

Naval Academy *N. J. Vaptsarov*
125 Years of Bulgarian Maritime Education:
A Current View

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During its 125 years long history, the Naval Academy *N. Y. Vaptsarov*, proved itself a leader in Bulgarian maritime education. The Academy is approved by the International Maritime Organization of the United Nations in London. Many difficulties and successes have been filling the long way of the establishment and the development of Naval Academy, which well-earned received national and international acknowledgement: a place on the White List of the IMO and a Certificate of Quality ISO 9002.4 and ISO 9000:2000 from the Lloyd Register with institutional accreditation from The National Accreditation and Assessment Agency of the Ministerial Council of Bulgaria. Thanks to the unique traditions and potential the Naval Academy possesses the ability to realize its main mission: to train commanding and operational staff for the Navy and for the Merchant Sea and Inland Fleet. A number of countries such as Japan, Germany, Turkey, Greece etc. demonstrated a high interest in this experience during the anniversary year 2006.

I. Short historical information about establishment and development of Naval Academy as a national symbol of Bulgaria.

After the Bulgarian liberation from Turkey in 1878, the country needed a sea outlet. Bulgaria has a long Black Sea coastline and the country needed a Navy and Merchant Fleet to fly the national flag in the World Ocean. This was how the newly liberated country begun to affirm its identity but this need required marine staff training. The Naval Academy was established on the 9th of January in Rouse. Naval Academy *N. Y. Vaptsarov* was founded as a technical school first but it started training

marine staff soon. The Bulgarian marine officers, trained at Naval Academy, replaced the foreign captains and engineers managing the Bulgarian ships. They won the marine labor market competition as soon as the beginning of the Twentieth Century.

The establishment and the development of Naval Academy *N. Y. Vaptsarov* were based on national marine laws. The school moved to Varna as a Mechanical School of the Navy in 1900 and received high technical school rights in 1904. The marine school received higher military school status in 1942 and trained a staff for the Navy and for the Merchant fleet at sea and on the river Danube. Higher engineer naval school status has been given to The Marine School in 1956 and all the trainees for the Navy and for the Merchant fleet started receiving engineering qualifications. This qualification process continues and fully corresponds to the standards for international maritime engineers (IMarE). The International Maritime Organization of the United Nations Organization audited the school for the first time in 1960 and since then internationally recognized diplomas for maritime specialists have been issued.

Since the establishment of Naval Academy *N. Y. Vaptsarov* a few basic traditions were developed and they have been preserved till nowadays:

- A) Combining undivided authority with academism.
- B) Integrated staff training for both Navy and Merchant fleet.
- C) Training in marine style of life.
- D) Common theoretical training and sailing practice.
- E) Adaptation to the new requirements and high quality of maritime education; affirmation of the school as a center of maritime education in Bulgaria.
- F) Strictly following the international standards regarding training maritime officer's staff.

These traditions define the content of the main motto of the Naval Academy *N. Y. Vaptsarov*: “Duty, Honor, Dignity, Professionalism.” Thanks to these traditions the quality of the Bulgarian maritime education at Naval Academy *N. Y. Vaptsarov* conforms to the national requirements, standards of IMO, London, London Institute of Maritime Engineers (IMarE), International Standards Organization (ISO), Lloyd Register, and the STCW’95 convention.

II. The Naval Academy *N. Y. Vaptsarov* adjusted its training programmes to meet the new IMO requirements.

The Naval Academy *N. Y. Vaptsarov* is the first unique school, training during its 125 years long history staff together both for the needs of The Navy and The Merchant Fleet. This unique experience has been preserved under the new IMO requirements. The school plans and the curriculum were quickly reorganized in correspondence to the Seafers’ Training Certification and Watchkeeping Code 78/95 (STCW’ 95 Code), placing the human factor at the center of the marine profession! IMO, Lloyd Register, IAMU and the National Assembly recognize the Bulgarian military and civil education at the Maritime school! Merchant fleet staff training must include special marine endurance elements, which impose a specific training and educational regime. During the naval education and the service at the Navy a number of valuable personal characteristics, basic for the marine profession are being developed: ability to live and work reliable in socially and physically closed environment; capacity for long living together and stable professional activity in conditions of personal satiety and sensor deprivation; team work skills and habits; high psychic stability; skills for bearing privations and coping with extreme situations; possessing discipline, punctuality, adaptation, personal responsibility, communicating skills, logical and critical thinking; ability to accept reasonable and realized risk; capability for adequate estimation of the situation and taking relevant decisions in deficit of time; purposefulness.

The Naval Academy *N. Y. Vaptsarov* trainees prepare to manage sophisticated, technical systems and contemporary ship crews (often multinational) in extreme conditions. Using the education plans and curricula approved by the IMO in 1998, the Naval Academy emphasized these fields, methods and forms of training, which comprise a quality course of study:

Course of Study
at the The Naval Academy
“N. Y. Vaptsarov”

1. Environment and regime of the maritime education.

2. Perfect organization structure, organization of the study process, study-planning documentation and system of quality.

3. High quality academic staff with aspiration for scientific researches and high achievements.

4. Classical and modern methods for simulator training and sailing practice, which build up high professionalism and abilities for crisis management:

1. Environment and regime of maritime education:

The entire environment and the system of training and education as well as the physical, marine and psychic endurance of the cadets and students define the development of the professional mariners. The maritime education is accomplished in regime closely emulating conditions at sea. There are two possibilities of training – with government sponsorship or on own support and payment. The marine profession demands education under “cadets conditions” with harsh regime of live and activity, closed to the ship’s conditions, hierarchy and relationships. The cadets and the students studying at the Naval Academy *N.Y. Vaptsarov* have chosen a difficult career, filled with privations and harsh life conditions.

The maritime profession requires strong longing for intellectual and physical work. The maritime officers are responsible for the safety of the cruise, the technical equipment and the crew member's and passenger's lives.

The knowledge, the experience, the life energy and the sense of the duty help them passing the probation at sea successfully and to meet the extreme trust. The cadets keep the ship hierarchy rules, live in a campus, study the ship language and marine terminology, learn to live in small groups in social isolation out of the outside world, go through special systems of psychic and physic endurance during their education. They are trained in swimming, rowing and yachting. In that kind of environment the trainees learn obedience, punctuality, discipline, personal responsibility, leadership and ability to make decisions in dynamic and unpredictable circumstances. This is how the marine character hardens and the cadets gain marine spirit.

There is a newly built up system at the school about developing the cadets and the students as leaders. Books about the leadership have been issued, multileveled programs about creating and developing leadership characteristics have been set up.

Game based methods of education are widely used – conducting situational professional games in English, during the psychology classes, and tactics with the navy. The whole information needed about the new requirements, tendencies and achievements in the international maritime sailing have been received at the Naval Academy through the Internet. The staff includes in the lectures information about the latest technical achievements, and the achievements in the science and world. IMO courses are being organized and the IMO requirements are being studied.

2. Perfect organization structure, organization of the study process, study-planning documentation and system of quality:

The education and training are conducted corresponding to the national and international legislation and standards requirements. All the candidates go through strong system of selection based on intellectual, physic, psychic and moral characteristics, motivation and values which guarantees yet on the entry high quality of trainees.

Two faculties function at the Naval Academy: “Navigating” and “Engineering” as well as a Post graduate qualification department. The built up faculty organization proved its advantages. The contribution to improving the quality of the training-educational process and the scientific development of the lecturer’s staff is clearly seen.

3. High quality academic staff with aspiration for scientific researches and high achievements:

Traditional research emphases, related to the problems of the Navy and the Merchant Fleet, exist at the Naval Academy. Modern courses such as: psychology and psychophysiology of labor specific to maritime transport; diagnosing and controlling the electronic systems; increasing the exploitation reliability and safety of the maritime transport systems; new educational technologies, have been developed during the last few years along with the classical areas of training and education. The results of the courses are tested via training simulator. The requirements of the International Convention STCW’95 and The IMO Model courses have dictated the new content in the scientific work.

The lecturers keep regular scientific contacts with the maritime academies and universities in United Kingdom, Germany, Greece, Italy, Poland, Romania, Russia, USA, Turkey, Ukraine, Hungary, France, Holland, Croatia, Sweden, Japan etc. Lecturers on specialization from Naval Academy raise their qualification by participating the British Council program “English for peaceful aims” and the courses organized by Language Institute of USA and held in San Antonio, Texas.

There are more than 50 publications in the foreign scientific press and participations at scientific conferences overseas of the lecturers from the Naval Academy during the last few years. They actively participate at international scientific forums, organized in the country, such as the annual celebration The Month of the Science in Varna, *Black Sea 2006*, the International Scientific-practical Conference about the development and the problems of the aquatic transport in Bulgaria. Anniversary Scientific Session was held on the 17-18th of May 2006 and The XIIIth International Scientific-Technical Conference Trans & MOTAUTO' 06 was held on the 25-28th October 2006, Varna. Two National Conferences of Maritime education "BulMet' 2003" and "BulMet' 2005" was held under the patronage of the president of Republic of Bulgaria Georgi Parvanov.

The Naval Academy owns publishing center, specialized in publishing academic literature – scientific, technical, military, and humanitarian. The scientific editions are being republished by civil publishers and there is increasing interest about them by the students and the lecturers from other universities. Naval Academy is the biggest publisher of marine scientific-technical literature in Bulgaria.

The scientific researches are closely tied to the educational process. The cadets and the students are involved in doing scientific work.

4. Classical and modern methods for simulator training and sailing practice, which build up high professionalism and abilities for crisis management:

The curricula of all specialties at the school have been renewed according to the STCW'95 requirements; the training at the simulator has been activated – navigating the ship, radar and ARPA simulators, electronic charts, GMDSS, and survivability.

According to the regulation 1.12 of STCW'95 using simulators, while training ship specialists is mandatory. The simulator complexes for the navigators and engineers at Naval Academy include the

situational simulators ECMS (Center's Environmental Crisis Management Simulator) and CMTS (Center for Marine Training and Safety) demanded by the world maritime standards.

A) The mechanics have available Nord Control Simulator from Norway which made impression even on the NATO officers. The lecturer's had upgraded the simulator's hardware and software, which considerably increased its characteristics and possibilities.

B) The navigators have available the biggest planetarium at the Balkans and a modern navigating simulator.

The cadets and the students as leaders of teams and ship crews learn strategies of coping with incidents with guns, collisions at sea, destructive human behavior – panic, fear, distress, group disorganization in correspondence with STCW'95 Convention and the approved school plans and curricula by IMO since 1998. We use the following methods at our practice: including in scenarios of natural disasters and accidents at sea, crisis situations, solving cases of destructive human behavior and coping with group disorders, training for possessing skills of acting if accidents with naval weapons occur, psychological trainings on leadership at extreme situations.

The standards of IMO about this kind of activity have different nuances, well known by the lecturers and the trainees: Emergency Preparedness, Environmental Crisis Management, Spill Management Team and Crowd Management. This activity is strictly defined by STCW'95, Regulations number AV/2 and AV/3. The training is accomplished according to IMO standards through the following methods and forms: lectures at the classrooms, role plays, psychological trainings, practical crowd management scenarios.

The management of human behavior in ship environment is included in the school plans and curricula at the Naval Academy, because these questions are regulated in the IMO model courses: Model Course "Human Relationships" (IMO number 1.21); Model Course "Human Resources Management" (IMO number 5.04); Model Course "Personal Survival" (IMO number 1.19); The

International Management Code for the Safety Operation of Ships and for Pollution Prevention. [International Safety Management (ISM) Code]. Trainees who successfully completed the course receive certificate Personal Safety and Social Responsibilities in according to the rules VI/1 and A-VI/1-4 of STCW'95. The lecturers from Naval Academy *N. Y. Vaptsarov* are one of the first in the world who published a book for the cadets and students training of IMO standards – “Human relationships and Social Responsibilities”, parallel with the implementation of the new school plans and curricula, based upon STCW'95 in year 1998. There are 15 courses at the Naval Academy based upon the STCW'95 standards training captains and mechanics from the merchant ships and many civil specialists.

Conclusions:

- 1) The symbiosis between the maritime education for the Navy and for the Merchant fleet is unique in Bulgaria. This process was based upon government concern and the national maritime politics. It has to be preserved and developed, because it brings high profit in currency and adds quality to our national culture – military, maritime, technical, technological, transport, educational, scientific, economical, financial, commercial and spiritual!
- 2) The integrative education of cadets and students for the Navy and for the Merchant fleet at Naval Academy *N. Y. Vaptsarov* is in interest of our national security and will contribute to our quicker incorporation to NATO.
- 3) Naval Academy is in condition to satisfy the increased needs of marine officers for the world maritime market. It is ready to continue educating foreign cadets and students. It has gathered unique experience in this field training marine staff from 11 countries.
- 4) Educating the mariners is a continuing process. The graduates keep improving their professional habits after graduating the Naval Academy, which is defined by international and national rules of

graduating mariners. The marine specialists participate at courses, simulator trainings, qualification courses, etc.

At Naval Academy post graduate qualification of Navy and Merchant fleet officer's staff is accomplished which leads as a result to high management level required by IMO and NATO standards. We train management specialists for both Navigation Maritime Bulgare and the Navy Headquarters, something recently a priority of the foreign maritime academies only! This reveals new avenues of development!

5) A number of countries such as Germany, Japan, Israel, Kuwait, and USA as well as companies for training and export of maritime staff, have been demonstrating interest to the training at the Naval Academy. Naval Academy is prepared to accept and train them well! The certificates granted by IMO, ImarE, ISO and Lloyd Registers guarantee the prestige of the national leader in maritime education.

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