

**EXPAND SEA TIME TRAINING FOR CADETS AND PROMOTE
MARITIME RESEARCH**

IMPORTANCE OF ON-BOARD TRAINING FOR CADETS

1. Background

1.1 As seafaring professionals, to be safe and effective managers of capital ships at sea, ships officers must not only have a sound knowledge disciplines such as navigation, marine engineering, maritime law, maritime commerce etc but also have the practical 'hands-on' abilities to react and apply their knowledge correctly to the ever changing situations and the vagaries of the sea – this is sometimes succinctly expressed as good 'seamanship'.

1.2 In order to develop the knowledge and proficiency of officer trainees (ie cadets) there is a need for achieving a good balance between academic work ashore and thorough exposure and on-the-job (OJT) learning at sea. Guidelines on the training of seafarers along with minimum requirements on cadets' OJT have been stipulated under IMO's STCW78 Convention, as amended and related national legislation.

1.3 Current regulations stipulate an international minimum 'on-board' service (sea-time) of 12 months for navigators and merely 6 months for marine engineers (though this is being raised to 12 months under the new Manila Amendments 2010). Most nations, including Malaysia, have perhaps adopted the 'minimum' sea-time requirements – thinking that time spent at maritime academies can automatically replace much of the OJT at sea. Though this can be achieved to a great extent through academies having 'operational' training ships of their own, it's not been the case in maritime education & training (MET) institutions in the world, albeit a few in highly developed nations. Adoption of these minimum sea-time requirements therefore have been adopted without making a thorough study of the learning outcomes for seafarers, leading to more and more 'competency gaps' amongst

seafarers being reported in international shipping.

1.4 Competency gaps amongst seafarers may be further accentuated by the very nature of modern shipping: varied ship-types, sophistication and non-standardisation of onboard equipment, short sea passages, short port turn-round times, minimum manning levels, increased commercial pressures and 'paper-work' for ships' officers (who are the mentors for cadets' OJT) etc. The cadets also need time to not only adjust to the unique environment at sea, but also to the multicultural environment onboard – which is a fact of today's shipping.

1.5 Signs now abound - through competency-gap analyses, port-state control audits, incident and accident reports etc that all may not be going too well with the practical abilities of modern day seafarers! Malaysia as a major player on the international maritime scene and moving towards developed nation status must ensure that its seafarers are not only knowledgeable but are recognized internationally as being highly experienced and competent.

2. What is needed

2.1 Extended sea-time (OJT), of up to 18 months, for navigating cadets appears to be a strong requirement and this should, along with simulator-based and other training, improve the overall competence of Malaysian merchant navy officers. For marine engineering cadets, Malaysian Maritime Academy (ALAM) has already extended sea-time requirements to 12 months in keeping with Manila Amendment guidelines (though the current nationally legislated requirement is only 6 months).

3. Possible Constraints

3.1 Extended sea-time, though essential for the achievement of appropriate learning objectives and the reputation of national shipping, is likely to cause some burden on shipowners/operators. There will be a greater demand for 'billets' (ship-

berths) for cadets on board ships in order to accommodate the additional period of training onboard.

3.2 If the availability of sea-berths is not addressed, the problem of onboard training could be further compounded through delays in cadet placements on ships etc.

MARITIME RESEARCH

1. Background

1.1 Official research currently conducted locally is 'marine' research, both fundamental & applied and undertaken mainly by government funded universities. The exception is The Maritime Institute of Malaysia (MIMA) which does undertake some 'maritime' research, through its five research centers (though even this has been relatively restricted to a few sectors of this wide field) and University Technology Malaysia (UTM) which has undertaken some maritime research related to vessel design and seakeeping.

1.2 Other university bodies undertaking marine research in the country are (though mainly restricted to marine biology and ecology):

- University of Malaya Research Centre
- Centre for Marine & Coastal Studies, USM Penang.
- University Malaysia Terengganu Research Centre (this is the only centre which operates a small research vessel, the rest hire commercial/fishing vessels when required).

2. Established Maritime Institutions

2.1 MIMA

2.1.1 The Maritime Institute of Malaysia (MIMA) is a policy research institute set up by the Malaysian Government to look into matters relating to Malaysia's interest at sea, and to serve as a national focal point for research in the maritime sector. Established in 1993, MIMA was incorporated under the Companies Act 1965, as a company limited by guarantee and not having a share capital, with its own Board of Directors.

2.1.2 The Institute takes a comprehensive approach in dealing with maritime issues. Its role is to deal with national, regional and global maritime matters affecting Malaysia. MIMA is therefore expected to contribute towards a meaningful, comprehensive and cogent national maritime policy for Malaysia. One key task of the Institute is to complement the efforts of the various government agencies involved in the maritime sector by mobilising expertise to assist and support them in national maritime policy planning and implementation. The Institute's role will be both advisory and consultative. MIMA will provide advice and second opinions to Government agencies and other relevant organisations. The Institute also has the task of promoting the free exchange of ideas on all maritime matters.

2.2 MARITIME TRANSPORT TRAINING INSTITUTE (MATRAIN)

2.2.1 Maritime Transport Administration and Management Training Institute, Marine Department Malaysia was established to conduct training and research in the field of marine transportation. It is located in Pulau Indah and was inaugurated on 22nd June 2009. Under this institute organization, there are three units namely Support Services Unit, Training Development Unit and Research and Development Unit, with 36 positions. It is envisaged that the institute will be a centre of excellence in marine transportation. The institute is also recognized as "Regional Training Centre" in ASEAN as was decided in "Maritime Transportation Working Group" (MTWG) meeting which was held on 29th – 30th May 2007 in Singapore. The objectives of the MATRAIN are to generate knowledge workers, to provide marine courses and seafarers training and to undertake research in marine transportation field

Maritime Division
Ministry of Transport,
Malaysia

17 October 2011