

## ABSTRACT - FUNDAMENTAL AND COMPLEMENTARY SCIENCE

**TANER ALBAYRAK, OSMAN KAMIL SAG (pg. 128-132)**

Piri Reis University Maritime Faculty, Turkey

### **MARITIME ENGLISH IN VIEW OF STCW 2010**

**Abstract:** *Despite a widespread recognition that safety at sea and competency in English are inextricably linked, it is often the technical side of training rather than the acquisition of linguistic competence which is seen as a priority at maritime colleges and institutes. Today some may argue the importance and necessity of maritime English in view of increased automation of navigational systems, computers which may well speak directly to other computers in order, for example, to bring a ship successfully into port, so eliminating the human element in communication entirely. STCW 2010 Amendments including mandatory training for BRM, ECDIS, and Leadership as well as other non-mandatory trainings are welcomed by the Industry. New competency requirements such as Ice Navigation, Cargo Handling in Oil/Chemical Tankers, Dynamic Positioning Systems, Ship Safety Officer, Incident Investigation, Engine Resource Management, Energy Conservation, Crises Management, Leadership and Teamwork, Anti-Piracy Measures, etc have also introduced new terminologies along.*

*This paper intends to discuss whether existing Maritime English standards and curricula are adequate to cover multinational and multicultural competency issues as a “Lingua Franca” to develop leadership skills, reveal & develop management styles, achieve efficient communication, produce effective teamwork, understand situational awareness, use standard operating procedures & checklists, understand mental abilities and limitations, e.g. memory, workload, competence, confidence, etc. enhance the quality of decision making, understand health issues: fatigue, stress, nutrition, and human resources challenges for continuity, competence and culture to focus on the significance of human capital in the sustainability and development of the shipping industry in view of STCW2010 amendments.*

**Key words:** MET, STCW2010, Maritime English, human resources management, leadership

**AUREL BEJAN (pg. 133-136)**

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### **BODY COMPOSITION ASSESSMENT**

**Abstract:** *Establishing realistic short and long-term goals for body composition are a challenge. The fitness classification chart can assist you in establishing realistic goals. To provide insight into the techniques and methodology used in assessment of body composition using the following steps:*

- identify characteristics of basic body composition;
- identify methods of analyzing body composition;
- identify circumference sites and procedure for measuring body fat % of males and females;
- calculate lean body mass and target weight.

**Keywords:** body composition, percent body fat, fitness classification chart, long range body composition goal

**MARIAN CAȚĂ (pg. 137-140)**

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### **DEVELOPING APPLICATIONS FOR ANDROID USING JAVA**

**Abstract:** *In this paper I intend to present how to create some applications for Android smartphones using Eclipse IDE for Java Developers. As a case study, I have created a special application for our academy students.*

**Keywords:** Android, Java, Eclipse, smartphone

**CARMEN LUMINIȚA COJOCARU (pg. 141-143)**

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### **EMOTIONAL INTELLIGENCE AND COGNITIVE ABILITIES**

**Abstract:** *The present research is part of an ample project which laid the foundation of our PhD thesis (The Incidence of the Emotional Intelligence on the crystallisation of the person logic profile of the navy officer, 2007).*

*The study deals with the interaction between a set of constitutive variables of emotional intelligence and another set of variables in the area of cognitive abilities (of general intelligence) with their structural function in the whole person logical profile.*

**CEZARINA-LORELAI DINCU (pg. 144-145)**

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### **VARIATION OF SOME ENZYMES ACTIVITIES ALAT, ASAT, LDH - IN HYPERBARIC CONDITIONS**

**Abstract:** *This paper presents the variation of the ALAT, ASAT and LDH enzymes activities in the serum of ten divers, registered before and after 51 metres depth dive. It was notified a growth over the upper normal value of the ALAT at three of the divers and of the ASAT at two of the divers after the dive.*

*Concerning the LDH level, it varied within the normal limits at nine divers, except for one whom there were registered higher values.*

**Keywords:** hyperbaric conditions, hepatic cytolysis, membrane permeability, HELIOX respiratory compound

**PAUL DOMINTE (pg. 146-148)**

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### **A STUDY OF LEADERSHIP AND ITS IMPACT ON THE EDUCATIONAL MANAGEMENT**

**Abstract:** *The way to lead an organization has raised many studies especially in the Anglo-Saxon world, from where they spread quickly worldwide. The authoritarian methods specific to labour relations, to communist ideology and practice, have left much room for other types of leadership in a world where the most important decisions needed the approval of the party. After 1989, Western practices, based on organizational effectiveness at all levels, entered in theory in our country, as well. In practice most leaders continue to behave as before, either from habit or from ignorance or lack of trust in other models than those that have paid off for a lifetime.*

*Therefore, the change cannot come to Romania through channels other than the change in the manner of dealing with decision-making and interpersonal relations at work, or what the Anglo-Americans call leadership. Any action with regard to reform in this context, which does not reach the leader and the manner of behaviour in relation to subordinates, can only be a fiasco, if not a semantic aberration (a*

genre to make reform. Without changing anything!); the relations within education must be reformed since the claim is to form future leaders.

**Keywords:** leadership, management, educational system, manager, organization

**VIRGIL ENE-VOICULESCU, CARMEN ENE-VOICULESCU (pg. 149-150)**

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**THE STUDY PARAMETERS TO OBSTACLE RACE FROM THE NAVAL PENTATHLON**

**Abstract:** The naval pentathlon it's the most important discipline to CISM to the Navy Forces in Romania. In this study we have selected the aspects which we can establish the contain and the structure on the level at military students to the event obstacle race to naval pentathlon used main parameters presented in specially literature (Alexe N., 1993[1]; Dragnea A.[2], 1992; CISM-Naval Pentathlon, 2008[3]).

**Keywords:** Naval pentathlons, obstacle race, relay obstacle race

**VIRGIL ENE-VOICULESCU, CARMEN ENE-VOICULESCU (pg. 151-152)**

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**UTILITY SWIMMING EVENT IN THE NAVAL PENTATHLON**

**Abstract:** Naval Pentathlon has five disciplines: Obstacle race (305 meters) with 10 obstacles; Lifesaving swimming race (75meters) with 5 separate features with working dress, Utility swimming race (125 meters) with 6 separate features with swim-fins; Seamanship race (270 meters) with 7 separate features with land work and slalom rowing around buoys; Amphibious cross-country race (2500 meters) with 5 separate features with 50 meters shooting, 100 meters water passage paddling, 25 meters grenade throwing.

**Keywords:** Naval pentathlon, utility swimming race, underwater swimming, passes over the barrel obstacle, rifle carrying.

**OLIMPIU MANUEL GLODARENCO, IONEL DAN CIOCOIU (pg. 153-155)**

Director of Navy Museum/Naval Staff Forces

**CONSIDERATION REGARDING THE ROLE OF GEOPOLITICAL PIVOT OF THE BLACK SEA**

**Abstract:** Influenced by political and military events, the Black Sea has become transformed into a complicated intersection of geopolitical and geo-economic boundaries, becoming also a framework within which the Euro-Atlantic community asserts itself. Its strategic importance lay mostly in the role it played as a bridge and a frontier, a buffer and transit zone, between Europe and Asia at the crossroads between powers and empires. Black Sea has remained during its history a sensitive spot on the larger Eurasian map, an area in which the Great Powers employed their geostrategic concepts about the control of the seas.

**Keywords:** still conflicts, secessionist conflicts, cooperation, interference, security.

**SNEZHANA HRISTOVA, KREMENA STEFANOVA (pg. 156-163)**

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**INTEGRO-SUMMATION INEQUALITIES AND APPLICATIONS TO IMPULSIVE DIFFERENTIAL EQUATIONS WITH “SUPREMUM”**

**Abstract:** This paper deals with some qualitative properties of the solutions of impulsive differential equations with “supremum”. Initially several integral inequalities for piecewise continuous function that involve the supremum of the unknown function over a past time interval are solved. These inequalities are generalizations of the classical integral inequality of Gronwall-Bellman. They are a mathematical tool for studying boundedness of the solutions of impulsive differential equations with “supremum”.

**Keywords:** integral inequalities, supremum, boundedness, impulses

**Ion LAZĂR (pg. 164-167)**

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**SPECIFIC METHODS AND MEANS OF TRAINING FOR THE OBSTACLE COURSE TEST WITHIN THE MILITARY PENTATHLON**

**Abstract:** The military pentathlon (obstacle course) became an imposed necessity by the military system's modernization and connection to international political and social requirements.

It is necessary to establish a modern guideline, unitary in structure and content, regarding the athletes training in the current military pentathlon. Multiple means and methods were used, which had the role of verifying various aspects of athletic training content and structure. A series of known methods were used for investigating the somatic physiological and motor parameters, as well as specific measurement methods developed by us for this purpose. At the same time, adapted methods that were elaborated by us were used, both referring to the specific aspect of physical training, as well as psychological profile specific to the military pentathlon.

The proper use of training methods and means for the obstacle course has improved the results for this test.

**Key-words:** training; obstacle; methods; military pentathlon.

**KARIN MEGHEȘAN, VALENTIN M. (pg. 168-171)**

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**MEDIA IMPACT ON NATIONAL SECURITY POLICIES**

**Abstract:** The mechanism of national security policy is an issue of increasing interests in post cold war era. But what is the impact of the media upon national security policy decision making? New world wide events show us that more than ever national policy is often at the mercy of the media. The Wiki leaks, the Murdoch inquiry, the impact of new social media on Arab democratic movements are just some examples regarding the effect of nearly simultaneous presentation of information around the world.

The world is changing, and the processes by which national policy is developed may also be changing. This study employs a relatively narrow definition of national security issues as only those which are concerned with national survival and preservation of our way of life. The media affects us as individuals and as a collective body. The main purpose of this article is to focuses upon the impact of the media on national security.

**Keywords:** national security, media, decision making, liberty vs. security

**NAIE GILLES OPRISAN (pg. 172-175)**

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**THE CONTINUOUS IMPROVING OF THE STRUCTURE AND THE CONTENTS OF THE DOCUMENTS AND WORKING MANNER IN ORDER TO ENSURE THE SPECIFIC PHYSICAL TRAINING OF NAVAL STUDENTS**

**Abstract:** The present work represents a concrete image of the synthesis of large experimental studies over the naval students in order to link tightly the educational forms of training (and of course the checking methods) of students and naval personnel, with the direction and the bulk of specific requests of the physical training aboard any kind of ship. Finally, a new orientation and modernisation of the educational effort was imposed in the physical specific training, in the way the tests of physical training is put into practice in various ways of the discipline. One of the works in here, still have an experimental character and it will be probably necessary to make new re-shapings, adaptations and new improvements. These ones (the ones included) are strictly referring to the theoretical and practical frame of the development of the directed physical training in highest level of specific naval education.

**Key-words:** Test, rowing, swimming with the equipment on, the life buoy transportation, pulling the cable, applied itinerary, specific physical training, specific psycho motional training, etc.

**TIBERIU PLEȘU (pg. 176-178)**

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**PARLIAMENTARY PROCEDURE IN ROMANIA**

**Keywords:** Parliament, Procedure, Constitution, Member of Parliament, Senator.

**EMANUEL PLOPEANU (pg. 179-182)**

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**THE ROMANIA FACTOR AND THE BRITISH – TURKISH NEGOTIATIONS FOR ABANDONING EUTRALITY AND JOINING ALLIED SIDE (1943)[1]**

**Abstract:** Among neutrals states, Turkey played an important role in the strategies of both United Nations and Axis Powers. Both of them tried, through various instruments, to obtain Turkey's participation at the war. During the long talks, especially between British and Turkish heads of Foreign Affairs departments, Romania came into discussion. Turkish side argued that they cannot enter into war if Soviet Union postwar plans include a total domination of Balkans and cannot suggest to Romania to capitulate to Soviet Union. It remains open to debate if this stance was adopted only as another pretext for rejecting the Allied pressures or was an honest attitude, emerged from the real fear about Soviet future intentions. We believe a combination of both is the real truth because, after all, discussing Romania was, in fact, discussing about future Soviet hegemony in this area.

**Keywords:** neutrality, Soviet domination, negotiations, Romania's future

**IOAN POPOVICIU (pg. 183-185)**

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**A NEW APPROACH TO SECURING THE SETUP AND FLOODING STAGES OF ROUTING ALGORITHMS**

**Abstract:** In this paper we describe a method to securing the steps of routing algorithms, using a public-key infrastructure and cryptographic hashing of messages to achieve security. This method can secure several routing algorithms for networks where a single bad router can affect an entire network.

**Key words:** network, router, protocol, algorithm, security

**KREMENA STEFANOVA (pg. 186-192)**

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**NONLINEAR GENERALIZATIONS OF BIHARI INEQUALITY IN THE THEORY OF PARTIAL DIFFERENTIAL EQUATIONS WITH “MAXIMA”**

**Abstract:** This paper deals with some nonlinear integral inequalities that involve the maximum of the unknown scalar function of two variable. The considered inequalities are generalizations of the Bihari inequality. The importance of these integral inequalities is defined by their wide applications in the qualitative investigations of partial differential equations with “maxima” and it is illustrated by some direct applications.

**Keywords:** integral inequalities, maxima, scalar function of two variable, partial differential equations

**PAUL VASILIU (pg. 193-199)**

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**THE DETERMINATION OF THE OPTIMAL PATHS WITH MINIMUM MULTIPLICATION IN UNDIRECTED GRAPH THAT HAVE THE VALUE OF THE EDGES OBTAINED FROM THE DIJKSTRA ALGORITHM**

**Abstract:** By defining the optimal path with minimum value in a finite undirected graph, with positive value for edgess, we usually understand the determination of the path for which the amount of the edges values that compose the path is minimum. This problem is solved by classics algorithms, but the most efficient from all is Dijkstra algorithm.

In this paper we will define the concept of optimal path of minimum value as a result of the multiplication of the edges values that compose that path in a finite undirected graph, we will prove how these paths can be obtained, we will introduce an adaptation of the Dijkstra algorithm and finally, an implementation in C language.

**Keywords:** undirected graph, Dijkstra algorithm, multiplication