

***GREENWICH SAIL &* POWER SQUADRON**

[**www.GreenwichSPS.org**](http://www.GreenwichSPS.org)

**8-Hour ABC Course Given over Two Saturdays**

(Note: This has successfully been given to 5th & 6th graders)

1. Course Objectives:
2. Teach the basic safe boating curriculum
3. Prepare students for the State exam
4. Introduce students to further courses (such as Seamanship and Piloting)
5. Introduce the Power Squadron as an educational, social and civic-minded organization
6. Our Certified Instructors are group leaders working with small groups of students to bond with them and promote interest in further study and participation in Squadron activities.
7. Teaching Method:
8. The method is aimed at getting students involved in the course material from the very beginning of the course.
9. The course utilizes the **Socratic Method** to the extent practical. We ask, not tell.
10. **SEO meets with instructors** in advance to brief on methodology.
11. Course Format:
12. The course is on 2 successive Saturday mornings, 4 hours each day.
13. **We distribute books and materials at least one week in advance of to the first class**. Students are expected to have read the materials prior to class.
14. Course Content
15. Introductions
16. A sample set of slides taken from the main ABC PowerPoint presentation that in its entirety takes approximately 1 hour to present.
17. The class is divided into **small groups of 4 to 6 student**s with each group having an experienced and charismatic group leader.
18. The group leader guides each group of students through the study questions at the end of each chapter, emphasizing and illustrating key concepts and drawing on personal experience.
19. Review of questions related to State regulations
20. Review of State course material
21. State exam
22. USPS ABC exam
23. Commander’s introduction to the Power Squadron
24. Charting exercise
25. Anchoring exercise
26. We include a 15-minute session on knots, for fun and for practical instruction.
27. Refreshments: **We serve coffee at the start and lunch at the end of each day**. This fosters the collegial nature of Power Squadron courses and the social benefits of the squadron.
28. Results: Students have passed both ABC exam and State test with high grades; some have taken subsequent Piloting and other classes; a few have become active in the squadron.

*SEO Andy Cummings, JN*

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 **LESSON PLAN**

**Course:** ABC 8-Hour (2-day Format)

**Lesson Title:** Presentation of Key Concepts from Chapters 1 to 4

**Presentation Time:** 1 Hour

**Presentation Method:** Participatory Lecture

**Equipment Required:** Laptop, Projector, Screen, PowerPoint Presentation

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| --- | --- | --- |
| **Objectives** | **Actions & Details** | **Resources & Notes** |
|  |  |  |
| Introduce Topic | Students introduce themselves |  |
|  |  |  |
| Chapter 1, Section 1 | Types and parts of boats | Students talk about what type of boats they have |
|  | Important Definitions | Slides 9 and 10 (directors and freeboard) |
| Chapter 1, Section 2 | Life Jackets | Slides 1—10  |
|  | Fire Extinguishers | Slides 22, 23, 28 (p 18 of CT Guide) |
|  | Visual Distress Signals | Slides 39 and 40 |
|  | Sound Devices | Slides 52, 53, 54 (p 18 of CT Guide) |
|  | Other Equipment | Slide 56 |
| Chapter 1, Section 3 | Fueling | Slides 4, 5, 7 |
|  |  |  |
|  | Definitions |  |
|  |  |  |
| Chapter 2, Section 4NAVIGATION RULES | Pecking Order | Slides 5 and 6 |
|  | Overtaking | Slide 7 |
|  | Meeting | Slide 11 |
|  | Crossing | Slides 12 and 13 |
|  | Sailboats | Slide 14 |
|  |  | Slides 17 and 18 |
|  | Navigation Aids |  |
| Chapter 2, Section 5NAVIGATION AIDS |  | Slide 2. Pages 64 and 65 of text. |
|  |  |  |
| **Objectives** | **Actions & Details** | **Resources & Notes** |
|  |  |  |
| Chapter 2, Section 6LIGHTS AND SOUNDS | Lights | Slides 2, 3, 4 |
|  | Sounds | Slides 13 and 14 |
| Chapter 2, Section 7GOVERNMENT REGULATION | Boat Registration | Slide 2 |
|  | Hull Identification Number | Slide 6 |
|  | Negligent Operation | Slide 10 |
|  | Wakes | Slide 11 |
|  | Oil Discharge | Slide 16 |
| Chapter 3, Section 8STATE AND LOCAL REGULATIONS |  | General reference to CT Boating Guide. Be sure to hand out Accident Report |
|  |  |  |
| Chapter 3, Section 9 and 10FINDING YOUR WAYANCHORING |  | We will be working with 2 practice problems on the second Saturday |
|  |  |  |
| Chapter 3, Section 11ADVERSE CONDITIONS AND EMERGENCIES | Emergency Procedures | Slide 2 |
|  | Cold Water Immersion and Hypothermia | Slides 10 and 11 |
|  | Carbon Monoxide | Slide 15 |
|  | Weather | Slide 34 |
|  |  |  |
| Chapter 3, Section 12COMMUNICATIONS | VHF Radio | Slides 5 and 13 |
|  | Mayday call | Slides 24 to 27 |
|  |  |  |
| Chapter 4, Section 13WATER SPORTS SAFETY | General. Diving. | Slide 2, page 37 and 38 of CT Guide (100 foot rule). Bring Alpha Flag |
| Section 14 | Trailering  | Slide 6 |
|  | PWC Operation | Slides 2 and 3 |
| Section 15 | Knots | Bring Rope (Practice time permitting) |

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**Practice Piloting Problem**

**ABC Course – Using Bowditch chart**

(Note: Our instructors give this exercise the second day of the course after giving the exam; students enjoy it and it’s a good introduction to a Piloting course.)

**Situation**

You are fishing very close to buoy R”10” just southwest of Channel Island when you receive a call from friends asking you to join them for lunch at buoy G”1” at the start of the channel into Shark River. As you leave, you check your watch and it is exactly 12 noon. You plan to cruise at 10 Knots.

**Questions:**

1. **What course would you follow?**
2. **What is the distance?**
3. **What time would you arrive?**

**I. What course would you follow?**

Step 1

Using a sharp pencil draw a line from R “10” to G “1”. This is your course line.

Step 2

Place your parallel rule on the course line and carefully “walk” it up to the compass rose.

Step 3

Make sure that the edge of the parallel rule is on the center of the rose and read the course heading off the outer ring of the compass rose which will give you the true course.

 **Answer: 310°T**

**II. What is the distance?**

Step 1

Carefully put the two points of your compass on both the start and end points of the course line.

Step 2

Measure the distance off of the scale at the top of the chart.

 **Answer: 3.7 nm.**

**III. What time will you arrive?**

What we know:

Speed = 10 Knots

Distance = 3.7 NM

How long will the trip take?

Elapsed Time of the Trip = 3.7 Miles÷10 MPH = .37 hours or .37X60 = 22 minutes.

 **Answer: Our estimated time of arrival = 12:00 + 22 Minutes = 12:22 pm.**

*Ralph Kravitz, JN*

*Boating Course Chair*



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 **Practice Anchoring Problem**

**ABC Course – Using Eldridge Tide Tables**

(Note: We give students Eldridge Tide & Pilot book which are available from RobertWhite.com and give this exercise the second day of the course. It can be adapted to any area.)

**Situation**

You are the skipper of a 32” sailboat that draws 6 feet and has 3 feet of freeboard between the waterline and the deck. On July 13, you pull into Greenwich Harbor with the idea of anchoring and spending the night. It’s 1630 hrs. when you find the spot where you plan to drop your anchor. Your depth meter reads 8.5 feet.

**Questions**

1. **Is this a safe place to anchor or will you run aground at low tide?**
2. **What should be the length of rode?**

*The TideTables do not list the times of high and low tide in every harbor. They list reference harbors and expect a user to find the reference harbor closest to their location. They do, however, include the times of current change, before or after the nearest reference harbor, for many other harbors.*

**Solutions**

Step 1

Find the reference harbor closest to Greenwich. After checking the Tide Tables, we see that the reference harbor closest to Greenwich is Bridgeport (pages 98-103).

Step 2

We determine if there is a significant time differential between where we are (Greenwich) and our reference harbor. On Page 16, we determine that there is a there is a 5 minute lag between the current change in Greenwich and Bridgeport which is insignificant for our purposes.

Step 3

Find the high and low tides for July 13th in the Bridgeport and we see (on Page 101) that:

• 1630 hrs. is exactly low tide

• the difference between high and low tide is 7.8 feet on that day.

1. **Will we run aground?**

**No** - given that we anchored at low tide, the depth will not drop any lower. You, at a minimum will have 2.5 feet of water below the keel.

1. **What is the length of rode we should use?**

Vertical Distance = Depth of Water At Present + Distance Water Will Rise + Free Board

Vertical Distance = 8.5’ + 7.8’ + 3.0

Vertical Distance = 19.3’

Length of Rode = Vertical Distance X 7

Length of Rode = 19.3 X 7 = **135’**

*Ralph Kravitz, JN*

*Boating Course Chair*