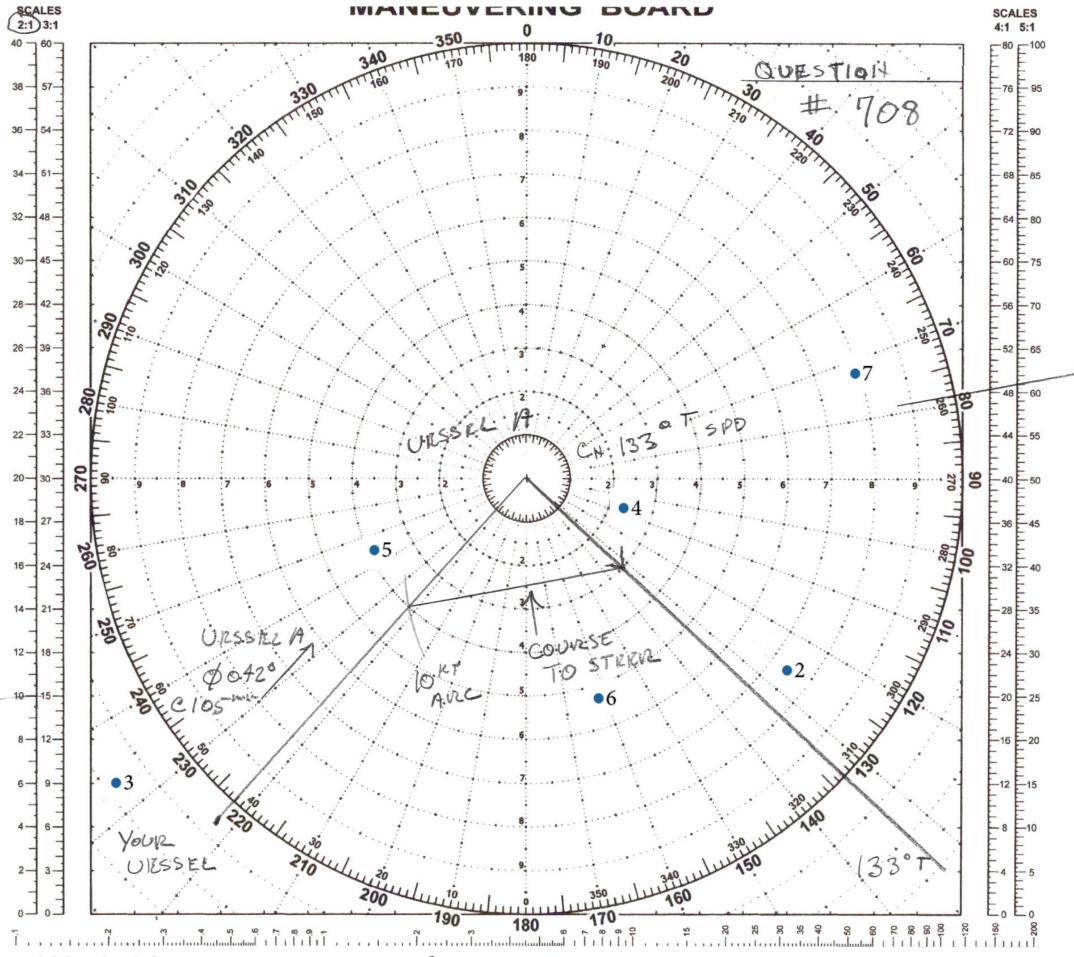
NGNC - Vessel Intercept

USCG Navigation General (Near Coastal) Question 708 You are enroute to assist vessel A. Vessel A is underway at 6 knots on course 133°T, and bears 042° at 105 miles from you. What is the course to steer at 10 knots to intercept vessel A?

The student will need a maneuvering board and plotting tool to solve this type of problem.

- 1 Read the entire question. Clarify what is being requested.
- •2 Plot position of Vessel A at the center. Draw a trackline of 133° T from the center to outer ring. See the completed maneuvering board on the following page. There is a blank maneuvering board you may print out in the resources folder and there is a video on how to use a maneuvering board in the first video folder on the flash drive, "introToCharts / MAintroToManeuveringBoard.mp4".
- •3 Using an appropriate scale, (10:1) plot your ship's position. Using bearing 042° T at 105 miles looking at Vessel A, draw a line connecting these two points.
- •4 Using an appropriate scale, (2:1) plot a vector representing Vessel A speed 6 knots on course 133° T.
- •5 Using 2:1 scale, measure your ship's speed using compass. Placing the point on the tip of Vessel A speed vector. Swing the arc until it crosses the bearing line from your vessel to Vessel A in the center.
- •6 Draw a line connecting the where the arc meets the bearing line and tip of speed vector.
- •7 Transfer this line to the center then read the correct course to steer on the outer ring. 079° T

Answer: Course 079° T



USCG NGNC Question 708 Maneuvering Board