


*"Urban Legends of the CWI"*

*How to get and stay certified*


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Boston Section AWS  
February 25, 2008



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Informational Presentation

Length of presentation:  
1 hour + 15 minutes for Q&A



Potential CWIs  
CAWIs  
CWIs  
SCWIs

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Informational Slide

- The presentation will focus on the largest group of people at the presentation.
- Quick show of hands – interest of this group?
  - Potential new CWIs
  - CWIs
  - SCWIs

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References

- AWS QC1:2007 Standard for AWS Certification of Welding Inspectors
- AWS B5.1:2003 Specification for the Qualification of Welding Inspectors
- [www.aws.org](http://www.aws.org)
- <http://www.aws.org/w/a/certification/index.html>

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### Outline of Presentation

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- Overall Guidance
- Getting certified
- Keeping certified
- Future training opportunities

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### *Overall Guidance*

Lessons Learned

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### Free Advice

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- If you don't know, ask...If you ask, verify
- Remember where to find the information, which is more important than memorizing everything
- If it isn't written down, then it didn't happen
- Keep a copy for your records...and keep your records organized (3-ring binders, hanging folders, shop notebooks)

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### Free Advice

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- Keep your contact information current
- Send important documents with "receipt signature required"
  - Call to verify the information has been received **and** is in process with the right department
  - Record the names of the people of the people you speak to and the dates of the conversations

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## Getting certified

(AWS QC1:2007, Section 4)

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## What are the levels of Certification?

- Senior Certified Welding Inspector (SCWI)
- Certified Welding Inspector (CWI)
- Certified Associate Welding Inspector (CAWI)
- Endorsements
- Other certifications (NDE)



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## Chain of Command

- SCWI – senior/supervisor level
- CWI – individual contributor
- CAWI – individual contributor, that takes direct supervision from SCWI or CWI

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## What do I have to do to take the test?

(AWS QC1:2007, Section 5)

- Experience
- Education
- Evidence of employment
- Fill in the forms
- DO NOT FORGET your eye exam
- SCWI – six years as a CWI minimum

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### What are the different sections of the test?

- Part A – Fundamentals
- Part B – Practical
- Part C – Code Book
- Code Book endorsements



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### What do I need to do to pass the test?

- SCWI
  - Part A & B, 72% minimum correct (144/200 questions)
  - That's a "C"
- CWI
  - Part A, B & C, 72% minimum correct (all sections)
  - That's a "C"
- CAWI
  - Part A, B & C, 60% minimum correct (all sections)
  - That's a "D"



QC1:2007, Section 6

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### Taking the wrong code at the wrong time

- Plan to take the test that is the most appropriate for your industry!
- If you're working in Structural Industry, then you should plan to take the intended that you plan to work in!!
- DOT requires evidence of taking the AWS D1.1 or D1.5
- Unless you work with a specific code every day start with API 1104.

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### When is the last time you took an exam?

Taking a test can be overwhelming...



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### Watch outs

- Make sure you have confirmation that the package was received AND is being processed
- Make sure you fill out the forms correctly AND on-time
- Eye exam – forget it and it's an easy way to fail the exam (Section 8)

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### Test taking Tips

- Take practice exams
- Time yourself
- Answer ALL the questions
  - Probability is in your favor!
- Process of elimination
- If you jump around, make sure you verify the exam question number. You can use your test booklet



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### Test taking Tips

- Put a tick mark on the test sheet every 10th question, to verify that you're on the right question
- Erase neatly!!
- Read the question, answer it based on the specification in front of you.
  - Example Part B weld specimens



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### What do I do if I don't pass the test?

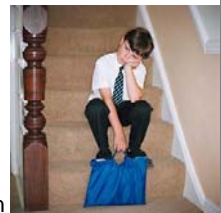
(Section 6, 7)

*Look at the stats:*

Average 1st pass rate (not confirmed):

- 40% no prep
- 60% with some preparation

90% Boston Section last three years



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Sometimes, the rules are very easy to understand...



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### SCWI

- Any test taken within 12 months of the original test date
- Up to (2) re-examinations within this 12 month period

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### CWI

- Pass with 60%, automatic CAWI
- If you achieve a 72% overall simple average but don't meet the 72% of any of the parts, you can take over those sections
- Up to (1) re-examination within one year of the original test without training
- Any additional re-examinations require 40 hours of documented further training in welding inspections before re-examination
- Up to (3) retests in any three year period

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### CAWI

Eligible for upgrading to CWI (Section 14)

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CAWI's are not eligible for renewal

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(Section 15)


- You have to retake the test and pass at the CWI required level to keep your certification
- You must pass the test within the 3 year period

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Journal/log

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- Daily Log should be kept by CWI
- If it isn't written down, then it didn't happen
- It's a digital world – a picture says a thousand words



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Folder for all certification-related stuff

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- Hanging folder in file cabinet
- Any event, meeting, training – put a copy in the file

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## SCWI & CWI

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- Submit renewal package within the 6 month period before your expiration date
  - Not earlier than six months but no later than the expiration date

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## SCWI & CWI

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- Document that during that last three years, no period greater than 2 years continuous inactivity (or simply put, you have been working on welding related activities for at least 1 of the last 3 years period).
  - Remember the logbook recommendation??
  - Again, if you document what you're doing then taking ANOTHER test isn't needed...

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## SCWI & CWI

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- If you don't meet the criteria, then you have to take Part B and pass at the 72% minimum.
- You can only do this twice (two consecutive three-year periods). After than, you have to meet the 9-year recertification criteria

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## Upgrading from CWI to SCWI (Section 15)

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- If you are renewing at your 6 or 9-year recertification AND want to get your SCWI, then...
  - Fill in two separate applications
  - Meet the criteria to pass for the CWI (Part B or PDH) AND take the SCWI exams
  - You won't lose your CWI status if you don't pass the SCWI but meet the criteria of CWI.

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### 9-year recertification for SCWI and CWI

- Submit renewal package within the 6 month period before your expiration date
  - Not earlier than six months but no later than the expiration date
- Document that during that last three years, no period greater than 2 years continuous inactivity (or simply put, you have been working on welding related activities for at least 1 of the last 3 years period)
  - Remember the logbook recommendation??

**AND...**

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### 9-year recertification for SCWI and CWI

- Minimum of 80 PDHs earned during past nine-year certification AND twenty of those 80 PDHs must be earned in the final three-year period.
- Trainers can substitute teaching hours for the required PDHs, but the objective evidence has to be provided (16.4.5)

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### Options??

1. Take the ENTIRE test over
2. Take Part B examination only
3. Take a Supplemental Inspection Exam (SIE) or Endorsement
4. Take the 9-year Recertification Course (aka 9-year CWI Boot Camp)
5. Professional Development Hours

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### The "Sure Pain" Indicator

Option	Pain Threshold
1	Catastrophic
2	
3	
4	
5	
5	

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### Options - details

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- Option 1 – you can torture yourself over again ☺
- Option 2 – you can limit your torture level

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### Option 3

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- Good option if you know the Standards well
  - AWS, ASME, API
  - Inspector Programs like Radiographic Interpreter

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### Supplemental Inspection Exam (SIE) or Endorsement

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- RT – currently available
- Codebook exams to AWS D1.1, API 1104, AWS D1.5, ASME Section IX, B31.3, + B31.1, and AWS D15.1
- PT, MT, Steel Inspector (IBC) – future opportunities

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### Options - details

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- Option 4 – Good option if you have the time and money and you don't want to take the test again
  - If you don't want to retake the exam and don't have 80 hours of PDHs in the past 9 years
    - 6 day course
    - Informal, interactive discussion
    - Field trip to a local plant or test lab

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### Option 5

- Recommended if you don't like extra pain and can document what you've been doing
  - Remember the logbook??

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### What are Professional Development Hours & how to get them

- Professional Societies – AWS, ASME, ASM, ASNT, ASQ
- Contact hour – minimum of 50 minutes of instruction
  - If CEUs are awarded, each CEU = 10 PDHs
    - Class room, correspondence, or distance learning in one or more areas indicated in AWS B5.1.
  - No max but objective evidence is needed
- Attending local section meetings of a professional society (AWS or other) where technical presentations over one or more of the areas of B5.1
  - Maximum of 20 PDHs but objective evidence is needed

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### What are Professional Development Hours & how to get them

- Preparation and presentation of technical session at an AWS local or national conference addressing subjects contained in B5.1.
  - A single 10 PDHs will be awarded but objective evidence is needed
  - Maximum of 20 PDHs can be awarded under this provision during the nine-year period
- Participation on an AWS standing committee, sub-committee, or task group
  - A single 10 PDHs will be awarded but objective evidence is needed
  - Maximum of 20 PDHs can be awarded under this provision during the nine-year period

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### What are Professional Development Hours & how to get them

- Publication of a paper, article or book published in a nationally recognized publication that addresses a subject from B5.1
  - Objective Evidence is required
  - Each publication = 10 PDHs
  - No maximum limit
- Patent issues that has an association with the field of welding, inspection or testing.
  - Objective Evidence is required
  - Patents had to have been issued during the most recent nine-year period.
  - Each application = 10 PDHs
  - Max of 20 PDHs

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### What are Professional Development Hours & how to get them

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- Initial certification as an AWS RI or ASNT ACCP level II or III inspector in any NDT method listed in B5.1 (except VT)
  - NDE certification = 20 PDHs
  - No maximum limit
  - Objective evidence of the date of original certification.

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### Initial certification to endorsements offered under the AWS QC1 program

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- Codebook exams to AWS D1.1, API 1104, AWS D1.5, ASME Section IX, B31.3, + B31.1, and AWS D15.1
- All count a full 80 PDHs and will permit a CWI to recertify for 9-year recertification without further testing or seminars.
- The endorsement credit can be earned at any time during the nine-year cycle.

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### Future Training, Ideas and discussion

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### Topics to be considered

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- ISO-9001 & Welding Industry Auditor Training (flexible to participants of the class)
- Quality Management Systems
- Welding Metallurgy
- Welding Symbols
- Nondestructive Testing
- Welding processes
- CWI preparatory class

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### Future ideas?

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- Follow best practices already used by other Professional Societies
  - ASQ Recertification Journals
  - ASME
- Promoting developing directly welding related
  - Leadership
  - Quality
  - Conflict Resolution

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### Training to be offered

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- Getting certified vs. keeping certified focused classes?
- What are the needs, interests of our members?

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### Questions

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