	Issue	Page
Smokeless Combustion in Oil Burning Gas		
Turbines	June	205
Thermodynamic Design of Combined Steam		
and Gas Turbine Marine Propulsion		
System	June	207
GEARINGS AND COUPLINGS		
Air Clutches for Marine Propulsion	March	93
Analysis of the Formation of Oil Film and	in an on	
its Dynamic Characteristics in Mating		
Gears	April	126
Clutches for Medium Speed Geared Diesels	March	87
Electromagnetic Controllable Slip Couplings	February	53
Gearing for Multi-engine Propulsion Plants	October	360
Gears and Their Lubrication	February	61
Profile Modification of Helical Gear Teeth	January	30
Propeller Shaft Disc Brakes	October	367
Toothed Couplings-Analysis and Optimiza-		
tion	November	414
Very High Torque Flexible Coupling	December	434

# **GROUND EFFECT MACHINES AND HYDROFOILS**

GIOOND LITECT MACHINES AND ITTENOTO	ILU	
Boeing-built Hydrofoil Craft	September	323
Design Problems of Hovercraft	September	323
Design Problems and Operational Experi-		
ence with Hydrofoil Craft	October	374
Japanese Hovercraft	October	373
Performance of a Jet-flapped Hydrofoil		
Near a Free Surface	July	247
Seagoing Hydrofoil Craft	August	289
Some Special Problems in Surface Effect		
Ships	August	294
World's Largest Hovercraft	January	15
World's Largest Hydrofoil Vessel	December	439

## HEAT EXCHANGERS AND HEAT TRANSFER

Acid Cleaning of Heat Exchangers	June	207
Flux	February	61
Copper Foil Packing for Feed Heater Tubes	July	255
Corrosion and Heat Transfer	February	63
Corrosion Test Method for Heat Exchanger	reordary	02
Application	Tune	205
Developments of and Experience with a	June	200
Tube Cleaning Method for Condensers		
and Heat Exchangers	February	61
Flow-induced Vibration and Noise in Tube	r cordar y	01
Bank Heat Exchangers	July	256
Heat Transfer from Fuel Gas Flames	February	60
Heat Transfer in Long Tube Vertical Fall-		00
ing Film Evaporator	November	412
Heat Transfer and Pressure Loss in Spiral		
Tubes	May	158
Loss of Boilers Due to Trap	October	365
Oblique Flow Headers for Heat Exchangers	October	374
Radiation Heat Transfer in Non-isothermal		
Non-gray Gases	March	92
Shipboard Electric Surface Heating	August	286
Shipeourd Dietaite Surface Heading		
HYDRALILIC DI ANT		
Graphical Analyzia of the Stan Baspance of		
Undroulia Sorva machanisma	Amril	126
Hydraulic Servo-mechanisms	April	120
Engines	Oatabar	271
Engines	October	5/4
ICE AND ICEBREAKERS		
Canadian Ice Plough Development	October	359
Icebreakers	March	87
	a state of the second	

Model Test	ing in	Ice				October
Supply and	Buoy	Vessel	for Car	nadian	Coast	D 1
Guard						December

Page	INSPECTION AND TESTING	Issue	Page
205	Aspects of Radiography and Ultrasonic		
	Testing of Welds in Steel with Thick-		105
207	Clamp for Magnetic Particle Inspection	June November	195 399
	Considerations in the Application of the	riorenioer	
0.2	Helium Mass Spectrometer Type Leak	March	02
93	Cylinder Oil Analysis by Isotope at Sea	June	204
	Dual Sensitivity Inspection Penetrants and	G	224
126	Eddy Current and Ultrasonic Techniques for	September	334
53	Inspection of Large Parts	June	204
360	Eddy Sonic Test Method	July	255
30	Rings by Quick Spectrographic Samp-		
367	ling Methods	November	415
111	Material Utilizing Penetrating Radia-		
434	tion Techniques	March	92
	Fatigue Testing Marine Diesel Engine	Sentember	332
272	Identification and Measurement of Ultra-	September	552
323	sonic Search Unit Characteristics	January	28
274	Magnetic Method of Measuring the Wall	July	249
374	Thickness of Steam Generator Water		1.57
	Microwayes in Nondestructive Testing	May July	248
247	Nondestructive Testing of Composite Struc-	July	210
207	tures with the Sonic Resonator	February	63
294	Radioactive Method for Investigating Anti-	reoruary	02
439	wear Properties of Lubricating Oil		
	erosion	June	205
207	Radio-diagnostic Service	March	82
207	Ultrasonic Testing Equipment for the		
61	Dimensional Evaluation of Defects	February	60
255	Robertson Crack Arrest Test	November	414
05	Assessment of Cylinder and Piston Ring		
205	Wear	July	256
	Nondestructive Testing	March	94
61	Time Rate of Wear Testing Mechanical		
256	Ultrasonic Probes Using Shear Wave	July	250
60	Crystals	August	284
412			
150	INSTRUMENTS AND CONTROLS		205
158 365	Adaptive Control for Prime Movers	August Mav	295 158
374	Airborne Infra-red Detection Set Provides		
92	Automated Ship	February October	63
286	Automatic Control of Marine Alternator	october	500
	Sets Automatic Starting for Marine Cas Tur	September	329
	bines	August	283
126	Automatic System for Loading, Discharging		
274	Automating the Hydraulic Dredge	January	93 18
3/4	Automation at Sea	July	251
	Automation of Ships' Navigational Systems Britain First with Computerized Fisheries	August	292
359	Research Vessel	November	413
87	Computer Definition of Ship Characteristics	November	413
512	beth 2	May	153
440	Danish Rules for Unattended Engine Rooms	October	371

	Issue	Page
from Tube Resistance	March	93
Dynamics of Marine Steam Propulsion	August	284
Electromagnetic Log	November	411
Electronic Control System for Ships'	Juna	187
Electronic Controls for d.c. Propeller Drives	September	318
Electronic Relay for Overspeed Shutdown	April	120
Electronic Torsiograph System	September	332
Gas Turbine Auto-starting Sequence Con-	Tuna	107
Governing Gas Turbine Engines for Marine	June	197
Propulsion	October	374
Hydromechanical Fuel Control for Portable		
Gas Turbine Generators	November	414
tures in Large Engines	November	406
Monitoring Turbocharger Vibration	June	186
New Approach to Maintenance and Opera-		
tion of Large-bore, Two-stroke Diesel		
Periodically Unattended Engine Rooms	September	333
New Modular Alarm System	August	285
Oleometer	September	333
Preumonic Control System	February	33
Polish Remote Control System	November	409
Portable Phase-sensitive Eddy Current In-	11010111001	
strument	September	333
Power Meters	March	94
Ship Automation Through Systems Ap-	December	455
proach	October	372
Ship Loading Rate Meter*	September	335
Ship's Trim Indicator*	September	335
bines	November	410
Study on Boiler Efficiency Control	November	413
Thyristor Control of Propulsion Machinery	January	22
Ultrasonic Pressure Gauge	May	158
Unmanned Engine Room Success	October	373
Warp Tension Meter for Seine Net (Fly		010
Dragging) Vessels	June	206
INTERNAL COMBUSTION ENGINES		
7025 Operating Hours Between Cylinder	Juna	100
Advanced Design Motorship Machinery	June	199
Plant	June	189
Air Motion and Combustion in a Swirl		
American Opposed Piston Diesel Engine	April	124
Application of Pulse-converters to Two-	June	197
stroke Diesel Engines	December	436
Aspects of the Stork Large Marine Diesel		
Axial Stiffness of Diesel Engine Crankshafts	May	159
Axial Stiffness of Marine Diesel Engine	August	294
Crankshafts	September	319
Axial Stiffness of Marine Diesel Engine		
Blast Injection Today?	December	442
Comparison of High-powered Single-engine	500000	505
and Multi-engine Plants for the Pro-		
Connecting Rod Design	June	206
Constant Pressure Turbocharging	August	284
Criterion for Evaluating Diesel Engine Per-	- ugust	207
formance	November	415
Crosshead with Floating Pin for Large		201

Engines ... ... August

Page		Issue	Page
	Cylinder Liner Scuffing	June	207
93	Design of Marine Diesel Crankshaft	September	334
284	Development of a High Output Four-cycle		
411	Engine Supercharged on the Constant	Tune	206
187	Ebullient Cooling System	December	438
318	Engine with Two-stage Turbocharging	January	11
120	Engineering Design of Oil-free Internal		
332	Combustion Engines	November	415
	Experimental Correlation Between Rate of		
197	Injection and Rate of Heat Release in	Mariamhan	115
27.4	a Diesel Engine	November	415
374	Fluorocarbon Resin in Piston Kings	September	554
111	posal	October	362
414	High Output Medium Speed Marine Diesel	November	397
406	High Speed Engines	December	433
186	Hot Gas Engine	June	203
	Influence of Intake Air Temperature on	T	21
	Smoke Emission in Diesel Engines	January	31
222	Intermediate Fuel and Cylinder Wear in	March	80
333	Large Bore Problems	Ianuary	19
205	Large Outboard Motor	August	294
55	Marine Diesel Exhaust Noise	August	285
322	Marine Engine for More Than 40 000 bhp		
409	at 102 rev/min	January	13
	Matching of Exhaust Turbochargers to	NT 1	115
333	Two-cycle Diesel Engines	November	415
94	Measuring Combustion Chamber Tempera-	Manaphan	106
435	Medium-speed Engines for Liberty Replace-	November	400
372	ments	February	54
335	Medium-speed Machinery in Esso Tanker	April	118
335	Multi-engine Uniform Plant in Swedish	1	
	Ferry	October	361
410	New B. and W. Engine	April	114
413	New Bolnes Engine	May	155
22	New Medium Speed Engine	December	3/1
158	New Series of British Polar Marine Diesel	December	430
373	Engine	October	366
515	Plasticity and Creep in Large Bore Engine		
206	Pistons and Cylinder Liners	October	374
	Radio-diagnostic Service	March	82
	Stress Investigations on Large Diesel	Taharaa	()
	Study of Governing Factors for Cylinder	rebruary	02
199	Head Wall Temperature of High Speed		
	Diesel Engines	March	94
189	Super-large Bore Engine	June	195
	Swedish Vee Engine	March	88
124	Teflon Piston Rings for Diesel Engines	March	83
19/	Twin Geared Engines for Bulk Carriers	August	287
436	Engine Engine	November	102
450	Engine	November	402
159	IOINTING AND SEALING		
294	Frictional Behaviour of Labyrinth Seal and		
	Shroud Material in Steam and Gas		
319	Turbines	January	20
112	Instantaneous Energy Dissipation Rate in a		
365	Lap Joint	September	334
505	On Activated Stern Tube Seal	January	25
	Opumum Seal Performance	January	29
206			
207	LIFE SAVING EQUIPMENT	1	
284	German-built Lifeboat for Columbia	November	400
115	Large Catamaran Submarine Rescue Vessels	December	442
415	marine Rescue Shin	October	367
291	Survival Capsule	December	437

Page

126

61

62

16

126

127

256

255

293

441

92

256

51

293

251

159

373

151

123

31 295

November 404

December 442

February

February

January

April

April

August

March

February

August

July

May

May

April January

August

October

July

December

Issue

April

LUB	RI	CA	TIO	N	
			C		-

Analysis of the Formation of Oil Film and Its Dynamic Characteristics in Mating Gears

Cylinder Lubrication of Large Marine	-	
Diesel Engines	September	330
Frictional Behaviour of Solid Lubricants at	-	
Low Speeds	July	255
Gears and Their Lubrication	February	61
Incompressible Elastic Viscous Lubricants		
in Continuous-sleeve Bearings	March	93
Lubricating-oil Additives: How they Act	April	127
Lubrication of Highly Supercharged Marine	-	
Diesel Engines	April	122
Mechanism of Action of Lubricating Oil		
Additives	April	125
On the Field of Temperatures in Lubricating		
Films	March	95
Plasma Spraying	July	255
Stick-slip under Press Fit Conditions	March	93
Thermal and Oxidation Stability of Heavy		

hermal and Oxida	tion S	tability	1 10	leavy		
Duty Industrial	Gear	Oils			February	62

## MACHINE TOOLS AND PROCESSES

Diamond Tools in Shipbuilding	 	October	375
Electric Underwater Tools	 	April	123
Sonic Riveting Machine	 	December	442

## MATERIALS, STRUCTURES AND STRESSES

Advantages of Aluminized Wire Rope for Sea Water Service Application of Self-lubricated Materials Applications of Plastic Theory of Bending Bolts with Asymmetric Threads Brittle Fracture Strength of Welded Joint Characteristics of Nine Per Cent Nickel

Steel for Low Temperature Service .... Composite Self-lubricating Bearing Materials Consideration of Fracture Toughness in

Pressure Vessel Design .... July Copper Foil Packing for Feed Heater Tubes July Crankshaft Stress Analysis and Bearing Load-carrying Capacity November 413

Critical Pressure of Flat Acrylic Windows under Short Term Hydrostatic Loading

Curvature Effects on Stress Concentrations at Reinforced Circular Holes

Cyclic-stress Limits for Bolts and Studs .... Determining the Normal Stiffness of Joint

Faces ... Dispersion-Strengthened Allovs .... Effect of Steam Environment upon Creep

- Behaviour of Stainless Steel Effects of Notches and Salt Water Corrosion
- on the Flexural Fatigue Properties of Steels for Hydrospace Vehicles

Evaluating Mechanical and Corrosion Suitability of Materials

Evaluation of Various Journal Materials with Regard to Machining-type Wear .... Experience with Alclad Aluminium in Deep

Sea Buoyancy Sphere ... Fatigue Strength of Bearing Metals Lining

raugue Strength of Dearing Metal	S LI	unig
on Steel Plates in Lubricating	Oil	
Future of Plastics in Ships		
Heat Treatment of Iron Castings .		
High Strength Nickel-base Alloy v	with	Im-

proved Oxidation Resistance up to 2200°F

2200°F		 	 	August
High Tensile	Steel	 	 	October

High Tensile Steels in Ship Construction	Issue April	Page 113
Hot Tensile Properties of $\frac{1}{2}$ chromium $\frac{1}{2}$ molybdenum $\frac{1}{4}$ vanadium and $2\frac{1}{4}$		
chromium/molybdenum Steam Pipe	Ianuary	30
Hydrogen-stress Cracking	June	194
Rolling Contact Fatigue	April	126
Influence of Mode of Loading on Fatigue	May	205
Influence of Notches on Mechanical Be- haviour at Elevated Temperatures	May	150
Some Metallographic Observations Influence of Rotor Metal on Bearing	October	374
Machining Type	June	205
Cracking of Carbon Manganese Steel Welds	August	283
Initiation of Brittle Fracture in Structural	April	127
Lamellar Tearing in Hot Rolled Steel	July	254
Metalliding Midship Bending Stresses on Two Dry	May	156
Cargo Ships	February	60
New Casting Alloy for Deep Ocean Use Numerical Analysis of Crack Propagation	March	94
in Cyclic-loaded Structures	June	205
Plasticity and Creep in Large Bore Engine	July	254
Pistons and Cylinder Liners Recent British Work on Behaviour of War-	October	374
ship Structures Research Concerning Increasing Fatigue	January	30
Strength of Press-fitted Shaft Assembly Residual Strains and Displacements within	August	295
the Plastic Zone Ahead of a Crack Reversing Normal Strains by Rolling Con-	February	62
tact Load	January	28
Conditions of General Yielding Some Aspects of the Influence of Structure	June	206
upon Stress-corrosion Cracking and Grain Boundary Corrosion in Mild		
Steels Strain, Stress and Flexure of Two Corru-	March	93
gated and One Plane Bulkhead Sub- jected to a Distributed Lateral Load	November	414
Stress Investigations on Large Diesel Engines	February	62
Strip Cladding of Steel with Stainless and Nickel Based Alloys	Iuly	251
Study of Brittle Fracture	March	93
and H.A.Z. of Mild Steel Weld	April	125
Study of the Law of Crack Propagation	May	157
Notch Inclination Angle	August	282
sheet Material	September	326
METALLURGY		
Development of High Temperature Alloys	Terrer	10
Study on Dispersion-strengthened Heat	January	12
Resisting Steel	December	443

#### 287 NAVIGATION AND NAVIGATIONAL EQUIPMENT

370	Acoustic	Marker	Launcher	 	 March	95

254

	Issue	Page
Automation of Ships' Navigational Systems	August	292
Breaking of Sheet Ice*	February	63
Circular Polarization in Marine Radar	April	118
Developments in Gyroscopes	June	199
Developments in Navigational Engineering	August	285
Electromagnetic Log	November	411
Fluidic Bow Thruster without Moving Parts	November	412
Laser Modulation for Communications	May	156
Marine Radar Simulator	May	153
Retractable Bow Thruster	November	404
Transverse Thrusters for Self-propelled		
Dredgers	April	121
NUCLEAR PLANT		
Design of a Marine Nuclear Power Plant		
Utilizing the Direct Brayton Cycle	Sentember	325
Economics of Nuclear Power in the Context	Deptember	020
of the Container Ship	March	86
German Nuclear Powered Research Vessel	May	151
Germany Approaches Nuclear Merchant		101
Marine Status	April	117
Ice Condenser	January	17
Scandinavian Marine Reactor Study	March	84
Seanding full marine reactor Study	THE OTHER	0.

# OCEAN ENGINEERING

Benthos' Deep-submergence Pyroceram Test		
Vehicle	July	254
Challenge of Designing Undersea Devices	July	254
Challenges of Ocean Engineering of the		
Future	April	125
Delvos Mobile Steady Sea Station	December	440
Full-scale Lighter Than Air Submarine		
Simulator System for Deep-diving		
Rescue Operations	July	254
Progress in Oceanographic Research and		
Technology	July	247
Special Design Features, OSS of Oceano-		
ano when and OSC a2 Discoverer	Movember	113

grapher and OSS o2 Discoverer ... November 413

Scandinavian Marine Reactor Study

## PROPELLERS AND SHAFTING

THOI ELECTIC AND OTHER THUS		
50 000 shp c.p. Propellers	November	407
Auxiliary Variable Pitch Propeller	July	249
Blade for Marine Propeller*	March	96
Blade for Marine Propeller*	April	127
Casting of Marine Propellers in Nickel	-	
Aluminium Bronze	May	158
Cold Shrinking a 29-ft Keyless Propeller	January	19
Considerations of Propeller Lavout from		
the Engine Builder's Point of View	Tune	206
Controllable Pitch Propeller Design	July	249
Controllable Pitch Propeller as an Integral	July	
Part of the Ship's Propulsion System	September	330
Controllable Pitch Propeller for River and	September	
Inland Shipping	September	319
Controllable Pitch Propellers	March	91
Controllable Pitch Propellers	June	189
Controllable Pitch Propellers	June	201
Controllable Pitch Propellers for Stern		
Trawlers	January	23
Correlation and Application of an Unsteady		
Flow Theory for Propeller Forces	September	321
Design of Ducted Propellers	October	359
Effect of Blade Number and Aperture		
Clearances upon Vibratory Propeller		
Forces	September	327
Effect of Propeller Type on Stopping	1	
Abilities of Large Ships	January	14
Exact Treatment of the Helicoidal Wake in		
the Propeller Lifting-surface Theory	April	121

	issue	rage
Experimental Verification of a Design		
Method for Ducted Propellers	November	413
Fabricated Propeller	March	84
Fitting and Removal of Marine Propellers*	April	128
Fluidic Bow Thruster without Moving Parts	November	412
Fully or Partially Ducted Impellers*	December	444
Hydrodynamic Aspects of Contra-rotating		
Propellers	June	199
Icebreaker Screw Design	July	254
Investigation into the Propeller Cavitation		
in Oblique Flow	April	125
Ky-series of Nozzle Propellers	September	331
New Propeller Design	September	329
Propeller Design and Analysis by Lifting	1	
Surface Theory	August	283
Propeller Maintenance-Propeller Efficiency		
and Blade Roughness	January	30
Propeller Shaft for Two Counter-rotating		
Propellers*	August	295
Research with Propeller Induced Vibrations	March	87
Retractable Bow Thruster	November	404
Sealing for Propeller Shaft*	August	295
Shafting Arrangement for Two Counter-		
rotating Propellers*	Tune	208
Shafting for Contra-rotating Propellers	July	250
Shrouded Propellers for Tankers	April	122
Some Effects of Variation in Blade Area,		
Blade Outline and Boss Diameter on		
Model Screw Performance	September	334
S.S.P.A. Standard Propeller Family Open	September	
Water Characteristics	March	94
Suspension Device for Steering Propellers*	October	376
Theoretical Predictions of Characteristics		
and Cavitation Properties of Propellers	November	413
Universal Propeller Charts for Ship Design	February	61
Utilization of Propeller Shrouds as Steering		
Devices	August	283
Wake and Thrust Deduction at Extreme	0	
Propeller Loadings	July	256
-		

# **PROPULSION PLANT**

	Comparison of High-powered Single-engine and Multi-engine Plants for the Propul-		
407	sion of Merchant Ships	June	206
249	Control Systems for and Sea Operation	- unit	200
96	Experience with CODOG-powered		
127	Frigates	June	207
	Controllable Pitch Propeller as an Integral		
158	Part of the Ship's Propulsion System	September	330
19	Danish CODOG Frigates Operational Pro-		
	gress Report	October	374
206	Gas Turbine Combined with Marine Steam		
249	Turbine Plant	September	333
	Gas Turbines v Steam Reliability Analysis		
330	for Warship Propulsion Plant	November	414
	Geared Diesel Fast Container Ship Proposal	October	362
319	Geared Propulsion Unit*	December	443
91	Girodin Axial-piston Drive Mechanism	May	155
189	Marine Reheat Turbine Plant	February	62
201	Multi-engine Uniform Plant in Swedish		
	Ferry	October	361
23	Observations on Present and Future Marine		
	Power Plants	September	334
321	Propulsion Machinery for 400 000 Tonner	September	327
359	Propulsion Plants for Container Ships	September	320
	Steam Propulsion Systems for Modern Ships	September	333
	Thermodynamic Design of Combined Steam		
327	and Gas Turbine Marine Propulsion		
	System	June	207
14	Underwater Power from Aluminium	August	293
	Underwater Power from Aluminium	November	413
121	Watercraft Propulsion Pump*	November	415

# Index

Issue

January

October

October

February

December

November 414

June October

July

June

April

March

April

August

August

August

November

February

September

January

February

September 320

December 443

May

June

June

May

April

October

September 334

December 443

June

June

June

July

April

June

Page

206

28

121

375

375

61 206

369

254

443

197

126

93

125

294

192

255

285

295

200

414

206

62

333

29

159

60

205

204

150

375

116

	Issue	Page	
PUMPS	10040	I uge	Electrochemical Study of Aluminium Cor-
Experimental Programme to Provide Two-			rosion in Boiling High Purity Water
dimensional Cascade Data Applicable			Erosion Between Two Parallel Surfaces
to Pump Design	September	333	Oscillating in Close Proximity in
Hydraulic Transients Caused by Reciprocat-			Liquids
ing Pumps	March	94	Exact Treatment of the Helicoidal Wake in
Screw Pumps for Tanker Cargo Handling	November	408	the Propeller Lifting Surface Theory
Use of Numerical Methods for the In-			Experimental Determination of Steady and
vestigation of Flow in Water Pump	-	11	Unsteady Loads on a Submerged Super-
Impellers	February	01	cavitating Hydrofoll
watercraft Propulsion Pump <sup>*</sup>	November	415	Experimental Investigation Simulating
REDAIRS AND MAINTENANCE			Experiments on Slamming of Wedge shaped
7025 Operating Hours Between Cylinder			Bodies
Overbauls	Tune	100	Ferrofluid Sensor
Cost Relations of the Treatment of Shin	June	1//	Fishery Research Vessel
Hulls and Fuel Consumption	March	92	Full-scale Lighter-than-air Submarine Simu-
Creative Thinking v Mental Inertia	September	319	lator System for Deen-diving Rescue
Damaged Tanker Drydocked with Own	September	517	Operations
Pumps	November	409	-Francis
Repair of Dredge Pumps	June	198	General Theory of Oscillatory Combustion
Steering Gear Repair by Selective Plating	March	88	Generation of Noise by Flow Through
Structural Air Leakage Test Method Using			Pipes
Neofoamer	January	31	Hydrodynamic Coefficients for Swaying,
			Heaving and Rolling Cylinders in a
RESEARCH AND INVESTIGATION			Free Surface
Analysis of the Modified Strip Theory for			Hydrodynamic Entrance Lengths for Ducts
the Calculation of Ship Motions and			of Arbitrary Cross Section
Wave Bending Moments	February	62	Incompressible Elastic Viscous Lubricants in
Analysis of Right Angle Drive Propulsion	-		Continuous-sleeve Bearings
System	September	333	Investigation into the Propeller Cavitation
Application of Gunpowder to the Removal	*	20	in Oblique Flow
of Keel Blocks	January	30	Isothermal Aerodynamic Investigation of
Application of Wave-making Resistance	T	201	a Suspended Flame Register
Theory to Hull Form Design	June	206	Magnetostrictive Torquemeters
Approximate Methods in Z-steering lest	Talar	251	Manoeuvrability of Snips on a Straight
Analysis	August	204	Marina Diasal Exhaust Noisa
Axial Stiffness of Marine Diesel Engine	August	294	Mathematical Model for Steady Operation
Crankshafts	December	442	of Stirling-type Engine
Britain First with Computerized Fisheries	December	112	Measurement of Dead Load in Steel Struc-
Research Vessel	November	413	ture by Magnetostriction Effect
British Shin Research Association	April	119	Measurements of Boundary Lavers of Shins
Bubble-growth Calculation Without Neglect	· · · · ·		Measurements of the Components of Re-
of Interfacial Discontinuities	April	125	sistance on a Tanker Model
Carbon Dioxide Condensation Cycles for			Measurements on Fully Wetted and Venti-
Power Production	October	374	lated Ring Wing Hydrofoils
Concepts for Deep Submergence Hydro-			Mechanical Potential Drops at a Fluid
static Shaft Seals	December	442	Branch
Confined-jet Amplifier	September	334	Mechanisms of Noise Generation in a
Connecting Rod Design	June	207	Compressor Model
Correlation and Application of an Unsteady	<b>G</b>	201	Mechanisms of Wear in Misaligned Splines
Flow Theory for Propeller Forces	September	321	Method of Investigating Low-cycle Thermal
Crankshaft Stress Analysis and Bearing	Norma	112	Fatigue
Load-carrying Capacity	November	413	Model Experiments on Sound Transmission
Through a Critical Speed	Mox	157	in Motor Shing
Demonstration of Modern Means of Ship	Way	157	Model Tests with Decelerating Nozzles
Production by Means of the Example			New Method for Determining the Instan-
of Straking and Nesting	December	443	taneous Value of Rate of Pressure Rise
Development of a High Output Four-cycle	December	115	in an Internal Combustion Engine
Engine, Supercharged on the Constant			Cylinder
Pressure System	June	206	New Method of Expressing and Measuring
Diagnosis of Engine Trouble	November	407	the Sealing Ability of Gasket Materials
Discharge Coefficients for Conical Poppet			New Russian High Speed Craft
Valves	December	443	Nozzles in Pressure Vessels Under Pressure
Dutch Research Ship	December	435	Fatigue Loading
Dynamic Programming for Computing			Oceanographic Research Ship
Optimal Plate Dimensions in Some Ship			Optimizing an Sb-Be Source for Neutron
Structures	May	158	Radiographic Applications
Effects of New International Formulation			Performance Investigation into the Elas-
on Turbine-generator Performance Cal-	Terret	001	tically Stepped and Shrouded Thrust
culations	June	204	Bearing

	Issue
Piston Engine Heat Recovery Systems	June
Pneumonic Control System	Sentember
Pressure Measurements on Elanned Hydro	Deptember
faile in Consister Eleven and Wales Eleven	Fahrmary
Tons in Cavity Flows and wake Flows	February
Pressure Response of Oil Hydraulic Lines	December
Progress in Oceanographic Research and	
Technology	July
Radioactive Tracer Techniques for Study-	
ing the Efficiency of Technological	
ing the Enciency of Technological	
Measures for Increasing the Wear Re-	
sistance of Marine Engine Components	January
Radiographic Sensitivity	February
Recent Progress in Neutron Imaging	December
Reciprocating Compressors with Non-	December
hubricated Cylinders and Labyrinth	
Distance Distin Distan Di	
Pistons or Plastic Piston Rings	May
Research on the Hydrodynamics of Cata-	
marans and Multi-hulled Vessels in	
Calm Water	Inly
Review of Research on Catamarans	December
Shin Industry Descarch in Deland	December
Ship mousely Research in Poland	June
Ships Gear for Oceanographic Research	February
Some Production Research Activities on	
Steelwork and Outfitting	September
Sound Insulation in Ships' Cabins	Tuly
Special Design Features OSS of Oceano-	July
grapher and OSS of Discoverer	Navambar
Statia and Departie Tests of Coul	November
Static and Dynamic Tests of Speed	
Governors for Diesel Engines	May
Stick-slip Under Press Fit Conditions	March
Structural Analysis by Finite Element	
Method	November
Torsional Vibration Analysis of a Hydro-	
dynamic Split Torque Transmission	Mov
Twonty Voors of Descerch under the Chin	Iviay
I wenty rears of Research under the Ship	
Structure Committee	August
Use of Numerical Methods for the Investi-	
gation of Flow in Water Pump Im-	
pellers	February
Weighing Advantages of Sealing and Hydro-	
static Concepts for Reciprocating	
Pistons	Tular
	July
CAFETY MEACURES	
SAFETT WEASURES	
Optical Smoke Detector	February
Protecting Standby Equipment	February
Safety Problems in the Merchant Marine	July
Some Aspects of Nuclear Safety and Shin	
Design	Sentember
Design	September
SALVAGE	
Foam-in-salvage	February
Mathad of Daising Submanaed Objects*	Mari
Method of Kaising Submerged Objects"	way
SEBARATING REEINING AND CLEANING	
SEPARATING, REFINING AND CLEANING	
Acid Cleaning of Heat Exchangers	June
Developments of and Experience with a	
Tube Cleaning Method for Condensers	
and Heat Exchangers	February
Factors Affecting the Efficiency of Absorn	or unity
tion Oil Filtration	August
Noval High Efficiency Oil Computer for	August
Novel righ Enciency On Separator for	Man
Ship Use	March
Russian Tank Cleaner Emulsifier	June
SHIP DESIGN AND DESIGN STUDIES	
400 000 dwt Tanker Design	June
Case for Multi-hull Ships with Particular	
Reference to Resistance Characteristics	October
Catamaran Container Ship	July

ł	age		Issue	rage
	207	Comparative Methods for Preliminary		202
	322	Design	June	202
		Container Ship Design by Digital Computer	February	54
	61	Design of a Cargo Liner in Light of the		
	442	Development of General Cargo Trans-		
		portation	September	334
	247	Design of a Hinged Tanker	January	17
		Economic Design of Bulk Cargo Carriers	July	256
		Expansion Joints for Ship*	April	128
		Expansion Joints for Sinp III III	January	12
	20	Freedom Shins	January	20
	50	Gas Tanker Development at AG Weser		
	00	Gas Taliker Development at AO weser,	Tuno	105
	442	Bremen	December	137
		Hinged Ship	December	43/
		Hull Form Design Procedure for High	C. to be	222
	159	Speed Displacement Ships	September	333
		Hull Steel Weights of Large Oil Tankers		105
		and Bulk Carriers	April	125
	255	Lloyd's Register's Rules for Dry Cargo		
	441	Ships	June	204
	202	Mammoth Tanker Considerations	February	51
	63	Model Studies for an Oceanographic Ship		
	05	Derived from an Offshore Supply		
	334	Vessel	Tune	189
	256	New Long Range Ocean Going Warship	August	286
	250	New Type Combination Carrier	November	396
	112	Novel Hull Design	Tune	185
	415	Performance of Fishing Vessels	January	22
	150	Principles of Marchant ship Ontimization	January	22
	159	Calculations	Tomuory	20
	93	Calculations	January	150
		Proposed New Stern Arrangement	May	150
	407	Rational Approach to the Selection of Ship		200
		Size	June	200
	158	Review of Research on Catamarans	December	441
		Semi-submersible Freighter for Container		
	286	Cargo	May	154
		Ship's Stern Frame Structure*	September	336
		Some Aspects of Nuclear Safety and Ship		
	61	Design	September	324
	01	Stretch Forming Hull Structures	September	332
		Underkeel Clearance	May	154
	251		intug	
	234			
		SHIP MODEL TESTS		
		Braking of Large Vessels	September	335
	55	Deformation of Free Water Surface by Dis-		
	61	placement Flow Due to a Moving Ship		
	240	in a Laterally Limited Shallow Water-		
	249	way	September	333
		Determination of the Viscous Drag of a	Septemeer	000
	324	Shin Model	November	412
		Investigation of the Scale Effect on Self	rovember	112
		Propulsion Factors	August	294
	62	Model Experiments on Sound Transmission	August	274
	03	from Engine Deem to Accommode		
	160	from Engine Room to Accommoda-	C	220
		tion in Motor Ships	September	320
		Motions and Propulsion of Single Screw		
	207	Models in Head Seas	February	01
	207	Rough Water Model Testing	April	123
		Scale Modelling	January	29
	<i>(</i> <b>1</b>	Some Model Experiments with Transom		
	61	Flaps to Round-bottom Craft	June	204
	205	Wind Tunnel Tests on a Model of a Car		
	295	Ferry	August	294
	92	SHIP MOTION AND STABILIZATION		
	200	Analysis of the Control of Activated Anti		
		Analysis of the Control of Activated Anti-	Sentembor	330
		Anti-sitch Contor for Chine	August	206
	10.1	Anu-pitch System for Ships*	August	290
	194	Apparatus for Stabilizing the Roll of a	Darrah	111
	100	Ship*	December	444
	374	Cushioning of Water Impact by Entrapped	D /	112
	210	Air	December	443

	_	-	
De la set en la Desian of Bossino Boll	Issue	Page	Ei.
Stabilizers	Iuly	256	ГП
Drag Reduction of Water-borne Vehicles*	November	415	Fir
Stabilizers	June	187	Fir
bility in Restricted Waters	December	443	Fo
Influence on Ship Motions of Different Wave Spectra and of Ship Length	April	126	Fre
Paint Systems for Hulls and the Problems of Frictional Resistance	June	187	Ge
Passive Stabilizers for Oil Tankers*	January	31	Ge
Passive Stabilizers for Tankers* Pitch and Heave with Fixed and Controlled	May	160	Gr
Bow Fins	January	28	He
Rolling and Its Stabilization by Active Fins	July	255	Ho
Sea Spectra Simplified	April	126	He
Ship Stabilizer*	August	296	I.F.
Shock Phenomena on a Trawler	October	375	Jaj
Stabilizer Fin Control System	May	152	Jaj
Systems for the Control of Ship Motions	May	158	La
Vosper - Thornycroft Moving - weight			La
Stabilizer	June	196	La La
			La
SHIP RUDDERS AND STEERING			Le
Effectiveness of Bow Thruster at Low and	Manah	02	Lit
Medium Ship Speeds	March	92	Lit
Fluidrive Transmission for Bow Thrusters	January	14	Me
Hydraulically Powered Bow Thrust Unit	January	23	Mu
Italian-built Stern Trawler with Kort Nozzle		-	Mu
Rudder	March	90	
Open-water Tests on Nozzle Rudders	January	29	M
Rudder Shock Machined in situ	March	84	
Securing Means Against Turning of the			Ne
Rudder Motor Carried by the Rudder			110
Head of a Ship*	February	64	Ne
Ships' Steering Arrangements*	March	95	Ne
Steering System for Ships*	March	95	Ne
Test Results of Largest Bow Thrust Unit	March	85	No
			No
CHURC NEW CONSTRUCTION			2.10
SHIPS-NEW CONSTRUCTION	November	100	Oc
20-knot Keirigerated Cargo Linei	April	123	Or
2400 np Tug for South Africa	February	56	Pas
10 000 dwt Topker	October	361	Pol
202 577 dut Tanker	July	248	Po
All analogod Longliner for Greenland	July	210	Po
Waters	November	396	Pre
Australian Supply Vessel for Rough Seas	February	62	
Automated Freight Ferry	October	368	Qu
Automated I P.G. Tanker	October	370	Re
Rituman Tanker	December	436	Re
British built Vessel with Majerform Hull	November	402	Ro
Canadian Bulk Carrier	January	21	Ru
Container Cargo Ship for Rotterdam-Scot-			Ru
land Service	August	282	Sco
Container Shin	July	247	Sel
Danish Train Ferry	December	440	
Danish-built Twin-screw Ferry	November	411	Sho
Drilling Rig Supply Vessel	April	117	Sho
Dutch 14 000 dwt "Unity" Vessel	October	363	Sol
Dutch North Sea Packet Launched at			Sov
Birkenhead	August	289	Spa
Dutch Research Ship	December	435	Sur
Fast American Cargo Liner	June	185	1
Fastest Roll-on/Roll-off North Sea Cargo			Toy
Ship	August	290	Tw
Finnish-built Multi-purpose Cargo Vessel	April	115	Tw
First Drive-through Ferry for British Rail-	-		Un

ways ... August

Page		Issue	Page
256	Owners	August	285
415	First Roll-on/Roll-off Ship for Atlantic Container Line	March	88
187	First Two SD14s 14 650 dwt Two Deck	Senten	224
443	Forest Product Carrier	November	324
110	French Combination Ore/Bulk/Oil Carrier	September	328
126	French-built Passenger/Cargo Liner for	Marah	0.5
187	German Transatlantic Passenger Liner	October	85
31	German-built Bulk Cement Carrier	November	412
160	Great Lakes Tanker with Mirrlees K Major		
28	Helicopter Support Ship	January	24
255	Holland-built Products Carrier	November	308
126	Hong-Kong-built Roll-on/Roll-off Ship	June	188
296	I.H.I. Complete First Freedom Ship	April	120
375	Japanese Distant Water Factory Trawler	November	406
152	Japanese Inland Sea Vessel	March	83
130	Large Bulk Carrier	June	202
196	Largest Ocean-going Conveyor Bulker	December	442
	Largest Ship for Israeli Fleet	March	434
	Largest Tanker Built in Britain	February	57
	Lead Ship of Six Refrigerated Cargo Vessels	June	191
02	Liberty Replacement from Yugoslavia	January	15
92	Liberty Ship Replacement	October	371
14	Madium Speed Machinery in Face Teal	October	370
23	Multi-purpose Carrier	April	118
	Multi-purpose Dry Cargo Ship with Geared	January	20
90	Machinery	November	410
84	Multi-purpose Reefer with Maierform SV		
0.	Bow New Esso Topker with Steen Turking Dec	May	156
	pulsion	Sentembor	276
64	New Series of Fast Cargo Liners	February	520
95	New Type Combination Carrier	November	396
85	New U.S. Coast Guard Cutters	November	405
05	North Sea Automobile Carrier	January	24
	type Engine		
100	Oceanographic Research Ship	January	26
123	Ore/Oil Carrier	April	110
56	Passenger/Car Ferry	November	412
361	Polish-built Stern Trawler for British Owners	November	408
248	Powerful American Tugs	November	407
201	Provertul German Tug	October	370
396	marine Rescue Ship	October	267
368	Oueen Elizabeth 2	February	55
370	Refrigerated Cargo Motor Vessel Antarctic	July	246
436	Refrigerated Sea Water Trawler	November	414
402	Roll-on/Roll-off Coasters	June	201
21	Russian Liberty Ship Replacement	February	52
282	Scottish-built Reefer for German Owners	May	157
247	Self-loading/discharging Bulk Cement	January	20
440	Carrier	November	402
411	Short-sea/Coastal Tanker	September	331
117	Short-sea Roll-on/Roll-off Ships	January	27
363	Solvent Carriers for Norwegian Owners	October	364
200	Spanish Tanker Construction	April	119
135	Supply and Buoy Vessel for Canadian Coast	June	191
185	Guard	December	110
	Towmaster Tugs	April	121
290	Twin Gear 4800 hp Installation	February	57
115	I win Screw Sludge Vessel	April	117
	Unusual Vessel with Multiple Propulsion		

... ... ... August

Machinery

	Issue	Page				
World's Biggest and Fastest Container Ship	November	408	1			
World's Largest Dredger	August	288				
World's Largest Refrigerated Cargo Liner	November	411				
			]			
SHIPYARDS, SHIPBUILDING AND LAUNCHING						
Demonstration of Modern Means of Ship						
Production by Means of the Example	D	112				
of Straking and Nesting	December	445				
Jumbolzation Carried Out Alloat	January	24				
Papair Caissons*	October	375	(			
Repair Caissons	October	515	(			
			]			
SMALL CRAFT						
50-knot Gas Turbine Patrol Boats	January	19				
Adequate Strength for Small High-speed		104				
Vessels	April	126	J			
Buoy Vessel with Towing Facilities	September	321	1			
Design Consideration for Deep Submerg-	Contombor	152	-			
ence Vehicle Machinery Systems	October	368	1			
German huilt Lifeboot for Columbia	November	400				
Hydraulic Dumping Barges	April	113	1			
Logging Tug	March	90	1			
Sea-link	May	153				
Tug for Fighting Fires on Large Tankers	March	89				
Twin-screw Diesel Tug	July	252				
Water Tractors for Venice	April	124				
	-					
UNDERWATER FOUNDAENT						
Compost Underson Compostors	Ostabor	260	1			
Design of Pressure Hulls for Small Sub-	October	302				
marines	August	203	-			
Excursion into Depth	August	284				
Japanese Underwater Survey Vessel	March	85				
oupmine characteristics						
VIBRATION						
Coupled Torsional-norizontal vibration of	April	125				
Effect of Blade Number and Aperture	April	125	-			
Clearances upon Vibratory Propeller						
Forces	September	327				
Effects of Varying Electrode Shape on Arc.	arr territori					
Operations and Quality of Welds in						
2014-T6 Aluminium	October	364				
Fore and Aft Vibration of Superstructure	November	413				
Measurement of Transient Vibrations	November	414				
Research with Propeller Induced Vibrations	March	87				
Secondary Balancers—A New Approach	February	56				
Test of Turbine Blade Vibration by Tele-	Santamhan	221				
Unstable Vibrations of a Shaft with Un	September	554				
symmetrical Stiffness Carrying an Un						
symmetrical Rotor	December	442				
Vibration of a Mammoth Tanker with						
Special Consideration to Athwartship						
Flexibility	March	92				
Vibration Problems with High Speed Turbo-						
machinery	August	293				
Wave-excited Hull Vibration	September	332				
WEIDING AND CUTTING						
Afloat Welding Method in Japan	March	80				
Application of Weld Performance Data	October	374				
Arc and Transfer Characteristics of the	000000	517				
Steel/CO. Welding Process	June	194				

	Issue	Page
Aspects of Radiography and Ultrasonic Testing of Welds in Steel with Thick-		
nesses from 100–300 mm Brittle Fracture Strength of Welded Joint	June December	195 442
Cold Cracking in Multilayer Welds of Low- alloy High-strength Steel	August	293
Composition Effects in Iron-base Weld Metal	July	252
Correlation Study Between Ultrasonic, Radiographic and Visual Examination		255
cO₂ Welding with Flux Cored Wires	September	333
Current Penetration Seam Welding Deformation of Longitudinal Fillet Welds	February	60
Subjected to a Uniform Shearing	Inly	254
Distortion in Welded Structures	March	94
Effect of Copper in Low Alloy and Mild Steel Weld Metals	March	94
Effect of Fit-up on Heat-affected Zone Cold Cracking	August	294
Effects of Applied Magnetic Fields on Welding Area	Ianuary	30
Explosive Forming of Tube Joints	February	62
Fatigue Strength of a Weldable High Strength Martensitic Stainless Steel	February	60
Fatigue Tests on Butt Welds with Slag Inclusions	August	282
Flash Butt Welding of Heavy Sections	April	127
Steels	October	374
Gas Shielding Test Methods	February	61
velopment in Resistance Spot Welding Hot Cracking in Austenitic Stainless Steel-	February	60
weld Deposits	August	294
Inert Gas Welding of 12 per cent Nickel	August	293
Maraging Steel	August	293
Cracking of Carbon Manganese Steel		
Lamellar Tearing in Silicon-killed Boiler	August	283
Plate New Ultrasonic Plastic Welding Technique	August	294
Parallel-gap Welding Techniques Using	reordary	00
Automatic Pulse Compensation	August	281
Pulsating-arc Fixed-position Automatic	June	190
Pipe Welding System	June	193
and Heat-affected Zone of Mild Steel		
Submerged-arc Butt Welding from One Side	April	125
Only in Ship and Tank Construction	March	93
Toughness in Electroslag Welds	June	190
Underwater Welding	September	335
Weldability of 70/30 Copper-nickel Tube-	Santambar	326
Welding Brass to High Strength Low Alloy	September	520
Welding of Copper with Deep Penetration	February	60
Welding Dissimilar Aluminium Alloys	September	28 325
Welding Low Alloy Steel Castings with the	News	105
Welding in U.K. Ship Construction	January	28
Why Some Heats of Stainless Steel May Not Weld	July	253