

PREFACE

COURSE PREPARATION

This guide is intended to assist the Member Training Officer or Instructor in conducting a training program for Auxiliarists interested in acquiring sufficient knowledge to successfully pass the written examination for the Weather Operational Specialty Course (AUXWEA).

It must be recognized that weather behaves differently in different regions, even though the basic principles remain the same. For the most part, the Student Study Guide covers general principles. However, Chapter 7 contains brief sketches of typical weather patterns for the various regions in which Auxiliarists conduct surface operations. It is up to you, the Instructor, to expand on this material for the region in which your students operate, so that they will have a solid basis for development of the skill needed to evaluate weather observations and forecasts. A visit or call to the nearest National Weather Service office may help you to learn about additional rules of thumb used by professional meteorologists for local weather forecasts. You will also find additional material on the Weather Branch web site. You may want to download selected portions for class sessions, arrange for live on-line sessions to supplement your presentation, or have your students access the site for self study.

You must emphasize the importance of devoting time to this course. None of the concepts are difficult, but many of them will be new to the student. The challenge is “putting it all together,” i.e., integrating the wealth of observational data and forecast products, while applying the basic principles to assess how much the weather might deviate from a forecast, or to make visual observations when underway for the same purpose.

The course has been organized in a sequence to: first, get the student familiar with a few simple observations that he or she can make; second, introduce the basic concepts of weather physics; third, cover generic weather patterns at the synop-

tic scale; fourth, get the student acquainted with weather charts, related weather products, and how to use them; fifth, cover how to evaluate a forecast; and last, discuss what to expect from bad weather and how to cope with adverse conditions when underway. The Student Study Guide contains numerous examples, with discussion or footnotes referring back to material from preceding chapters. This is intended to reinforce the learning of concepts by helping the student to see how they may be applied to weather situations.

To be fair to the students, and to assure maximum probability of their success, you must also be prepared to devote sufficient time to the course so that you will be able to guide your students. It is highly desirable for you to have completed the AUXWEA Specialty Course. If that is not possible, it is essential that you acquire a high level of proficiency. You may accomplish this by self study of the Student Study Guide, some of the more basic references cited in the guide’s bibliography (Appendix D), the weather chapter in Chapman’s text on piloting, and/or the weather sections of the Coast Pilot for your region.

Each chapter of the Student Study Guide ends with a series of multiple choice study questions. The questions are repeated in this guide, with the correct answer indicated by boldface type and a page reference given to where the answer may be found in the Student Study Guide. Review these questions and answers before discussing the study questions with your students. All questions on the AUXWEA written examination are based on the material and questions in the student guide.

Some of the material in the course is best presented in lecture format with visual aids. This guide is supplemented by graphics, as well as some suggestions for simple demonstrations. The graphics are suitable for reproduction as overhead transparencies for classroom use. They are numbered for convenient reference and listed in this guide. The overhead numbers are only for reference in lesson plans; you may present them in a

different order if you wish. A supply of water-soluble marking pens will be useful to supplement the information in the graphics. It will also be useful to refer to the figures in the student text as you present the material, and you may want to enlarge some of them to make additional transparencies.

You should encourage your students to ask questions during the presentation to assure that they are clear on the concepts. Also, you should devote some class time in each lesson to a discussion format. Student participation will provide you with feedback on the student's understanding of the subject matter and the possible need for further coverage. If classroom discussion reveals that some students are not completing the study questions, take them aside and emphasize the importance of doing that work.

The classroom should be adequate for the number of students. It should also meet the basic requirements for a good learning environment, with a minimum of distractions, rest rooms available nearby, etc.

The Flotilla Member Training Officer should be aware of any changes to any study materials and should pass such information on to the Instructors. It is up to the Instructor to be sure that the students are advised of any changes.

COURSE FORMAT

The course is designed as eight lessons, each covering one chapter in the student text. Most lessons encompass one session varying in length from one hour and 40 minutes to two hours and 30 minutes. Chapter 5 requires more time and is divided into two sessions. Ideally, you should teach the sessions a week apart to allow the students to devote the necessary time to the course. Appendix A contains a sample schedule.

A final review session is recommended after the eighth lesson, for two reasons. First, you may not have had time to cover some material to the desired extent. Second, you need to be sure that

any areas of uncertainty on the students' part are resolved before the examination. Discuss Appendix B, HOW TO TAKE EXAMINATIONS, with the class during the review session.

INSTRUCTOR'S ACTIONS

You should provide the study guide to the students before the first session, with instructions to read Chapter 1 and complete its study questions. Be sure that the students have the guide at least one week early, with a clear understanding of what they need to accomplish by that time.

You should inspect the classroom before the first session to make sure that it meets the necessary requirements. You should make sure that all necessary visual aids equipment will be available.

FINAL EXAMINATION PROCEDURE

At least one month before the scheduled date of the final examination, complete Form CG-4887, Auxiliary Operational Specialty Course (OSC) Examination Request/Transmittal Form. This form must be submitted by the Flotilla Commander or Flotilla Member Training Officer to the Director of Auxiliary for the appropriate District or Region, at the request of the Instructor.

The AUXWEA final examination must be proctored by one of the following:

1. A commissioned, warrant, or petty officer of the U.S. Coast Guard or U.S. Coast Guard Reserve.
2. An AUXOP member or a BQ member who has satisfactorily completed the AUXWEA Specialty Course, and who has been specifically designated by the Director of Auxiliary.

The test should be administered and returned to the Director of Auxiliary within three days of the date you have specified on CG-4887. The test is closed book with no time limit. A grade of 75% is required to pass the course. Any member failing a Specialty Course final examination may retake the test after thirty (30) days have elapsed.

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