

Final Evaluation of Students in the Instructor Development Course

The Final Evaluation (final exam) for the ID course is designed to assess the student's ability to plan for and successfully teach USPS courses and seminars. It consists of two, equally important parts:

1. Evaluation of the student's 15-minute presentation by the local instructor according to the checklist and criteria in the *Instructor Manual* and on the ID Course webpage, and
2. Evaluation and Review of the student's 1-hour lesson plan, the responsibility for which is shared by the local instructor and the national ID Committee. The local instructor should review each student's lesson plan and provide feedback before it is submitted to IDCom. The lesson must be on a boating related topic.

The purpose of the ID course is to help those new to teaching build the skills and knowledge needed for successful teaching. This includes an ability to plan and organize materials and techniques that results in a strong learning environment.

The squadron evaluation of the 15-minute presentation is to insure that the student instructor has the necessary presentation skills to successfully communicate lesson content in a way meaningful to the student. The squadron evaluation of the 1-hour lesson plan measures how well the student instructor can apply the learning principles taught in the course in planning a lesson. The lesson plan review conducted by the national ID Committee is to insure that the level of the student instructor's understanding of the learning principles meets the standards set by USPS and NASBLA.

Please refer to the "Instructions" document that can be downloaded from the Instructor Development Course webpage at <http://www.usps.org/national/eddept/id/idcourse.htm> for details on how to conduct and submit the necessary documents for the final evaluation.

Note: National committees develop the objectives and content of USPS courses and seminars. While guidelines are provided, it is the **local instructor's responsibility to adjust** the content to the students in his or her class, while still teaching the key concepts and skills covered in *Student Manual*.

Examples of Lesson Plans

There are many ways to write a successful 1-hour lesson plan. The three examples that follow are ones actually submitted by students completing the ID course and used with their permission.

Example of a 1-Hour Lesson Plan That Needed Revision	page 2
Example of Strong 1-Hour Lesson Plan	page 5
Another Example of a Strong 1-Hour Lesson Plan	page 10

Example of a 1-Hour Lesson Plan That Needed Revision

The following 1-hour lesson plan received a score of 62 the first time it was submitted. The person who evaluated it said in their comments, “Lesson content provides good information. The focus of the lesson plan appears to be on the information and not the learner’s understanding of the information. The instructor does not indicate how a personal delivery would strengthen audience understanding.” The evaluator continues with 5 additional paragraphs of specific suggestions on how the lesson plan could be strengthened. The student revised their initial lesson plan, resubmitted it, received a passing score of 92, and passed the course.

Lesson Plan		
[Name removed]		Planning a Great Loop
Overall Presentation Time = 60 Minutes		
Materials Required: PowerPoint Presentation, Internet Connection, Handouts, Large Map		
Instructional Purpose	Actions and Details: Instructional method, examples, questions to ask	Teaching Aids, Resources and Notes
Gain Attention, Motivation Time: 1 minute	Ask question: Have any of you ever taken an extended trip on your boat? Or dreamed of taking a year from your job and traveling on your boat?	Have website video playing in the background
State Goal or Objective Time: 30 seconds	The objective of this lesson is to describe the process of planning a Great Loop Cruise. We'll discuss what is the Great Loop, planning the timing of the trip, purchasing the right boat, and provisioning for the trip.	
What is the Great Loop? Time: 10 minutes	What is the Great Loop? Explain the route, giving the alternative routes that are available. Travel counterclockwise, starting in Stuart Florida, up the Intracoastal waterway, through Chesapeake Bay, back to the ICW, to New York Harbor. Then the Hudson River to the Erie Canal and through the Great Lakes. The route continues to Chicago, the Illinois River then onto the Mississippi River. The loop then follows the Ohio and Tennessee Rivers to Mobile, Alabama, and then back to Florida.	
What are alternative routes? Time: 5 minutes	Some loopers add 1500 miles to trip by heading North from New York harbor to the St. Lawrence River to Lake Ontario. Some loopers stay on the Mississippi through New Orleans. In Florida, either take the Okeechobee canal back to Stuart, or travel through the Keys to return to the East Coast.	Large Map to show route Show alternatives on Map

	How much time do you have? Some loopers do the trip all in one year, others break it up into parts, storing the boat and going back to work in between legs of the journey.	
Planning your Trip Time: 15 minutes	If you decide to do in one trip, you must plan carefully as the northernmost section of the trip has a very short window of navigation, July 1st through August 30th. Before or after those dates, the weather is too cold for comfortable cruising. Also need to avoid hurricane season in Florida to avoid the storms.	Show "climate" map, determining when you should travel in each section
	Your budget determines whether you will be "roughing it" (anchoring) or staying in marinas. It will also determine the speed at which you travel, since your boat may be more efficient at slower speeds. It will also determine the route you take and the amount of time you spend cruising. a 20 week trip can cost almost \$19K, while a 54 week trip could cost \$46K. About \$900 per week.	What do you think is the cost of such a trip?
	Study current maps and charts. This will help you plan for fuel stops, marinas for overnight stays, locks and bridge openings. You'll also need to check for any hazards to navigation.	
Medial Summary Time: 1 minute	Brief summary: Plan your trip carefully, including establishing a budget, a time table, and your chosen route.	
Selecting a boat Time: 10 minutes	There is no such thing as the perfect boat for doing the Great Loop. Every choice is a compromise. Get to know your boat before you start your trip.	
	People have made the loop in yachts, and in kayaks and jet skis. Most people choose a trawler type boat that is comfortable enough to live on for an extended period of time. Recommendations: Single engine boat is better (less maintenance), don't leave without an autopilot.	
	Don't attempt this trip unless one of you can fix stuff on the boat. Doesn't matter if the boat is old or new, things will break. If you buy an old boat, buy a quality brand like Grand Banks or Hatteras.	

Provisioning your boat Time: 10 minutes	Spare parts are crucial, as emergency repairs may need to be made when far from the nearest marina.	
	Stock of food is not necessary for the whole trip, as you will be visiting marinas quite often and can restock your larders when at the marina.	
	You don't need equipment such as washer dryer, ice maker, water maker, trash compactor, etc. More stuff to break and isn't necessary since you'll be visiting marinas often.	
Where to get more information Time: 5 minutes	There are a multitude of books, eds, websites, etc. to help you plan your trip. There is also Support Groups such as the AGLCA (America's Great Loop Cruisers Association) that give you assistance.	Handout with books, websites, etc.
Final Summary Time: 30 seconds	Selecting your boat is crucial, old or new doesn't matter. You will spend more to maintain and older boat, so buy a quality brand. At least one crew member should be able to fix things that go wrong, and don't go overboard on food provisioning as you will be able to restock frequently.	

Example of Strong 1-Hour Lesson Plan

The initial submission of the following 1-hour lesson plan received a score of 97. The person evaluating the lesson plan said in their comments “Well-designed lesson. Very good use of questions. Use of wait time after asking questions and demonstrating follow-up questions for anticipated learning problems would strengthen the lesson plan. On the timing of the role-play I wonder how much repeating could occur in the designated time? Do you use actual sounds for the nav aids? You have put the students in the learning situation and allowed them to process the experience. Well done.”

In hindsight, since the lesson was part of an ongoing course, “Homework” and “Preview of Next Lesson” are appropriate, and since they were not included, 4 additional points should have been subtracted for failure to address them (“See them next class” is not a preview of how the course will move forward). However, a score of 93 is still an excellent score, and in both cases the student passes the course.

USPS Instructor Development Course [Name Removed] Z123456 pg 1

Course: Seamanship		Lesson Title: Ch 4, Handling at Sea Topic: Reduced Visibility	
Overall Presentation Time for Lesson: 60 minutes			
Materials Required: chairs in front of room, label cards for chairs as either buoy or boat, (references): blindfold Power Point presentation, laptop, projector, screen, extension cord, power strip signal flashlights, signal cue cards			
Instructional Purpose	Actions & Details: Instructional Method, Examples, Questions to Ask, Teaching Aids		Resources & Notes
Gain Attention Motivation Time: 10 minutes	<p style="text-align: center;">SMILE! & Greet Students</p> <p>Method: Share Personal experience of difficulty navigating in fog. Ask students if they have had similar experiences? If not, relate to similar condition like heavy rain/fog, snow storm or blizzard to help students visualize the situation)</p> <p>Method: Demonstration & Role Play Place several chairs in front of the room and label them as buoys or boats.</p> <p>Situation: Tell the class that an unexpected weather change has occurred and that there is restricted visibility</p> <p>Ask for volunteers to sit in chairs and play role of buoy or boat and identify their obstacle when he Captain approaches.</p> <p>Ask for a "Captain" to pilot through the area</p> <p>Instruct the "Captain" that there is restricted visibility, He/she is to wear the blindfold or close his/her eyes and pilot the boat into home port</p> <p>Repeat with several students participating in various roles.</p>		<p>personal interaction</p> <p>Teaching aids: chairs in front of room, label cards for chairs as either "buoy" or "boat"</p> <p>Note: Tell students to play role assigned, but to prevent Captain from injury during simulation</p> <p>Blindfold</p> <p>Role play</p>

	Ask group about the difficulty encountered in piloting the boat	discussion
State Goal or Objective Time: 3 minutes	Method: Presentation, Tell the students that after this class they will have practical knowledge to navigate safely in restricted visibility situations. Students will verbalize and demonstrate: - What aids to navigation are designed for restricted visibility - How to aids to navigation are used to make safe passage - Actions to be taken when encountering restricted visibility	PowerPoint slides of class Goal & Objectives Reinforce material from ABC Course and Seamanship chapters and builds on prior knowledge
Recall Prerequisites Time: 5 minutes	Method: Students read assigned homework Chapter 4 pre/post class & have life experience in situations Method: Question & Answer, Discussion Q: On the highway, what informs drivers of unsafe driving conditions? What are the aids to driving? A: (Students respond) Possible responses might include: Slippery when wet, Bridge freezes, Electronic Reduce Speed signs, Road conditions changing, "Bump ahead", Curve ahead (often visual rather than sound) Q; What are some examples of aids to boaters for navigation hazards? A: (Students response) Possible responses might include: Buoys, beacons & markers, navigation charts, Q: What are useful in restricted visibility? A: (Students response) Light & sounds signals, navigation lights, navigation charts	Text read & homework Establish a comparison between familiar "land" aids and "water" aids PowerPoint slides of buoys, beacons. Navigation charts showing hazards
Present Information Time: 15 minutes	Method: Presentation & discussion using PowerPoint slides covering the following information: <u>Aids to Navigation</u> light & sound signals in restricted visibility in conjunction with nautical charts, tell you (1) where you are, (2) help you reach your destination safely (3) serve as collision avoidance Review: Lighted Marks -how to identify aid lighted for visibility * Lights on lateral marks match the color of the mark-red or green * Lights on preferred-channel marks have light color matching top band of color * Lights on safe-water and isolated- danger buoys have white	PowerPoint slides of buoy/beacons. showing types & symbols on chart Slides for safe actions to be taken Slides of Vessel sound signals Review reinforces previous knowledge and association of information about navigation aids and

	<p>lights * Special-purpose buoys have yellow lights</p> <p>Aids to Navigation Buoys & Beacons sound signals shown on charts,</p> <p>Sound signals for Boats in restricted Visibility: Horn or bell</p> <p>Review vessel Sound Signals: Power boat making way; 1 Long blast, interval at least every 2 minutes Power boat stopped; 2 Long blasts interval at least every 2 minutes Sail, Towing, unable to maneuver, disabled; 1 Long & 2 short blasts interval at least every 2 minutes</p> <p>DANGER, In doubt or disagree; 5+ short blasts</p>	<p>meaning with their role in a practical situation of restricted visibility, ie: warns of danger, aids in finding position, helps pilot a safe course & reinforces action plan to be followed</p> <p>Power Point Presentation of information for visual and audio sensory component</p> <p>Discussion of material</p>
<p>Elicit Student Engagement And Provide for Practice</p> <p>Time: 10 minutes</p>	<p>Method: Demonstration & Role Play - Repeat above group activity exercise with addition of new material presented</p> <p>Set up demonstration: Place chairs in front of the room and label them as "buoys" or "boats" with cue cards specifying the designated light & sound signals.</p> <p>Ask for a volunteers to sit in chairs and play role of "buoy" or "boat" and to follow the signal pattern designated on the cue card with flashlight &/or sound. Ask for a "Captain" to pilot through the area</p> <p>Instruct (the situation) Tell the class that unexpected weather change has occurred and that there is restricted visibility, but this time there will be navigational aids to assist. The "Captain" is to wear the blindfold or close his/her eyes and pilot the boat into home port</p> <p>Repeat with several students in various roles.</p>	<p>Role play & demonstration of material presented</p> <p>Teaching aids: chairs in front of room, label cards for chairs as either "buoy" or "boat"</p> <p>Cue cards with light & sound signals for "buoys" & "boats"</p> <p>Flashlight for light signal</p> <p>Note: Tell students to play role assigned, but to prevent Captain from injury during simulation</p> <p>blindfold</p>
<p>Feedback and Medial Summary</p> <p>Time: 4 minutes</p>	<p>Method: Discussion and Q&A about the above activity which serves as an enactment & summary of presentation information. Ask the students about the difficulty and differences encountered in piloting the boat through each exercise.</p>	<p>Discussion, feedback</p>

	<p>Q; How difficult was it to navigate through the first exercise?</p> <p>Q: How much difference did the addition of the light & sound cues make in the second exercise?</p>	
<p>Check for Understanding</p> <p>Time: 5 minutes</p>	<p>Method: Discussion and Q&A, Presentation</p> <p>Let's see how well we understand what we have learned so far:</p> <p>Q What is role of ATONs and vessel actions in these situations?</p> <p>A: (expected student responses) light & sound signals, charts and navigation tools help the Captain when visibility is restricted. Boaters need to know waters they are traveling, how to execute and understand the signals</p> <p>Now that we learned about aids to navigation during restricted visibility, let's consider what other actions can/should be taken by the prudent captain?</p> <p><u>Actions to be taken:</u></p> <p>Q: What should the Captain do in advance?</p> <p>A: Monitor weather conditions, instruct crew & guests, don PFDs (& safety harness), tum on navigation lights</p> <p>Q: When Restricted visibility conditions occur what needs to be done?</p> <p>A: Reduce speed (able to stop in ½ distance), Post look outs-Look for signal lights, Listen for sound signals</p> <p>Monitor VHF Radio CH16, NOAA weather, radar, GPS</p> <p>Q: What else if it becomes difficult to proceed?</p> <p>A: Plot/note position periodically, if necessary; anchor safely & OUT of Traffic lane, continue sound signals. Always take the safest action and alert others via radio and signals</p>	<p>provides an opportunity for feedback and review of material</p> <p>Questions prompt students to draw on previous knowledge and relate it to the restricted visibility situation presented</p> <p>Power Point slides of actions and equipment on boat to use</p>
<p>Conclusion Including Student Responses & Performance Assessment</p> <p>Time: 8 minutes</p>	<p>Method: Discussion and Q&A</p> <p>In this class, we discussed navigation issues in restricted visibility situations.</p> <p>We discussed the need for knowledge of the weather, local waters, hazards and aids.</p> <p>We discussed and practiced using sight and sound signals and the actions that should be taken by Captain, crew and guests on board.</p>	<p>Discussion to summarize and Review of information presented and integrate with information in other sections/courses, ie: ABC course, signaling, weather,</p>

	<p>Q: What would be prudent actions for the "Captain" prior to or anticipating these situations? Q: What would be the first actions the "Captain" implements when encountering restricted visibility? Q: What other action(s) should be taken? Q: Can anyone tell us what the sound signal for a power boat underway in restricted visibility is? Q: What is the sound signal indicating danger or unclear message? Q: Are there any other questions/comments? Q: Was exercise helpful? Suggestions for future classes?</p>	<p>safety measures</p> <p>Elicit student feedback on effectiveness of teaching methods & material</p>
	<p>Thank students for participating. See them next class!</p>	

Another Example of a Strong 1-Hour Lesson Plan

The initial submission of the following 1-hour lesson plan received a score of 95. The person who evaluated the lesson plan said in their comments “Very good lesson plan, lots of interaction. Good questions. I would like to see a finer breakdown of time rather than 30 min. to cover full area.” One point was subtracted for “Gain Attention Technique,” “Motivation” and “Elicit Student Engagement / Questions,” and two points were subtracted for “Checking for Understanding.”

NOTE: Including an image of individual slides, whenever possible (it is realized that students have different levels of computer proficiency), is extremely helpful in evaluating a lesson plan. When inserting an image is not feasible, a brief verbal description of what is on the slide is helpful. As discussed in the course, PowerPoint® is not in itself a teaching aid; rather it is what is on the slides that determines if the slide is a relevant teaching aid. A slide containing only bullets and words is not considered to be a teaching aid.

Course: Low Cost Navigation Solution – Seminar		Lesson Title: What’s on Your iPad?
Overall Presentation Time: 60 Minutes		
Materials Required: Two (2) Apple iPads (with IOS 7.1 installed), iPad Water Proof Cover, 20 PIN to USB Apple projector interface cable, iPad AC Power adapter, Laser Pointer, Student Hand-Outs, Laptop, Projector, Extension Cord, Power strip.		
Instructional Purpose	Actions & Details: Instructional Method, Examples, Questions to Ask	Teaching Aids, Resources & Notes
Gain Attention Motivation (8 minutes)	<p style="text-align: center;"><u>SMILE – WELCOME EVERYONE!</u></p> <p><u>PRIOR to class ensure iPad, external GPS receiver are interfaced – GPS position obtained and connected to projector – test interfaces and film clip</u></p> <ul style="list-style-type: none"> • Have the 3 minute clip from ‘Perfect Storm’ running as students enter classroom • After clip finishes - Introduction to material – Key Element – “It Doesn’t Cost a Lot to be a Safe Boater” • Introductions of yourself and ask questions to the class – Q “How many of you have electronics installed on your boat?” Q “How many of you would like a low cost solution to display electronic charts, hazards, tides, currents?” 	<ul style="list-style-type: none"> • <u>East Coast Coastal Cruiser Chart, 3rd Edition</u> Visual Aid to show students what they will see • iPad w/ IOS 7.1 • Waterproof cover!! • External GPS Receiver • Student Handouts: <ul style="list-style-type: none"> ○ <u>Dual</u> Wi-Fi GPS Receiver Satellite Status Page ○ NAVIMATICS Charting software screen showing Version ID ○ Web Site address listing for software used
State Goal or Objective (1 minute)	<p>Students will have acquired an understanding of:</p> <ul style="list-style-type: none"> • Students will have an understanding of chart symbols, basic navigation principals prior to class via email containing on-line study references • How to acquire low cost navigation, tides and currents applications for your iPad • How to use these applications to enhance the boating experience and safety on the water 	Each student should have reviewed study guide PRIOR to class to re–enforce chart symbols that will be used tonight. <ul style="list-style-type: none"> • Have one student volunteer to bring their iPad – instructor loads all apps on that iPad
Recall Prerequisites	Q “When you are on the water – what do you use to know where you are located? <u>Responses (R) could include:</u>	

<p>(3 minutes)</p>	<ul style="list-style-type: none"> • LAT/LONG • Buoy Numbers • Landmarks (Local Knowledge) <p>Q “How do you obtain a latitude and longitude position?”</p> <p><u>Responses could be:</u></p> <ul style="list-style-type: none"> • Hand held GPS • Installed display • My cell phone (how accurate is it?) • I have no idea! <p>Wouldn't something like this be useful – point to screen showing iPad display</p>	<p>iPad screen showing:</p> <ul style="list-style-type: none"> • LAT/LONG Display superimposed on current chart – location being downtown Wilmington, NC 
<p>Present Information</p> <p>(30 minutes)</p>	<p>Method: Instructor presents real time electronic charts on an iPad projected – to teach the use of low cost Apple iPad maritime charting, tides/currents, hazards and safety solutions. Instructor will present the following information.</p> <p>iPad Requirements</p> <ul style="list-style-type: none"> • Model independent • IOS 7.1 installed • External GPS Receiver <ul style="list-style-type: none"> ○ Why? Cellular capable iPad is not required – Wi-Fi model works very well (lowest cost model) ○ Cellular GPS isn't accurate enough for navigational uses ○ Present the self-contained Dual XGPS150 as an example of a low cost (\$99.00) very accurate – within 3 meters – geo-positional receiver ○ Capable of receiving signals from 14 satellites ○ Explain a “locked on” satellite ○ The more satellite locks you have the more accurate your position will become – need 6 satellites to have 3 meter accuracy • Before jumping into charting application let's review – <ul style="list-style-type: none"> ○ Q- What does a chart symbol showing FL G 61 4s mean? ○ R- 4 second flashing green # 61 ○ Q- What does chart symbol R 62 mean? ○ R- Red 62 channel buoy • Next software application is the chart plotting application <ul style="list-style-type: none"> ○ Describe the “free” NAVIMATICS charting package sponsored by Active Captain <ul style="list-style-type: none"> ▪ Supports routes, waypoints, elapsed time calculations, ICW markers ▪ Hazard identification to include comments from cruisers – near real time “local knowledge” ▪ All information/data presented on the screen 	<p>iPad Screen:</p> <ul style="list-style-type: none"> • Showing Dual GPS Receiver “satellite status” page • Describe signal strength and point out those satellites that have locked on to receiver • Point out the LAT/LON read out for Wilmington LAT: 34°14.112'N LON: 77°57.013'W • Position accuracy – 3 meters • Point to channel buoys on the screen  <ul style="list-style-type: none"> • Point out highlights from the NAVIMATICS East Coast chart showing Cape Fear River <ul style="list-style-type: none"> ○ Hazards markings ○ Channel buoys ○ Depths ○ Current and Tide Stations

- Explain Active Captain – Composed of Atlantic ICW cruisers who report hazards, marina reviews and safety recommendations
- With the iPad on and projected – move to and show how to:
 - Enter/position cursor for way point creation and naming
 - Connecting way points to create a route and naming – storage of routes
 - Demonstrate how to retrieve a route – show screen with route superimposed
 - Show ETA (estimated time of arrival – if moving)

SOLICIT QUESTIONS ON CHART DISPLAY, BUOYS, WAYPOINTS OR ROUTE CREATION AND DISPLAY – Before Moving Forward

- Let’s now look at the hazard reporting features of the NAVIMATICS application
 - Point to the “yellow square” on the displayed screen
 - Double click and show the ID of the hazard – in this case its shoaling at Snow’s Cut
 - Show the LAT/LON of the hazard on the display
 - Double click on the “yellow square” and show the “Comments” – made by other mariners about the hazard – in this case on 3/19/14 vessel *Stevadore* reported having 8 feet of water between R172 and R174
- Let’s now move to how do you find accurate tides and current information
 - Position the screen cursor on the blue triangle with the T – double click
 - Choose today’s date
- Currents
 - Position screen cursor on the blue triangle with the C – double click

Q “What time is the next HIGH tide today at this tide station on the Cape Fear River?”

R “About 2:45PM”

Q “And what is the current speed at the next LOW tide at this CURRENT station?”

R “Negative 2.5 knots”



- Show way-point and route directory
 - Pick a route and point out how it is displayed on the chart



Show chart with Snows Cut channel to Cape Fear River southbound – point to “yellow square” on chart

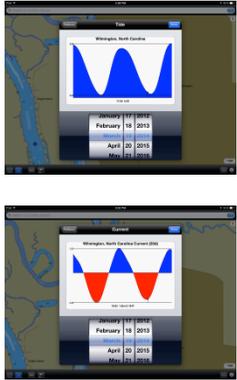


Highlight how useful this type of data would be if you were cruising this area – for the first time

Show the Tides station symbol – T inside a Blue Triangle

Point to GRAPH showing HIGH tides (Blue) and LOW tides (Red) and times

Show the Current station symbol – C inside a Blue Triangle

	<p>This concludes the portion on a low cost iPad electronic chart application. Each student should have an understanding of the use and display options available to show charts, way-points, routes, hazards and tides/currents on an iPad interfaced with the <i>Dual</i> External GPS Receiver, <i>Dual</i> GPS Receiver Status application and the NAVIMATICS chart application.</p> <p><u>SOLICIT QUESTIONS BEFORE PROCEEDING – YOU MAY HAVE TO REGRESS TO SOME POINT TO CLEARLY DEMONSTRATE A PARTICULAR POINT IN THE LESSON</u></p> <p>At this point let’s move to the next low cost iPad application that you will find interesting. Another free application.</p> <ul style="list-style-type: none"> • Several free applications that offer redundant capabilities to the NAVIMATICS applications are available. One called <i>Commander Compass</i> offers a free application that our smaller boats may find useful. <ul style="list-style-type: none"> ○ Interfaces with the external GPS receiver discussed earlier ○ Offers an extremely accurate compass feature ○ Degrees off the horizon read out ○ GPS coordinates ○ Speed over ground ○ Universal time clock (UTC) ○ Full array of Google maps when “Location” is selected from menu 	<p>Point to GRAPH showing currents for HIGH tides (Blue) and LOW tides (RED) with the speed (Knots) + speed for incoming (HIGH) tides and – speed for outgoing (LOW) tides</p>  <p>Load the <i>Commander Compass</i> application and show the opening screen</p>  <p>Load and show the menu screen Select “Location”</p> 
Elicit Student Engagement	<p>Method: Student Lead Activity</p> <ul style="list-style-type: none"> • Randomly select 3 students <ul style="list-style-type: none"> ○ Provide 3X5 card showing cruise plan (total distance 10 miles) 	<p>Provide 3X5 cards to all students to enable class to follow as the 3 students perform the cruise planning</p>

(10 minutes)	<ul style="list-style-type: none"> ○ Students are to plot course from home marina to destination marina ○ Plot minimum of 5 way-points and enter route ○ Show HIGH/LOW tide times ○ Show route CURRENTS 	task on the iPad while their actions are being projected on the screen and to perform the same tasks on the second iPad that was pre-loaded with the apps covered in this lesson
Provide for Practice and Feedback (4 minutes)	Accomplished by the above activity	Solicit any questions from the students who were not at the iPad <ul style="list-style-type: none"> • Ask them to highlight any issues they witnessed • Was the application easy to use, from their perspective?
Conclusion Including Student Responses & Performance Assessment (4 minutes)	Tonight we discussed and demonstrated how effective and low cost your iPad can be for on-board navigation. Q- How would you rate the usefulness of the applications? Q- Do you think, based on the return on your investment, do these application answer your boating needs? Q- How do you think these applications enhance your safety on the water?	Questions allow for both feedback and effectiveness of the instructional material.