TRAINING CREWS FOR INNOVATIVE FUELS

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Why Train?

Innovation and Development slows down if legislation does not provide safety standards and relevant training programmes.

TRAINING FOR LOW FLASHPOINT FUELS (IGF CODE)

- An established training pathway but...
-usually LNG focused...
-not vessel specific.
- May not keep pace with developments.

We encourage vessel developers to talk to Flag State Authority First.





Guidance

MCA customer process for alternative fuels - hydrogen

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There are two pathways via the University of the Highlands and Islands:

UK Near Coastal.

IGF Bolt on for International Trading.

IGF "Bolt-On" for Hydrogen [GH2 and LH2]

- Crew hold IGF pre-requisites, including sea service.
- Vessels >500gt under IGF Notation.
- 2/3 days training plus a witnessed first bunkering.

Crew responsible for designated safety duties including:
Firefighting, and Emergency response.

Attend **Basic IGF Training** and obtain certificate or demonstrate alternative certification for service on liquefied gas tankers. (STCW A-V/1-2 & I/14)

Attend UHI Orkney training and obtain:

Certificate of fuel-specific training for service on ships using compressed gaseous or liquid hydrogen as a fuel -Part 1

Crew may serve on Vessels using Hydrogen as a fuel. Masters, Engineer Officers and anyone delegated with duties including:

Operation of fuel related equipment, planning/monitoring/control of all fuel operations, bunkering, firefighting, hazard prevention.

Attend Advanced IGF Training

and obtain certificate or demonstrate alternative certification for service on liquefied gas tankers. (STCW A-V/1-2-2 & I/14)

Training must include 2 simulated bunkering exercises.

30 days sea service on a vessel utilising IGF Fuels

Attend UHI Orkney training and obtain:

Certificate of fuel-specific training for service on ships using compressed gaseous or liquid hydrogen as a fuel-Parts 1& 2. **

Obtain proof of 1 Hydrogen bunkering exercise.

Evidence of training and service listed above to be submitted to MCA for issue of Certificate of Proficiency Advanced IGF.

After STCW IGF training, a programme of fuel-specific training to add Hydrogen-specific knowledge and safety awareness while meeting STCW requirements.

However, there are disadvantages.

UK Near Coastal [GH2 and LH2]

- UK Waters up to 150 miles offshore.
- Typically, vessels <500gt.
- Stand-alone training, fuel specific.
- 3 days training plus a witnessed first bunkering.
- Aimed at CMDC etc and coastal vessels.
- Can respond to new developments.
- Can't currently transfer to IGF Notation vessels.

Vessel operator to engage with MCA Seafarer Services - Future Fuels team to agree seafarer training requirements.



UHI Orkney to notify MCA of candidate names and intended date for training and await authorisation for course to take place. UHI Orkney to establish all pre-requisites are met.



Course to take place at an approved training venue. All crew to attend all days. UHI Orkney to enrol students, check pre-requisites, adjudicate test papers. Certificates not to be issued at this stage.



New vessels: UHI Orkney to attend and witness crew undertaking first operational bunkering of vessel then notify MCA that this has taken place.

Subsequent bunkering: crew replacement, (etc) Chief Engineer or Master to witness and notify UHI Orkney and MCA that this has taken place.



UHI Orkney will then forward certificates to vessel operator.

A stand-alone programme of training that is fuel-specific.



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