

Currents

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Hot topics

- **ABC3 Update for 2012 (see article on this page)**
- **New Cruise Planning Course under development (page 2)**
- **Threat to GPS? (see article this page)**
- **On-line exam capability for ABC Internet students (page 3)**
- **Water Trainer takes USPS back to the future (page 4)**

Hot Links

To contact the FCC: www.fcc.gov

For more about LightSquared: <http://www.lightquared.com/>

For information on ABC: <http://www.usps.org/national/eddept/b/main.htm>

For updates on P material: <http://www.usps.org/national/eddept/p/main.htm>

For updates on AP material: <http://www.usps.org/national/eddept/ap/main.htm>

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America's Boating Course: The Best Just Got Better

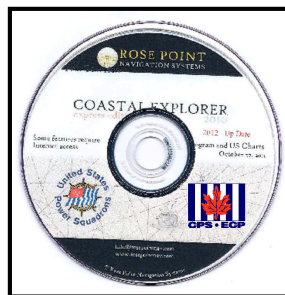
The National Association of State Boating Law Administrators (NASBLA) regularly upgrades its standards for basic boating courses. The USPS Basic Public Education Committee has been hard at work updating our America's Boating Course 3rd Edition (ABC3) to meet the latest standards. NASBLA has certified our revised ABC3 student and instructor materials as meeting their 2012 standards. The 2012 material was printed in December and January. The new material will be available to ship shortly.

New items include the 2012 ABC3 Instructor Manual containing embedded copies of the new assessment examinations with answer keys. The assessment program includes two new examinations for use when presenting Chapters 1 – 4, the familiar 8-hour version of ABC3. An optional examination is provided for use when the 8-hour course is extended to 12 hours by teaching Chapter 5. The current examination answer key remains valid for 2012 examinations. The Student Kit will continue to include the bonus

Courseware CD for student self-study and the Rose Point Coastal Explorer™ DVD.

The changes included in the 2012 reprinting increase the emphasis on boating safety, reflecting the boating industry's goal to reduce accidents and fatalities. Expanded treatment is provided for compliance with the Rules of the Road, wearing life jackets, proper use of vessel lighting and sound signals, improved situational awareness and better decision making.

Squadrons should continue to use the ABC3 2010 Student Manuals until supplies are consumed. However, classes are to be conducted using the 2012 Instructor materials (Instructor Manual, CD with PPT presentations and 2012 examination series) as soon as they are available. This material will have a new catalog number. Watch for an e-mail blast announcing its availability. Since the changes are included in the 2012 instructor materials, students will receive the up-to-date instruction and we can continue using the 2010 Student Manual until stocks are depleted, then phase-in the 2012 Student Manual reprint.



Will LightSquared Wi-Fi Service Threaten Our GPS Receivers?

An issue is brewing in Washington that may have significant impact on the boating community. The issue is the potential jamming of GPS signals by a proposed national wireless network called LightSquared.

What is the problem? LightSquared, LLC was founded to offer wholesale Wi-Fi services

across America by fielding a combination of spot beam satellites (i.e. satellites with antennas aimed at covering a specific area) and terrestrial base stations. The current plan is to use the Mobile Satellite Service (MSS) L-band between 1525 and 1559 MHz, only 26 MHz below the GPS L₁ frequency. As the LightSquared signals

(Continued on page 2)

New Cruise Planning Course

The Marine Environment Committee is writing a new Cruise Planning course that promises to be an improvement over the old edition. The new course will contain many of the same topics that were previously covered but will focus on cruises of up to one month along inland and coastal waterways. This is a change from the previous offshore cruising theme. The Committee believes this better reflects the type of boating undertaken by most of our members and the public. The course was last updated in 2003.

The new student manual will include descriptions and tips about actual cruise routes in the United States. At present, we have created sample cruises on the Atlantic Intracoastal Waterway, inland rivers, and the Pacific Northwest. A Great Lakes

cruise is also being drafted which will give our members four options to consider in their planning.

Despite the emphasis on US cruising, we have retained international requirements, particularly when travelling between our immediate neighbors, Canada, Mexico

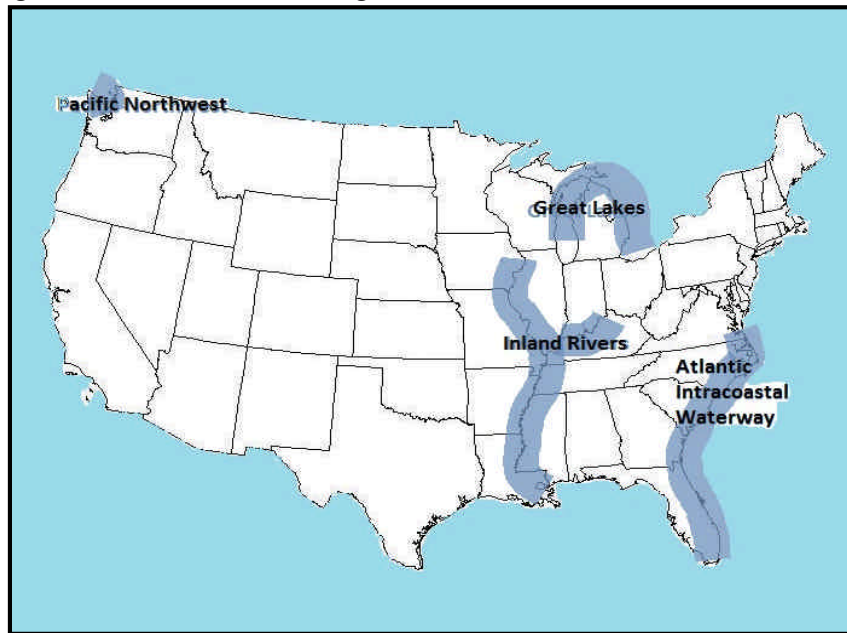
and the Bahamas. The final part of the manual will present the students with a cruise planning exercise using an outline of planning factors and an opportunity to select their geographic area.

The course development is consistent with other USPS courses. The course

material will include a new student manual, instructor manual, slide presentation with notes, homework and examinations.

Chapter topics and cruise descriptions have been contributed by many USPS members with knowledge of the subjects and areas. On that note, cooperation has been excellent from our district leadership and members.

Printing is tentatively scheduled for late 2012.



GPS (Continued from page 1)

are 90 decibels higher than GPS (a billion times stronger), up to 75% of GPS units may be rendered unusable. The situation is akin to "starting a lawnmower in a public library" in the words of one reporter.

Why would GPS receivers not work? GPS receiver manufacturers have taken advantage of the relatively quiet guard bands (vacant frequency bands) surrounding GPS frequencies, using inexpensive receivers with poor selectivity characteristics. This has helped make GPS available for automotive and marine applications as well as smartphone uses such as traffic reporting. LightSquared frequencies are within the lower end of the quiet band.

How did the FCC let this happen? The original plan was to use ground-based signals to augment L-band spot beams from the SkyTerra satellite network. Through a series of spectrum swaps, LightSquared is attempting to repurpose

the MSS for a ground-based high powered network of 40,000 digital base stations. This has been done legally, so there can be no legal challenge to their actions.

How bad is the problem? A test completed in December concluded that 75% of low precision GPS receivers would be rendered inoperable. Last summer, findings of an independent lab (ironically, funded by LightSquared) predicted complete outage for WAAS-enabled aircraft flying above 3,000 feet over urban areas. (WAAS, Wide Area Augmentation System is a system that improves GPS accuracy.) Tests on precision systems such as farming and scientific uses will begin soon.

What are the next steps? The FCC has received tens of thousands of comments advocating the denial of the contemplated use of L-band frequencies. The Department of Defense, FAA and industry groups are advising that this bandwidth must be protected. LightSquared is be-

coming increasingly assertive, stating in December that "it is clear that GPS devices are purposefully designed to look into LightSquared's licensed spectrum, and given this evidence, we believe decision-makers should consider LightSquared's legal rights as the licensee."

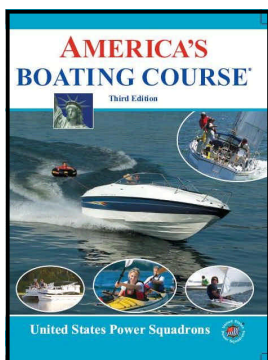
Some in the industry are speculating that LightSquared is pressuring the FCC, hoping for an advantageous swap to spectrum away from the L-band.

USPS has opposed the LightSquared position (through our voices on the GMDSS Implementation Task Force and RTCM) to preserve the greater utility of GPS devices. BoatUS has vocally opposed them as well. The alternative is billions of dollars to be spent on replacement devices that can filter out LightSquared's signals. Individuals needn't comment at this point, but if you wish to contact the FCC and exercise your right to comment, go to www.fcc.gov and click on "Public Comment (ECFS)."

America's Boating Course Courseware to Provide On-line Exams

As stated in a companion article in this issue of *Currents*, the America's Boating Course student kit includes a bonus CD referred to as the ABC Courseware. For 2012, the classroom bonus CD is the same as USPS has been shipping for the past 3 years. The bonus CD works with Windows and Macintosh computers and all browsers.

An alternative version of the courseware is provided to the student taking the Internet version of ABC3. A new 2012 version of this Courseware will now support on-line examinations for states that accept the NASBLA standards for on-line assessments.



This new version of the on-line Courseware is a "managed" course as required by NASBLA. That is, the student must play every slide in each of the six modules and listen to all of the associated narration. The student's progress through the set of Flash slides is controlled so that a "skip-to-the-end" approach is not possible. For each of the six modules, there is a mandatory quiz that the student must pass. If a passing score is not achieved on any quiz, the student is directed to repeat the entire module and try the quiz again.

After passing the six quizzes, the student may attempt the new on-line final examination. If available, state-specific ques-

tions will also be included in the final assessment. The final assessment is driven by a new "exam engine" that draws the required number of exam questions in a random fashion from a huge database. No two on-line exams will be the same.

Additional on-line study aides for the student will include a "practice test" and links to a state-specific study guide and state-controlled boating websites. All state items are based upon the student's state of residence.

Development and testing of the new on-line courseware has been ongoing through most of 2011. It will be demonstrated to several states early in 2012. Upon NASBLA approval, the new on-line courseware will go 'live' by the end of June 2012.

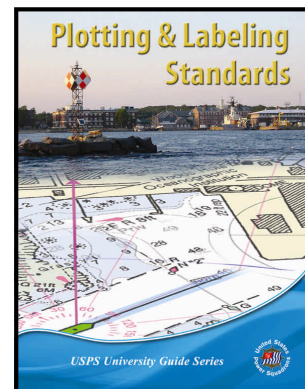
Updated Plotting and Labeling Standards

The USPS Plotting and Labeling Standards have just been revised. They have been reviewed thoroughly both within USPS and by other authorities such as US Coast Guard personnel.

Our goal is to have consistent plotting and labeling in all USPS courses and to have our standards aligned with generally accepted practices.

The new standards recognize that GPS now is the primary positioning method taught in USPS navigation courses. Waypoint navigation is addressed, as is planning prior to underway navigation. A known position is no longer used in USPS courses; no symbol is provided.

This updated booklet has been printed in color. It can be ordered via our on-line catalog.



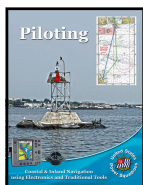
Inland/Coastal Navigation Courses Updated

Both of the USPS Inland/Coastal Navigation classes are popular courses that provide a unique, up-to-date integrated approach to using GPS backed up by traditional methods. Both are regularly updated

Piloting Course

The Piloting Student Manual has been updated and is now available. This Manual contains only a few changes from the previous printing. The Instructor Manual and the Power Point presentations have not been revised.

The updated Piloting Student Manual is included with both the instructor and student kits. In addition, the USPS Plotting

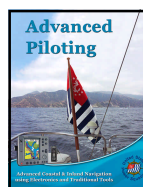


and Labeling Standards booklet and the Rose Point Coastal Explorer disk are included in all Piloting instructor and student kits.

There are a few differences between the Piloting Manual and the Plotting and Labeling Standards booklet. Until the Piloting Manual is updated, Piloting exams should be completed in accordance with instructions in the Piloting Manual and Piloting exam.

Advanced Piloting Course

The Advanced Piloting Manual has been updated and will be available soon. There is no



significant change in content. Updated manuals will be included in kits when the present inventory is exhausted. The Advanced Piloting Instructor Manuals and Power Point presentations have been updated.

The graphics in the Advanced Piloting PowerPoint presentations, the Advanced Piloting Instructor Manual and the updated Advanced Piloting Student Manual are consistent with the new Plotting and Labeling Standards booklet. Kits which include the Weekend Navigator also include the Rose Point Coastal Explorer disk. The Plotting and Labeling Standards booklet and Rose Point Coastal Explorer disk may be ordered separately, if needed.

Currents is published twice yearly by the USPS Educational Department at each national meeting of USPS. Visit the EdDept web site at: <http://www.usps.org/eddept>

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Download a PDF of Currents in color with links at: <http://www.usps.org/eddept/misc/currents.htm>

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OTW
Continued from below



Water Trainer will be in use at the 2012 Annual Meeting in Jacksonville Florida. Later the boat will move down the coast of Florida, and then back along the pan-

handle, reaching Texas in late March.

In early April, the boat will head north, making training stops on its way to Chicago and Detroit. Then it is on to the Northeast through September, ending the year with a cross-country jaunt to California. As the weather clears in 2013, the boat will head north into the Pacific Northwest.

Just as it was one hundred years ago, on-the-water is again becoming the leading edge of USPS. These on the water programs will lead our way into the next one hundred years.

Back to the Future – OTW Training Brings USPS Back to Its Roots

The boats were out on the water. Some crews were doing docking exercises. Some were practicing high-speed maneuvers. Some were solving basic navigation problems. No, this wasn't a BOC event last summer, it was an event held one hundred years ago at the Boston Yacht Club. It was before that stormy day that resulted in the creation of the Power Squadron. Roger Upton was directing the event. We all know the rest of the story; we are living it in USPS.

Coming back to the future, we see that USPS has gone back to the past. With the continuing additions to BOC, the recent addition of the Practical On The Water Training program, along with the release

of several classroom on-the-water course supplements, we have returned to our roots: on-the-water training. This is where USPS belongs; this is where we as members belong.

Practical On-The-Water Training is the new on-the-water program for the general public. The water routines are based on BOC Inland Navigator, but that is where the similarity ends. This one-day program adds four hours of classroom instruction on the nature of boats and boating. The classroom presentation is designed to complement, but not replace ABC3.

This year we also introduced on-the-water (OTW) supplements to Seamanship, Sail,

and Advanced Piloting classes. Each of these programs is designed to extend classroom instruction out onto the water. Squadrons across USPS are developing plans for a very full summer of OTW events. There are even training events being planned for Hawaii later this fall.

The USPS training boat, appropriately named, *Water Trainer* was commissioned this past August. This 20-foot Boston Whaler (a 200 Dauntless model), has been used in training the public and USPS instructors. It was employed starting in Maryland and worked its way down the Atlantic coast as the weather cooled.

(Continued above)



USCGA–USPS MOU



In August of 2011, a Memorandum of Understanding (MOU) implementation plan was signed by the Coast Guard Auxiliary and the United States Power Squadrons. The purpose of the plan was to outline how the two organizations were going to work together and to assign people from both organizations to implement various aspects of the plan.

The Educational Department team, headed by ANEO Eugene Molteni, is responsible for three areas of activity. They are:

1) Recruiting:

Our two organizations represent the two

largest U.S. boating organizations but only a tiny portion of the overall boating community. In conjunction with the USPS Membership Committee we will:

- Develop materials that promote Auxiliary and USPS membership to basic boating students including locally-customizable fliers and PowerPoint presentations.
- Develop materials that promote Auxiliary and USPS membership to boat owners who have just taken a Vessel Safety Check (VSC), including a brief training packet to teach our members how

to utilize these materials.

2) Sharing missions:

This task is being defined by Educational Department representatives of both organizations.

3) Sharing training opportunities:

This covers sharing training materials and activities, consistent with the regulations of both organizations.

Discussions have taken place with our counterparts in the Auxiliary and the plan is moving forward rapidly. Last minute developments will be presented at the annual meeting.