

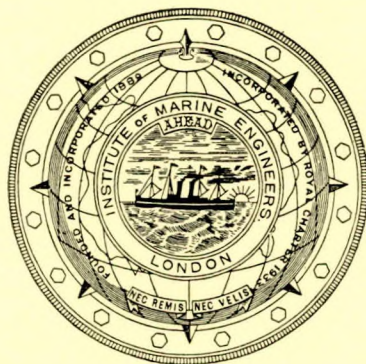
THE INSTITUTE
OF
MARINE ENGINEERS

FOUNDED 1889

INCORPORATED BY ROYAL CHARTER 1933

PATRON : HER MAJESTY THE QUEEN

TRANSACTIONS



Volume LXIX 1957

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British Standards Institution

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Joint Nuclear Marine Propulsion Panel

Institute of Marine Engineers: VICE-ADMIRAL SIR FRANK MASON, K.C.B. (*Chairman of Panel*),
 REAR-ADMIRAL F. E. CLEMITSON, C.B., (ret.), R. COOK, M.Sc., H. N. PEMBERTON, H. N. E. WHITESIDE.
Institution of Naval Architects: J. M. MURRAY, M.B.E., B.Sc., SIR VICTOR SHEPHEARD, K.C.B., R.C.N.C.
Institution of Engineers and Shipbuilders in Scotland: G. JOHNSON, B.Sc., P. W. THOMAS, B.Sc.
North East Coast Institution of Engineers and Shipbuilders: T. W. F. BROWN, D.Sc., S.M., PROFESSOR L. C. BURRILL, M.Sc., Ph.D.
Secretary: J. STUART ROBINSON, M.A.

The Institute of Marine Engineers' Guild of Benevolence

Committee

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Vice-Presidents: ENG. CAPT. W. A. GRAHAM, O.B.E., R.N.R., JAMES TURNBULL, O.B.E.

Members of Council: E. R. CHAMBERLAIN, F. D. CLARK, T. W. LONGMUIR, R. MUNTUN, B.Sc.

Members of the Guild: W. J. BROWN, W. A. CORMACK, B. C. CURLING, O.B.E., W. R. HARVEY, G. SPECK, G. RIDLEY WATSON, B.Sc.

Honorary Treasurer: J. CALDERWOOD, M.Sc. (*Vice-President*)

Secretary: J. STUART ROBINSON, M.A.

Annual Report of the Council for 1957

1957 has been a year of particular significance in that it has seen, with the taking over and occupying of the Institute's new Memorial Building, the completion of twelve years of strenuous effort. The tempo of construction of the building increased rapidly from the early months of the year and by midsummer it was realized that it would be possible to arrange the official opening for the autumn. This historic event took place on 25th September 1957 when, in the presence of many members and guests, Admiral of the Fleet the Earl Mountbatten of Burma, K.G., P.C., G.C.B., G.C.S.I., G.C.I.E., G.C.V.O., D.S.O., supported by the President, Sir Ronald Garrett, The Right Honourable and Right Reverend The Lord Bishop of London, Rear-Admiral F. E. Clemitson, C.B. (ret.) (Chairman of Council), and Mr. H. A. J. Silley (Past President and Chairman of the Building Committee), declared the Memorial Building open and unveiled the Memorial Books. (A full report of this occasion appeared in the October issue of the *TRANSACTIONS*.) This event was made possible by the overcoming of many practical difficulties, not least those of completing the financial arrangements for the project. In July a sum of £85,000 still remained to be found; this at a time of restrictions on credit and other difficulties, and with the ever present threat of rising costs of materials and wage demands. It was appreciated that the earlier the building was completed the less vulnerable would the Institute be on this count, but it also meant that there was less time to raise the money required. The Council is happy to report that the shipping industry again rallied to the Institute's aid, as can be seen from the accounts, by a substantial contribution in the way of unsecured loans. Also a request to the Capital Issues Committee for reconsideration of their previous refusal to allow an increase in borrowing permission was favourably decided and approval was received for an additional amount of £70,000 to be borrowed on mortgage. Finally a number of contributions were received in the way of gifts and covenants. For all this help the Council would like to express its gratitude.

The last and, in some ways, the most difficult problem to overcome was the suddenly re-awakened interest of the City Corporation in that portion of the Minories in which the old building was situated. A sale by private treaty was virtually completed when the Corporation re-announced their plans—dormant for ten years—for the re-development of this site, involving the demolition of No. 85. This meant that it was virtually impossible to dispose of the building privately. Negotiations were opened with the City Corporation with a view to their purchasing it, but there appeared to be many difficulties in the way. However, it is now possible to report that the Corporation have agreed to buy, subject to ministerial consent.

Much thought and discussion centred on how to emphasize the memorial aspect of the scheme and it was finally decided that the names of all those marine engineers who died during the Second World War should be recorded in memorial books mounted on a plinth inscribed with the words:

"This Memorial Building is dedicated to the marine engineers of the Royal and Merchant Navies who lost their lives during the 1939-45 War, whose names are recorded in these Memorial Books".

With the disposal of the Minories premises and the Memorial Building virtually finished, this great scheme will be completed and the financial liability met. It will commemorate the marine engineers who died at sea in the service of their country by providing now and in the future institutional premises second to none, and a financial return which will enable the Institute greatly to extend its work on behalf of the profession and the members.

MEMBERSHIP

Every year for the last six years it has been reported that the membership elections for that year have exceeded those for the year before, and this year it is again possible so to report, although this time the margin is not so great. It is a matter for satisfaction that the Institute's membership does continue to grow by a net figure of something over 1,000 a year, but it is appreciated that saturation point must be reached sooner or later. The Council, however, feels that this point is some way off yet and is investigating whether extension of the Institute's activities in certain directions might continue to encourage this substantial rate of growth. As will be seen from the table, the number of members elected this year totals 1,326, and the losses by deaths, resignations, etc., total 297, which is somewhat more than last year. The total membership now stands at 11,491.

The Council appreciates how big a part is played in matters connected with membership growth by those who administer the Sections. In saying this, however, it must not be overlooked that the members individually can themselves do much to extend the membership by bringing it to the notice of others who do not yet know what is being done by the Institute for the profession.

NEW LOCAL VICE-PRESIDENCIES

The Council has agreed that Local Vice-Presidencies should be created at Birmingham and Karachi.

ROYAL CHARTER AND BY-LAWS

The Privy Council's assent was received in August to the amendments to the By-Laws (mainly concerning the rates of membership subscriptions) which were approved by the members at the Annual General Meeting held on Tuesday, 23rd April 1957.

The Council has petitioned the Privy Council to make a number of small alterations in the Royal Charter with particular reference to the objects of the Institute as follows:—

"7. The objects and purposes for which the Institute is hereby constituted are to promote the scientific development of Marine Engineering in all its branches and in the furtherance of such objects (but not otherwise)—

A. to enable Marine Engineers to meet and to correspond; to facilitate the interchange of ideas respecting improvements in, and original and improved methods of working, machinery, and the publication and communication of information on such subjects;

B. to uphold the status of Members of the Institute

Annual Report of the Council for 1957

- by holding or prescribing examinations for candidates for election and by requiring standards of knowledge and experience which can be approved;
- C. to co-operate with Universities, other Educational Institutions and Public Educational Bodies for the furtherance of education in Marine Engineering Science; and
- D. to do any such other lawful things as are incidental or conducive to the attainment of any of the above-mentioned objects”.

TRAINING OF MARINE ENGINEERS

The Council has discussed the training of marine engineers for the Merchant Navy and has made certain recommendations which have been forwarded to the Shipping Federation.

AWARDS

The Council is pleased to record that two donations have been received during the year, one from the Yorkshire Copper Works, Ltd., which provides the “Yorkshire Award”, and the other from Cdr. F. Roberts, O.B.E., D.S.C., R.N.(ret.) (Member). Under the terms of the former a sum of £40 will be awarded biennially to the writer of an essay or the author of a paper read before the Institute dealing with any development related to any aspect of marine engineering or a product applicable to marine engineering, and whilst the terms of the latter have not yet been agreed, it will provide an award connected with Phase III of the alternative scheme for the training of seagoing engineers.

THE GUILD HOUSE CHARITY BALL

As was reported in the June issue of the *TRANSACTIONS* the first Guild House Charity Ball was held at The Dorchester on Wednesday, 8th May 1957, under the patronage of Lady Anderson. As a result of generous response in providing gifts for the tombola and advertising in the programme, a sum of over £1,100 was raised.

PAPERS AND TRANSACTIONS

As can be seen from the Summary of the Year's Activities meetings have been held throughout the year. It is gratifying to note that attendance at these meetings continues to rise.

THE SECRETARY'S TOUR

A report on the Secretary's tour of Pakistan, India and Ceylon appeared in the November issue of the *TRANSACTIONS* and included places visited and persons met. Upon his return the Secretary made a number of recommendations, two of which have been acted upon by the creation of a Local Vice-

Presidency and the formation of a Section at Karachi. Other recommendations are still under consideration.

BRITISH NATIONAL COMMITTEE FOR NON-DESTRUCTIVE TESTING

The Council has been invited to nominate a representative to serve on the newly formed British National Committee for Non-Destructive Testing, and Mr. R. H. Paddon Row (Associate Member) is acting as the Institute's representative.

THE INSTITUTION OF ENGINEERS AND SHIPBUILDERS IN SCOTLAND—CENTENARY CELEBRATIONS

The Institute was represented at the Institution's Centenary Celebrations by the Chairman of the Scottish Section, Mr. W. Young, and his wife, and the Secretary, Mr. J. S. Robinson, and his wife.

ACCOUNTS

As mentioned in the Report for 1956 there is a deficit on the General Revenue Account for 1957. This amounts to £2,898. It will be noted that the increases in postal charges, telephone and printing costs are reflected in the charge for those items which are shown under Administration.

The net cost of producing the *TRANSACTIONS* and the Year Book has increased this year by £2,105, although the sales of *TRANSACTIONS* to non-members increased by £550. To offset some of the great increase in postal charges, delivery of the *TRANSACTIONS* and other correspondence is now being made by hand in the E.C.3 district. This makes a sufficient saving to meet the cost of an extra member of the House Staff, who is not fully occupied in this task and is able to assist in other ways. The increase in the subscription rates from 1st January 1958, however, will allow for an estimated surplus of income over expenditure for 1958 after taking into consideration increases in the establishment costs for maintaining the part of The Memorial Building occupied by the Institute.

Income from the lettable parts of the building and the relative expenses are shown in the National War Memorial Building Fund Revenue Account; there is a surplus of revenue amounting to £11,208. The proportion of ground rent and rates applicable to the accommodation occupied by the Institute has been charged to this Account.

The Balance Sheet now incorporates those items previously included in the National War Memorial Building Fund Balance Sheet. The Capital Account for the Memorial Fund and the explanatory note (Note 1) shows the total contributions to the Fund since it opened in 1945 and disbursements made from the Fund since that date.

The item “Cost of Construction” under the Memorial Building is the total of progress payments certified by the Architects up to 31st December 1957.

SUMMARY OF THE YEAR'S ACTIVITIES

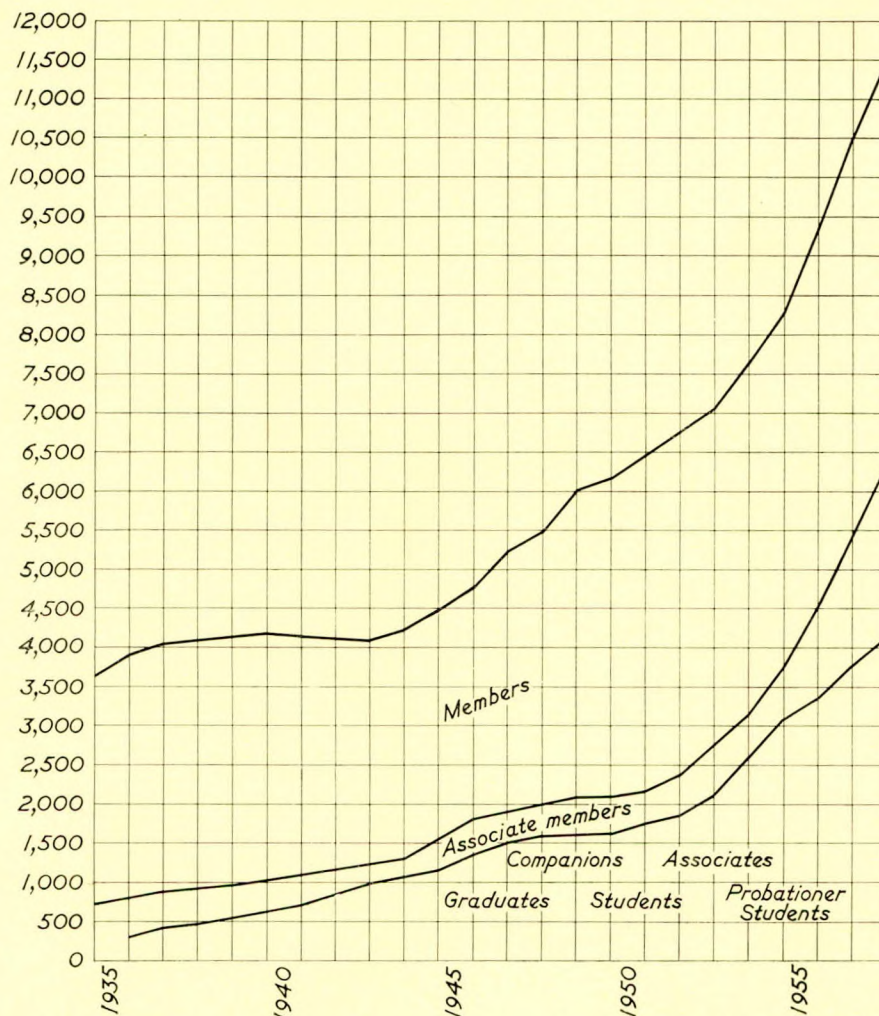
MEMBERSHIP

The changes in the membership are shown in the following table and chart:—

Grade	Total 31st Dec. 1956	Transfer		Elected	Died	Resigned	Lapsed	Total 31st Dec. 1957	Increase or decrease during 1957
		From	To						
Past Presidents	12			1				13	+ 1
Honorary Members	6			1				7	+ 1
Members	4,994		50	274	73	60	42	5,143	+ 149
Associate Members	1,688	19	123	379	4	12	16	2,139	+ 451
Companions	47			2	2	1		46	— 1
Associates	1,786	97	1	124	5	23	33	1,753	— 33
Graduates	586	55	6	217	1	6	1	746	+ 160
Students	427	9	52	102		5	1	566	+ 139
Probationer Students	916	52		226	1	11		1,078	+ 162
Totals	10,462	232	232	1,326	86	118	93	11,491	+1,029

Annual Report of the Council for 1957

Chart of Membership



COUNCIL

At their meeting on 14th May 1957 the Council elected Rear-Admiral F. E. Clemitson, C.B. (ret.), as Chairman of Council and Mr. R. Munton, B.Sc., as Vice-Chairman for the 1957/58 session.

VICE-PRESIDENT

The following appointment of a Vice-President to fill a casual vacancy has been made by the Council:—

Glasgow: James Gilchrist *vice* Ewen H. Smith, deceased.

LOCAL VICE-PRESIDENTS

The following appointments of Local Vice-Presidents have been made by the Council:—

Birmingham: H. E. Upton, O.B.E. (first holder of this office).

Karachi: Captain I. K. Mumtaz, P.N. (first holder of this office).

PAPERS READ AND DISCUSSED

Date	Title	Author
8th January	"Application of Research to the Design of Marine Steam Turbines"	T. W. F. Brown, D.Sc., S.M. (Member)
12th February	"Corrosion in Scotch Marine Boilers"	F. Wormwell, D.Sc., Ph.D., M.Sc., G. Butler, M.A., Ph.D., and J. G. Beynon, A.I.M.

2. Model Boiler Tests on the Influence of the Copper Content of the Steel on the Corrosion of Tubes in Artificial Sea Water

"Boiler Feed Water Treatment for Advanced Steaming Conditions"
"Harland and Wolff Pressure Charged Two-stroke Single-acting Engine"

"Developments in Marine Electrical Installations with Particular Reference to A.C. Supply"

*"Design and Operating Experience of an Ore Carrier Built Abroad"

"Recent Developments in British Naval Main Propulsion Steam Turbines"

G. Butler, M.A., Ph.D., and H. C. K. Ison, A.I.M.

J. Leicester, M.I.Chem.E. (Associate)
C. C. Pounder (Vice-President)

A. N. Savage, M.I.E.E., M.N.E.C. Inst. (Member)

R. Atkinson, D.S.C., R.D., B.Sc.(Eng.), A.M.I.Mech.E. (Member)

The late F. J. Cowlin, O.B.E., M.I.Mech.E. (Associate Member), and A. F. Veitch (Associate)

* Read before a Joint Meeting of the Institute of Marine Engineers and the Institution of Naval Architects.

Annual Report of the Council for 1957

12th November	“Heat Balance Calculations and Their Use in the Installation Design of Steam Turbine Merchant Ship Propulsion Machinery”	Cdr. E. Tyrrell, R.N.(ret.) (Member)	2. University Education and the Training of Naval Architects	Part I by Prof. A. M. Robb, D.Sc. Part II by Prof. L. C. Burrill, M.Sc., Ph.D. Prof. S. J. Palmer, O.B.E., R.C.N.C.
27th November	†“The Nuclear Propulsion of Ships”	Sir Christopher Hinton, K.B.E., M.A., F.R.S., and R. V. Moore, G.C., B.Sc. (Eng.), M.I.Mech.E., M.I.E.E.	3. The Selection, Education and Training of Officers for the Royal Corps of Naval Constructors	Capt. I. G. Aylen, O.B.E., D.S.C., R.N.
12th December	“The Trials and Maiden Voyage of the Gas Turbine Ship <i>John Sergeant</i> ”	J. J. McMullen, B.S., M.S., Dr. Ing. (Member)	4. Training of Engineer Officers in the Royal Navy 5. The Training of Engineers for the Merchant Navy	S. F. Dorey, C.B.E., D.Sc., F.R.S.
			October	*“Further Sea Trials on the <i>Lubumbashi</i> ”
			November	“Lloyd’s Register and the Marine Engineer”—Presidential Address **“Ships in Port”

PAPERS PUBLISHED IN THE TRANSACTIONS

Issue	Title	Author
January	“Reheating as a Contribution to the Economy of the Marine Steam Turbine, with Special Reference to the Installation in t.s.s. <i>Empress of Britain</i> ”	A. W. Davis, B.Sc. (Member)
February	“Some Aspects of the Application of Planned Maintenance to Marine Engineering”	W. H. Falconer (Associate Member)
March	“Application of Research to the Design of Marine Steam Turbines”	T. W. F. Brown, D.Sc., S.M. (Member)
April	“Corrosion in Scotch Marine Boilers” 1. Model Boiler Tests on the Corrosion of Mild Steel Tubes in Highly Saline Waters 2. Model Boiler Tests on the Influence of the Copper Content of the Steel on the Corrosion of Tubes in Artificial Sea Water “Boiler Feed Water Treatment for Advanced Steaming Conditions”	F. Wormwell, D.Sc., Ph.D., M.Sc., G. Butler, M.A., Ph.D., and J. G. Beynon, A.I.M. G. Butler, M.A., Ph.D., and H. C. K. Ison, A.I.M.
May	“The Harland and Wolff Pressure Charged Two-stroke Single-acting Engine”	J. Leicester, M.I.Mech.E. (Associate)
June	“Developments in Marine Electrical Installations with Particular Reference to A.C. Supply”	C. C. Pounder (Vice-President)
July	*“Design and Operating Experience of an Ore Carrier Built Abroad”	A. N. Savage, M.I.E.E., M.N.E.C. Inst. (Member)
August	“Corrosion Resistance of Titanium to Sea Water” ‡“Recent Metallurgical Problems in Marine Engineering”	R. Atkinson, D.S.C., R.D., B.Sc.(Eng.), A.M.I.Mech.E. (Member) J. B. Cotton and B. P. Downing B. Todd, M.Eng.
September	*Symposium on “The Education and Training of Naval Architects and Marine Engineers” 1. A New Deal for Naval Architecture in University Education and a few Related Professional Questions	Prof. E. V. Telfer, D.Sc., Ph.D.

October	*“Further Sea Trials on the <i>Lubumbashi</i> ”	Prof. G. Aertssen
November	“Lloyd’s Register and the Marine Engineer”—Presidential Address **“Ships in Port”	Sir Ronald Garrett R. Atkinson, D.S.C., R.D., B.Sc.(Eng.), A.M.I.Mech.E. (Member) and L. Baker, D.S.C., M.I.Mech.E. (Member)
December	“The Stopping of Ships in an Emergency” “Recent Developments in British Naval Main Propulsion Steam Turbines”	J. E. Church (Member of Council) The late F. J. Cowlin, O.B.E., M.I.Mech.E. (Associate Member) and A. F. Veitch (Associate)

JOINT NUCLEAR MARINE PROPULSION PANEL

A number of meetings of the Panel Committee have been held during the year. Two issues of the Panel Journal have been published and contained the following papers:—
“Some Safety Considerations of Nuclear Power Reactors” by C. D. Boadle, B.Mech.E.
“An Introduction to Nuclear Power” by P. T. Fletcher, B.Sc.(Eng.), M.I.C.E., M.I.Mech.E., M.I.E.E.

STUDENT SECTION ACTIVITIES

The following events have taken place during the year:—
12th January—Visit to s.s. *Sheldrake*.
14th January—Lecture on “Radio Aids to Marine Navigation” by Captain R. G. Swallow, R.N.(ret.).
11th February—Panel meeting to discuss “The Management of a Ship”.
18th March—Lecture on “Gas Turbines” by W. J. R. Stocks.
28th March—Lloyd’s Register Lecture for Juniors: “An Introduction to Nuclear Power” by P. T. Fletcher, B.Sc.(Eng.), M.I.C.E., M.I.Mech.E., M.I.E.E., followed by a visit to the Atomic Energy Research Establishment, Harwell, on the following day.
13th April—Visit to s.s. *Ceramic* and m.s. *City of Johannesburg*.
27th April—Visit to m.s. *Escalante*.
4th May—Visit to m.s. *Rangitane*.
11th May—Visit to s.s. *City of Hull*.
14th October—Programme of technical films.
4th November—Lecture on “Deck and Engine Auxiliaries” by Cdr. D. W. Malim, R.N.(ret.) (Member).
9th November—Visit to m.s. *Ruahine*.
2nd December—Lecture on “The Integral Furnace Boiler” by J. P. Groome (Associate).

JUNIOR LECTURES

The following lectures were arranged in addition to those
‡ Read before the Merseyside and North Western Section.
** Paper 4 (Session 4) of the Conference on the Mechanical Engineer’s Contribution to Clean Air, 19th-21st February 1957, sponsored by the Institution of Mechanical Engineers.

† Joint Nuclear Marine Propulsion Panel Lecture.

* Read before a Joint Meeting of the Institute of Marine Engineers and the Institution of Naval Architects.

Annual Report of the Council for 1957

reported by the individual Sections of the Institute:—

- 8th April at Woolwich Polytechnic. "Gas Turbines" by J. A. Barnes, B.Sc., A.M.I.Mech.E.
30th October at Poplar Technical College. "The Construction of the Ship" by G. Ridley Watson, B.Sc. (Member).
7th November at Acton Technical College. "The Construction of the Ship" by G. Ridley Watson, B.Sc. (Member).
8th November at the Technical Institute, Falmouth. "Modern Martine Steam Turbines" by J. H. Gooch, B.A.
11th November at East Ham Technical College. "The Junior Engineer's First Trip to Sea" by H. C. Gibson (Associate Member).
3rd December at The Municipal College, Southend. "Diesel Hydraulic Propulsion" by F. J. Mayor (Member).

EDUCATION GROUP

The Annual General Meeting of the Group was held on Tuesday, 19th March 1957, and was followed by a discussion on the subject of "A Comparison of the Training of Sea-Going Engineers in Other Countries".

INSTITUTE AWARDS

The Denny Gold Medal has been awarded to A. N. Savage (Member) for his paper entitled "Developments in Marine Electrical Installations with Particular Reference to A.C. Supply". In making this award the Council wishes to record that all the papers considered, namely those read by members during the year, were of an excellent standard.

The Institute Silver Medal has been awarded jointly to Sir Christopher Hinton, K.B.E., M.A., F.R.S., and R. V. Moore, G.C., B.Sc.(Eng.), for their paper entitled "The Nuclear Propulsion of Ships".

The Akroyd Stuart Award for 1956/57, value £50, has been awarded to C. C. Pounder (Vice-President) for his paper entitled "The Harland and Wolff Pressure Charged Two-stroke Single-acting Engine".

The W. W. Marriner Memorial Prize, value £5, for the best Engineering Knowledge script written by a candidate in the Ministry of Transport and Civil Aviation's examination for the Second Class Engineer's Certificate of Competency has been awarded, on the recommendation of the Chief Examiner of Engineers, to Q. M. Watt.

Extra First Class Engineer's Certificate Examination—Institute Award. The Institute silver medal for the candidate obtaining the highest marks in the examinations in 1957 has been awarded, on the recommendation of the Chief Examiner of Engineers, to J. M. Duguid (Associate Member).

1957 Essay Competition. The following awards have been made from the combined Jacobs, Murdoch and Robertson Prize Fund:—

The sum of £5, to J. R. Michaelis (Student) for his essay entitled "Nuclear Power for Marine Propulsion".

The sum of £4, to C. B. Jagger (Graduate) for his essay entitled "Evaporators".

The sum of £4, to G. P. Shiner (Student) for his essay entitled "Heat Treatment of Carbon Steel".

Institute Prizes for the Study of Heat Engines

The Institute's Annual Prizes, value two guineas each, for students at technical colleges and schools in marine centres who accomplish the best year's work in heat engines, were awarded as follows:—

D. S. Hodson, Birkenhead Technical College.

B. G. Jones, Bootle Municipal Technical College.

R. W. E. Shannon, Belfast College of Technology.

B. F. Bickell, Bristol College of Technology.

J. Roach, Cardiff College of Technology and Commerce.

R. M. Hodgson, Central College of Further Education, Barrow-in-Furness.

B. J. Owens, City of Liverpool Technical College.

R. W. Dicker, City of Portsmouth College of Technology.

J. Hall, Constantine Technical College, Middlesbrough.

T. J. Barnicoat, Cornwall Technical College.

J. W. Murray, Dundee Technical College.

S. B. Brewer, Falmouth Technical College.

N. Watson, Gateshead Technical College.

W. Little, Greenock Technical Further Education Centre.

J. R. Robinson, Hull Technical College.

A. J. Tozer, Plymouth and Devonport Technical College.

M. P. Gornall, The Polytechnic, Regent Street, London, W.1.

R. G. A. Hull, Poplar Technical College.

D. R. Patterson, Riversdale Technical College.

E. Pirie, Robert Gordon's Technical College, Aberdeen.

K. H. Mitchell, Royal Technical College, Glasgow.

W. Gair, Rutherford College of Technology.

T. Merritt, Southampton Technical College.

R. T. Wilkinson, South-East London Technical College.

A. A. Hook, South-West Essex Technical College.

K. Wadge, South Shields Marine and Technical College.

A. G. Boyle, Stow College of Engineering.

A. Grantham, Sunderland Technical College.

K. T. Morgan, Swansea Technical College.

M. Bell, West Ham College of Technology.

J. H. Rowntree, West Hartlepool Technical College.

B. A. Jenkyn, Woolwich Polytechnic.

Institute Awards for the Ordinary National Diploma Course

The Institute's awards (value two and three guineas each respectively) for the best first year and the best second year students taking the ordinary National Diploma Course under the alternative scheme for the training of seagoing engineers were awarded as follows:—

B. S. Scott (first year) and A. J. Ewins (second year), Acton Technical College.

B. Marsh (first year) and M. Reid (second year), Birkenhead Technical College.

M. E. Glover (first year) and M. K. McGarr (second year), Bolton Technical College.

E. J. Bradley (first year) and W. K. Philp (second year), Cardiff College of Technology and Commerce.

J. E. Miller (first year) and P. J. Hambling (second year), Gateshead Technical College.

P. Wilshaw (first year) and M. R. Thornton (second year), Hull Technical College.

M. D. Whitney (first year) and R. D. Payne (second year), Kingston-on-Thames Technical College.

B. C. Osborne (first year) and B. P. Jeffery (second year), Poplar Technical College.

D. C. Dorney (first year) and R. E. Mason (second year), Riversdale Technical College, Liverpool.

K. Bloomfield (first year) and J. R. Little (second year), South East London Technical College.

D. Reid (first year) and D. J. Doyle (second year), Stow College of Engineering.

D. Langham (first year) and A. H. Perrett (second year), Swansea Technical College.

J. T. Gibbs (first year) and W. R. O. Mann (second year), Constantine Technical College, Middlesbrough.

R. G. Knibbs (first year), City of Portsmouth College of Technology.

Thames Nautical Training College—H.M.S. Worcester

The Institute's annual prize, value two guineas, for excellence in marine engineering, was awarded to Cadet P. J. Henderson.

THE INSTITUTE OF MARINE ENGINEERS

BALANCE SHEET

31st DECEMBER 1957

1956	£	£	£	£
ACCUMULATED FUND				
69,361			70,633	
172			248	
10			—	
2,790			—	
<u>72,333</u>			<u>70,881</u>	
—			2,898	
1,700			2,200	
<u>1,700</u>			<u>5,098</u>	
			<u>65,783</u>	
THE NATIONAL WAR MEMORIAL BUILDING FUND				
Capital Account				
177,648			178,726	
Revenue Account				
—			11,208	
<u>177,648</u>			<u>189,934</u>	
			<u>255,717</u>	
THE CHURCH COMMISSIONERS				
10,000			350,000	
—			25,000	
<u>10,000</u>			<u>375,000</u>	
—			<u>31,000</u>	
3,999			<u>3,999</u>	
1,114			<u>2,041</u>	
AWARDS AND PRIZE FUNDS (Note 3)				
1,776			1,776	
444			444	
<u>2,220</u>			<u>2,220</u>	

1956	£	£	£	£
FIXED ASSETS				
14,650			14,650	
179,512			598,477	
			2,497	
			10,314	
			12,811	
			507	
			<u>12,304</u>	
2,497			302	
			302	
			<u>302</u>	
			<u>625,431</u>	
INVESTMENTS				
38,939			38,939	
9,200			11,400	
29,739			27,539	
1,083			1,083	
<u>30,822</u>			<u>28,622</u>	
9,692			7,090	
9,156			7,041	
2,572			—	
—				
—				
25,507			25,863	
			14,832	
<u>46,927</u>			<u>54,826</u>	

Annual Report of the Council for 1957

CURRENT LIABILITIES				
7,580	Sundry Creditors	...	...	14,766
—	Progress payment on Building...	...	...	15,000
—	Mortgage Interest	...	...	3,590
—	Income Tax	...	...	3,620
1,516	Unexpired Subscriptions (Note 10)	...	...	1,926
<u>9,096</u>				<u>38,902</u>
<u>£274,710</u>				<u>£708,879</u>

£274,710

£708,879

REPORT OF THE AUDITORS TO THE MEMBERS OF THE INSTITUTE OF MARINE ENGINEERS

We have audited the attached Balance Sheet and annexed Accounts and have obtained all the information we have required. We have verified the Investments, Bank Balances, Insurance Policies and Title Deeds by means of Certificates.

In view of the advanced stage reached in the construction of the Memorial Building it has been deemed advisable to incorporate the National War Memorial Building Fund Balance Sheet into the Balance Sheet of the Institute, and the comparative figures for 1956 have been adjusted so as to bring them into accord with those for the year under review.

The National War Memorial Building Fund Revenue Account covers a period of nearly four months, but the expenditure is temporarily restricted to the items shown, pending the completion of the building contract.

In our opinion the Balance Sheet and Accounts have been properly drawn up so as to exhibit respectively, together with the explanatory notes, a true and fair view of the state of the Institute's affairs as at 31st December 1957, and of the income and expenditure for the year ended on that date.

SARDINIA HOUSE,
52 LINCOLNS INN FIELDS,
LONDON, W.C.2.
27th February 1958.

WEST AND DRAKE,
Chartered Accountants.

THE NATIONAL WAR MEMORIAL BUILDING FUND REVENUE ACCOUNT PERIOD ENDED 31st DECEMBER 1957

Ground Rent	...	...	...	...	£	2,209
General Rates (Estimated)	...	...	...	...	£	2,200
Water Rates (Estimated)	...	...	...	...		115
Insurance	...	...	...	...		127
						<u>4,651</u>
Electricity and Gas	...	...	...	...		379
Oil	...	...	...	...		868
						<u>1,247</u>
Wages	...	...	...	...		450
Cleaning	...	...	...	...		336
Sundries	...	...	...	...		124
						<u>910</u>
Surplus for Period	...	...	...	...		<u>11,208</u>
						<u>£18,016</u>

Rents Receivable	...	...	...	...	£	17,197
Service Charges	...	...	...	...	£	819
						<u>18,016</u>

£18,016

GENERAL REVENUE ACCOUNT

YEAR ENDED 31st DECEMBER 1957

1956	£	£	£	£
				MEMBERSHIP EXPENDITURE
5,527			7,484	Transactions (Note 8)
				Year Book
1,190			1,338	Cost less Advertising Revenue ...
				Journal of the Joint Panel on Nuclear Marine Propulsion
—			391	Local Sections' Expenses
731			885	Travelling to Sections
120			198	Lecture Expenses
136			213	Junior Lecture Expenses
16			14	Examination Expenses
				Common Preliminary Examination ...
40			37	Associate Membership
88			58	Engrossing Certificates
61			41	Prizes
135			165	Secretary's Eastern Tour
—			1,051	
—		8,044	—	11,875
				ESTABLISHMENT (Note 9)
954			834	Rent and Rates
75			80	Insurance
2,128			3,228	Housekeeping, Fuel and Lighting ...
42			86	Repairs
278			508	Depreciation of Furniture
—			278	Removal Expenses
—		3,477	—	5,014
				ADMINISTRATION
				Salaries, Pension, Insurance and Superannuation
9,610			11,198	Library
312			456	Stationery and General Printing ...
1,709			2,359	Postage and Telephone
1,213			1,374	Audit Fee
150			275	Provision for Doubtful Debts
100			—	Sundries
483			686	
—		13,577	—	16,348
				Library Books written off
				Surplus for the year, transferred to Accumulated Fund
—		2,790	—	
£27,888			£33,539	

1956	£	£	£	£
				MEMBERSHIP INCOME
1,298			1,510	Entrance Fees
23,719			26,183	Subscriptions (Note 10)
—		25,017	—	27,693
				INTEREST ON INVESTMENTS
1,732			1,752	Less: Credited to Awards
25			26	
—		1,707	—	1,726
				PROFIT ON SALES OF PUBLICATIONS
				"Running and Maintenance of Marine Machinery"
337			260	"Electricity Applied to Marine Engineering"
320			274	"Naval Architecture and Ship Construction"
371			359	Reprints of Papers, etc.
120			329	
—		1,148	—	1,222
		16		Hire of Hall and Library
				DEFICIT FOR THE YEAR, TRANS- FERRED TO ACCUMULATED FUND
—			—	2,898
£27,888			£27,888	

NOTES ON ACCOUNTS

BALANCE SHEET

1. The National War Memorial Building Fund

Capital Account

	<i>To</i> <i>31st Dec.</i> <i>1956</i>	<i>Year to</i> <i>date</i> <i>1957</i>	<i>Total to</i> <i>31st Dec.</i> <i>1957</i>
	£	£	£
Receipts			
Donations	181,031	16,263	197,294
Investment Income	17,506	48	17,554
	198,537	16,311	214,848
Less: Expenditure			
Appeal Expenses	626	—	626
Foundation Stone Laying Ceremony	2,000	—	2,000
Memorial Book	—	889	889
Building Finance Expenses	4,307	—	4,307
Loss on Realization of Investments	13,657	—	13,657
Mortgage Interest	144	14,322	14,466
Professional Charges	134	17	151
Sundries	21	5	26
	20,889	15,233	36,122
Net	177,648	1,078	178,726

2. Social Events Account

Balance in Hand at 31st December 1956

Add: Profits

Dinner		737	
Conversazione		560	
		1,297	

Less: Losses

Summer Golf Meeting		8	
Autumn Golf Meeting		7	
		15	

Less: Special Expenses

Memorial Building Opening Ceremony			355
---	--	--	-----

Balance in Hand at 31st December 1957			£2,041
---	--	--	--------

BALANCE SHEET

3. Awards and Prize Funds

	Capital Account	Income Accounts for 1957			Balance 31st Dec. 1957
		Balance 31st Dec. 1956	Income	Awards	
		£	£	£	
Akroyd Stuart Award	700	234	32	50	216
W. W. Marriner Prize	230	4	7	5	6
Adam Girdwood Award	15	4	1	—	5
Denny Gold Medal	250	75	10	4	81
Denny Award	100	31	11	—	42
Stephen Legacy	100				
Lord Inverforth Award	100				
John I. Jacobs Award	119	96	11	13	94
W. Murdoch Legacy	62				
D. F. Robertson Award... ..	100				
	<u>£1,776</u>	<u>£444</u>	<u>£72</u>	<u>£72</u>	<u>£444</u>

4. City Premises Redemption Policies

Single Premiums to:—

		£	£
Royal Exchange Assurance Company to secure the payment on			
1st November	2011 of*	...	10,000
10th June	2012 of†	...	2,000
„	2012 of†	...	1,000
„	2012 of†	...	1,000
„	2012 of†	...	1,000
„	2012 of‡	...	5,000
Canada Life Assurance Company to secure the payment on			
10th June	2012 of†	...	1,000
Atlas Assurance Company to secure the payment on			
10th June	2012 of†	...	1,000
Sun Life Assurance Society to secure the payment on			
10th June	2012 of‡†	...	1,000
			<u>£23,000</u>

* Premiums paid out of Capital

† Premiums paid out of Life Subscriptions

‡ Premiums paid out of Revenue

‡† Premiums paid partly out of Revenue and partly out of Life Subscriptions

(The present surrender value of the above policies is £3,910.)

5. The Memorial Building

	<i>To</i> <i>31st Dec.</i> <i>1956</i> £	<i>Year to</i> <i>Date</i> £	<i>Total to</i> <i>31st Dec.</i> <i>1957</i> £
Cost of Construction to date			
Foundations and Frame	70,709	—	70,709
Building and Equipment	85,000	430,000	515,000
Architects' Fees	21,521	10,000	31,521
Surveyors' and Agents' Fees	2,100	8,617	10,717
Solicitors' Fees and Stamp Duty	182	2,313	2,495
	<u>179,512</u>	<u>450,930</u>	<u>630,442</u>
Less: Compensations and Tenants' Contributions	—	31,965	31,965
	<u>179,512</u>	<u>418,965</u>	<u>598,477</u>

6. Investments—General

At Cost Less Bonus

£2,500 3½% War Loan 2,571

At Cost

£10,700 3½% War Loan 10,065
£2,500 3½% Conversion Loan 2,668
£1,834 3% Savings Bonds 'A' 1955/65 1,817
£1,000 3% Savings Bonds 'B' 1955/65 1,000
£9,000 3% Savings Bonds 'B' 1960/70 9,000
£5,500 3% Savings Bonds 'A' 1965/75 4,705
£800 3% Treasury Stock 704
£6,000 British Transport 3% Guaranteed Stock 1978/88 5,918
£500 Australia 3¼% Registered Stock 1956/61 491

£38,939

(Market Value at 31st December 1957, £27,520)

7. Investments—Awards

Akroyd Stuart Award

£915 3½% Conversion Loan at Cost 698

John I. Jacobs Award

£200 2½% Consols as valued at 31st January 1919 119

Lord Inverforth Award

£100 3½% War Loan at par 100

W. W. Marriner Prize

£166 3% Savings Bonds 'A' 1955/65 at cost 166

£1,083

GENERAL REVENUE ACCOUNT

8. Transactions

1956								£	£
£	£								
19,355		Composition, Printing, Paper, etc. ...	...	...	...	...	...	19,853	
1,359		Reporting, Abstracting and Salaries	...	...	...	...	...	2,192	
4,246		Wrapping and Postage	...	...	...	...	...	5,178	
<u>24,960</u>								<u>27,223</u>	
388		Student Transactions ...	...	...	...	...	...	676	
	25,348								27,899
17,900		Less: Advertising Revenue ...	...	...	...	...	...	17,888	
1,852		Sales ...	...	...	...	...	...	2,402	
69		Profit on Bound Volumes	...	...	...	...	...	125	
<u>19,821</u>								<u>20,415</u>	
	<u>£5,527</u>								<u>£7,484</u>

9. Establishment Charges Analysis

£								Minories	Memorial Building	Total
£								£	£	£
	Rent and Rates	...	...	...	...	...	...	834		834
	Insurance	...	...	...	...	...	...	73	7	80
	Housekeeping, Fuel and Lighting	...	...	...	...	...	...	1,462	1,766	3,228
	Repairs	...	...	...	...	...	...	61	25	86
	Depreciation of Furniture	...	...	...	...	...	...	189	319	508
								<u>2,619</u>	<u>2,117</u>	<u>4,736</u>
	Removal Expenses	...	...	...	...	...	...			278
										<u>£5,014</u>

10. Subscriptions

1956								Received	Unexpired	Net
£								£	£	£
14,309	Members	...	...	...	...	...	...	16,183	829	15,354
3,792	Associate Members	...	...	...	...	...	...	5,552	604	4,948
4,249	Associates	...	...	...	...	...	...	4,326	218	4,108
815	Graduates	...	...	...	...	...	...	1,320	162	1,158
250	Students	...	...	...	...	...	...	370	40	330
129	Probationer Students	...	...	...	...	...	...	246	35	211
175	Companions	...	...	...	...	...	...	112	38	74
<u>£23,719</u>								<u>£28,109</u>	<u>£1,926</u>	<u>£26,183</u>

Annual Report of the Council for 1957

INSTITUTE EXAMINATIONS

Associate Membership Examination. Four candidates entered for the Joint Part I Examination. M. S. Tambe and P. B. Rao passed. Two candidates entered for the Part II Examination and P. B. Rao passed.

Common Preliminary Examination. All Students elected during the year were admitted by exemption.

National Certificates and Diplomas in Mechanical Engineering. The following have been issued and signed by the President during 1957: Ordinary National Certificates, 981; Endorsements, 101; Higher National Certificates, 246; Endorsements, 9; Ordinary National Diplomas, 21; Ordinary National Diplomas—alternative entry for seagoing engineers, 174; Higher National Diplomas, 19.

INSTITUTE PUBLICATIONS

There has been a further heavy demand for the Institute's publications, namely, "The Running and Maintenance of Marine Machinery", "Electricity Applied to Marine Engineering" and "Naval Architecture and Ship Construction".

LIBRARY

The Library service has been used by members during the year, except for a period of about two months during the removal to The Memorial Building, when it is regretted that the service was not available. Many new books have been added to the Library and reviews of these have been published month by month in the SUPPLEMENT TO THE TRANSACTIONS. The Council takes this opportunity to express its appreciation to all those who have contributed book reviews during the year.

INSTITUTE REPRESENTATION ON OUTSIDE ORGANIZATIONS

The Institute's representation on the following committees has been altered as indicated:—

British Standards Institution

MEE/11/4—Marine Flanges: J. Liddell, B.Sc., *vice* P. McKechnie.

MEE/34/9—Boiler and Superheater Tubes: J. Liddell, B.Sc., *vice* P. McKechnie.

NFE/27/3—White Metal Bearing Alloys and Tin Base Die Casting Alloys: N. Macleod (new representation).

City and Guilds of London Institute: Advisory Committee on Shipbuilding, Ship Joinery, Yacht and Boat Building

C. H. Taylor-Cook, B.Sc., *vice* T. W. Longmuir.

HONOURS

The Council congratulates the following members upon whom Her Majesty Queen Elizabeth II conferred honours during the year:—

Sir John D. Cockcroft, K.C.B., C.B.E., F.R.S. (Honorary Member)—O.M.

Captain J. D. F. Elvish (Associate)—C.B.E.

Captain W. Gregson, M.Sc., R.N.R. (Member)—C.B.E.

C. M. Vignoles (Companion)—C.B.E.

F. J. Welch (Member)—C.B.E.

A. J. Gerard (Member)—O.B.E.

A. E. Munro (Member)—O.B.E.

T. C. W. Tippin (Member)—O.B.E.

D. Carmichael (Member)—M.B.E.

J. F. Howey (Member)—M.B.E.

C. W. Paul (Member)—M.B.E.

DEATHS

Amongst the losses by death recorded throughout the year were those of the following who will be remembered particularly for their services to the Institute:—

S. N. Kent (Honorary Vice-President).

H. J. Vose (Honorary Vice-President).

Ewen H. Smith (Vice-President, Glasgow).

R. T. Wilson (former Vice-President).

M. McAffer (former Local Vice-President, Greenock).

J. Weir, O.B.E., J.P. (Companion).

REMEMBRANCE DAY

The Institute was represented by Rear-Admiral F. E. Clemitson, C.B. (ret.), Chairman of Council, at the service in Westminster Abbey on Sunday, 10th November 1957, and Mr. W. J. Ferguson, M.Eng. (Past Chairman of Council), laid a wreath on the Mercantile Marine War Memorial, Tower Hill, London, E.C.3.

STAFF

The following have joined the Institute Staff during the year:—

A. E. Franklin (Secretarial Assistant, Technical).

Miss I. J. Cross (shorthand typist).

Miss M. Hannay (shorthand typist).

Miss B. E. Harrison (shorthand typist).

Miss E. P. Sleet (clerk typist).

A. Marshall (bookkeeper).

The following have joined the House Staff following occupation of The Memorial Building:—

J. Ellis (porter).

H. Pountney (general assistant).

SOCIAL EVENTS

The following social functions have been held:—

Annual Dinner, at Grosvenor House, London, W.1, on 8th March.

Charity Ball, at The Dorchester, London, W.1, on 8th May.

Summer Golf Meeting, at Sunningdale Golf Club on 16th May.

Autumn Golf Meeting, at the Berkshire Golf Club on 3rd October.

Annual Conversazione, at Grosvenor House, London, W.1, on 6th December.

F. E. CLEMITSON (*Chairman of Council*)

J. STUART ROBINSON (*Secretary*)

Annual Reports of the Sections

KINGSTON UPON HULL AND EAST MIDLANDS

The Annual General Meeting of the Kingston upon Hull and East Midlands Section was held on 30th January 1958. Mr. F. C. M. Heath (Vice-President) was in the Chair and twenty-one members attended.

The total membership of the Section is now as follows:

	<i>Registered</i>	<i>Non-registered</i>
Members	71	57
Associate Members	50	43
Associates	29	16
Graduates	12	14
Students	12	20
Probationer Students	24	28
	198	178

During the year the following meetings were held:

- 17th January. A film entitled "Ocean Highways", with a comment and introduction by A. R. Kenworthy.
- 14th February. "Launching of Ships" by R. S. Hogg (Member).
- 21st March. "Visual Observation of Stresses" by J. Ward, B.Sc., Ph.D. (Member): this meeting was held at Leeds.
- 10th October. "Modern Methods of Shipbuilding" by R. S. Hogg (Member).
- 21st November. "Marine Lubrication" by G. H. Clark (Member).
- 16th December. "The Trials and Maiden Voyage of the Gas Turbine Ship *John Sergeant*" by J. J. McMullen, B.S., M.S., Dr.Eng. (Member).

The standard of lectures has been high and the meetings in Hull have been well attended, the average number present being eighty-one; the meeting held in Leeds, however, was attended by only nine members.

The Annual Dinner was held on 8th November and was a success, 178 tickets having been sold.

The Committee has been reconstituted for the 1958/59 session as follows:

- Vice-President, Kingston upon Hull: F. C. M. Heath
- Chairman: J. G. Charlton
- Vice-Chairman: H. F. Hesketh
- Committee: P. F. Dilnot
- A. W. Edwards
- F. T. Green
- G. W. Hill
- G. H. M. Hutchinson
- A. W. B. Kemp
- C. Kling
- F. T. Morris
- Bryan Taylor, B.Sc.(Eng.)

The Honorary Secretary and Honorary Treasurer, Messrs. E. Barnett and C. J. Potter, were re-elected.

- J. G. CHARLTON (*Chairman*)
- E. BARNETT (*Honorary Secretary*)

MERSEYSIDE AND NORTH WESTERN

It is again very satisfactory to report that local interest in the Institute is being maintained and although reference to the summary below would seem to indicate a drop in numbers as compared with last year, it will be noted that an increase of about one hundred registered members is recorded. The

apparent drop in total membership in the area is due to transfers to other districts and also to a complete revision of the local register which has just been completed. Membership for the area, as at 31st December 1957, is as follows:

	<i>Registered</i>	<i>Non-registered</i>
Members	302	158
Associate Members	106	108
Companions	1	—
Associates	111	68
Graduates	16	48
Students	45	46
Probationer Students	73	157
	666	585

The Annual General Meeting was held on 4th February 1957 and six senior meetings took place in the rooms of the Liverpool Engineering Society at The Temple, Dale Street, Liverpool, at which the following papers were read:

- 7th January. "Some Aspects of A.C. Auxiliaries for Marine Use" by Cdr. D. W. Malim, R.N.(ret.) (Member).
- 4th February. "Fundamental Principles of Marine Instrumentation" by F. P. Rout.
- 4th March. "Welding of Steam and Feed Pipework for Marine Installations" by J. Chamberlain, O.B.E., and W. L. Roe, A.M.Inst.W.
and
"The Influence of Weld Faults in Fatigue Strength, with Reference to Butt Joints in Pipe Lines" by R. P. Newman.
- 1st April. "Practical Application of the 1952 Fire Appliance Rules" by G. Keenan (Associate Member).
- 7th October. "Marine Machinery Breakdown" by J. H. Milton, B.Sc. (Member).
- 4th November. "The Free Piston Engine and Its Marine Application" by P. Watson, B.A.

Fourteen Junior Lectures, as follows, were provided for the colleges within the area:

- 16th January (Birkenhead). "The Steam Reciprocating Engine" by G. Yellowley (Member).
- 28th January (Old Swan). "Modern Marine Steam Turbines" by J. H. Gooch, B.A.
- 13th February (Birkenhead). "Modern Marine Steam Turbines" by J. H. Gooch, B.A.
- 15th February (Byrom Street). "Launching of Ships" by R. S. Hogg (Member).
- 20th February (Riversdale). "Diesel Hydraulic Propulsion" by F. J. Mayor (Member).
- 20th February (Wallasey). "A Junior Engineer's First Trip to Sea" by H. C. Gibson (Associate Member).
- 28th March (Bolton). "Oil Fuel Burning" by R. B. Cooper.
- 29th March (Byrom Street). "The Control of Steam Temperature in Marine Watertube Boilers" by E. G. Hutchings, B.Sc. (Associate Member).
- 10th April (Riversdale). "Modern Marine Steam Turbines" by J. H. Gooch, B.A.
- 5th November (Barrow). "Boiler Water Treatment" by J. F. Colville.
- 20th November (Birkenhead). "Engine Room Equipment" by J. N. Cairns.

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- 22nd November (Bolton). "Engine Room Equipment" by J. N. Cairns.
 29th November (Barrow). "Air Conditioning of Ships" by S. J. Jones, B.Sc. (Member).
 4th December (Riversdale). "Marine Diesel Engines" by D. B. Stables (Associate Member).

Members were also invited by the Liverpool Engineering Society to attend the Thomas Lowe Gray Lecture entitled "Salvaging of Ships, with Special Reference to the *Empress of Canada*" by Captain W. R. Colbeck, R.N.R.

The increase in registered members together with the resumption of individual notification of meetings, has resulted in a marked improvement in attendance at senior meetings; this is particularly the case in the latter half of the year when attendances averaged 120 per meeting. The increased number of students attending these lectures is noted with satisfaction.

As arranged at the end of the 1956/57 Lecture Session, for the latter half of the year Junior Lectures have been presented only to the four colleges within the area dealing specifically with marine apprentices and the attendances at these lectures have been more encouraging.

A party of over sixty members spent a most enjoyable and instructive day on 15th May 1957 as guests of The Yorkshire Copper Works, Ltd., Leeds; tours of the laboratories and works were most instructive and the guests were entertained to an excellent luncheon and tea, followed by dinner served on the train homeward bound to Liverpool.

The Annual Dinner-Dance was held this year at the Adelphi Hotel, Liverpool, on Friday, 27th September, when we were honoured by the presence of the President, Sir Ronald Garrett, the Chairman of Council, Rear-Admiral F. E. Clemitson, C.B., (ret.), and Mrs. Clemitson, and the Secretary, Mr. J. S. Robinson, and Mrs. Robinson. Over 220 guests attended and the event resulted in a profit of £6 10s. 1d. The total credit balance in the Social Fund is now £43 2s. 9d.

At the fifth Annual General Meeting of the Section, which was held on 3rd February 1958, Mr. A. O. Milne (Chairman) referred gratefully to the help given by the retiring Members of the Committee during his year of office, Messrs. G. Pickering and J. L. Snowden; he recorded with regret the death on 21st January 1958 of Mr. Pickering. The Chairman thanked the Liverpool Engineering Society for granting to the Section the necessary facilities to enable them to hold their meetings.

It was announced that Messrs. R. F. Capey, J. L. Snowden and D. S. Tod had been elected to replace the Chairman, who is also retiring from the Committee, and Messrs. Pickering and Snowden; the Committee is now constituted as follows:

- Vice-President, Liverpool: T. McLaren, B.Sc.
- Chairman: E. Perry
- Vice-Chairman: J. L. Snowden
- Committee: R. F. Capey
- J. F. Douglas
- W. H. Falconer
- G. Keenan
- C. R. Maplestone
- J. A. Smith, D.S.C., B.Sc.
- D. S. Tod
- G. Kenworthy-Neale (co-opted for 1958)
- A. O. Milne (co-opted for 1958)

- Honorary Secretary: T. Kameen
- Honorary Treasurer: J. E. Shields

On taking the Chair which Mr. Milne vacated, Mr. Perry paid tribute to the handling of the Committee's affairs during Mr. Milne's term of office and expressed the hope that he himself would be able to uphold the high standard. Mr. T. McLaren also thanked the retiring Chairman for the manner in which he had carried out his duties.

- A. O. MILNE (*Chairman*)
- T. KAMEEN (*Honorary Secretary*)

NORTH EAST COAST

The Membership strength of the Section at 31st December 1957 was:

		<i>Registered</i>	<i>Non-registered</i>
Members	270	93	
Associate Members	160	34	
Companions	—	3	
Associates	95	48	
Graduates	58	17	
Students	35	6	
Probationer Students	58	22	
	676	223	

The following meetings have been held for the presentation of papers:

- 17th January. "Safety at Sea" by Stewart Hogg (Member of Council).
- 14th February. Annual General Meeting, followed by two of the papers from the symposium, "Recent Developments in Marine Diesel Engines" by P. Jackson, M.Sc. (Member) and W. Kilchenmann, Dipl. Ing.
- 14th March. "Combating Cylinder Liner Wear and Fouling in Large Low-speed Diesel Engines" by M. J. van der Zijden and A. A. Kelly (Member).
- 10th October. "Some Teething Troubles in Post-war Reduction Gears" by S. Archer, M.Sc. (Member).
- 17th December. "The Trials and Maiden Voyage of the Gas Turbine Ship *John Sergeant*" by J. J. McMullen, B.S., M.S., Dr. Ing. (Member).

The average attendance at these meetings was sixty-eight.

In addition, the following lectures of particular interest to junior members have been held:

- 29th October (South Shields). "Automatic Boiler Control" by L. Young.
- 21st November (Sunderland). "Air Conditioning of Ships" by S. J. Jones, B.Sc. (Member).

There was an attendance of eighty-six for the meeting at South Shields and 140 at Sunderland.

The Annual Dinner-Dance was held on 8th February and was a happy and successful function greatly enjoyed by those fortunate enough to be present.

The Section Committee wishes to express appreciation to the retiring Chairman, Mr. John Bulman, and to the lecturers and others who have contributed to the programme during the year; and especially to the auditors, Messrs. J. G. L. Black and J. G. Gunn.

The Annual General Meeting was held on Thursday, 13th February 1958 at Stephenson Building, Newcastle upon Tyne, and sixty-two members attended. The Annual Report and Financial Statement were examined and approved; it was noted that the cost of running the Section during 1957 was £71 16s. 3d. and that there was a balance of £71 11s. 9d.

The scrutineers, Messrs. A. W. Bell and C. R. Rowcliffe, reported that Messrs. J. G. L. Black, J. G. Gunn and E. Lea had been elected to the Committee, which is now constituted as follows:

- Vice-President, Newcastle upon Tyne: J. Bulman
- Local Vice-President, West Hartlepool: S. H. Dunlop
- Local Vice-President, Middlesbrough: E. T. Middle-ditch
- Chairman: P. Jackson, M.Sc. (Local Vice-President, Sunderland)
- Committee: M. Adams
- J. G. L. Black
- A. J. S. Bennett, M.B.E.
- L. S. Candlish
- Professor G. H. Chambers, D.S.C.
- E. C. Cowper
- W. Embleton
- W. C. Grant
- J. G. Gunn, B.Sc.
- E. Lea
- D. G. Ogilvie, B.Sc.(Eng.)
- J. Orange, J.P.

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G. H. Turner
 W. Willcock
 G. Yellowley
 Honorary Secretary: A. W. Jones, B.Sc.
 Honorary Treasurer: E. C. Cowper
 J. BULMAN (*Chairman*)
 A. W. JONES (*Honorary Secretary*)

F. R. Topping, B.Sc.(Eng.)
 A. T. Willens
 W. Young
 Honorary Secretary: A. W. Clark
 Assistant Honorary Secretary: J. D. B. Mundie
 Honorary Treasurer: R. Marshall
 W. YOUNG (*Chairman*)
 A. W. CLARK (*Honorary Secretary*)

SCOTTISH

The total membership of the Section is now 1,064, consisting of 665 registered members and 399 non-registered members—a net increase of ninety-seven members over the total number for 1956.

Mr. James Gilchrist has been appointed Vice-President for Glasgow in succession to the late Mr. E. H. Smith.

Joint meetings were held with the Aberdeen Mechanical Society in Aberdeen and with the Institution of Engineers and Shipbuilders in Scotland in Glasgow, and a paper was read in Edinburgh.

The third Annual Dinner was held on 22nd February and the first Dinner and Dance on 7th December. Both these functions were very successful and it is intended to repeat them each year.

The following papers or lectures were given during 1957:
 9th January (Glasgow). "Cast Irons in Marine Engineering" by E. M. Currie.

13th February (Glasgow). "The Development of the Gas Turbine" by A. W. Pope, B.Sc.

13th March (Edinburgh). "The Wire Mill" by R. Taylor.

15th March (Aberdeen). "The Wire Mill" by R. Taylor.

9th October (Glasgow). "Developments and Trends in the Marine Field" by W. Young (Member).

*23rd October (Glasgow). "Survey of Ships" by R. E. Knowles (Member).

13th November (Glasgow). "Developments in Marine Electrical Installations with Particular Reference to A.C. Supply" by A. N. Savage (Member).

11th December (Glasgow). "Higher Speed Internal Combustion Machinery for Marine Propulsion" by J. Calderwood, M.Sc. (Vice-President and Honorary Treasurer).

The average attendance at Glasgow meetings was eighty-four. The average attendance at Aberdeen and Edinburgh meetings was thirty-seven.

The Annual General Meeting of the Scottish Section was held on 12th February 1958 at the Institution of Engineers and Shipbuilders in Scotland, Glasgow; Mr. W. Young was in the Chair. The Committee's Annual Report and Financial Statement for 1957 were formally approved. A vote of thanks to the Committee, and particularly the four retiring members, Captain N. J. H. D'Arcy, R.N.(ret.), Messrs. W. B. Johnstone, O.B.E., W. R. G. Smith and A. W. Oxford, was proposed by Mr. J. Rorke and carried by acclamation.

The Committee for 1958 is constituted as follows:

Vice-President, Glasgow: J. Gilchrist
 Vice-President, Leith: Sir William Wallace, C.B.E.
 Local Vice-President, Greenock: J. P. M. Ferrier
 Local Vice-President, Dundee: W. O. Gardiner
 Chairman: To be appointed
 Vice-Chairman: To be appointed
 Committee: T. D. W. Abell
 R. Beattie
 A. Campbell
 R. M. Dunshea
 J. H. King
 D. W. Low, O.B.E.
 A. McColl
 D. D. McGuffie
 T. M. Murdoch
 J. Robson, M.B.E.
 J. Rorke, B.Sc.
 G. J. Thomas

* Junior Meeting.

WEST MIDLANDS

The West Midlands Section, now in its fifth year, continues to operate as an important member of the group of engineering institutions in the district. With an average attendance of fifty-six at meetings it is improbable that these figures are exceeded by other similar bodies.

This year, for the first time, it is not possible to report an increase in membership; this situation is due entirely to a considerable exodus of members from the area and the effects of a census of Section membership carried out recently. The exact figures are now as follows:

	<i>Registered</i>	<i>Non-registered</i>
Members	76	12
Associate Members ...	35	11
Associates	23	8
Graduates	11	6
Students	10	5
Probationer Students ...	7	13
	162	55

Actual numbers apart, this census does indicate the very considerable trend amongst members to register with the Section and to take a greater part in its activities. It must be remembered, however, that some 25 per cent of members resident in the West Midlands are not registered with the Section and the Committee would welcome their attention to this matter.

As has been customary during the past two years the Section meetings have been held at the Birmingham Exchange and Engineering Centre. Although increased charges for the accommodation now approximate to those made elsewhere, it is felt that the ideal situation and background of the Engineering Centre afford the best possible conditions for Section meetings. It is possible, however, that a change of meeting place may become necessary due mainly to some anxiety felt by the Exchange Management concerning the expiration and renewal of their lease and also as a result of the larger attendances at meetings.

Four meetings for the presentation of papers were held during the year, as follows:

3rd January. "Reheating as a Contribution to the Economy of the Marine Steam Turbine, with Special Reference to the Installation in T.S.S. *Empress of Britain*" by A. W. Davis, B.Sc. (Member).
 7th February. "Free Piston Engines" by P. Watson, B.A.
 10th October. "Turbocharging of Two-stroke Oil Engines" by Rear-Admiral W. G. Cowland, C.B., (ret.) (Member).
 12th December. "Lloyd's Register of Shipping" by L. D. Trenchard (Member).

The Fourth Annual Dinner was held as in previous years at the Imperial Hotel, Birmingham, on 14th March. Ninety-six members and guests attended, amongst whom the Section had much pleasure in welcoming Mr. T. W. Longmuir (Chairman of Council), Dr. A. L. Clarke, Mr. J. A. Kendall, Captain(E) H. K. Hodgkin, R.N., and Mr. J. S. Robinson (Secretary of the Institute).

Prompted by the suggestions of members, the Committee decided to hold such events in future later in the year and accordingly the Fifth Annual Dinner took place in Birmingham on 21st November. On this occasion Section members were delighted to receive the President, Sir Ronald Garrett, together with Rear-Admiral F. E. Clemitson, C.B., (ret.) (Chairman of Council), Mr. W. J. Ferguson, M.Eng. (Member of Council),

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Mr. B. G. House, and Mr. J. S. Robinson. The 110 members and guests present were unanimous in voting the evening a success.

It is perhaps worth noting that at the first of these social evenings some fifty-four members were present; now, little more than four years later, the attendance has doubled and although this fact alone may not provide a true picture of the Section's progress, it is without doubt indicative of the enthusiasm of members and a measure of their support.

During the year the Section Committee was invited to nominate a member to hold the office of Local Vice-President for Birmingham. The Committee was unanimous in the decision to select Mr. H. E. Upton, O.B.E. (Chairman) as the first holder of this office, which recommendation the Council of the Institute was pleased to approve.

The Committee has done its utmost to arrange papers of wide and varying appeal and whilst there is at present a sufficiency of interesting and topical material from external sources, the Committee has long been aware of the considerable wealth of engineering knowledge available within the Section and efforts are being made to ensure that future meetings are a little more representative of local interests.

The fifth Annual General Meeting was held on Thursday, 13th February 1958 at the Birmingham Exchange and Engineering Centre and was attended by forty-two members. Mr. H. E. Upton, O.B.E. (Chairman and Local Vice-President) was in the Chair. The Annual Report and Financial Statement were approved.

In accordance with the by-laws four members of the committee retired and the constitution of the 1958 committee is as follows:

Local Vice-President, Birmingham: H. E. Upton, O.B.E.

Chairman: L. D. Trenchard

Vice-Chairman: H. E. Muckley

Committee: W. C. Carter, B.Sc.

J. R. Cotterill, J.P.

J. H. Gilbertson

K. H. Harrison

J. E. Mason

J. E. Robinson

R. S. Robinson, B.Sc.

B. W. Thompson

Honorary Secretary: D. S. Pike

Honorary Treasurer: F. Wilson

In his address, the Chairman remarked that as his tenure of office had now come to an end he could look back over the past five years and view the Section's growth and achievements with considerable pleasure; he expressed the hope that the West Midlands Section of the Institute would continue to expand and maintain its position amongst the professional bodies in the area. He concluded by extending his thanks to Messrs. L. C. Cox, B. E. G. Forsling, Civ.Eng., and J. A. Forrest, M.B.E., B.Sc., Wh.Ex., who were also retiring from the committee, for their efforts, and to the Honorary Treasurer and Honorary Secretary for their work in maintaining the business of the Section.

A vote of thanks to the Chairman was proposed by Mr. J. R. Cotterill and seconded by Mr. R. S. Robinson. This proposal was warmly applauded.

The meeting ended at 7.0 p.m.

H. E. UPTON (*Chairman*)

D. S. PIKE (*Honorary Secretary*)

WEST OF ENGLAND

Membership has increased very slightly during the current year in spite of resignations of registered members caused by removal from the district, and by one death, making a total of 115 registered members. Current figures of registered Members are as follows:

Members	...	...	...	...	54
Associate Members	...	...	...	...	24
Associates	...	...	...	...	18

Graduates	...	...	...	...	4
Students	...	...	...	...	5
Probationer Students	...	...	...	...	10
					115

The programme for the year has again been varied and interesting and has included the following meetings:

21st January (Bath). "Some Considerations of Wear in Marine Gearing" by W. H. Darlington, M.B.E., Ph.D., M.Sc.(Eng.).

11th February (Bristol). "Marine Lubrication" by G. H. Clark (Member).

25th February (Bristol). Annual General Meeting, followed by films entitled "Forward Together" and "The Diesel Generator as a Composite Heat and Power Unit".

18th March (Bath). "Metal Spraying and Synthetic Rubber Coating for Corrosion Prevention" by J. H. Payne.

29th April (Bristol). Films entitled "The Back of Beyond", "Rig 20", "Hydraulics", "We've Come a Long Way" and "The Fell Locomotive".

21st October (Bristol). "Elimination of Torsional Vibration in Diesel Engine Transmission Systems by Flexible Coupling Incorporating Forced Viscous Damping, also Considered in Conjunction with Engine Isolation" by G. Hallelwell, M.I.Mech.E. (Member).

11th November (Bath). Films entitled "The Diesel Story", "Tanker Engineer", and "Machining of Metals".

25th November (Bath). "Heat Balance Calculations and their Use in the Installation Design of Steam Turbine Merchant Ship Propulsion Machinery" by Cdr. R. Tyrrell, R.N.(ret.) (Member).

16th December (Bristol). A film entitled "Sui Gas Pipe Line".

The average attendance at these meetings was between thirty and forty including a number of visitors.

On 14th June a very enjoyable cocktail party was held at the Grand Spa Hotel, Clifton, Bristol.

A visit on 19th September was planned to the Locomotive Works at Swindon but owing to the poor response—only fourteen members having applied for tickets—the trip had to be abandoned.

The Annual General Meeting of the Section was held on Monday, 24th February 1958 at 7.30 p.m. at the Grand Hotel, Bristol. Mr. F. C. Tottle (Chairman of the Section) was in the Chair and there were thirty-five members present. The Annual Report and Financial Statement were read and accepted.

A vote of thanks was passed to Mr. S. Jones-Frank for his work as Honorary Secretary during the last three years and his resignation, due to business commitments, was accepted with regret. It was then proposed by Mr. T. A. Fawcett and seconded by Mr. W. Brunton that Mr. J. Vickery should be appointed Honorary Secretary and this suggestion was accepted.

Mr. A. J. A. Davies signified his willingness to carry on for a further term in the office of Honorary Treasurer and this was received by all members with very great pleasure. A vote of thanks was passed to Mr. Davies for his past work and for his offer to continue in the appointment.

It was reported that Messrs. G. B. Dawson, J. E. Gander, T. A. Rees and A. L. Thomas had been elected to the Committee to replace those who were due to retire. In addition, Messrs. F. C. Tottle and O. Watson were co-opted to serve for a period of twelve months. Mr. W. John, M.B.E., was elected Chairman of the new Committee, which is now constituted as follows:

Local Vice-President: D. W. Gelling

Chairman: W. John, M.B.E.

Committee: R. S. Brown

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W. Brunton
G. B. Dawson
J. E. Gander
K. J. Heavisides
S. Jones-Frank
T. A. Rees
A. L. Thomas
F. C. Tottle (co-opted)
O. Watson (co-opted)
G. A. Williams

Honorary Secretary: J. P. Vickery
Honorary Treasurer: A. J. A. Davies
F. C. TOTTLE (*Chairman*)
F. JONES-FRANK (*Honorary Secretary*)

Bombay

The year 1957 started auspiciously for the Bombay Section with the visit of Mr. J. S. Robinson (Secretary of the Institute); amidst his various engagements and visits to marine workshops and technical institutions, a very enjoyable luncheon was arranged on board the s.s. *Amra* by Mr. G. E. Kerr (Local Vice-President) when a number of members who were present were able to meet Mr. Robinson.

It is gratifying to report that ninety-five local members have registered their names with the Section. In addition, efforts are being made in the district to obtain new members for the Institute.

Arrangements have been made for the Section to receive financial support from Headquarters in London on the same basis as the other Sections; namely, a basic grant of £25 per annum plus four shillings for every registered member, any credit balance remaining at the end of a year to be deducted from the following year's grant.

Mr. T. K. T. Srisailam (Honorary Secretary) having been transferred to Calcutta on 1st May 1957, Mr. C. S. Sundaram (Honorary Treasurer) took over his duties from that date.

In Mr. G. E. Kerr's absence from India on leave for some months from July 1957, Mr. W. M. Campbell accepted the Council's invitation to act as Local Vice-President until his return.

A General Meeting was held on 13th August at the Nautical and Engineering College Hall, Waudby Road, Bombay 1; Mr. W. M. Campbell was in the Chair and there were twenty-five members present. Draft rules for the operation of the Section were discussed and a committee was appointed.

The Annual General Meeting was held on 28th February 1958 at the Nautical and Engineering College. Mr. G. E. Kerr (Local Vice-President) was in the Chair and forty-one members were present. The following Committee was elected for 1958:

Chairman: G. E. Kerr (Local Vice-President)
Committee: H. A. Amos
S. Blakeman
Capt. T. B. Bose, B.Sc., I.N.
N. J. D'Sylva
D. Dyer
P. N. Rabady
S. A. Samson
R. G. Sathaye
B. S. Sood
Honorary Secretary: C. S. Sundaram
Honorary Treasurer: S. Kasthuri
G. E. KERR (*Chairman*)
C. S. SUNDARAM (*Honorary Secretary*)

BRITISH COLUMBIA

The first dinner meeting for the 1957 season was held in the Ward Room of H.M.C.S. *Naden* at the R.C.N. Headquarters in Esquimalt, on Vancouver Island. It is established policy to hold the first Spring Meeting of the year on Vancouver Island on account of the members resident in Victoria and district who constitute thirty-six out of a total of ninety-four members in the British Columbian Section. The attend-

ance and interest shown was gratifying and forty-five members and guests were present, with a good attendance on the part of the Vancouver members, who made the overnight journey involved.

The guest speaker for the occasion was Dr. William H. English, B.A., who heads the Marine Physics Section of the Pacific Naval Laboratories. Dr. English spoke on "Marine Hydrodynamics" in a most interesting and instructive manner and a period of discussion followed.

The first dinner meeting in Vancouver was held on 10th May, at which meeting the annual election of officers took place. The meeting was held in the Terminal City Club with Mr. James Brydon (Local Vice-President) in the Chair. As the result of the first year's experience in operating the Section, several changes in procedure were discussed and adopted. It was also agreed that an annual fee should be paid by each member to defray the incidental expenses of running the Section. Three members were appointed by the Victoria members to act as a committee on their behalf.

The guest speaker was Mr. L. P. Young, B.Sc., metallurgist of the A.I. Steel Foundries, who addressed the meeting on "Modern Steel Foundry Practice". The lecture was productive of an interesting discussion and question period.

The Fall Dinner Meeting was held in the Terminal City Club, Vancouver, on 25th October and thirty-seven members and guests attended. The guest speaker of the evening was Colonel J. W. Inglis, Principal of the Vancouver Vocational Institute, who spoke on the subject of "Engineer Training" with particular reference to the standards in effect in British Columbia and the other Provinces of Canada.

JAMES BRYDON (*Chairman*)
W. DEY (*Honorary Secretary*)

CALCUTTA

Two meetings were held by the Calcutta Section during 1957, the first when Mr. J. S. Robinson (Secretary) visited India at the end of January and addressed the Section informally. The second meeting, on Wednesday, 27th March, was for the presentation and discussion of a paper entitled "The Mechanism of Combustion in Internal Combustion Engines" by P. D'Abreo.

J. CONNAL (*Chairman*)

CAPE TOWN

The second Annual General Meeting of the Cape Town Section was held on 7th February 1958. Mr. I. W. Jones Evans (Local Vice-President) was in the Chair.

The Section is indebted to Mr. C. S. Milford for placing at its disposal for all meetings without charge the premises of the South Atlantic Corporation, together with the use of an epidiascope and film projector, so that expenses have been very small. The financial position is therefore so satisfactory that it has been possible to reduce the annual subscriptions to the Section to 10s. per annum.

During 1957 the following meetings have been held:
7th June. A paper entitled "The Great Eastern", prepared by H. Alyn Lane, was presented by I. W. Jones Evans (Local Vice-President).
16th August. "The Causes and Effects of Boiler Explosions" by C. S. Russell (Honorary Secretary).
20th November. A paper entitled "Marine Machinery Break-downs" by J. H. Milton (Member) of Lloyd's Register of Shipping in London, was presented by C. S. Russell (Honorary Secretary).

On 7th February members were invited to pay a visit of inspection to the 83,000-ton tanker *Universe Leader* which was in dry dock at Cape Town and a fair number took advantage of the opportunity to see the latest developments in modern tanker design.

The Section was invited to send a delegate to the Second Conference on Engineering Education and Training held at the University of Cape Town in February under the auspices of the Liaison Committee of the South African Institutes of Civil, Electrical and Mechanical Engineers. Mr. Jones Evans attended this conference but, as was anticipated, the discussions

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were almost entirely confined to the training of university students.

The Section was also invited to appoint a member of the Institute to the Continuation Class Committee for Advanced Nautical Training and Mr. Jones Evans attended a meeting of this committee on 23rd October when it was agreed that the training of marine engineers should be included as a function of the committee. Mr. C. S. Russell, in his capacity as marine surveyor and engineer examiner, was already a member of the committee so that the Institute is now represented by two members of the Section.

Mr. C. S. Russell attended a meeting of the Nautical Training Advisory Board on 25th November, when matters relating to the training of marine engineers were discussed.

The office bearers for the year 1958 are as follows:

Chairman: I. W. Jones Evans (Local Vice-President)

Committee: G. McMullan
D. J. Robertson
T. F. Russell
H. J. Stokes
F. Wardle

Honorary Secretary: C. S. Russell

Honorary Treasurer: A. L. Brown

I. W. JONES EVANS (*Chairman*)

C. S. RUSSELL (*Honorary Secretary*)

DURBAN

The third Annual General Meeting of the Durban Section was held in the Merchant Navy Officers' Memorial Club, Aliwal Street, Durban, on 30th January 1958 at 7.45 p.m. Mr. T. Ratcliffe (Chairman) was in the Chair.

Membership has increased during the year to thirty-eight. Mr. L. M. Olsen is obliged through pressure of other work to give up his work as Honorary Secretary and Mr. D. McG. Clark has been appointed in his place. The Chairman thanked Mr. Olsen on behalf of the members for the work he had done from the inauguration of the Section in November 1955.

In view of the satisfactory state of the Section's financial affairs it was agreed that a sum of £10 be sent to the fund for the Memorial Building. It was also decided that £10 should be donated to the Merchant Navy Officers' Memorial Club for their generosity in lending their rooms free of charge for Section meetings during the year.

Some interesting meetings had been held during the year, including the following, though as a result of the Chairman's illness these had been fewer than in the previous year:

28th February. "Marine Propulsion Machinery Developments for Naval Vessels" by T. Ratcliffe (Local Vice-President).

10th October. "Marine Machinery Breakdowns" by J. H. Milton (Member), presented by P. F. Balfour (Member).

In addition, all members of the Section were at liberty to attend meetings arranged by the Natal Association of Scientific and Technical Societies, the Section having accepted membership of that Association.

Thanks were expressed to the Chairman for his service to the Section throughout another year; Mr. Ratcliffe had wished some other member to take over the office of Chairman but had been prevailed upon to continue as the Committee felt that he was ideal for the job. The Committee for 1958 is constituted as follows:

Chairman: T. Ratcliffe (Local Vice-President)

Committee: P. F. Balfour
W. S. Boreland
F. R. Eales
H. T. V. Horner
W. W. Hutchinson
R. M. Murray
L. M. Olsen

Honorary Secretary: D. McG. Clark

Honorary Treasurer: J. R. Holdsworth

T. RATCLIFFE (*Chairman*)

L. M. OLSEN (*Honorary Secretary*)

SYDNEY

The Annual General Meeting of the Sydney Section was held on 4th February 1958. Captain G. I. D. Hutcheson, R.A.N.(ret.) (Local Vice-President) was in the Chair and ninety-five members and guests were present.

The Section continues to grow in number, the present total being 148, which is a gain of twelve in the past year.

Four general meetings were held, also the ninth annual meeting for students and apprentices, as follows:

6th March. Annual General Meeting, followed by a paper entitled "The Lubrication of Heavy Diesel Engines" by F. J. Ward (Member).

30th May. "Honeycomb Materials in Ship Construction; a Modern Technique from the Field of Reinforced Plastics" by H. C. Mullins.

19th July. Meeting for Students and Apprentices: "Marine Engineering as a Profession" by E. L. Buls (Member).

31st July. "The Interpretation of Laboratory Analysis of Used Lubricating Oils" by T. M. Devitt.

26th September. "Impressions of a Recent Visit to Shipyards and Engineering Works in Great Britain" by J. Munro (Member).

The annual dinner was held at the Wentworth Hotel on 24th October 1957 and was attended by sixty members and fifty guests.

During the year Mr. N. A. Grieves (Honorary Secretary) has been appointed to the Marine Engineering Advisory Committee of the Sydney Technical College. The College authorities, who are responsible for the marine engineering course, have co-operated to the fullest extent in regard to the Student Section.

The Committee for 1958 has been constituted as follows:

Chairman: Captain G. I. D. Hutcheson, R.A.N.(ret.)
(Local Vice-President, Sydney)

Committee: W. G. C. Butcher
D. N. Findlay
D. A. MacFarlane
F. J. Ward
G. B. Williams

Honorary Secretary: N. A. Grieves

Honorary Treasurer: J. R. Robertson

The death on 22nd January 1958 of Mr. B. P. Fielden, to which the Chairman referred with deep regret, has caused a casual vacancy on the Committee which will be filled at their first meeting.

On the completion of the formal business the President of the Institute, Sir Ronald Garrett, re-presented his Presidential Address entitled "Lloyd's Register of Shipping and the Marine Engineer". A vote of thanks to the President was proposed by Mr. W. G. C. Butcher, seconded by Mr. G. T. Marriner, and carried by acclamation.

G. I. D. HUTCHESON (*Chairman*)

N. A. GRIEVES (*Honorary Secretary*)

VICTORIAN

The membership of the Section has increased during 1957. Three senior meetings have been held, as follows:

10th May. "Practical Experiences with the Use of Heavy Fuel Oil in Medium Speed Industrial Diesel Engines, Operated by the State Electricity Commission of Victoria" by R. P. Kay and D. C. Cooper (Associate Member).

9th August. "Methods of Procedure Associated with Building a Modern Tug" by A. Pritchard.

8th November. "The Napier Deltic Diesel Engine" by K. Smith (Associate).

A Students' Night was held on 30th October when films and talks on marine engineering as a career were given to an audience of technical school students.

Evening visits were paid to the Australian Paper Mills at Fairfield and to the Shell Company's refinery at Geelong.

At a meeting held at the Kelvin Hall, Melbourne, on 7th

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February 1958 to welcome the President, Sir Ronald Garrett, the officers for 1958 were elected and the committee is now constituted as follows:

Local Vice-President: A. J. Edwards

Committee: C. Bie

P. Bossen

J. E. North

K. Paxton

G. Seales

D. W. K. Vagg

Auditor: H. W. Alcock

Honorary Secretary: F. C. Hall

Honorary Treasurer: J. H. Coles

F. C. HALL (*Honorary Secretary*)

Representatives' Reports

British National Committee for Non-Destructive Testing.

Representative: R. H. Paddon Row.

The sub-committee on Non-Destructive Testing operated under the Joint Committee on Materials and Their Testing until July 1957 when it was decided that a British National Committee for Non-Destructive Testing should be formed to replace the sub-committee. Initially the sub-committee acted as the British National Committee and rules, etc., for the British National Committee were discussed and agreed.

Considerable time was spent in discussing ways and means of obtaining proper representation at the International Conference on Non-Destructive Testing which was held at Chicago, Illinois, U.S.A., in November 1957. Some groundwork was carried out with various member bodies to find out if it would be possible to hold an International Conference in Great Britain in three to four years' time and an effort was to be made at the November Conference at Illinois to obtain agreement to such a suggestion as an alternative to the Japanese proposal that the next International Conference should be held in Tokyo in two years' time.

A considerable amount of basic work has also been carried out on the possibility of providing courses for training inspectors in non-destructive testing as the committee feels that this is very important and of an urgent nature. It is hoped that these courses can be started this year but at the moment of writing this report nothing concrete has been decided.

The British Shipbuilding Research Association, Research Board.

Representative: S. A. Smith, M.Sc.

This report describes a few items on the Association's research programme to illustrate the progress made during the year. An event of great significance is that the opportunity of joining B.S.R.A. has been provided for British shipowners.

An item in the Machinery Section of the programme is concerned with the performance of brick and brick-bolt materials in watertube boilers. This year the work has been planned to compare the performance of rammed and cast plastic quarls with that of conventional quarl blocks. The quarls have been fitted in ships and have been inspected from time to time. Further tests are to be carried out.

To investigate the deaeration of boiler feed water, the Association, following the completion of a survey of information on the subject, has carried out a number of tests on board ship. The meter used for this work to measure oxygen concentrations has now been modified and used for further ship tests. The information thus obtained has been analysed and further readings are to be taken under operating conditions at sea.

The work on the causes and prevention of crankcase explosions has reached an interesting stage. The development in conjunction with the Graviner Manufacturing Company of

a device to give audible and visible warning of the presence in a crankcase of a dangerous concentration of combustible mist has been concluded and the Company are now manufacturing the unit commercially. Further work is proceeding to test the efficiency of various means of providing flame suppression in relief valves. A programme of work has been put in hand concerned with the ventilation of cargo spaces, including shipboard and model tests, to determine the best siting of ventilator heads, the relative performance of various designs of cowl and other factors.

Progress has been maintained in other sections of the programme. In the field of hydrodynamics, work has continued on the methodical series resistance and propulsion experiments on ocean going merchant ship forms, the analysis of hull surface roughness data and the effect of laminar flow over propeller blades. Part of the work on ships' structures has been concerned with the determination of ship bending moments due to waves, the effect of low temperature on the performance of launching greases and the testing of full-scale components of ships' structures.

Much valuable performance data has been gathered from ships in service and on trials and vibration studies continue as an important feature of the Association's work.

City and Guilds of London Institute: Advisory Committee on Shipbuilding, Ship Joinery, Yacht and Boat Building.

Representative: C. H. Taylor-Cook, B.Sc.(Eng.).

A meeting in October 1957 was called to consider the report of the examiners for 1957 and to appoint examiners for 1958. In addition, a revised draft of the syllabuses for course number 184 on yacht and boat building was approved. The syllabuses have been brought up to date.

College of Advanced Technology, Cardiff.

Representative: David Skae.

Since being appointed to the Governing Body of the College, the Institute representative has agreed to serve on the Administration Committee and the Mechanical Engineering Advisory Committee. There have been two meetings of the first of these committees at which matters of administrative detail were discussed, but no meeting of the second committee had been held by the end of 1957.

Engineering Joint Examination Board.

Representatives: F. H. Reid, B.Sc., Wh.Ex., and F. S. Gander, B.Sc.

The Common Preliminary Examination was held from 2nd to 5th April, and from 1st to 4th October 1957.

The Annual General Meeting was held on 14th June 1957 to receive the report for 1956/57, including the statement of accounts and the reports of the Moderating Committee on the examination results.

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The examination results are shown in the following table:

Examination	Whole Examination				Part Examination				Total sat
	Sat	Passed	Referred in 1 or 2 subjects	Failed	Sat	Passed	Referred in 1 subject	Failed	
Oct. 1956									
Home	22	4 (18%)	5 (23%)	13 (59%)	116	64 (55%)	10 (9%)	42 (36%)	138
Oversea	51	16 (31%)	14 (28%)	21 (41%)	19	9 (47%)	1 (6%)	9 (47%)	70
April 1957									
Home	37	6 (16%)	15 (42%)	16 (43%)	181	97 (54%)	18 (10%)	66 (36%)	218
Oversea	103	40 (40%)	33 (33%)	30 (30%)	44	21 (48%)	14 (32%)	9 (20%)	147

Since the first examination in April 1941, 6,431 candidates have entered for the April examinations and 4,190 for the October examinations, making a total of 10,621 candidates.

The Board agreed that

- (a) Mr. C. W. Tonkin (representing the Institution of Mechanical Engineers) be Chairman for the year 1957/58.
- (b) Mr. L. O. Wood be appointed Registrar of the Joint Board in succession to Mr. B. J. S. Roper who was due to retire on 30th November 1957.
- (c) The examinations be held on 15th-18th April and 7th-10th October 1958.
- (d) As the October 1957 examination had been fixed for 1st-4th October, the first three days of which are public holidays in India, it was decided to cancel the October 1957 examination in India.

Institution of Electrical Engineers' Ship Electrical Equipment Regulations Committee. Representative: A. N. Savage.

As previously reported this committee has been divided into a number of sub-committees in order to deal with the amount of work entailed in preparing a fourth edition of the Regulations, a fourth edition having been authorized by the Council of the Institution.

The various sub-committees have held numerous meetings during the year. Although good progress has been made an appreciable amount of work still remains to be dealt with.

Joint Committee on Materials and Their Testing of Technical Institutions and Societies in Great Britain. Representative: R. Cook, M.Sc.

At present there are twenty-four member institutions and societies within the Joint Committee. Three additional Institutions and Societies were admitted to membership during the year.

Mr. T. M. Herbert, M.A., M.I.Mech.E., was elected Chairman for the current year, and Mr. R. Main, A.M.I.Mech.E., was appointed Secretary.

The Committee met on the 26th March 1956 and the 18th June 1957, and a meeting of its Non-Destructive Testing Sub-Committee was held on the 30th July 1957.

Formation of the British National Committee for Non-Destructive Testing

The Joint Committee carried out an important task during 1957 by initiating the British National Committee for Non-Destructive Testing. For some time, the need for some kind of Committee to act as the focal point for non-destructive testing in Great Britain had been expressed in different quarters and, as a result of an informal meeting of interested parties convened by the Joint Committee Chairman, a Non-Destructive Testing Sub-Committee was set up to advise the Joint Committee upon the organization of a National Committee on non-destructive testing. The Sub-Committee's recommendations were eventually accepted on the 18th June 1957 and the newly-formed National Committee met for the first time on the 3rd September 1957.

Future Symposium

The Joint Committee has discussed the possibility of fostering a symposium on the testing of plastics and has ex-

pressed the opinion that there is a definite need for a discussion on this subject. Enquiries are being pursued to this end.

Joint Engineering Institutions Examinations Committee.

Representative: C. H. Taylor-Cook, B.Sc.(Eng.).

In addition to regular meetings for the appointment of examiners, consideration of examination papers and preparation of pass lists, one or two matters of policy have been considered. The Institution of Public Health Engineers has been admitted to participation, the Institution of Civil Engineers having agreed to sponsor their candidates. The New Zealand Institution of Engineers has also been admitted. Because of the very low marks obtained by many candidates in the examination, some consideration has been given to the methods of preparation adopted by candidates but it has not been possible to draw any definite conclusions.

Lloyd's Register of Shipping Technical Committee. Representatives: A. Logan, O.B.E., and H. J. Wheadon.

This Committee held two meetings during 1957, one on 30th January and the other on 20th November.

Classification Rules were amended so that a ship would not obtain the Class 100A1 unless she were considered suitable in size and general characteristics, as well as in strength, for the classification and service contemplated.

Watertight bulkheads

In view of the fact that more large cargo ships are being built with machinery aft, the number of bulkheads in these ships was specially considered and amendments made to the Rules.

Rules for reduction gearing for main and auxiliary machinery

The Panel studying this subject, on which Messrs. Logan and Wheadon served, made their report and the proposed revised rules as recommended by the Panel were approved.

Rules for welded construction

An amendment was made to the Rule concerning the thickness at which P5 steel is required, the effect of the amendment being that in cargo ships the limit was raised from 0.60in. to 0.80in. for topside material and reduced from 0.85in. to 0.80in. for bottom shell.

Rules for pumping and piping

A number of minor amendments were made.

Royal Naval Reserve (General Service) General Committee.

Representative: F. D. Clark.

One meeting of the General Committee was held under the Chairmanship of Admiral Commanding Reserves. Of the matters discussed the following will be of interest to members of the Institute.

The intended organization of the Unified Reserve and its division into various training lists was explained, with emphasis given on the valuable part the professional seaman has to play in the Unified Reserve. At that time the name for the Unified Reserve was under discussion but since then the title, Royal Naval Reserve, has been decided upon.

It is probable, as a result of the unification of the Reserves, that some alterations to the Regulations for entry of Merchant

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Navy Engineer Officers may be necessary with particular reference to those qualified for direct entry as Lieutenant-Commander.

Admiralty approval has now been given to the recommendation to the Royal Naval Reserve General Committee that from 1st March 1958 British merchant ships with the master, irrespective of rank, and one other officer, irrespective of rank and branch, who are members of the Naval Reserves, should qualify to wear the Blue Ensign. The present rules are to continue for the Patrol Service.

To broaden the entry of cadets to the Royal Naval Reserve, in addition to the *Conway*, *Pangbourne* and *Worcester*, the scheme has been extended to the following schools: Gordonstoun, Elgin; Robert Gordon's College, Aberdeen; Royal Technical College, Glasgow; Leith Nautical College; City of Liverpool Technical College; School of Navigation, Warsash; Smith Nautical College, Cardiff; and King Edward VII Nautical College.

BRITISH STANDARDS INSTITUTION COMMITTEES

C37/2/2 Sampling of Steam. Representative: W. McClimont, B.Sc.

Meetings were held on 22nd February and 31st May 1957 to consider sections of a draft Standard. It has become apparent that separate specifications will be necessary to differentiate between the methods of sampling applicable to the determination of purity and the determination of quality of steam. The membership of the panel has been strengthened and consideration is being given to extending the terms of reference to cover the analysis of steam when it has been sampled.

C/37/3 Methods of Boiler Water Treatment. Representative: H. J. Wheadon.

The panel elected by this committee to revise British Standard 1170, entitled "Treatment of Water for Marine Boilers", completed the work undertaken early in 1957. The revised edition has now been published.

ELE/1/10 Marine Motors and Generators. Representative: A. N. Savage.

The draft of this new specification has been approved by Technical Committee ELE/1 and the Electrical Industry Standards Committee and has now been published.

ELE/3/2 Ships' Cables. Representative: A. N. Savage.

The revision of B.S. 883 has been completed during the past year and has now been published.

GLC/4 Observation and Gauge Glasses for Pressure Vessels. Representative: W. E. Hoes.

The first meeting of the above committee was held on the 12th December 1956 under the title "Glass Level Gauges for Pressure Vessels" which was afterwards changed to "Observation and Gauge Glasses for Pressure Vessels" in order to describe the scope of the proposed new Standard more exactly.

It has been decided that the specification will be divided into four separate sections to deal with different types of glasses under the following main headings:

- (1) Tubular gauge glasses.
- (2) Plate and reflex glasses for use in level gauges separate from the pressure vessel.
- (3) Glass windows (sight and light glasses) in the wall of the pressure vessel itself (particularly circular glasses).
- (4) Protector glasses for tubular gauges.

At the meeting in January Mr. W. E. Hoes was elected Chairman, and work proceeded throughout the year on each of the four subdivisions in turn.

The first consideration of the committee is to establish dimensional standards and to endeavour to reduce the number of different sizes as far as possible.

In addition it is considered that the specification should

give some guidance to users about the safe working pressures and temperatures of glasses of the different types and sizes. This entails the careful study of existing test reports and technical papers and will probably require some further research and experimental work before the draft specification can be completed.

Good progress on each subdivision has been made during the year and it is hoped that the finished specification will provide guidance and useful information not hitherto generally available.

INE/4/5 Ships' Refrigeration Thermometers. Representative: R. W. Cromarty.

During the past year the work of this committee has made steady progress. The draft requirements for electrical long distance thermometers have been discussed and those for direct reading liquid expansion distance thermometers are ready for discussion.

INE/6/2 Pressure Gauges (Drafting). Representative: A. J. Mann.

The above committee has under discussion certain revisions to the existing Standard.

It is anticipated that the work will soon be completed, when a revised Standard will be available for publication.

ISE/- Iron and Steel Industry Standards. Representative: James Turnbull, O.B.E.

Considerable work has been done on additional specifications for the mechanical properties of steels at elevated temperatures and on the co-ordination of steel specifications.

B.S. 18, "Tensile Testing of Metals", has been revised and issued and a full revision of B.S. 1633, "Boiler Steels", should be published this year.

ISE/6 Steel Castings. Representative: E. Burnett, M.B.E.

Meetings were held on the 2nd April and 10th September, when further consideration was given to the draft British Standard for Steel Castings for General Engineering Purposes, document CX (ISE) 1169, in relation to certain amendments proposed by the Committee for Steel Chemical Pressure Vessels, and after modification these amendments were adopted and the Secretary instructed to pass them to the Industry Standards Committee for approval and publication.

Consideration was also given to the request by the Engineering Standards Co-ordinating Committee as to whether it was possible to prepare a British Standard for the Classification of Castings, with particular reference to Service requirements. At present Class 1 Castings cover failure which would result in loss of life and loss of serviceability, Class 2 Castings refer to the loss of serviceability only, and Class 3 refer to failures which would not be of any serious consequence. The Committee considered that there was merit in this proposal to classify castings according to the danger of failure in use and that it should be applicable not only to the Services but should in fact cover the general engineering uses as well, and it was recommended that the British Standards Institution should set up a new Technical Committee for the purpose of classifying castings in this way.

B.S. 3100, "Steel Castings for General Engineering Purposes", has been published since the previous report.

MEE/6/19 Gear Hobbing Machines. Representative: S. A. Smith, M.Sc.

This committee has been engaged on the preparation of a specification for gear hobbing machines for precision work with a capacity not greater than 3ft. in diameter and a British Standard is now in its final draft form.

MEE/13 Engine Testing Fittings. Representative: J. Calderwood, M.Sc.

During the year a draft revision of B.S. 412, "Indicator Cocks and Valves", was issued for industrial comment. This presumably will be published early in 1958.

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MEE/17/7 Gears for Turbines and Similar Drives. Representative: S. A. Smith, M.Sc.

Part 2 of B.S. 1807 has been prepared which refers to tooth form and pitches. This draft has been completed and is awaiting the approval of the Mechanical Engineering Industry Standards Committee for publication.

MEE/21/1 Solid Drawn Air Receivers

MEE/21/3 Welded Steel Air Receivers

Representative: T. D. Shilston.

These two committees held a number of meetings during 1957 and were actively engaged in the revision of the Standards concerned but to date no final drafts have been issued for comment.

MEE/34 Land Boilers. Representative: J. Anderson.

The committee met on one occasion for the purpose of casting a vote on behalf of the United Kingdom, as a member of Technical Committee ISO/TC 11, on the Second Draft ISO Proposal for Stationary Boilers.

This draft had been prepared by the American Secretariat, taking into account the decisions on majority votes at the second plenary meeting of the International Standards Organization held in Madrid in February 1956.

The committee decided to approve the draft, subject to the reservations made by the U.K. delegation at the Madrid meeting, and at the same time extended a vote of thanks to the U.K. delegates who attended the Madrid meeting for putting forward so ably the British point of view on various points at issue.

MEE/34/1 Cylindrical Boilers. Representative: J. Anderson.

This committee reviewed the following six British Standards specifications dealing with shell type boilers, viz.: B.S. 537, 609, 665, 761, 931 and 2790. It was proposed that a number of amendments be made and a draft embodying these is being prepared for consideration of the committee.

MEE/34/2 Water Tube Boilers. Representative: J. Anderson.

A number of meetings of this committee were held and the work on the proposed revision to B.S. 1113, "Water Tube Boilers and Their Integral Superheaters", was continued.

MEE/34/6 Boiler Mountings and Fittings. Representative: J. Anderson.

The committee met on one occasion to review the proposed revisions to B.S. 1123, "Valves, Gauges and other Safety Fittings for Air Receivers and Compressed Air Installations".

MEE/34/8 Pipes and Piping. Representative: J. Anderson.

This committee, together with other B.S. Committees, is considering the co-ordination of requirements for low alloy steels in various B.S. specifications.

MEE/34/9 Boiler and Superheater Tubes. Representative: J. Liddell, B.Sc.

A number of meetings of this committee were held during the year to continue the work of merging the existing British Standards for boiler and superheater tubes into one comprehensive Standard. Two drafts were considered and it is hoped that the new Standard will be published in the near future.

MEE/63 Ships' Side Scuttles and Frames. Representative: E. F. J. Baugh.

Two meetings of this Committee, under the Chairmanship of Mr. D. R. Murray-Smith of the Ministry of Transport, have been attended.

They were held on the 29th October 1957, and 10th January 1958 respectively; the immediate objective of the Committee is to revise B.S. 3024 and on this being achieved the Committee can consider entering the international field by putting B.S. 3024 forward as a proposal for an International Standard.

Useful work was accomplished by the Committee and in view of the ever increasing use of light alloys there is also a proposal that ships' side scuttles manufactured from light alloy should be included in the revised Standard.

MEE/81 Valves for Gas, Water and Steam. Representative: A. Logan, O.B.E.

Tests were carried out by independent professional laboratories on certain brass globe valve bodies which had been submitted to temperatures and pressures above that called for in B.S. 218 and a report circulated to committee members.

MEE/84 Ignition Equipment for Compression Ignition Engines. Representative: J. Calderwood, M.Sc.

A draft British Standard on "Glossary of Terms and Definitions for the Injection Equipment of C.I. Engines", has been issued for industrial comment. This is likely to be published early in 1958.

MEE/91 Jointing Materials and Compounds. Representatives: W. E. Hoes and Lieut.-Cdr. A. P. Monk, D.S.C., R.N.(ret.).

There have been no meetings of the parent committee of MEE/91 during 1957 but sub-committee MEE/91/2 concluded its work in November 1956 and the final British Standard 2815 for compressed asbestos fibre jointing was published at the end of January 1957.

Sub-committee MEE/91/3 is concerned with the dimensions of gland packing and two meetings have been held within the past year. The last meeting was held jointly with Technical Committee MEE/68 Pumps, as it was appreciated that the standardization of gland packings was dependent upon the gland sizes agreed by MEE/68. Further progress of MEE/91/3 will be dependent upon the work carried out by MEE/68 in standardizing gland sizes.

Sub-committee MEE/91/4, which is concerned with the preparation of a standard for gasket dimensions, has made good progress during the year and the final draft will be considered at the next meeting on the 16th January 1958.

The draft should then be ready for submitting to industry with a good possibility of its publication before the end of the year. This specification is concerned with the dimensions of gaskets used between British Standard flanges and it might be thought that very little variation in these dimensions could exist. In practice this has proved to be far from the case and a definitive standard should prove most useful to both producers and users.

MEE/123 International Combustion Engines for Stationary Purposes. Representative: A. Logan, O.B.E.

Important amendments were made to B.S. 649:1949, these including a change in the basis of rating from a twelve-hour period to continuous running.

NFE/27/3 White Metal Bearing Alloys and Tin Base Die Casting Alloys. Representative: N. Macleod.

When this sub-committee of Technical Committee NFE/27 Tin and Tin Alloys first met in January 1957 it was decided to ask the Institute to nominate a representative.

The writer joined the sub-committee at the third meeting on 19th March and it has met at intervals since.

At an early stage it was decided to drop from their considerations the die casting alloys and concentrate on the bearing alloys.

Considerable progress has been made towards drawing up a preliminary draft Standard for white metal bearing alloys, which will specify nine bearing alloys covering the range normally used in engineering practice, including an alloy for underwater bearings.

PTC/2 Fuel Oils. Representative: R. Munton, B.Sc.

Following a decision to adopt a minimum flash point of 130 deg. F. for oils of classes "A" to "D", a sub-committee was set up to consider the use of oil fuels with flash point

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below 150 deg. F. at sea. This sub-committee decided that the available evidence did not warrant any reduction in the minimum flash point for marine boilers and oil engined vessels below the present limit of 150 deg. F.

SFE/- Solid Fuel Industry Standards Committee. Representative: R. Cook, M.Sc.

Two meetings were held during 1957, the first on 13th March and the second on 9th October. These approved for publication the following draft British Standards:

Revision of B.S. 1016 Part 5, "Gross Calorific Value of Coal and Coke".

Revision of B.S. 1334, "Preformed Thermal Insulating Materials for Central Heating and Hot and Cold Water Supply Installations".

B.S. 2742, "Notes on the Use of the Ringelmann Chart".

New work undertaken by the committee includes the preparation of Standards on: Solid smokeless fuels for open domestic fires; large central incinerators for hospitals.

Work in connexion with ISO/TC 27 Solid Mineral Fuels has continued actively and preparations have also been put in hand for the first meeting in June 1958 of ISO/TC 64 Methods of Testing for Performance and Efficiency of Fuel-using Equipment Excluding Internal Combustion Engines.

USM/2/5 Symbols and Abbreviations. Representative: C. H. Taylor-Cook, B.Sc.(Eng.).

This committee has not met since October 1956 but during the year its findings have been issued in the form of Draft British Standard 1991, Part 5, and comments were to be submitted by 31st December 1957. It is probable that these comments will be considered by the sub-committee before its final report is sent to the parent committee for correlation with the reports from the other three sub-committees.

Minutes of Proceedings of the Sixty-ninth Annual General Meeting

Tuesday, 22nd April 1958

The Annual General Meeting of the Institute of Marine Engineers was held on Tuesday, 22nd April 1958 at 5.30 p.m., the President, Sir Ronald Garrett, occupying the Chair.

The Minutes of the preceding Annual General Meeting, held on 30th April 1957, were confirmed and signed.

Introductory Remarks by the Chairman

The CHAIRMAN said that he found himself embarrassed by this item on the agenda in the same way as his predecessors had been in that he really did not know what to talk about. He could not talk about the affairs of the Institute in the past year because that would be dealt with later in the agenda, and he could not talk about the finances of the Institute for the same reason. Nor could he talk about his successor because theoretically his name was still wrapped in mystery and that left him only the budget or the weather. That being so, the best thing to do was to pass to the next item on the agenda.

He wished to remind the meeting that certain changes had been made in the procedure in connexion with the elections since last year. Four suggestions had been made at the previous Annual General Meeting. The first was that all the votes should be entered on one side of the ballot paper and he understood that that had been adopted and put into force by the Council. The second suggestion was that the Honorary Treasurer's nomination should be provided for in the nomination paper. That also had been agreed to by the Council and had been put into operation. The other two suggestions, which had not been accepted by the Council, were (i) that as a consequence of the ballot being so disappointing the ballot papers should be issued separately or pre-paid for return and (ii) that the names of the proposers and seconders of candidates should appear on the ballot paper.

Examination of the Voting Papers

At the invitation of the CHAIRMAN, the Scrutineers retired to examine the voting papers.

Annual Report

Mr. J. STUART ROBINSON, M.A. (Secretary), presented the Annual Report of the Council for 1957.

Annual Financial Statement

Mr. J. CALDERWOOD, M.Sc. (Honorary Treasurer), in presenting the Annual Financial Statement, said that members would note that it was divided into three parts, the Balance Sheet, the Income and Expenditure Account for the building and the Income and Expenditure Account for the general funds.

So far as the Balance Sheet was concerned there was no need for him to make any remarks about it except to mention the difficulties, which the Secretary had referred to, which had arisen in the middle of last year. There was no doubt about it that a year ago the position had not been a very happy one. At that time permission had been refused for an increased loan but, as the Secretary had explained, that permission had been

granted later and the Institute had also received a number of unsecured loans. What the Secretary had not said was that the relief in capital funds was largely due to the efforts of the Secretary and Mr. Silley. Both of them, and the Secretary in particular, had put in an enormous amount of very good and very difficult work and the Institute owed them a tremendous debt of gratitude.

With regard to the War Memorial Fund Revenue Account, he was afraid that the figures were rather misleading because they showed a surplus of £11,200. That was not a real surplus because none of the charges on the other side had yet come in or been paid. There would certainly be something to pay for ground rent, and possibly rates and various other charges. In addition to that there would be a sinking fund for depreciation and while in the long run it was expected that the building would be very profitable it was too early to predict what the real margin of income over expenditure would be.

Turning to the General Revenue Account, as had been expected, there was a deficit of nearly £3,000 on the present year's working but members would remember that it had been agreed that the subscriptions should be put up. The deficit was not as large as had been expected a year ago and that was largely due to the increase in membership. On the other hand there were additional expenses which were not yet fully shown. Moving into the Memorial Building added to the staffing expenses to some extent. The cost of the TRANSACTIONS had gone up by over £2,000 during the year, and much of that increase had occurred during the second half of the year when the cost of postage and printing had gone up. That meant that for the present year the cost of the TRANSACTIONS would be at least £3,000 above what it had cost two years ago.

With the new subscription rates, it did appear that there would be a reasonable surplus on the next year's working. As in the previous year the Revenue Account had been simplified as far as possible and notes on the various accounts had been put at the end, giving more detail for those who wished to refer to them. He did not think he need say any more but he would try to answer any questions.

Adoption of Annual Report and Accounts

Mr. H. N. PEMBERTON (Member), in proposing the adoption of the Annual Report and Accounts, said that the outstanding event of the year had been the taking over and occupying of the new Memorial Building, which was the culmination of twelve years of strenuous effort on the part of all those concerned with the planning and financing of that imaginative project. In the Report the Council expressed its gratitude for all the contributions and gifts which had been received and he felt sure that the members of the Institute would wish to join with them in that expression, not least to the shipping industry for its magnificent support throughout the enterprise and also for the substantial contributions made in the form of unsecured loans mentioned in the Balance Sheet.

He had been going to include a word of congratulation

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about the £11,000 surplus shown in the Building Revenue Account but he was afraid that the Honorary Treasurer had spiked his guns. He thought it would be wrong, however, not to say something complimentary about it because he knew that the planning of the take-over of the Memorial Building had been very carefully thought out. Arrangements had been made, for example, for tenancies to be taken up as space became available instead of waiting until the whole building was complete and he was sure that that had helped in achieving a surplus no matter how uncertain that surplus might ultimately be.

Turning to membership, an increase had again been reported that year. The steep rise in membership shown in the chart on page vii of the Report continued steadily, as they had been told, at the rate of 1,000 members per annum. He noticed in the Report that the Council appreciated that saturation point must be reached sooner or later but that might be some way off yet. His own view was that there was ample scope for further development and expansion of the Institute's activities in the years to come. The future success of the Institute depended entirely upon the services it gave to members and he did not think members had any reason to complain either of the technical merit of the papers presented or the manner of their publication in the *TRANSACTIONS*. Attendance at meetings continued to increase and there could be no doubt that the amenities and appointments of the new premises were proving very attractive.

The Joint Nuclear Marine Propulsion Panel under the able leadership of Sir Frank Mason was continuing to be active and particularly so in the consideration and selection of papers and information on atomic energy. The Panel had before it the single objective of ensuring that members of the Institute were kept well informed of progress and development in the field of atomic energy.

Finally, turning to the Accounts, members would note that in the General Revenue Account there was a deficit of some £2,900 for the year. It would be recalled that the Treasurer had forecast this in his financial statement at the previous Annual General Meeting and, of course, this was the reason for the increase in the subscriptions in January. The benefit of the increase would accrue during the course of the present financial year.

With those few words he formally proposed the adoption of the Annual Report and Accounts.

MR. R. F. CAPEY (Member), in seconding the motion, said that the Merseyside and North Western Section Committee had expressed their appreciation that one of their members had been asked to second Mr. Pemberton's proposal, especially as this was the first Annual General Meeting to be held in this beautiful Memorial Hall.

The Report was a memorable one in view of the historic event of the year, and comprehensive, incorporating as it did the Section Reports.

Credit was due to the staff for its preparation and presentation and credit was due also to the Council and Members of the various Committees who had made the Report possible. It was the counsel of these Solomons, together with the members who represented the Institute on the many scientific, experimental and investigation Committees, that made the Institute one of which every single member should be justly proud.

The recommendations made to the Shipping Federation regarding the training of future marine engineers for the Merchant Navy was only one example of the importance of the work being done, and it would be of interest to all to hear the result.

He would like to call attention to the very modest mention of the official opening of the Memorial Building; the modesty was typical of the Chairman and members of the Building Committee. The trials and tribulations experienced over the years since the Committee was formed were sufficient excuse for the stoutest of hearts to give up the ghost, but they had not. He referred to them as super-Solomons. The words "strenuous effort" as printed in the Report could be cubed, or

even raised to the fourth power. He thought it would be the wish of every member to offer congratulations and sincere thanks to them for such valiant efforts, and he felt sure that they were pleased to hear from the Secretary that the negotiations with the City Corporation concerning the Minorities premises had reached a successful conclusion.

There were many observations which could be made on the Annual Report, especially from the point of view of finance, but having read the Statement of the Auditors and listened to the Honorary Treasurer, he thought the accounts could be accepted as "fair and reasonable".

In conclusion, and as an opposite comparison, he would refer to the reluctance of the Capital Issues Committee to give permission for additional borrowing powers in connexion with the new Building, as against the willingness of the Privy Council regarding the membership subscriptions. It was pleasing to note that after reconsideration the Capital Issues Committee had also become kindly.

With those few remarks it gave him great pleasure to second the adoption of the Annual Report and Accounts for the year ending December 1957.

There were no questions and *the motion was carried unanimously*.

Presentation of Awards for 1957

The CHAIRMAN presented the following awards for 1957:—

Denny Gold Medal: A. N. Savage (Member) for his paper entitled "Developments in Marine Electrical Installations with Particular Reference to A.C. Supply".

Institute Silver Medal: Sir Christopher Hinton, K.B.E., M.A., F.R.S., and R. V. Moore, G.C., B.Sc.(Eng.), jointly for their paper entitled "The Nuclear Propulsion of Ships".

Extra First Class Engineer's Certificate Examination—Institute Medal Award: J. M. Duguid (Associate Member) for obtaining the highest marks in the Ministry of Transport and Civil Aviation's examinations during 1957.

Essay Competition Award: J. R. Michaelis (Student) for his essay entitled "Nuclear Power for Marine Propulsion".

Sir Christopher Hinton was prevented by illness from being present to receive his award and the SECRETARY read a letter which had been received from him.

The CHAIRMAN announced that the other recipients of awards who were unable to be present would have their prizes forwarded to them.

Report of the Scrutineers

The CHAIRMAN read the report of the Scrutineers, as follows:—

President: E. L. Denny, B.Sc.

Vice-Presidents: *London*: R. K. Craig, C.B.E.
W. Sampson.

S. A. Smith, M.Sc.

James Turnbull, O.B.E.

Glasgow: J. Gilchrist.

Kingston upon Hull: F. C. M. Heath.

Royal Navy: Vice-Admiral N. E.
Dalton, C.B., O.B.E.

Honorary Treasurer: J. Calderwood, M.Sc. (Vice-President).

Members of Council: H. Armstrong.

G. M. Kennedy.

Vice-Admiral Sir Frank Mason,
K.C.B., (ret.).

F. M. Paskins, O.B.E.

H. N. Pemberton.

Associate Member of Council: D. S. Pike.

Vote of thanks to Scrutineers and Re-appointment for 1958/59

MR. CALDERWOOD, in proposing a vote of thanks to the scrutineers, said that the scrutineers had quite the most thankless task of any on the present occasion; they had to go out at

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the beginning of the meeting and count pieces of paper. Not only did they do that but they undertook the task year after year. He would ask the meeting to pass a very hearty vote of thanks to the scrutineers and approve their re-appointment for the ensuing year.

The motion was carried unanimously.

Vote of Thanks to the President

REAR-ADMIRAL F. E. CLEMITSON, C.B., (ret.) (Chairman of Council) said that it was his privilege to propose a vote of thanks to the retiring President. It was also a great pleasure to tell him how much his year of office as President had been valued and to extend thanks to him for all that he had done for the Institute during that period. There must be some element of sadness on such an occasion because of the inevitable loss from the Council of one whose wisdom and enthusiasm had helped greatly and whose company they had very much enjoyed. While they had to say *au revoir* now, and he understood that technically the President gave up his office at the end of the meeting, they hoped and, indeed, were certain that *au revoir* would not mean goodbye.

All else apart, they had been very fortunate in having had Sir Ronald Garrett as their President, with his long and distinguished association with Lloyd's Register of Shipping, with which the Institute had such intimate and happy relations. He felt sure that his valuable and informative Presidential address was an apt reminder, if one was needed, of that connexion.

He thanked Sir Ronald most sincerely for the interest he had taken in the Institute and its affairs and for his helpful guidance and for his and his wife's attendance at the Institute's functions, both in and out of London. He thought that those functions, when the President met quite a number of the body general of the members, were surely not only one of the most pleasant parts of his activities but also one of the most fruitful. He could assure Sir Ronald that his visits to the Sections had been greatly appreciated and he would make special mention of his visit to the Sydney Section where, apart from making history, as he had been the first reigning President who had done so, that visit had been a resounding success.

He hoped that Sir Ronald, in his turn, had enjoyed his term of office and now that he knew everyone well they hoped he would keep in touch with them from time to time. For instance, he believed that the second Friday in March was a significant date for Past Presidents.

If he might intrude a personal note he would like to say, as Chairman of Council, how much he had been helped and encouraged by the happy relationship which had existed between himself and the President. He had great pleasure in proposing formally that a vote of thanks be accorded to Sir Ronald Garrett for his work during the year as President of the Institute.

MR. R. MUNTON, B.Sc. (Vice-Chairman of Council), in seconding the motion, said they would all agree that in what had been a very excellent year for the Institute they had had a very excellent President. No doubt everyone would remember his Presidential address in which he had showed very clearly that during his period at Lloyd's Register of Shipping he had formed a very good opinion of the surveying staff of that great organization. He could only hope that Sir Ronald had formed at least nearly as good an opinion of the members of the Institute during his term of office. As had been anticipated, relations had been most cordial the whole time and he had given the utmost help to the Council. He had the greatest pleasure in seconding the vote of thanks to the President.

The motion was carried unanimously.

The CHAIRMAN thanked the proposer and seconder and the meeting for the vote of thanks which he appreciated very greatly but which he was only too conscious that he did not deserve. He was very fully aware of his own shortcomings as President but he could assure them that he had greatly enjoyed his year of office. He was afraid that he had left a considerable

part of the Presidential duties to his friend, Admiral Clemitson, particularly those duties which consisted of "wining and dining". Whenever he had the opportunity of wining and dining with the members of the Institute he had seized it but when it had been the President's duty to wine and dine elsewhere on the Institute's behalf he had left it to Admiral Clemitson, who was intellectually, technically and gastronomically better able to carry out that duty.

He was glad to say that in his year of office he had been able to see a good deal of the membership of the Institute, bearing in mind how difficult it was to see anything like a large proportion of such a large and widely scattered body. He could assure the meeting, and Mr. Munton, that his contacts with the members had increased his already very high regard and respect for the members of the profession and he had had it impressed upon him what a very fine organization the Institute was. It was playing a great part in looking after the interests of the profession and he was quite sure that in the years to come, when there would be some very difficult problems to face and solve, the Institute would be well equipped to play a leading part in their solution.

He would like to thank Admiral Clemitson for his kind references to his wife. He could assure him with all sincerity that she had very greatly enjoyed the Institute's functions and both he and his wife would always look back to the past year with the greatest pleasure. He was consoled by what Admiral Clemitson had said about *au revoir* not meaning goodbye. This was a sad occasion for him and he hoped very much that there would be opportunities for seeing the members of the Institute from time to time.

Finally, he would like to thank the Chairman of the Council and the Secretary for all the help they had given him during his year of office. They had not only made his task extremely easy but also extremely pleasant and he was deeply grateful to them both.

Vote of Thanks to the Council and Officers

DR. J. E. RICHARDS, B.Sc., Wh.Sc. (Member), in proposing a vote of thanks to the Council and officers of the Institute, said he was sure he was speaking on behalf of all members when he offered their gratitude to the Council and officers for the effort which had resulted in the official opening and occupation of the new building which, as they all knew, was dedicated as a memorial to the marine engineers of the Royal and Merchant Navies who lost their lives during the 1939/45 war. None of the friendly atmosphere which had always characterized the meetings had been lost in the transfer, and it spoke well for the Secretary and his staff that the Institute had so quickly settled down in its new quarters.

During the last year the membership had continued to increase rapidly and through its local branches the activities of the Institute were now world wide. Its prestige was also growing. That had been brought about by the energetic and wise direction of the affairs of the Institute by the Council, the good work of the Secretary and the enthusiasm of the committees of the local Sections and the Section Secretaries.

A very important feature of the Institute was the Junior Section. The instructive Lloyd's Register Lecture for Juniors by Mr. P. T. Fletcher was followed by a most successful visit to the Atomic Energy Research Establishment at Harwell. On that occasion he had the pleasure of meeting some of the Institute's young members and had been struck by their keenness and enthusiasm for their chosen profession. He had also been impressed by the good service which was being given to the Institute by the Chairman of the Junior Section, Mr. F. D. Clark.

They were grateful to the Papers Committee and to the authors for the continuing high standard of the papers presented to the Institute. The two papers on nuclear propulsion had been very well attended and the good discussion which they received indicated the interest which was being taken by members in that new field. It was to be hoped that it would soon be possible to have discussions at the Institute of particular marine engineering features of that new development, and he

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felt sure that the experience of members could be very helpful to progress in that field.

He wished to express appreciation of the excellent work which was carried out by the Secretary and his staff. There was no doubt that the attitude of personal attention to each member as an individual which characterized the staff did much to form the congenial atmosphere which was always present.

It was with very great pleasure that he proposed the vote of thanks to the Council and officers.

MR. N. MACLEOD (Member), in seconding the vote of thanks, said that he was honoured by the invitation to second the vote of thanks to the Council and the officers of the Institute. The vote of thanks had been so ably proposed that the seconder really had very little to say other than to endorse Dr. Richards's remarks. There were meetings at which the vote of thanks was somewhat a formality, introduced in a conventional way to round off the business, but, speaking as a very ordinary member of the Institute, the Council and officers could be certain that the vote of thanks indicated the sincere feeling of all members. The duties of the Council and committee members took up much of their limited leisure time and involved attendance at meetings after a day's work. This year, at the first Annual General Meeting held in the new building, they must thank the members of the Building Committee in particular who had done a lot of hard work and had not a little anxiety in dealing with the problems involved in completing so large a building. They had the satisfaction of knowing that the result of their efforts was admired and appreciated by all members.

He felt sure that the members of the Council would wish to join with other members in thanking the Secretary and staff for the smooth running of the affairs of the Institute. He had great pleasure in seconding the vote of thanks to the Council and officers of the Institute.

The vote of thanks was carried unanimously.

REAR-ADMIRAL CLEMISON, in reply, said it was a great pleasure for him to reply to this vote of thanks which had been so happily proposed by Dr. Richards and seconded by Mr. Macleod.

They had said some very nice things, and it was not for him to gild the lily, but he would like to emphasize the signal work done by the Secretary and all his staff in what had been a quite strenuous year. They were very fortunate in their staff and their unremitting service to the Institute—and, what was more, always service with a smile.

Other speakers had referred to this past year as having been indeed an historic one for the Institute. Their establishment in this fine Memorial Building, and on a very satisfactory basis as far as could be foreseen, had involved a great amount of hard work and often hard thinking, and of this the Council and the staff had carried their full share.

Reference had also been made to the good work of the Papers and Transactions Committee. He had been particularly struck by the notably high quality—and the wide range—of the papers they had had this session, as well as by the excellent attendance at the meetings and the lively and fruitful discussions.

At the same time he would not have them forget all their other committees who had put in such a lot of work—work which might often not be spectacular, but which was essential for the running and progress of the Institute.

He must, too, say just a word about the Sections. He had been fortunate enough to have visited nearly every one in this country and he had been very impressed by their organization and enthusiasm—and their growth. They were an essential part

of the Institute and they had a great part to play in their combined success. He was certain they were doing it and would continue to do so.

They must not, of course, rest on their laurels, and he was certain they would not, but should go on from strength to strength by reason of the continuing enthusiasm and work of the Council and its committees, and of the staff, and the support of all their members. The Council, indeed, gave much thought to their future progress and activities, and he was sure these thoughts would be translated into action, where and when appropriate.

Finally, might he say how much he himself had been helped by the Council—by every one of them, and particularly the senior members—whose kindly encouragement and guidance had always made his own job so easy and pleasant, and gently prevented him from straying from the right path. His gratitude also went out to the Secretary and all his staff. It was invidious to mention names, but again he must particularly thank the senior members of the staff, with whom his contacts had inevitably been closer, for their great help.

He did, therefore, on behalf of the Council, officers and staff of the Institute thank Dr. Richards and Mr. Macleod for the eloquent and generous manner in which they had proposed and seconded the vote of thanks, and all of them for their equally generous support of it.

Closing Remarks by the Chairman

The CHAIRMAN said that it was fitting that his last action as President should be to say something about his successor, Mr. Denny, because as soon as the meeting ended he would be taking over. Nobody with the name of Denny really needed any introduction to marine engineers. Mr. Denny was a member of one of the oldest and most famous shipbuilding families, not only in Great Britain but in the world. He understood that the Institute had been fortunate enough to have five previous members of Mr. Denny's family as Presidents, going back to Peter Denny in the year 1891, who was, he thought, the present Mr. Denny's grandfather. Then there had been Colonel Denny in 1900 and James Denny in 1908 and Sir Archibald Denny, who was Mr. Denny's uncle, and in fairly recent years there was Maurice Denny, who was his cousin. Acting on the principle that one could not have too much of a good thing the Institute had wisely added another member of the family, the second representative of the third generation of the family, to occupy the Presidential Chair.

If he himself had had any qualities as President then Mr. Denny had all those and also a great many that he personally had lacked. Mr. Denny, of course, had the technical knowledge and he had added to his many qualifications quite recently by marrying a most exceptional wife. She was exceptional in many ways but what he had particularly in mind was that Mrs. Denny knew more about certain aspects, at all events, of the shipping industry than almost any shipowner in the country. He was quite sure that she would be a most valuable colleague to Mr. Denny in discharging his Presidential duties and he knew that she would be an ornament at any of the functions to which she might be invited.

He wished the Institute every success in the coming year and Mr. Denny a happy and prosperous year of office. (*Applause.*)

MR. DENNY expressed his thanks to the Chairman for his kind words, and his appreciation of the honour done to him in electing him President of the Institute. He looked forward with pleasure to his year of office and hoped to learn much of the Institute's work and activities in this capacity.

The meeting was then concluded.

The Institute of Marine Engineers' Guild of Benevolence

Minutes of Proceedings of the Twenty-fourth Annual General Meeting

The Annual General Meeting of the Institute of Marine Engineers' Guild of Benevolence was held at the Memorial Building, 76 Mark Lane, London, E.C.3, on Wednesday, 16th April 1958 at 3.0 p.m. Mr. W. Lynn Nelson, O.B.E. (Chairman of the Committee), was in the Chair.

The Minutes of the preceding Annual General Meeting, which had been circulated, were taken as read, confirmed and signed.

The CHAIRMAN said he would make a few remarks as briefly as possible because most of the business was covered by the Secretary's Report. Under the heading of "Relief" there had been a decrease in grants in 1957 to the extent of some £300. That was accounted for by the fact that in four cases in which relief had been granted the people concerned had entered the Guild House as residents, and the circumstances of three other people had improved.

Under the heading of "Membership" he was glad to say that in response to an appeal for help for the Guild House in 1957 more life and subscribing members had joined in one year than had joined over the past few years collectively. That was a gratifying position. The Committee was most grateful to those members who had helped in the drive for increased membership.

With regard to the Guild House, it had been hoped that practically all the accommodation would have been taken up by now but it had been found that the process would have to be a gradual one. The increase in residents had been gradual but steady and it was expected that the number of entrants would increase considerably within the next few months. There would probably be several more residents by July or the middle of August.

Presentation of Annual Report

MR. J. STUART ROBINSON, M.A. (Secretary), presented the Annual Report (see page xxxv).

Presentation of Annual Financial Statement

MR. J. CALDERWOOD, M.Sc. (Honorary Treasurer), said he would like to comment on one slight modification in the Balance Sheet, which otherwise generally remained the same, in connexion with the James M. Dewar Fund. Part of that Fund was payable to various people and reverted to the Guild at some date but in the meantime one of the annuitants had asked for the type of investment to be altered, his annuity being £250 a year, and on the alteration the Guild appeared to have made a profit of £648. That was quite good.

Turning to the Revenue Account he could say with satisfaction that for once they had made a slight loss. That might sound a curious statement to make but a benevolent institution was supposed to spend its funds. For several years, largely owing to the fact that Her Majesty's Government did not allow them to give more than a certain amount of money without taking away an equal amount, the Guild had not spent all the money available. Owing to the opening of the Guild House

they were in the position of being able to spend the money which came in, and that was a perfectly sound position for any benevolent fund to be in. They hoped to have more members and subscribers and more income and to be able to spend it all. The Guild House figures were perfectly straightforward but if there were any questions he would do his best to answer them.

MR. E. C. GARRATT, in proposing the adoption of the Annual Report and Financial Statement, said that in view of the information which had already been given he did not think that any special comments were called for. As a member of the Guild he would like to take the opportunity of thanking the Chairman of the Committee for the work which he had done and which was represented by the Report and Statement of Accounts.

MR. F. E. BARKER, in seconding, said that he would like to endorse the remarks made by Mr. Garratt. The position appeared to be very satisfactory indeed, considering the purpose for which the Guild operated.

The Annual Report and Financial Statement were adopted.

Election of Chairman for the Ensuing Session

ENG. CAPT. W. A. GRAHAM, O.B.E., R.N.R., said that he had great pleasure in proposing the re-election of Mr. Lynn Nelson as Chairman for the ensuing year. The Guild was very fortunate in having him as Chairman because he worked very, very hard and took an enormous interest in its activities. It was a very fine effort on his part.

The motion was carried unanimously.

Election of Members of the Committee for the Ensuing Session

The CHAIRMAN said that the following had been nominated by the Committee for election to the Committee for the ensuing session:—

Vice-President: James Turnbull, O.B.E.

Member of Council: W. R. Harvey.

Members of Guild: B. C. Curling, O.B.E.

F. D. Clark.

He had much pleasure in putting those nominations forward to the meeting but, of course, if there were any other nominations he would be pleased to accept them.

ENG. CAPT. W. A. GRAHAM said that he assumed that those nominated would be elected *en bloc* and he would therefore like to second the nominations *en bloc*.

The motion was carried.

Vote of thanks to the Committee

MR. A. J. W. HEDGER said that he had much pleasure in proposing a vote of thanks to the Committee for their contribution to the efficiency of the Guild's work during the past year.

COMMANDER H. T. MEADOWS, D.S.C., R.D., R.N.R., said that in his opinion the members of the Institute, whether they were members of the Guild or not, should be most grateful to

Minutes of Proceedings of Guild of Benevolence Annual General Meeting

the Committee of the Guild of Benevolence because the work involved must be very great indeed. Although it was more pleasant to give than to receive, in many cases there must be a certain amount of unpleasantness in connexion with the work carried out by the Committee. Their giving of help could not fail to be associated with unpleasantness sometimes, or perhaps frustration caused by the limited resources at their disposal. It was with great pleasure that he associated himself with the annual turning of the tables when the Committee was asked to accept something from the members, namely, their thanks. He seconded the motion with great sincerity.

The motion was carried unanimously.

The CHAIRMAN said that on behalf of each individual member of the Committee he thanked Mr. Hedger for the able way in which he had put the proposal and Commander Meadows for being so kind as to second the motion. As Chairman he wished to take the opportunity of adding his thanks and appreciation for the excellent support he had received from the members of the Committee during the year. His thanks were also due to Mr. Robinson, the Secretary, Mr. Pearce, who had looked after the figures, and Miss Howard, for their unstinted services to the Guild. They were all deeply conscious of their efforts on behalf of the Guild. He said that with great sincerity.

Cancellation of Present Rules and Adoption of New Rules

The CHAIRMAN said that this was a very important item. The Institute of Marine Engineers was most desirous, under the Act of 1843, of being accepted as a purely scientific body. Their legal advisers had urged that the Rules should be altered in order that the Guild might be established as a separate entity. In the interests of the Institute the Committee, after long and careful deliberation, had concurred, and the new Rules were now before the meeting. He understood that each member had been sent a copy of the new Rules and had had an opportunity of reading them. Therefore, as Chairman, he proposed "that the present Rules be cancelled and that the Rules as circulated to the members be hereby adopted".

MR. B. C. CURLING, O.B.E., said that having seen from the inside the vast amount of discussion and drafting which lay behind the re-casting of the Rules, he would like to second the motion that they be approved and adopted.

The CHAIRMAN asked whether any member of the Guild wished to make any comments on the new Rules.

MR. E. C. GARRATT, referring to paragraph 6 of the new Rules, asked why it was that the words "or dependent relatives" were added only in the case of sub-paragraph (d). He would have thought that those words applied to sub-paragraphs (a), (b) and (c) rather than to (d).

The CHAIRMAN pointed out that the Committee had been assisted in the drafting of the Rules by the Institute's legal advisers. No doubt it was a matter of legal phraseology and he would ask Mr. Robinson to go into that point. They would certainly make sure that it was not missed.

The SECRETARY said that he thought sub-paragraphs (a), (b) and (c) were intended to cover dependent relatives. He felt certain that it was a question of a word meaning the same thing.

MR. T. W. LONGMUIR suggested that a mistake had been made and that the wording should be altered.

The CHAIRMAN said that the omission could be remedied.

MR. CURLING suggested that the wording was an inadvertent hangover from the old Rules.

ENG. CAPT. W. A. GRAHAM said that if the words "or dependent relatives" were added to sub-paragraphs (a), (b) and (c) it would meet the case. He knew of a retired engineer whose sister was living with him. If anything happened to him his sister would be considered for relief, if necessary; therefore those words should be added to the other three sub-paragraphs.

MR. W. R. HARVEY considered that the Rules were perfectly right as they were, because the words "Any other persons" in sub-paragraph (d) covered the other three sub-paragraphs.

MR. R. MUNTON, B.Sc., disagreed with that view. He said that he would like to move an amendment to the resolution in the following terms:—

"That the words 'and/or dependent relatives' be added at the end of sub-paragraphs (a), (b) and (c)".

The CHAIRMAN said that that amendment would be put forward but it must be borne in mind that it would have to be referred to the Institute's legal advisers. It was in the interests of the Institute that the Rules were being altered and any major modification would have to be referred back to the legal authorities. That fact would have to be accepted if any amendment were made because he could not promise that it would be put into effect. When the question was a legal one it was necessary to defer to legal advice.

MR. LONGMUIR suggested that the words, "subject to the approval of our legal advisers", should be added to the amendment.

MR. R. MUNTON said that he would accept that.

MR. E. C. GARRATT seconded the amendment.
The amendment was carried.

Other Business

There was no other business.

Date of the Next Annual General Meeting

It was agreed that the date of the next Annual General Meeting be fixed provisionally for 15th April 1959.

A vote of thanks was accorded to the Chairman for presiding, and the meeting then terminated.

Twenty-fourth Annual Report of the Committee

The Committee's report of their work during the twelve months ending 31st December 1957 shows that there have been six new applications for assistance, four of which qualified for grants, the remaining two having to be refused under the Guild Rules.

MEETINGS OF COMMITTEE

Since the date of the preceding report there have been eleven Committee meetings.

APPLICATIONS FOR RELIEF

A summary of the applicants to whom relief has been granted in the last year appears below.

In twenty-eight cases relief was continued from the previous year, and again there have been many letters of appreciation. Four of the cases on weekly relief have transferred to the Guild House.

CHARITY BALL

The Committee wish to place on record their grateful appreciation to those who supported the Charity Ball by attending or by advertising in the programme. The Ball was held at the Dorchester Hotel on 8th May 1957 and showed a most satisfactory profit of £1,121.

GUILD HOUSE

During the year, the Committee have endeavoured to bring to the notice of as many persons as possible the facilities offered at the Guild House. There are now six permanent residents and during the course of the year the Committee were able to send three persons to the Guild House for a short holiday, to whom a grant would normally have been made to attend a convalescent home. Every effort is being made by the Committee to maintain the comfort and facilities at as low a cost as possible and they feel that there is every indication that the number of residents will be increased during the coming year, which will help the financial position.

MEMBERSHIP

Forty-seven Life and 108 Subscribing Members were elected during the year and, allowing for losses by death and resignation, the total membership of the Guild at the 31st December 1957 was 278 Life Members and 479 Subscribing Members. Of the latter eighty are covenanted subscribers, thus supplementing the Guild's income without extra cost to themselves.

W. LYNN NELSON,
Chairman of Committee.
J. STUART ROBINSON, *Secretary.*

PARTICULARS OF THE CASES ASSISTED BY THE GUILD

from 1st January to 31st December 1957

Case No.	Age	Qualification	Amount of Relief Granted £ s. d.	Case No.	Age	Qualification	Amount of Relief Granted £ s. d.
1	79	Widow of former member of the Institute	25 0 0	160	8 and 15	Children of former member of the Institute	247 17 0
6	76	Daughter of marine engineer ...	69 0 0	168	19	Son of member of the Institute ...	25 0 0
44	79	Widow of marine engineer ...	35 5 0	169	69	Widow of former member of the Institute and Guild ...	86 0 0
51	78	Widow of former member of the Institute	43 7 0	184	86	Former member of the Institute ...	43 7 0
71	66	Marine engineer	59 0 0	187	53	Widow of former member of the Institute	43 7 0
80	78	Sister of former member of the Institute	43 7 0	188	30	Widow and children of former member of the Institute ...	58 1 0
85	84	Widow of marine engineer ...	20 0 0	190	57	Widow of former member of the Institute	41 9 0
101	91	Widow of marine engineer ...	86 11 0	192	50	Widow of former member of the Institute	59 0 0
103	59	Widow of marine engineer ...	50 18 0	193	81	Widow of former member of the Institute	69 0 0
120	68	Marine engineer	123 0 0	204	74	Sister of marine engineer	69 0 0
133	68	Daughter of former member of the Institute	28 0 0	207	78	Marine engineer	59 0 0
134	88	Widow of former member of the Institute	58 11 0	210	88	Member of the Institute	5 0 0
138	54	Widow of marine engineer ...	55 12 6	211	86	Marine engineer	5 0 0
141	61	Daughter of marine engineer ...	34 3 6	220	60	Widow of former marine engineer	83 8 0
143	49	Widow of former member of the Institute	86 0 0	221	80	Widow of former marine engineer	40 14 6
144	65	Widow of former member of the Institute	70 0 0	224	52	Widow of former member of the Institute	18 3 0
145	71	Widow of former member of the Institute	42 0 0	225	46	Widow of former marine engineer	18 0 0
156	71	Widow of marine engineer ...	69 0 0				
159	68	Marine engineer	44 0 0				£2,014 1 6

THE INSTITUTE OF MARINE ENGINEERS' GUILD OF BENEVOLENCE

Balance Sheet, 31st December 1957

1956				1956			
£	£	£	£	£	£	£	£
CAPITAL ACCOUNT				FIXED ASSETS			
29,902		Balance at 31st December 1956	28,660		The Guild House		
68		Life Membership Subscriptions	520	11,843	Freehold Property, St. Floras Road, Littlehampton, at net cost	11,970	
346		Donations	464		Furniture and Equipment at cost	£2,103	
					Less: Depreciation	210	
<u>30,316</u>			<u>29,644</u>				
1,656		Less: Loss on Sale of General Investments		2,106			1,893
	<u>28,660</u>		29,644				<u>13,863</u>
				13,949			
REVENUE ACCOUNT				GENERAL INVESTMENTS			
12,092		Balance at 31st December 1956	12,694	23,912	Government Securities (Market Value £15,933)	23,912	
+602		Less: Deficit for the year	40		Freehold Ground Rents		
	<u>12,694</u>		12,654		Balance at 31st December 1956	£7,975	
					Less: Proceeds of Sales	1,191	
							6,784
					Less: Depreciation Reserve	804	
				7,171			5,980
							<u>29,892</u>
	<u>46,057</u>		44,660	31,083			
					CURRENT ASSETS		
SUNDRY CREDITORS					Cash and Bank Balances	8	
20		Subscriptions received in advance	20	231	Income Tax Recoverable	536	
640		Expenses	102	562	Ground Rents accrued	32	
4,043		Bank Overdrafts	2,240	59	Relief Grants paid in Advance	48	
				108	Sundry Debtors and Prepayments	281	
				65			
	<u>4,703</u>		2,362				905
							<u>44,660</u>
	<u>46,057</u>		44,660	1,025	THE JOHN SILLEY MEMORIAL FUND INVESTMENTS		
				46,057	27,886	Government Securities (Market Value £18,604)	27,886
					1,133	Uninvested Cash	1,133
							<u>29,019</u>
					29,019		
THE JOHN SILLEY MEMORIAL FUND					THE JAMES M. DEWAR MEMORIAL FUND INVESTMENTS		
29,008		Balance at 31st December 1957	29,019	12,033	Government Securities	12,033	
11		Add: Premium on Redemption of 2½% Defence Bonds		11,362	Commercial and Industrial Stocks and Shares (Market Value £21,834)	11,362	
	<u>29,019</u>		29,019				
				23,395			23,395
				3			650
							<u>24,045</u>
				23,398			
THE JAMES M. DEWAR MEMORIAL FUND							
23,398		Balance at 31st December 1956	23,398				
		Additional amount received from Trustees	647				
	<u>23,398</u>		24,045				

REPORT OF THE AUDITORS TO THE MEMBERS OF THE INSTITUTE OF MARINE ENGINEERS' GUILD OF BENEVOLENCE

We have examined the above Balance Sheet with the Books and Vouchers of the Guild and have obtained all the information we have required. In our opinion it is properly drawn up so as to exhibit a true and correct view of the state of the Guild's affairs according to the information and explanations given to us and as shown by the books of the Guild.

WEST & DRAKE,
Chartered Accountants.

SARDINIA HOUSE,
52, LINCOLNS INN FIELDS,
LONDON, W.C.2.
12th March 1958.

£98,474

£97,724

£98,474

£97,724

Annual Report of the Guild of Benevolence

REVENUE ACCOUNT for the year ended 31st December 1957

1956	£	£	£	1956	£	£
2,333	RELIEF DISTRIBUTED		2,014	323	MEMBERS' SUBSCRIPTIONS	406
	THE GUILD HOUSE			—	PROFIT ON CHARITY BALL	1,121
	Deficit for the year, brought from The Guild				INVESTMENT INCOME	
755	House Revenue Account...		2,703		Interest and Dividends	
	ADMINISTRATION EXPENSES				John Silley Memorial Fund	891
33	Printing and Stationery	143		853	James M. Dewar Memorial Fund	1,357
18	Postage	21		1,274	General Investments	865
42	Audit Fee	42		1,018	Bank Interest	—
12	Legal and Professional Charges	4		4	Ground Rents	271
23	Sundries	24		346		
				3,495		3,384
128		234			— DEFICIT FOR THE YEAR CARRIED TO	
602	Surplus for the year	—			BALANCE SHEET	40
£3,818		£4,951		£3,818		£4,951

THE GUILD HOUSE REVENUE ACCOUNT Year ended 31st December 1957

1956	£	£	£	1956	£
	SALARIES AND WAGES				
254	Warden	556		—	CONTRIBUTIONS FROM RESIDENTS AND LOCAL AUTHORITIES
29	Domestic Staff	330			
95	Gardener	308		16	COTTAGE RENT
378		1,194		105	Donation
	HOUSEHOLD MAINTENANCE				DEFICIT FOR THE YEAR
203	Provisions	826		755	carried to General Revenue Account
13	Laundry	95			
64	General and Water Rates	163			
11	Insurance	25			
159	Light and Heat	383			
6	Telephone	29			
11	Renewals and Replacements	75			
8	Cleaning Materials	38			
—	Income Tax—Schedule "A"	14			
—	Repairs	271			
—	Garden Implements and Seeds	20			
—	Poultry-keeping Expenses	58			
23	Sundries	65			
498		2,062			
—	TRAVELLING EXPENSES	44			
—	DEPRECIATION OF FURNITURE AND EQUIPMENT	210			
—	POCKET MONEY ALLOWED TO RESIDENTS	97			
£876		£3,607		£876	£3,607