S.S. President Coolidge Diver Distinctive Specialty Course Instructor Outline

This course provides knowledge regarding the historical background and current legislation of a prominent Second World War location and the training required to allow the candidates to competently and safely plan, organise and conduct dives thereon.

A. Course Overview

The goals of the S.S. President Coolidge Diver (SSPCD) Distinctive Specialty Course are:

a) To review the history and significance of SSPCD diving to this geographic location.
b) Te review legislative requirements and other relevant literature applicable to this geographic location.
c) To review the advantages and limitations of SSPC diving.
d) To demonstrate understanding of wreck layout, hazards and navigation
e) To review existing deep diving skills.

B. Course Requirements

1. Prerequisite certification
   PADI Advanced Open Water Diver (or equivalent)
2. Minimum age of 15
3. Student to Instructor ratio: 4:1
4. Nominal course duration: eight hours/one day
5. Minimum two (2) open water dives
6. Minimum Instructor rating: S.S. President Coolidge Diver (SSPCD) Distinctive Specialty Instructor.
7. Maximum depth 30 metres

C. Equipment and Material Requirements

Students and instructional staff to be fully equipped in standard diving gear and conform to the philosophies and intent of PADI General Standards and Procedures. This course is performed with open circuit equipment that may also include but it not necessarily limited to:

1. Equipment

i. Depth gauge/computer.
ii. Timing device.
iii. Slate for noting decompression information/blank slate for communication and backup tables
iv. Inflatable signal tube
v. Reel
vi. Knife/cutting device and backup knife/cutting device
vii. Compass
viii. Underwater light
ix. Ascent/descent lines
i. First aid kit
ii. Emergency oxygen
iii. Emergency assistance plan for the dive site/s chosen for the course

2. Materials and teaching aids:

(i) Instructor reference materials

- PADI Wreck Diver specialty instructor outline
- PADI Enriched Air manual
- Refer to: https://en.wikipedia.org/wiki/SS_President_Coolidge
- Local sketch and outlines of SS President Coolidge wreck

(ii) Student reference materials

- Encyclopaedia of Recreational Diving
- PADI Wreck Diver manual
- PADI Enriched Air manual
- Refer to: https://en.wikipedia.org/wiki/SS_President_Coolidge
- Local sketch and outlines of SS President Coolidge wreck

iii. Recognition materials

- PIC envelopes
- Specialty Diver Certificates

3. Recommendation: To undergo a Deep Diver and Wreck Diver specialty courses to complement this course and become two more steps closer to achieving the specialty training prerequisite for achieving the PADI Master Scuba Diver certification.

D. Academic Topics

The following is an actual presentation outline. Directions to, or comments for, the instructor are enclosed in [brackets]

1. Introductions, course overview and welcome to the course:

i. Introductions
ii. Course goals
iii. Classroom presentations [Give the dates and locations of venue.]
iv. Open water training dives: Two (2) dives required to no deeper than 30 metres
v. Performance assessment. [Note to instructor: You are to ensure that all performance requirements have been met. Skills performed on-site are to be directly observed. Academic assessment may be accomplished through discussions with students and oral quizzes. Tell the class how their performance will be evaluated.]
vi. Certification: Upon successful completion of the course, you will be awarded the PADI Distinctive Specialty Diver Certification in "S.S. President Coolidge (SSPCD) Diving"
vii. Class requirements: Course costs [Explain all course costs], Equipment needs, and materials used during the course and attendance requirements.
viii. Administration: Collect course fees, enrolment forms, [Continuing Education Administration Document or Standard Safe Diving Practices Statement of Understanding, PADI

Medical Statement, Liability Release and Express Assumption of Risk.

2.

(a) History and significance of this diving location

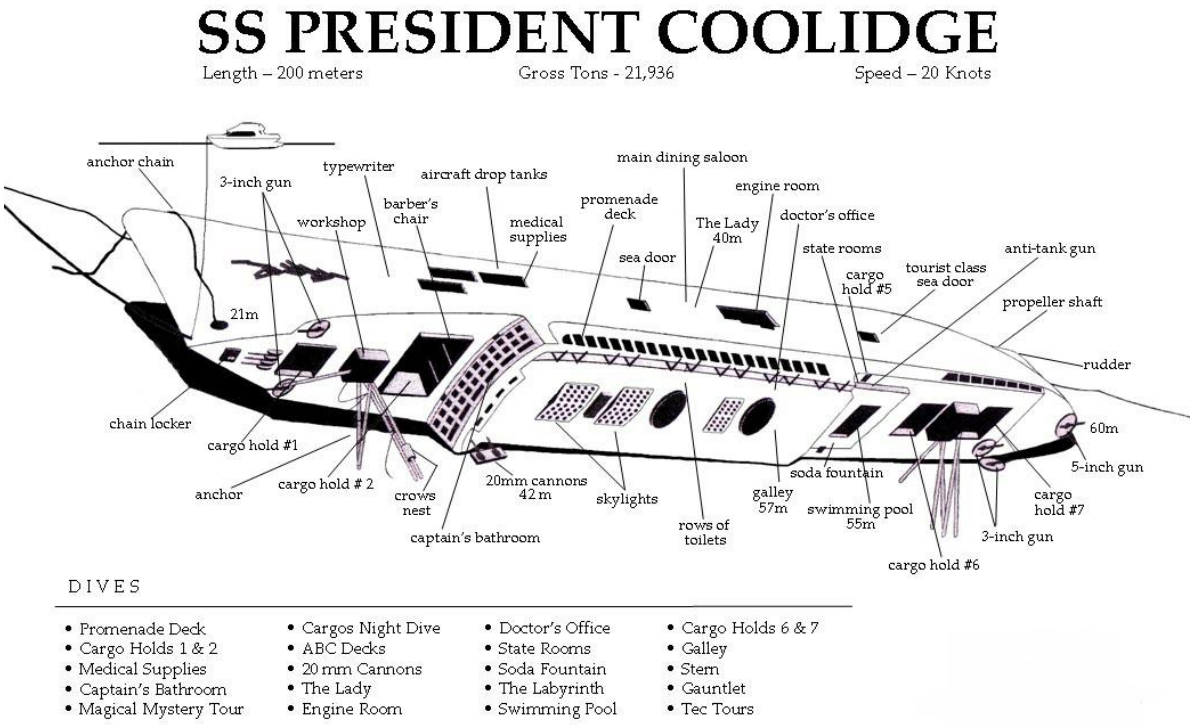
The SS President Coolidge
[please refer to
http://en.wikipedia.org/wiki/SS_President_Coolidge]

Citing from the above reference:

The SS President Coolidge was a US luxury ocean liner that was completed in 1931. She was operated by Dollar Steamship Lines until 1938, and then by American President Lines until 1941. She served as a troopship from December 1941 until October 1942, when she was sunk by mines in Espiritu Santo in the New Hebrides.

In 1980 the New Hebrides gained its independence and became Vanuatu.

The significance of this diving site is that it is easily accessible from the shore and serves as a significant diver tourist attraction. In 2007 ***The Times*** named the ***President Coolidge*** as one of the top ten wreck diving sites in the world



(b) Legislative requirements

i. In 1983 the government of Vanuatu declared that no salvage or recovery of any artifact would be allowed from the President Coolidge.

ii. Local divemaster guides are mandatory on any dive expedition. This protocol is to encourage local employment and income generation.

(c) Advantages and limitations of diving on the SS President Coolidge

❖ Advantages

i. Access to the dive site is easily made from the adjacent beach but a local is always on standby to collect a token fee (tax) for that access. Presently (2016) this stands at about 1000 Vatu or about A $10. Otherwise, access on a small diving vessel

avoids this tax but no doubt is included in the cost of the boat fee.

ii. It is a huge vessel and offers many different areas to dive from the bow at about 23m to the vessel's "swimming pool" positioned at the stern. This lies at a depth of 55m and requires technical diver certification.

iii. A clear and well-marked sandy area adjacent to the bow in 10 meters gradually leading up to a five meters are staging post positioned clearly for decompression stops.

iv. Clear water all the time!

v. At two dives a day, it is possible to spend a week of diving this vessel and still find a new part to discover.

vi. Very closely located to Million Dollar Point, another iconic diving wreck site.

❖ **Disadvantages**

vii. There are no lines laid for penetration. Even though many entry and exit points are easily accessible and visible during daylight hours, silt-up or diving at night would be hazardous without appropriate guidelines and lighting.

viii. Risks of diving at depth with technical diving equipment, combined with penetration and its associated activities, are increased and must be managed to minimise difficulties or incidents.

ix. Exposed in bad weather making the dive site undiveable**.**

x. Restricted access to technical diving resources (at the moment –February 2016)

d. Current wreck knowledge, wreck layout, hazards and navigation

i. Current wreck knowledge [discuss students' experience/knowledge levels]

ii. Wreck layout

Refer PADI Wreck diver manual and

www.research.usf.edu/dric/diving/docs/wreck-diving.ppt

Identify points of interest, overall condition and hazards

iii. Hazards

- Sharp Object
- Entanglement issues
- Aquatic Life
- Structural integrity
- Surge and suction pockets created by currents
- Loss of direction
- Collapsed or blocked passageways
- No direct access to the surface
- Restricted passageways
- Falling objects
- Silt
- Entrapment
- Loss of gas supply
- Stress recognition
- Buddy separation

iv. Navigation
    - Baseline navigation
    - Features noted
    - Following the ship's layout
    - Line-laying

(e) Review of deep dive planning procedures

Many deep wrecks and those requiring advanced skill sets are found at remote locations. Aspects of planning dives in remote areas (e.g. those dives conducted hours away from dive services, emergency medical personnel, etc.) require more consideration than regular wreck diving trips. These may include:

i. Plans need to cover more logistics – food, water, sleeping arrangements, quantities of gas required, compressors for filling tanks, etc.
ii. Emergency procedures – may need to plan for complex evacuations, having appropriate medical supplies available and people who can use them (e.g. several hours worth of emergency oxygen). Divers Alert Network (DAN) membership and insurance is a valuable asset at this location.
iii. Thinking in terms of self-sufficiency (e.g. what would you do if the boat engine broke down?). Even so, at this geographic location, only a short swim to the beach would be necessary!
iv. Turn around rules (1/3 and 1/4 rules)

E. Open Water Dives

Two (2) dives are to be performed over at least one day. Prior to all dives gas analysis must be completed for all gas mixtures being used (if using enriched air).

(i) Open Water Training Dive One

Learning Objectives.
By the end of this dive, you will be able to:

- ***Perform a correct entry appropriate to the dive site***
- ***Demonstrate appropriate streamlining of all dive equipment***
- ***Correct weighting and adjust buoyancy as required at depth***
- ***Use correct finning techniques to avoid silt-up***
- ***Perform guided short entry and exits in well-marked areas of the vessel***
- ***Perform an ascent rate of no more than 18 metres/minute or as indicated by the divers' computer***
- ***Perform appropriate safety stops and exit***

a. Briefing

- Evaluate conditions
- Facilities at dive site
- Entry technique to be used

- Exit technique to be used
- Wreck position, bottom composition, expected features and points of interest
- Depth range
- Planned dive time limit
- Review communication
- What to do if an emergency arises

b. Plan Dive

- Assign depth; have students determine theoretical depth and no-decompression limit (you should check these)
- Record no-decompression limit and maximum depths on slates
- Review depth gauges and instrumentation; each student should know how to account for behaviour of his/her instrumentation while diving
- Review planned dive times

c. Predive

- Prepare personal equipment including all extra emergency equipment
- Don equipment
- Predive safety check
- Proper entry
- Weight adjustment for neutral buoyancy
- Maintain buddy contact

d. Open Water Training Dive One

- Descend in buddy teams
- Perform required objectives.
- Ascent not to exceed 18 metres/minute with appropriate safety stops as planned.

e. Post dive

- Proper exit
- Remove and stow equipment

f. Debrief

- Assess performance, make suggestions, give positive reinforcement
- Students calculate their ending pressure groups—review for correct calculation
- Log dive (Instructor signs log)

(ii) Open Water Training Dive Two

Learning Objectives.

By the end of this dive, you will be able to:

- ***Perform deep entry***
- ***Demonstrate appropriate streamlining of standard and additional safety and dive equipment***
- ***Correct weighting and adjust buoyancy as required at depth***
- ***Observe and record by sketch or photograph the section of the vessel dived and related marine life***
- ***Dive with minimal impact on the environment***
- ***Perform an ascent rate of no more than 18 metres/minute or as indicated by the divers' computer***
- ***Perform appropriate safety stops as planned.***
- ***Perform a deep water exit***

a. Briefing

- Evaluate conditions
- Facilities at dive site
- Entry technique to be used
- Exit technique to be used

- Section dived, expected features and points of interest
- Depth range
- Planned dive time limit
- Review communication
- What to do if an emergency arises

b. Plan Dive

- Assign depth; have students determine theoretical depth and no-decompression limit (you should check these)
- Record no-decompression limit and maximum actual depth on slates
- Review depth gauges and instrumentation; each student should know how to account for behaviour of his/her instrumentation while diving
- Review line communications
- Review planned dive times

c. Predive

- Prepare personal equipment including all extra emergency equipment
- Don equipment
- Predive safety check
- Proper entry
- Weight adjustment for neutral buoyancy
- Maintain buddy contact

d. Open Water Training Dive Two

- Descend in buddy teams
- Perform required objectives.
- Retrieve guideline
- Ascent not to exceed 18 metres/minute with appropriate safety stops as planned.

e. Post dive

- Proper exit
- Remove and stow equipment

f. Debrief

- Assess performance, make suggestions, give positive reinforcement
- Students calculate their ending pressure groups—review for correct calculation
- Log dive (Instructor signs log)

F. KNOWLEDGE REVIEW

1. Describe two significant features about this geographic location

(i)

(ii)

2. Maximum depth of this course_____

3. What air usage rule should be used when penetrating a wreck?

---

4. List two advantages of diving this location

(i)_____

(ii)_____

5. List two disadvantages of diving this location

(i)_____

(ii)_____

6. List at least four different hazards of wreck penetration

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

F. KNOWLEDGE REVIEW –MODEL ANSWERS

1. Describe two significant features about this geographic location

(i) Tropical, warm, clear water

(ii) Easily accessible

2. Maximum depth of this course 30 metres

3. What air usage rule should be used when penetrating a wreck?
1/3 Rule

---

4. List two advantages of diving this location

(i) The vessel offers many different areas for diving without fear of repetition

(ii) Local guides mandatory with thousands of dives experience

5. List two disadvantages of diving this location

(i) Restricted access to technical diving equipment and other related resources

(ii) Very exposed in poor weather

6. List at least four different hazards of wreck penetration

- Sharp objects
- Entanglement issues
- Aquatic Life
- Structural integrity
- Surge and suction pockets created by currents
- Loss of direction
- Collapsed or blocked passageways
- No direct access to the surface
- Restricted passageways
- Falling objects
- Silt
- Entrapment
- Loss of gas supply
- Stress recognition
- Buddy separation