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September 25-26, 2001

Plenary Session

L.M.Klyachko, Rossudostroenie, Russia

The Present Status of Shipbuilding in Russia

S.I.Buyanov, Marine Fleet Central Research Institute, Russia

Prospects of the Russia's Marine Fleet Development

V.G.Fomin, G.Yu.Alyanchikova,

Water Transport Economics and Operation Institute, Russia

On the Development Concept for Inland Shipping till 2015

V.V.Chugunov, АК "Банк Еврофинанс", Russia

Financing of Ship Construction at Russian Yards

D.A.Chernenko, JSC "CDB "Schuna", Ukraine

Shipbuilding of Ukraine. Ten years of an independent development

Yu.B.Rybalchenko, Baltic Shipyard, Russia

The Baltic Shipyard Renovation

B.P.Ionov, L.G.Kuzmin, JSC Shipbuilding Enterprise "Northern Shipyard", Russia

Prospects of "Northern Shipyard" Development and Building of Several Types Vessels at it

M.A.Lobin, JSC North-West Shipping Company, Russia

Management and Marketing at JSC North-West Shipping Company

*V.D.Gorbach, O.G.Sokolov, G.Z.Margolin, V.M.Levshakov, A.A.Vasiliev, Federal State
Unitary Enterprise Central Research Institute of Shipbuilding Technology, Russia*

Ship hull production advanced technologies of 21st century

Kjell Einar Olsen, Eivind Haugen, Det Norske Veritas, Norway

Environmental Challenges, New Class Notations



Section A THE RUSSIA SHIPBUILDING MARKET

F.M.Katsman, S.O.Makarov Naval Academy, Russia

Principal Problems of Marine Transport in the North-Western Region of Russia

E.A.Klimenko, V.I.Kholosha, JSC Marine Research, Design and Technology Institute "FEMRI", Russia

What shall we carry and by what transport? (The present and future state of goods traffic and marine tonnage in the Far East region)

B.A.Osyukhin, A.Yu.Kleiman, L.M.Platonova, JSC "Navigation Instruments", Russia
The results of the work of the permanent fair "Navy Engineering and Navigation Equipment" in the field of assimilation of the Russian shipbuilding market

M.V.Kholosha, JSC Marine Research, Design and Technology Institute "FEMRI", Russia
Safety of navigation and JSM code - unity or antipode

A.N.Timofeev, Bureau of Independent Surveyors, Russia
Logistics Tools in Eurasian Transport Routes Considering the Environmental Factor

V.I.Payusov, JSC "Zvezda", Russia
New production of JSC "Zvezda" for shipbuilding

G.V.Egorov, B.N.Stankov, Marine Engineering Bureau, Ukraine
Modern Russian and Ukraine experience of ship modernisation

O.N.Androsenko, L.A.Alexandrova, V.S.Nikitin, "Onega" R&D Technological Bureau, Russia
Ship's furniture design and production

A.Sh.Kogan, Affiliated Branch of KSRI, Research Institute of Standardisation and Certification, Russia
Small-size Vessels at the Certification Market

I.A.Afonina, L.L.Emelianova, V.L.Stryuk, Museum of the World Ocean, Russia
Conversion of the diesel submarine "B-413" project 641 into a museum object

S.Ya.Chestny, "Morskaya Tekhnika", Russia
Shipbuilding in Russia. Equipment for new buildings

Section B MARINE ENGINEERING FOR THE DEVELOPMENT OF ALL OCEAN RESOURCES

S.P.Alekseyev, P.G.Brodsky, K.G.Stavrov, GNINGI MoD RF, Russia
Navigation-hydrographic and hydrometeorological support for the maritime activities in solving the ecological problems in the Arctic

A.B.Oparin, GNINGI MoD RF, Russia
Data bank covering the Arctic region environment in the interests of the economy of the country

*I.V.Bayushkin, E.V.Dyuzhev, FSUE CSRI "Kurs", Russia,
Yu.P.Belous, Elektropribor Central R&D Institute of State Scientific Center of Russian Federation, Russia,
L.M.Klyachko, ASVNC "Ples", Russia*
Present state and development perspective systems providing vessel navigation security in Russian Federation inland waters

B. Wisniewski, WSM, Poland
Ships Weather Routes Programming

S.P. Zarubin, A.I. Kabirov, S.B. Pisarev, G.A. Semenov, The Russian Institute of Radionavigation and Time, Russia

LF and ELF Radio Navigation Systems as Global Systems for Electromagnetic Monitoring of Large-scale Ionosphere Distortions and Short-term Earthquake Forerunners

V.A. Nikoltsev, G.A. Korzhavin, P.B. Antonov, A.S. Vasilievsky, O.A. Nikolaev, FUE CRI "Granit", Russia

Intellectual systems technologies for navigation safety's guaranteeing at the Finland Gulf water area

P. Bogdanov, A. Gevorkyan, V. Zholnerov, S. Pisarev, A. Feoktistov, K. Shupen, The Russian Institute of Radionavigation and Time, Russia

Services of the North-West navigation and timing center of Russian Federation for positioning-timing support of users

A.P. Martynyuk, "RIF-ACVAAPARAT", Moldova

Hydroacoustics Doppler logs

V.G. Saveliev, N.V. Aleksandrova, Yu.N. Gromov, V.V. Shibaev, Moscow State Academy of Water Transportation, Russia,

A.M. Kolychev, Research Institute for Precision Instrumentation, Russia

Practical Experience with a Laser Range on Inland Shipping Routes in 2000 and Future Prospects

A.A. Azbukin, A. Ya. Bogushevich, V.V. Burkov, V.S. Ilyichevsky, M.V. Kabanov, V.A. Korolkov, N.P. Soldatkin, Institute for Optical Monitoring SB RAS, Russia

Meteorological complex AMK-02

N. Minaev, Elektropribor Central R&D Institute of State Scientific Center of Russian Federation, Russia,

M. Kabanov, O. Lanskaya, N. Soldatkin, Institute for Optical Monitoring SB RAS, Russia

Photodetectors for solving of navigation problems



Poster papers

E.G. Babinov, G.I. Bezborodov, Navy HQ, Russia

Three Centuries of Navigation Service in the Russian Navy

N. Minaev, Elektropribor Central R&D Institute of State Scientific Center of Russian Federation, Russia,

M. Kabanov, N. Soldatkin, Institute for Optical Monitoring SB RAS, Russia

Calculation of photodetector parameters

A.K. Dolzhikov, "RIF-ACVAAPARAT", Moldova

Home-made multibeam sonars

N.B. Agafonov, I.B. Bedrin, O.V. Kustov, D.I. Moiseenko, The Russian Institute of Radionavigation and Time, Russia

Experience of integration navigation and telecommunication techniques at the development system of monitoring transport facilities

A.I.Gordienko, HDNO MoD RF, Russia,

G.A.Kaloshin, IAO SB RAS, Russia

Laser visual aids to navigation

A.P.Babichev, V.A.Bystrov, KSRI, Russia

Alternative compensator systems for navigational compasses

S.P.Barinov, GNINGI MoD RF, Russia,

A.I.Gordienko, HDNO MoD RF, Russia

Main prospects for development of the maritime differential subsystem GLONASS/GPS GNSS

A.N.Dobrotvorsky, GNINGI MoD RF, Russia

Present-day trends of technologies development for oceanologic exploration

A.O.Leonov, Peter the Great Naval College, Russia

The Russian Navy Hydrographers' School

S.P.Zarubin, A.I.Kabirov, V.N.Lyashko, B.G.Neoujmin, G.A.Semenov, A.E.Choglokov, The Russian Institute of Radionavigation and Time, Russia

An Information Channel for an Integrated Radionavigation System

A.G.Zykov, The Russian Institute of Radionavigation and Time, Russia

A Paging Receiver for "Chajka" Radionavigation System Data Channel (Loran-C)

A.V.Til, Moment, Russia

A conceptual approach to the design of seafloor geophysics observatory



Section C REQUIREMENTS AND IMPLEMENTATION OF ADVANCED TECHNOLOGY AND EQUIPMENT FOR CARGO VESSELS

O.B.Shulyakovsky, V.M.Piskun, Baltic Shipyard, Russia

Construction of chemical carriers: a prospective line of development of the shipbuilding industry

I.M.Ponomarev, Russian Maritime Register of Shipping, Russia

Historical Background and New IMO and IACS Requirements Concerning the Safety of Shipping

Jukka Varis, Jukka Kuuskoski, ABB Industry Oy, Finland,

John Hopkins, CCTS, Finland

Experiences of the Azipod Propulsion System

V.M.Pashin, A.N.Ivanov, V.G.Kalyuzhny, A.V.Sverchkov,

Krylov Shipbuilding Research Institute, Russia,

A.G.Lyakhovitsky, St.Petersburg Maritime Technical University, Russia,

G.A.Pavlov, Feodosiya Shipbuilding Association "Morye", Ukraine

The hydrodynamic and the design of artificially-ventilated ships

A.V.Sverchkov, KSRI, Russia

Enhancement of Economy of Ocean Fast Speed Car/Passenger Ferries

*I.V.Klementiev, I.A.Boitsun, JSC "Astrakhansky Korabel", Russia,
K.N.Nikeshin, Astrakhan State Technical University, Russia*
Utilization of twin-hulled tankers for servicing of oil-fields in the Caspian Sea

G.Pliskin, B.Troitsky, M.Trub, KSRI, Russia
Study of a new architectural type tanker

V.I.Kosulnikov, Giprorybflot, Russia
Trawlers for Remote and Open Sea Areas of the World Ocean

V.P.Nino, Giprorybflot, Russia
Modern Trends in Development and Improvement of Automated Systems for Fishing Ships

*Gavin Bowers, Belzona Polymerics Ltd., United Kingdom,
Wassili Wolnow, Belzona Services Nord GmbH, Germany*
Developments in Polymer Technology for Corrosion Control in Rudder Assemblies and other Load Bearing Areas

S.N.Iryutin, Naval Engineering Institute, Russia
Conception of safety training of seafarers and rescue coordination centre personnel



Poster papers

V.M.Kozin, A.V.Onishchuk, Institute of Machining and Metallurgy FEB RAS, Komsomolsk-on-Amure State Technical University, Russia
Technology of emersion of submersibles in long-term ice with usage of effects of a bending-gravitational resonance

S.B.Startsev, KSRI, Russia
Development of PC technology for determination of hydrodynamic characteristics of ship's rudder complex

S.A.Ogay, A.S.Ogay, FESMA named after Admiral G.I.Nevelskoy, Russia
Permeable windprotective devices for floating docks

V.I.Spirin, A.M.Plotnikov, Federal State Unitary Enterprise Central Research Institute of Shipbuilding Technology, Russia
Application of automatic system "Ritm-Sudno" in design and construction of sea-going transport ships

V.V.Dubinka, S.V.Yakovlev, BUM-TECHNO, Russia
Creating of non-contact technologies for dimensional monitoring that provides assembly of ship hulls with a minimum of fitting work based on application of measuring coordinates systems and electronic model of construction

N.V.Kulikov, K.E.Sazonov, KSRI, Russia
Ice Performance of Large Tankers

L.I.Vishnevsky, E.L.Vishnevskaya, KSRI, Russia
Self-adjustable blade propeller

A.M.Vishnevsky, L.M.Matsevich, A.B.Razletova, KSRI, Russia
Ship's environment and its influence on professional risk

Section D SHIP AND OFFSHORE POWER PLANTS

R.A.Ivanov, V.V.Timofeev, V.N.Shitkov, KSRI, Russia

Application of gas turbine installations on sea courts and structures - problems and prospects

A.Z.Bagerman, V.I.Golovanov, Yu.S.Kochanov, KSRI, Russia

Analysis and means to provide a continuous operation time of gas turbines in sea conditions.

A.A.Inozemtsev, S.V.Makhov, A.A.Pozharinsky, V.O.Rubinov, V.E.Simonov, S.V.Toropchin, Aviadvigatel Open Joint Stock Company, Russia

Gas turbine engines derived from aviation turbofan cores for marine propulsion: performance and development concept

À.À.Sarkisov, V.À.Ìorozov, V.M.Tsirulnikov, FSUE Klimov Corp., Russia

Gas turbine engines of the Federal State Unitary Enterprise "Klimov Corporation" for the powerplants of the marine boats and facilities.

A.S.Prikot, A.N.Tyutyuev, Aurora Corporation, Russia

Microprocessor system for control, regulation and diagnostics of a ship gas-turbine engine

V.I.Vasyukov, K.B.Veshnyakov, V.I.Zalugin, Yu.K.Panov, V.I.Polunichev, I.I.Afrikanov OKB Mechanical Engineering, Russia

Nuclear reactor plants for new generation icebreakers

Yu.A.Gubanov, Aurora Corporation, Russia

Control systems of ship electro-energetic power systems

V.F.Bedeker, Giprorybflot, Russia

Electric Power Systems for Fishing Ships. Standard Requirements on Configuration and Power Output of Electric Generators.

Poster papers

Yu.A.Gubanov, A.A.Leuta, Aurora Corporation, Russia

Program-physical modeling: a basis of new technology of designing of control systems of ship electropower systems (SES)

I.E.Gutner, O.K.Epifanov, FSUE CRI "Elektropribor", Russia

Electric machines and electronic digital components of automatic control systems for shipborne equipment

I.A.Glebov, FSUE "NII Elektromash", Russia,

N.A.Chernoplekov, Superconductivity and Solid State Physical Institute, RRC Kurchatov Institute, Russia,

L.I.Chubraeva, Division for Basic Researches in Electric Power Engineering of RAS, Russia
Increase of reliability and efficiency of ship propulsion systems due to application of superconductivity

P.A.Epifanov, E.P.Epifanova, I.E.Karpova, KSRI, Russia

Analysis of causes for arise heatlosses from extending warming pipelines and recommendations for reduce its

Yu.A.Nozhnitsky, M.F.Mokrous, Central Institute of Aviation Motors (CIAM), Certification Center "Quality", Russia

Certification problems of gas turbine engines of different application

A.S.Buzakov, Admiralty Shipyards, Russia,

V.G.Makarov, St.Petersburg State Marine Technical University, Russia

Enhancement of Pipeline Service Performances by Rational Detail Design

V.G.Makarov, St.Petersburg State Marine Technical University, Russia,

A.S.Buzakov, Admiralty Shipyards, Russia

Service Life Estimations for Onboard Seawater Lines



Subsection *MARINE SHAFT TORSIONAL VIBRATIONS*

M.Yu.Ivanov, Russian Maritime Register of Shipping, Russia

Principal Avenues for Improving Russian Maritime Register of Shipping Requirements to Torsional Vibrations of Marine Shafting

G.I.Bukharina, K.N.Pakhomov, KSRI, Russia

Modern methods of calculating researches of torsional vibrations in the ship's power plants shafts

L.V.Efremov, Institute of Problems Machines RAS, Russia

Algorithms and programs for a rating on influence of circular fluctuations of shafts on a technical status of their elements

V.I.Timofeev, KSRI, Russia

Ways in measurement of torsional vibrations in ship shafts, tendency of development

V.V.Terskikh, E.A.Shilov, KSRI, Russia

Complex for registration, handling and analysis of outcomes of field tests of ship propulsive systems

S.E.Chernov, Torsio Ltd, Russia

The method of application of an estimation of work capacity of silicone dampers of torsion vibration of engines



Section E *MODERN EQUIPMENT FOR OFFSHORE ENERGY VESSELS AND FLOATING FACILITIES*

A.P.Pronkin, V.L.Ustiantsev, E.S.Khanjian, V.Ya.Petrov,

SSC Yuzhmorgeologiya, Russia

Information resources of the Morgeobank is the effective development of natural resources of World Ocean and shelf of Russia

V.I.Evenko, Russian Maritime Register of Shipping, Russia

New Rules for the Classification and Construction of MODU as an Instrument of Ensuring Maritime Safety and Marine Environment Protection during the Exploration of the Russian Offshore Zone

V.Makarov, P.Nikitin, O.Timofeev,
St.Petersburg State Marine Technical University, Russia,
V.Shurpyak, Russian Maritime Register of Shipping, Russia
Development of the requirements for the underwater pipelines specified in the Register's rules for the first time

V.P.Shostak, Ukrainian National Maritime Technical University, Ukraine
Limit wind-wave conditions and specified characteristics of the drilling ships

B.A.Startsev, Federal State Unitary Enterprise Central Research Institute of Shipbuilding Technology, Russia,
S.B.Startsev, KSRI, Russia
Automatic positional stabilization of semi-submerged derricks under outside actions

Yu.P.Tveritin, OAO "Uralmash", Russia
Drilling equipment of OAO "Uralmash" for offshore drilling rigs

I.G.Novitsky, Yu.I.Polyakov, V.F.Rymanov, FSUE CRIST, Russia,
O.G.Maksimenco, SUE IM "Sevmashpredpriyatiye", Russia
Principal technology for maritime ice-resistant stationary platform "Prirazlomnaya" construction at State Unitary Enterprise "Sevmashpredpriyatie"

I.V.Suzdalev, S.V.Minin, FSUE CRIST, Russia
Features of welded constructions manufacturing in production and assembly of steelproof oil-and-gas producing maritime stationary structures

S.B.Startsev, KSRI, Russia,
B.A.Startsev, Technological Shipbuilding Research Institute, Russia
Working safety during building operations of oil and gas extracting stationary marine structures

S.P.Malyshev, R.A.Kaipov, Yu.M.Vishnyakov, L.I.Vishnevsky, A.M.Orlov, V.P.Struev, KSRI, Russia
The buoyant oil refining plant with raw material productivity 100 thousand tones in year

L.A.Vaisberg, A.N.Korovnikov, Mechanobr-Technika, Russia
Modern Technologies for Classification and Washing for Offshore Mineral Resources

Simon Daly, Gavin Bowers, Belzona Polymerics Ltd, United Kingdom
Development and selection of coatings for the protection of offshore process vessels operating at elevated temperatures and pressures

V.Kuznetsov, E.Itsko, V.Zaporozhets, Pigment Corporation, Russia
Corrosion protection of ships and underwater structures with new coating materials from "Pigment Corporation"

A.M.Vishnevsky, A.Ya.Lapovok, S.A.Kirillov, KSRI, Russia
New software for computer simulation of cathodic protection of ships and offshore installations

A.M.Vishnevsky, T.V.Kaljada, A.Ya.Lapovok, A.B.Razletova, N.L.Sudov, KSRI, Russia
Methods of electromagnetically safe ship design

**Section F MARITIME SAFETY AND ENVIRONMENTAL PROTECTION
FOR SHIPPING AND PORT OPERATIONS, DEVELOPMENT OF OCEAN
RESOURCES AND OFFSHORE ENERGY**

*D.A.Golubev, Committee on Nature Management, Environment Protection & Ecological Safety
of St.Petersburg, Russia*

Water Area Condition in St.Petersburg and the Region

B.P.Usanov, Committee on Economics of St.Petersburg Administration, Russia

Environmental Aspects of Transport Routes

*N.V.Barkov, Labour Protection & Ecology Department of the Inter-regional Association
"Federation of Trade Unions of St.Petersburg and the Leningrad Region", Russia*

Measures to Ensure Environmental Safety in St.Petersburg and in the Leningrad Region

Yu.V.Abramov, CJSC NPTs "Technoef", Russia

**On problem of setting-up a global system of protection of oil carriers and other ships
against mine danger and environment protection against oil pollution in cases of ship
wrecking on sea routes**

G.Sinitsyn, Lloyd Register Office in St.Petersburg, Russia

Ensuring of Ecological Safety and Ship Classification

*V.K.Shimansky, E.A.Rogozina, V.V.Ivanov, Yu.N.Belov, Yu.I.Ipatov, A.R.Arkhangel'skaya,
L.I.Sergeenok, All Russia Petroleum Research Exploration Institute (VNIGRI), St.Petersburg,
Russia*

**Highly efficient sorbents of FL-3ñ series for the cleaning of the offshore and industrial
waste waters from oil pollution**

Iwao Omae, Omae Research Laboratories, Japan

Current Status and Future of Antifouling Paints

N.G.Roslyakova, Yu.A.Novikova, Bureau of Independent Surveyors, Russia

KEF-type Phosphate Paints in Shipbuilding

V.V.Veter, Lipetsk Technical University, Russia

**Application of untraditional materials for transporting the carbon containing mediums
and constructing the sea structures**

*A.A.Azbukin, M.A.Buldakov, V.V.Burkov, M.V.Kabanov, V.A.Korolkov, N.P.Soldatkin,
Institute for Optical Monitoring SB RAS, Russia*

New devices for solution of ecoanalytical problems

V.N.Molchanov, Baltic Fund Ecological Safety, Russia

Some unresolved problems of the environmental safety and navigation

*S.A.Efremov, V.P.Keondjian, O.I.Leonenko, S.N.Ovsienko, ECOSEA, Russia,
S.A.Lebedev, Geophysical Center of RAS, Russia*

**The provision of ecological safety computer system of petroleum production and
transportation of oil and oil products**

A.A.Sverchkova, Bureau of Independent Surveyors, Russia

Aspects of Economics and Environmental Safety

*V.Makarov, O.Timofeev, St.Petersburg State Marine Technical University, Russia,
P.Nikitin, CJSC "Industrial Risk", Russia*

The oil products risk determination on the basis of the formal safety assessment

*V.I.Burak, G.A.Tyurin, B.P.Ardashev, E.S.Bylinovich, B.I.Efremov, S.I.Shabulin, KSRI,
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Multifunctional salvage ship for operations at nuclear, radiation, chemical and ordinary accidents at sea

*A.P.Novozhilov, Kuznetsov Navy Academy, Russia,
S.N.Guzevich, Navigation and Hydrography State Institute, Russia,
S.T.Guzeev, KSRI, Russia,*

E.I.Yakushenko, Navy Engineering Institute, Russia

Harmonization of the basic concepts in ship's magnetism field and maritime safety and environment protection fields experience

V.M.Lukianov, Giprorybflot Institute, Russia

Normative and technical documents on safe operation of vessels for companies of fish industrial complex

V.Ya.Lazarenko, Ozon Company, Russia

Advantages of the NES Sorbent in the Treatment of Sewage and Surface Waters

V.I.Ratnikov, Giprorybflot, Russia

Problem of Improving Electromagnetic Environment on Fishing Ships



Poster session

*G.A.Vasiliev, V.V.Nalyotov, V.N.Pshenin, A.N.Ptyushkin, V.I.Kovalenko,
Ekotrans-Dorservis, Russia*

Actual issues of ecology of sea-vessels' living and working quarters

I.M.Ashik, Arctic & Antarctic Research Institute, Russia

Numerical Methods and Variation Predictions for Levels, Currents, Drift and Distribution of Ice in the Gulf of Finland

*V.A.Ivanov, V.S.Rachouk, Design Bureau of Chemical Automation, Russia,
V.N.Plotnikov, Rubin Central Design Bureau for Marine Engineering, Russia*

Membrane Distillation of Sea Water