The Changes of Chinese Maritime Education Environment and Its Development Countermeasures

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Abstract: In recent years, China's maritime education, the external environment have undergone profound changes. Science and social development, on the one hand led to the decline in the status of seafarers, maritime career attraction as before, on the other hand, the overall quality of the crew to put forward higher requirements; China's maritime education scale and structure of significant changes in the seafarer labor market and The development of maritime education itself has become increasingly prominent; China and the world maritime industry development and the international seafarer labor market eastward, to our maritime education development brings new opportunities and challenges. Based on the qualitative and quantitative analysis of the development trend of maritime talents and the current situation of maritime education development in China, this paper puts forward some suggestions on how to improve the recent development strategy of maritime education, improve the regulations of maritime education and seafarers' management, accelerate the reform of maritime institutions. Keywords: Maritime Education, Development Countermeasure, Education Environment measurement system; Compensation measures

1. INTRODUCTION
With the development of modern science and technology and its extensive use in the maritime industry, ship technology, navigation technology, ship management technology more and more automated and intelligent, and the quality of knowledge and quality of navigation talents have been higher and higher The requirements of high-quality maritime talents have become the core competitiveness of the maritime industry. Vigorously develop the maritime industry has become the world's strategic, forward-looking options, the maritime industry has been given the new technology widely used, the economic industry in-depth expansion, comprehensive national strength embodies the important mission. The main service orientation of maritime education is the maritime industry, and the historical mission of the maritime industry is bound to make navigational education in the leading position. China is a large sea country, is also a typical ocean power, economic development to a large extent dependent on international trade and maritime transport, in order to strive for more future survival and development of an important space to achieve more effective maritime jurisdiction, complete the "peace "And the great cause of reunification of the motherland must pay attention to the development of national maritime forces. The realization of the interests of these countries fully embodies the overall status of higher maritime education.

2. THE INFLUENCING FACTORS OF THE DEVELOPMENT OF HIGHER MARITIME EDUCATION IN CHINA
From a global perspective, the world economy is growing at the same time showing the characteristics of accelerating the process of globalization, its direct impact is the inevitable expansion of international trade, and thus promote the rapid development of the maritime industry. Economic development, globalization, international trade, maritime industry mutual influence each other. Statistics show that the rapid growth of the global economy and the rapid development of trade, the rapid increase in the volume of shipping, which brought the rapid expansion of the size of the merchant fleet, taking into account the needs of the types of goods, containers, tankers, bulk carriers Teams and other special fleet will become the main fleet. The expansion of the fleet size, as well as the professionalization of the fleet, will be the overall quality of the crew to make new demands, higher maritime education must be affected, both opportunities and challenges.

With the development of China's economy, as an important part of transport and international trade based on the shipping industry has also been rapid development. China's maritime industry is responsible for more than 92% of China's total international trade and transport volume and more than the total amount of domestic trade and transport, with other modes of transport irreplaceable special status and important role, with the further development of China's economy, the maritime
industry in our country. The status and role of the economy will be more prominent. The expansion of fleet size, especially the increase in marine vessels, means that more ship maneuvers and managers are needed; the increase in large ocean-going vessels means the need for more international high-quality maritime talent.

China's long coastline, the sea area is huge, is a typical ocean power. In the State Council issued the "National Marine Economic Development Plan" under the guidance of the overall size and scope of the national marine economy has been further expanded. Emerging marine industry further expansion and expansion, pillar marine industry basic shape, coastal tourism, marine aquaculture, marine transportation, offshore oil and gas industry, coastal shipbuilding industry not only in the domestic economic activities occupy an important position in the international market also has Quite competitive. The rise of these industries, but also the requirements of higher maritime education.

3. THE CURRENT SITUATION AND MAIN PROBLEMS OF HIGHER MARITIME EDUCATION IN CHINA

At present, the management system of higher maritime institutions presents a diversified trend, responsible for the management of institutions at all levels of education departments and industry departments in their own way, there is no unified and coordinated management mechanism, maritime professional standards and general engineering disciplines, can not reflect Its special requirements. This management system will inevitably lead to different standards of investment in maritime education, the differences in teaching conditions vary, the quality of personnel training uneven. Therefore, the need to further improve the maritime education management system, mechanisms to strengthen the maritime education scale, structure, quality of macro guidance.

First, the education of maritime educational institutions is inadequate. Maritime industry due to the need for real boat, simulator and other special practice practice, education investment costs are much higher than the ordinary engineering, but the actual investment in education does not reflect this feature. Second, the experimental internship conditions are weak. The teaching practice of navigational students can not meet the relevant requirements of STCW2010 Manila Convention and the State Maritime Safety Administration, and even some navigational educational institutions can not meet the requirements, the experimental practice is ineffective and the quality is worrying. High-level maritime institutions of personnel training objectives is not clear, navigation professional professional standards and standards, training programs, professional curriculum system and teaching content and other aspects of the urgent need to strengthen and cultivate internationally competitive maritime professional training model to be improved, English teaching, international cooperation, domestic maritime institutions, school-enterprise cooperation is not enough depth, maritime culture, maritime status and education environment to be further construction. As the working language of international ships is usually English, China's maritime institutions have attached great importance to English teaching for many years, paying attention to the cultivation of students' foreign language listening and speaking ability. However, there are still insufficient English application ability in navigation class, especially listening and speaking. The ability to use English ability has been plagued by the development of seafarers in China, one of the main reasons for the development of labor. With the development of China's seafarers' labor export industry, more and more Chinese maritime talents have been sent to ship with other countries, or with foreign seafarers. Therefore, in the actual work and life, it will inevitably appear with other national seafarers. Cultural coexistence and conflict issues, because of these cultural differences and differences in living habits lead to negative attitudes and methods of work, and even affect the safety of the ship. Since the reform and opening up, China's higher maritime education has made great contributions to the stable and rapid development of China's economic construction. The excellent students of advanced maritime education have become the pillars and pillars of the maritime industry. Most of the graduates have been working in all areas of China's shipping industry. At the same time we should also be aware that the international shipping market demand for maritime technical personnel is changing, the rapid progress of navigation science and technology has brought new challenges, China's higher maritime education training objectives and training of talent specifications can not keep up with international Shipping market requirements, can not meet the changes in navigation science and technology, therefore, to explore and analyze the causes of problems is to solve the development of China's higher maritime education an important prerequisite.

Exploring the Reform and Development of Maritime Education in China

In recent years, China's maritime education development of the external and internal environment have undergone great changes, the impact of maritime education gradually appear. Technology and social development on the overall quality of the requirements of the crew to improve the preparation of senior officers to access the threshold is reduced; in recent years, the world fleet and China's maritime fleet both in capacity or in the number of growth, and the world fleet More employment of seafarers in developing countries, and the difficulty of
employment in our senior officers, especially operational level officers, has become increasingly prominent. Based on this, China's maritime education development strategy and seafarers management policy need to make adjustments to adapt to changes in internal and external environment to ensure that China's maritime education healthy and sustainable development. To determine the development strategy of China's maritime education, we must first study the domestic and international shipping industry on the number of maritime talent, type and quality of the demand for the status quo and development trends, the current status of our current crew and the status of seafarers income, Professional students enrollment, training quality (training pass rate), employment intentions, the actual employment situation, with objective data to speak, to avoid blind decision-making. On the basis of thorough research and scientific analysis, the overall development plan of maritime education in China is formulated, and the training objectives, training scale, training mode and training standard of all levels of maritime education are adjusted.

It is suggested that the competent authorities of maritime education should carry out research and drafting of maritime education legislation as soon as possible and make provisions in the form of laws and regulations in the form of laws and regulations on the objectives, conditions of running schools, teachers' requirements, enrollment and training standards, Regulations, "the training of seafarers, training, certification, internships and working conditions, interests and information statistics and publishing and other provisions to improve. The current urgent need to improve the content include the following aspects.

First, the establishment of scientific and rational preparation of senior officers access standards. Traditionally, the training of our senior officers has been using academic education, including undergraduate, college and secondary school navigation education mainly by the state investment, private maritime education institutions academic training into a large, experienced a long time, and the individual is a great loss. The establishment of senior seafarers access standards in examinations must be a bachelor's degree, and most of the maritime institutions employ graduation can not be employed, both for the country and the individual is a great loss. The establishment of a complete and transparent seafarers training enrollment, examination, certification and employment information statistics and publishing mechanism, allows the community to fully understand the development of the industry, and then make a rational choice.

Third, improve the seafarers examination and certification system. China's crew assessment of the form and content of the examination has long focused on the assessment of knowledge and skills of the direct expression (in recent years, the use of mechanical examination is only the form of media changes), and re-written examination of light comprehensive assessment of the overall quality and knowledge ability are extremely relaxed. International organizations such as IMO, ILO and BIMCO launched the GO TO SEA campaign in 2008, which aims to "make seafarers an attractive option for capable young people." Resolution 7 and Resolution 12 adopted by the Diplomatic Conference of the States Parties to the STCW Convention held in Manila in 2010 clearly referred to the shortage of "Qualified Officers". Resolution 7 also "recommends that the Administration should make arrangements to ensure that the company establishes standards and procedures for the selection of seafarers who are able to demonstrate the highest levels of knowledge, skills and professionalism". The development of science and technology on the overall quality of the requirements of the crew is getting higher and higher, only "capable young people" after rigorous training to become "qualified senior crew." The national law of the Philippines stipulates that the participation of senior seafarers in examinations must be a bachelor's degree, and most of the maritime institutions employ school-enterprise co-operation to develop seafarers. The success of the Philippine competition in the international seafarer labor market is not unrelated to its adherence to higher senior seafarers' access standards. China's maritime education has long been the first training after the recruitment, training before the lack of business participation in the selection. And maritime education and training with distinctive post targeted features, if the training failed to employment is a great waste of social resources. Second, as soon as possible to establish and improve the seafarers training enrollment, examination, certification and employment information statistics and publishing mechanism. Maritime education and crew training into a large, experienced a long time, public maritime education institutions academic education mainly by the state investment, private maritime education institutions and public education institutions of non-diploma education costs mainly by the students, and most of the current maritime students Non-diploma education students from poor families, if there is a large area of training after graduation can not be employed, both for the country and the individual is a great loss. The establishment of qualified young people must be a bachelor's degree, and theentry criteria in addition to physical conditions by the local examination, college entrance examination scores control. On the Reform of Higher Vocational Education after the Reform of the 20th Century. The "Crew Regulations", which came into force on September 1, 2007, are used as a condition for applying for a certificate of competency rather than completing a maritime academic education. However, China has not yet established a scientific and reasonable preparation of senior seafarers access standards. Undergraduate and high school navigation class as a result of college entrance examination scores, the quality of their students have basic assurance; other training institutions and maritime institutions to recruit non-academic education and training trainees, the entry criteria in addition to physical conditions by the training institutions to develop their own The requirements of students'
ability of the assessment is not comprehensive. The STCW Rule Part B gives guidance on competency evaluation: "The scope of knowledge is implicit in the concept of competency, so the assessment of competency does not only focus on the direct technical requirements for work, skills and tasks. It should also reflect a broader content that meets the overall requirements of the ship's senior crew, which includes relevant knowledge, theory, principles and cognitive abilities that support varying degrees of competency at all levels.

Fourth, the appropriate foreign foreigners to recruit and training the market, the introduction of well-known companies to participate in the recruitment and training of seafarers in China. The only way to adapt to the sailing education and the size of the crew training in China is to compete with other seafarers' labor exporting countries for the global seafarers' labor market and strive for greater share of seafarers' services. Many well-known foreign shipping companies attach great importance to corporate training, foreign aviation enterprises to participate in China's senior crew recruitment and training will greatly broaden the way our seafarers assignment.

The basic function of maritime education is to train high-quality maritime talents. The degree of welcome by the shipping company reflects the quality of the training of maritime institutions, and the employment and career development of graduates will ultimately determine the rise and fall of the maritime institutions. Maritime institutions should be based on the development of maritime technology and maritime market status, combined with social needs and their own advantages and characteristics, a reasonable positioning, improve the training model, and strive to cultivate a comprehensive quality, international competitiveness of senior maritime professionals. First of all, the maritime institutions to scientifically determine their own training objectives and scale, "take the initiative to adapt to" the shipping situation and the development of maritime education situation, that "the development goals should have a certain forward-looking and dynamic." [6] 14 undergraduate maritime professional not only to emphasize the job targeted, but also to focus on the training of complex maritime talent. Cultivating compound navigational talents is focused on the setting, design and implementation of the course. The quality of the course is reasonable or not, the quality of the course, the implementation of effective, are directly related to the quality of senior specialized personnel. [11] Comprehensive Maritime University can set up maritime safety and environmental management master's degree, to carry out maritime application-oriented master's education, enrollment standards, curriculum and training mode draw lessons from the World Maritime University practice, mainly to recruit maritime experience management level seafarers, Training to adapt to the international market of modern fleet management of senior composite talents and maritime professional teachers to meet the development of China's maritime industry on the needs of senior composite maritime talent. Higher vocational schools should be based on the seafarers labor market supply and demand situation and development trends, appropriate control of training scale, strengthen foreign language skills, safety awareness, teamwork awareness and modern ship and equipment operation and management skills training, focusing on training to adapt to the needs of assignment Of the operational level crew.

4. CONCLUSION

Maritime education plays an important role in the development of the shipping industry, which is basic, holistic and pioneering. At present, the internal and external environment of maritime education in our country has changed significantly. To ensure the healthy and sustainable development of maritime education in our country, it is suggested that the maritime education authorities should study and formulate the recent development strategy of maritime education in China and carry out the research and drafting of maritime education legislation as soon as possible. Improve the relevant regulations on seafarers' management. At the same time, maritime institutions should be based on the development of maritime technology and maritime market status, combined with social needs and their own advantages and characteristics, a reasonable positioning, improve the training model, and strive to cultivate a comprehensive quality, international competitiveness of senior maritime professionals.

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