



# **Module Quality Review**

## Module G: Ship Technology

## **Review by: Prof. Alfred Baird**

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### 1. Structure

There are 3 sub modules or module elements in Module G. The ME's have a focus on first ship type according to cargo, then according to working practices, and thirdly with emphasis on ship particulars/dimensions.

This seems a fairly arbitrary structure. An improved structure could consider a more detailed focus on each main specific ship types based on 6 sub modules, for example:

- Container ships (deep-sea; short-sea/feeder; geared; conro etc)
- Bulk ships (liquid; dry etc)
- Ferries (pax; ropax; roro; conro; high-speed etc)
- Cruise ships (mega; multi-market; focus; niche; river)
- Specialised ships (offshore/PSV, heavy lift, reefer, icebreaker etc)
- Other types of ship (pilot, tug, fishing, military)

Within this format a standard template could be used to present information about each ship type to the student. This would provide for more consistency.

#### 2. Content

As above, the structure could be improved and also the content would need to be adjusted in line with that. This revision should ideally be based around using a common template that is sufficiently detailed to present information relating to each of the six sub modules.

There is a general focus on vessels handling cargo. Many vessels do not handle cargo and these should be covered, as suggested in the revised structure.

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The distinction between dry and liquid cargoes is blurred sometimes. The material tells us that a container or roro ship is for dry cargo, yet such a vessel may be carrying hundreds of tank containers loaded with liquid cargo.

The first two learning outcomes appear to be rather similar.

The introduction seems quite limited and could be expanded further.

#### 3. Completeness of online material

In general the interactive ship graphics are very good and photos are also good quality.

SM 1:

Fig 5 on containership size seems outdated (e.g. the largest ship size noted is now in operation).

Ropax examples seem to be omitted – there are several thousand of such vessels in operation worldwide. Also missing is urban ferries/fast craft etc. Hence it is recommended to have a sub module covering all ferry types/applications.

Table 2 oil tanker – spelling for suezmax etc needs checked.

Fig 25 shaded areas look incorrect. This fig is also referred to in the text as fig 22?

Fig 26 is entitled 'LNG tanker along the river channel'. Could be re-named simply 'LNG tanker'.

4.1: would be a good idea to include dimensions of ships as these are critical factors for port and canal access – length, beam, draft in particular. The gross tonnage to a layman is normally not well understood and needs explained.

Fig 30 shows an outdated barge-ferry in Istanbul – might be better showing a more advanced IDO ferry – see

http://www.ido.com.tr/en/index.cfm?page=SubPage&textid=64&kapsam=64&l n=en

Fig 31 indicated a 'typical' ferry for 600 cars. The ferry in question will 'typically' load 100 trucks plus 100-250 cars, plus pax.

Fig 32 is inappropriately described as '...the most famous ferry'???

SM2:

The second sub module on 'ship types according to working purposes' is really just describing a range of specialised vessel types. As noted above, this could be given its own sub module category to follow on from presentation and discussion of the major ship types.



The sections on fishing vessels and yachts could be expanded a little, showing a more diverse range of craft (e.g. inshore, offshore and deep-sea fishing, plus sailing yachts).

The section on 'fast crafts' (or 'fast craft') could be integrated with ferries. Some of the examples shown here are not fast – e.g. the trimaran (which incidentally is not "the largest" either).

SM 3:

Some of this information should be presented in each sub module relating to specific ship types. There seems little logic to have a sub module considering only the matter of ship dimensions.

Much of the technical info provided is required more for persons studying to be navigators or naval architects.

The 'useful link: Cargo vessels' does not seem to be an essential addition, and access requires payment of a subscription?

#### 4. Quality of sources used

The references could be improved.

e.g. 'van Dokkum, Klaas (2006). Ship Knowledge'.

This reference needs the publisher/place to be added.

Other references are mainly websites. Most of the graphs and some photos come from Wiki – this tends to diminish the quality aspect.

It would be expected to have several academic references noted in the module, especially relating to textbooks and journal articles.

#### 5. Language

English language and grammar needs to be checked throughout the module material. There are a number of minor or basic changes required.