

# SCP TRIBUNE<sup>®</sup>

## Otto What???

An ocean-going tank barge, checkerboard-loaded with 2 cargoes (bunker fuel and Bakken Crude,) had delivered the crude and was scheduled next day to offload the bunker oil.

Because it is so thick and viscous, Bunker fuel must be heated to be pumped. No problem: the barge had heating coils in every tank.

But the spec label on the heating oil furnace worried the Tankerman. That furnace could put out 740°F! The Tankerman's Competent Person Training raised a red flag.



Why was 740°F of concern? Because, as Competent People know, liquid hydrocarbons can behave badly at such high temperatures. Diesel, for instance: At lower temperatures diesel needs a spark to make it catch fire or explode. But at around 500°F, diesel and gasoline enter a poorly-understood and dangerous area:

**The Autoignition Zone.** When they get so hot, these fuels may explode without any spark at all!

Remember; the barge's crude oil had been pumped ashore. But the empty ex-crude tanks still were heavy in Bakken Crude vapor and the barge had no inert gas. So, considers the Tankerman, is it really wise to fire up that furnace? After all, those 700+°F heating coils run throughout the barge, including through empty tanks rich in Bakken Crude vapor.

No one knows exactly what's in Bakken Crude; but it is very, very flammable. Might some crude on the coils possibly be heated to autoignition by the 740°F? No way to be certain.

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## TRAINING

### Shipyard Competent Person



#### 3-Day Initial

Aug 3-5 @ SSC

Sep 7-9 @ SSC

#### 1-Day Updates

Jul 20 @ Fremont

Aug 4 @ SSC

Aug 17 @ Fremont

Sep 8 @ SSC

Sep 17 @ Fremont

Fremont: Fishermen's Terminal

SSC: Georgetown Campus Just off I-5: Corson Ave

### OSHA 10 Maritime & General Industry

10-hour training on 29 CFR 1915 or 1910 provides methods on recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces specific to the maritime or general industries. Call 206-932-0206 for class schedule.



Heating Coils in the Bottom of a Cargo Tank

## Otto, Cont,

When called, the Chemist was interested in real-time heat tests. And a heat gun said the actual heating oil temperature was more like 450°F than the fearsome 740°F; And, the hot oil cooled pretty quickly after leaving the furnace. The engineering crew (Mate, Engineer and Tankerman) made 2 decisions:

1. Use a lower furnace temperature even if it takes longer to heat the bunker cargo.
2. On future such voyages discharge the bunker cargo first. That way there will be no hot coils in empty, gassy tanks, and Autoignition Temperatures will not be an issue.

Lesson: No repairs were done; no spaces entered. But Competent Person training will be valuable for doing many jobs safely.

## Investment in Certainty

As is our constant refrain, ship repair safety deals in the **World of Certainty**.

This means the Competent Person's report must be absolutely factual. Jobsite conditions are to be described with certainty.

And this certainty is expensive: \$2000 for a test meter, \$250 for calibration gas, \$500 for training, and then the daily toll for wages, (often at premium rate because Competent People can do their best work before the shift even starts...)

So, the question becomes: What good is all that expense, all that training, all that testing, all that printing and posting of this most valuable wisdom if no one...NO ONE... takes it seriously??



A very serious question. Why? Because workers unsure about the Competent Person's findings and requests will do damage. Expensive damage.



So, how to make sure the workforce really appreciates the Employer's safety investments and the Competent Person's good work? The answer has 2 parts.

First, as always, we're talking **Employee Training**; Costly, bothersome and absolutely necessary.

And Second: **Threats**. (In the Safety Business, one is supposed to say "Evaluation") But, as with other serious matters, that boils down to a threat. For instance, any worker who leaves his cutting torch unattended in a tank has been threatened with unemployment. We know and expect that. Same deal if you do hot work in a space which has not been

ok'd by the Competent Person: You have made a career decision

Moreover, as we found in June's 'Tribune,' the importance of the Competent Person is best reinforced through: **Training of Employees 29CFR 1915.12(d)**, a legal duty imposed on Employers direct from OSHA.

## HOPE FOR THE REST OF US

After a career running the Steel Shop, Competent Person Extraordinaire Dave retired June 23<sup>rd</sup>

Dave is a happy reminder that craftsmen in our dangerous industry may indeed retire with the security of good health and a reasonable pension. That's good. We all need something to look forward to.



But the retirement celebration brought with it the sober realization that there really aren't that many Daves around.

Monday morning the ship yard will miss those decades of experience and expert inspections. Who will keep repair jobs safe as the work continues? Where to find another Dave?

Where to find journeyman craftsmanship combined with OSHA training and the wisdom of experience?

And not everyone has the enthusiasm, physical strength and outright willpower to

test the deep spots of fuel tanks, cargo holds and engine rooms to make sure they stay safe.

And who can then communicate clearly, in legible writing, to workers who may not like to read? Who can talk the languages of several crafts?

Not to worry! It took 3 months, but the shipyard has found that fairly exotic mix of craft, authority and competence that guarantees safe and secure workplaces.



**EXPENSIVE INFORMATION:  
IVOR GARBUSH POSTS HIS SCP INSTRUCTIONS**

Congrats to **Michael Farley** of **Seattle Fire Department**: Winner of June's quiz.

### June's Question: Complete the Poem:

**Q:** The Skipper likes a shipshape craft...  
All the lines and leads are stowed  
Where they should be, 'fore to aft...  
From halyard splice to anchor **RODE**.

### July's Question:

Years ago there was a maritime union hall on 1st Avenue near Belltown. The premises were shared by 2 crafts: Shipwrights and Laborers. Except, in those days they called "Laborers" by their traditional title. What was the traditional maritime term for "Laborers?"

Please submit us your answer before July 25.

All correct answers will be entered into a random drawing and one person will win a **\$50** gift card!  
One entry per person, please.