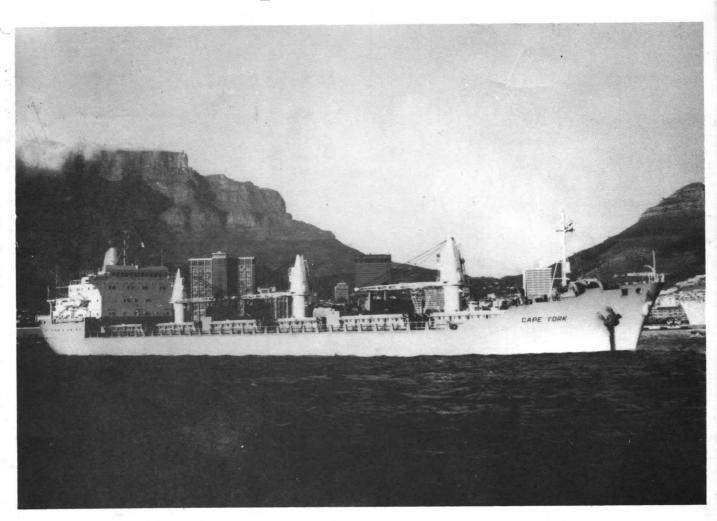


TRIAD

Scottish Ship Management Limited



M.V. "CAPE YORK"

NO. 22 SUMMER/AUTUMN 1974

EDITORIAL

We have to report that, unfortunately, for family and personal reasons, Mr. Gordon S. Morris tendered his resignation as Managing Director on 15th October, 1974. One of his first tasks after his appointment was to negotiate the independence of S.S.M. and to establish it as a separate trading company. He worked with enthusiasm and had a real desire to see S.S.M. progress and flourish. He will be missed and he has our good wishes for a successful future.

It is the intention of the Board of S.S.M. to appoint a new Managing Director in due course but it will be readily appreciated that it takes time to find the right man for this post and the Directors feel that in the meantime it is important to appoint someone to act as Chairman. Therefore, they have pleasure in announcing that they have appointed Mr. T.S. Shearer to act in this capacity. They also have pleasure in announcing the appointment of Captain Peter Smith to the Board as Director - Marine and Personnel. Both these appointments became effective as from 21st October, 1974.

The last ship to be re-engined - "Baron Wemyss" - left Amsterdam in September after completing successful sea trials and we are sure you will all understand that this marked the end of a very unhappy saga which caused a great deal of hard work and worry, not only to those at Head Office, but also to nearly all who sailed in the ships which eventually had to be re-engined. All of us hope that we can now lock forward to a long period of efficient and trouble-free operation and maintenance of these vessels. Fortunately, the running of the Stork Werkspoor medium-speed engines is proving most encouraging.

It would, however, be extremely remiss if we closed this unhappy chapter without expressing our gratitude and sincere thanks to the two companies in Amsterdam who have worked so closely with us and so well for us during the re-engining period. We refer, of course, to the Amsterdam Drydock Company and the maunfacturers of the engines, Messrs. Stork Werkspoor Diesels. Both these companies have given us complete satisfaction and tremendous co-operation and we would like to record in TRIAD our grateful thanks. There is no doubt that a well satisfied customer is the best advertisement any company can have and we fall into this category. We would also like to take this opportunity to thank all our superintendents who have spent so much time and effort during the past four years, first maintaining and then re-engining these ships.

You already know that Lyle and Hogarth are each building two 26,000-ton bulk-carriers at Govan Shipbuilders Ltd. The first of these is expected to enter service in November/December, 1975 and Lyle have chosen the name "Cape Ortegal" for this ship. This will be their fourth "Cape Ortegal", the first being built as long ago as 1911. The second Lyle vessel will be named "Cape Rodney". Hogarth have chosen two well known names for their vessels - "Baron Napier" and "Baron Pentland". There have been two previous "Baron Napiers" and two previous "Baron Pentlands".

Other items of interest are, of course, the design of our new house flag and the fact that we have appointed our first female cadet. Surely this is a milestone and we wish her well and look forward to the day when we will be able to announce that she has obtained her first Certificate of Competency.

In the interests of economy we do not propose changing the house flag on the TRIAD covers until the present stock is exhausted. The new flag will, of course, appear in due course.

For the future we now have a fleet of thoroughly modern ships and it is up to everyone on board and in the Office to strive constantly for increased efficiency and profitability because in these times of inflation and financial pressures increased profitability is absolutely essential if the future of us all is to be safeguarded. We are sure that, despite the uncertainties of the present time and the evils of inflation, with the re-engining programme behind us we can look to the future with confidence but ultimately our success depends upon the enthusiasm, goodwill and co-operation of all those who work for S.S.M.

We are sorry that TRIAD is making a somewhat late appearance on this occasion, the result of illness during the later stages of production.

OFFICE NEWS

Mr. John P. Walkinshaw joined the Board of Hogarth Shipping Company Limited on 28th June, 1974.

As mentioned in the Editorial, Captain Peter Smith joined the Board of S.S.M. Ltd. on 21st October, 1974.

Captain Smith joined Lyle Shipping Company Limited in July, 1948, sailing on "Cape Howe" as Second Officer. Two years later he joined "Cape Verde" as Chief Officer and sailed in that capacity on five "Capes" before being appointed Master of "Cape Hawke" during February, 1957.

After that, he commanded various Lyle ships and, after the formation of S.S.M. in 1968, his commands included various "Barons" as well - his last command being "Baron Renfrew". From that ship he came ashore in September, 1970 and joined the Office Staff as Assistant Marine Superintendent.

Mr. W. Moore, Chief Engineer, has come ashore and is now with the Technical Depart--ment as an Engineer Superintendent.

Captain P. Cooney has also come ashore and joined the Staff as Assistant Marine Superintendent.

The undernoted have also joined the Staff in recent months:

Mr. G. Burgess, as Technical Administrator, on 15th August, 1974.

Mr. J. Wort as an Engineer Superintendent with the Technical Department.

Mr. W. Cooper, on 5th August, 1974, as Assistant to Mr. David Gray.

Miss Margaret Mither, as Telephonist/Receptionist, on 8th July, 1974.

Mrs. P. Adams, on 22nd July, 1974, as Secretary to the Managing Director.

Mrs. E. Chambers joined the Operations Department on 29th July, 1974.

Miss Yvonne Anderson, as Receptionist/Typist.

Mrs. E. Price joined the Spares Department on 20th August, 1974.

Miss M. Gray on 16th September, 1974, as Secretary to Mr. J.G. Marshall.

J. Lannigan, on 23rd September, 1974, as an Office Junior.

Miss Marilyn Taylor left S.S.M. in August to join the Hogarth Staff as Secretary to Mr. M.B. Cheales. She takes the place of Mrs. Rita Aitken, who has left to live in Leven, Fife.

We are sorry to have to report that Mr. W.A. Taylor, Marine Accounts Department, has been away from the Office for some weeks owing to illness. We are glad to say he is progressing favourably and look forward to his return before too long.

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Our congratulations to Mr. and Mrs. Robert Gardiner on the birth of their daughter.

Congratulations are also due, somewhat belatedly we fear, to Miss Pat Ralph on her engagement to Mr. Gordon McBride on 2nd March, 1974.

PERSONNEL NEWS

Congratulations are due to Mr. A. Logan on successfully gaining his Second Mate's Certificate.

Congratulations also to Messrs. I. Rennie, N. Sewell, P. Gray, R. Healey and A. Harris on successfully completing their Cadetships. All are now sailing as Junior Engineer Officers within the fleet.

The following seagoing personnel met their match during recent months and we wish them every happiness: Mr. M. Smith, Chief Officer; Mr. D. Lloyd, Second Officer; Mr. A. Nisbet, Second Officer; Mr. D. Fitzpatrick, Third Officer; Mr. J. Watson, Third Engineer; Mr. G. Dunn, G.P. Cook.

Two well known members of the Catering Department, Mr. W. Gray and Mr. J. MacGar-vey, will shortly be seeking new pastures in Australia and we wish them well.

COVER PHOTOGRAPH. The Cover Photograph of "Cape York" was taken by Mr. J.K. de Vries, Marine Photographer, Cape Town. No prize is offered for spotting a fairly obvious feature in the photograph which dates it.

FLEET NEWS (as at 23rd October, 1974)

"BARON ARDROSSAN" arrived at Surabaya on 22nd October and expects to sail about the 25th of the month. From Surabaya she will sail to Port Hedland and there load for Mount Maunganui and on completion of discharge in New Zealand will load in Australia for Japan. From Japan she will cross the North Pacific and load on Time Charter for Australia.

"BARON BELHAVEN" is presently on passage from Port Esquivel to Blyth and is expected at the latter port on 1st November. She will be approaching Blyth from northabout. She continues on Time Charter.

"BARON CAWDOR" sails from Macassar on 23rd October after completing discharge and returns to Australia, indicated Brisbane, to load again for Indonesia.

"BARON DUNMORE" sailed from Nauru on the 16th October and arrived Newcastle, N.S.W. to discharge.

"CAPE GRAFTON" has loaded at various British Columbian outports and sailed from Tahsis on the 17th October for Sydney, N.S.W. where she is due on or about the 6th November. She will also discharge at Melbourne and Adelaide and thereafter will shift to Port Pirie to load for Antwerp or Avonmouth.

"CAPE GRENVILLE" sails from Newcastle, N.S.W. after loading on the 24th October for Honolulu and after completing discharge at the latter port will sail for British Columbia to load, on Time Charter, for Australia.

"CAPE HORN" is on Time Charter to Canadian Transport and is expected at Hobart on the 24th October to continue discharge, thereafter calling at Melbourne and Adelaide to complete. She should be re-delivered on or about the 11th November. She will then move to Port Pirie to load for Avonmouth or Antwerp and on completion of that cargo will sail for El Aaiun, Spanish Sahara, to load for Japan.

"CAPE HOWE" is due at Kirkenes on the 24th October to load for Newport, Mon. She continues on Time Charter.

"BARON INCHCAPE" After loading part-cargo at Port Pirie, this vessel completed loading at Esperance and sailed from there on the 14th October for Japan, where she will discharge at Niihama and Shikama. On completion in Japan, she will sail for Nauru to load phosphate for Western Australia.

"CAPE LEEUWIN" After drydocking at Avonmouth, this ship sails from that port on the 25th October for El Aaiun, where she will load for Japan. En route she will call at Durban for bunkers.

"BARON MACLAY" sailed from Lumut on the 22nd October after completing discharge and will call at Singapore to replenish bunkers during passage to Western Australia to load cargo for Indonesia. On completion, she will carry out a repeat voyage.

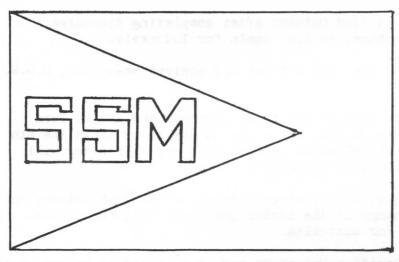
"CAPE NELSON" sails from Birkenhead on the 25th October and will probably load at Kirkenes for Newport, Mon. She continues on Time Charter.

"CAPE RACE" sailed from Rotterdam p.m. on the 23rd October after drydocking and is ballasting across to Smalkalden to load for Chaguaramus. She also continues on Time Charter.

"BARON RENFREW" is on Time Charter and arrived at Auckland on the 23rd October to discharge part-cargo. She hopes to sail from that port on the 26th October and moves to Napier, then Whangarei, to complete discharge. From New Zealand she sails for Nauru or Ocean Island to load phosphate for Western Australia and on completion of that voyage will load phosphate at Christmas Island for Eastern Australia.

NEW S.S.M. HOUSE FLAG

The response to the House Flag Competition announced in the last edition of TRIAD was excellent - the large number and high standard of entries creating quite a problem for the panel of judges. However, after considerable discussion and deliberation, a decision was reached and the final design chosen is reproduced here. The winner of the first prize was Mr. James Daly, a member of the Personnel Department here at No. 40; there were two runners-up, these being Second Officer L.G. Morison and Mrs. P. Paget, the wife of Third Officer John Paget. Also, an excellent design was submitted anonymously with the suggestion that should it qualify for a prize, that prize money might go to the R.N.L.I. It did qualify and accordingly the prize money of £5.00 was donated to the R.N.L.I., whose letter of acknowledgement is reprinted on the next page.



Colour Scheme

Letters

: Red

'Triangle' or

'pennant' portion

: White

Main Field

: Dark Blue

(the shade of blue might be described as 'french navy')

NEW S.S.M. CAP BADGE

The accompanying photograph of the new S.S.M. Cap Badge is to actual size. It is hoped that badges will be available very shortly. The Badge colours are:

Laurel Leaves and Sea-horse:
Gold
Background of central shield:
Red
Merchant Navy Coronet:

Merchant Navy Coronet:
Gold Colour



In addition to the new Cap Badge, the undernoted items are available, or will be shortly:

Tie Car Badge T-Shirt

25th September, 1974.

G.S. Morris, Esq.,
Managing Director,
Scottish Ship Management Ltd.,
40 Buchanan Street,
Glasgow, G1 3JZ.

Dear Mr. Morris,

I have much pleasure in acknowledging receipt of your cheque for £5.00. I was most interested to read how this donation had come to us and would ask you kindly to convey my thanks and gratitude to the gentleman concerned for allowing the R.N.L.I. to benefit from his prize money.

Please find enclosed my official receipt.

Yours sincerely,

for G.E. Paton (Glasgow Branch Organiser)

M.B. Brown.

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Our first lady cadet

Miss Linda Craig Forbes has joined S.S.M. as the Company's first lady cadet and on the 18th October she flew out to Newcastle, N.S.W. to join the "Cape Grenville" as a Navigating Cadet after having completed a two-week pre-induction course at Glasgow's College of Nautical Studies.

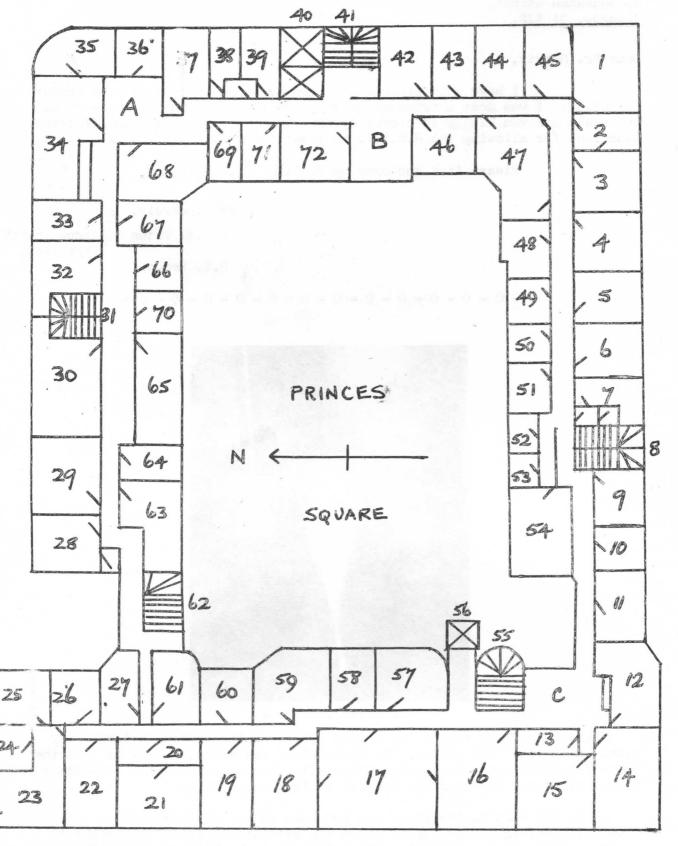
Linda was born in Inverness and her home is now in Cumbernauld. She attended Lesmahagow High School where she obtained no fewer than eight 'O' Levels, all Grade A. After leaving school Linda worked with the Milk Recording Association in Dumfries—shire. She is a keen swimmer and owns a motorcycle! Her father is a pharmacist.

We welcome Linda to $S_*S_*M_*$ and feel sure that she will prove a real asset to the Company.

OFFICE PLAN OF 40 AND 48 BUCHANAN STREET

The last Office Plan appeared in TRIAD No. 9 (Summer, 1970) and since then there have been a considerable number of changes — in personnel, the actual situation of departments, and also in structural alterations within the Office.

Therefore, it is time to provide an up-to-date plan, which appears here and supercedes the one mentioned above.



BUCHANAN

KEY

	OFFICE PLAN	- KEY	
	Victorial and Principal and bayongs		
1.	Board Room.	37。	Secretaries.
2.	Mrs. M. Cree.	38.	Gentlemen's Washroom.
3.	Mr. H.A. Walkinshaw.	39.	Ladies Washroom.
4.	Mr. A.C. Hogarth.	40.	Lifts (2) to Princes Square.
5.	Mr. T. Noble.	41.	Stairs to Princes Square.
6.	Mr. M.B. Cheales.	42.	Mr. J.P. Agnew.
7.	Gentlemen's Washroom.	43。	Mr. J.N. Maclean & Mr. D. Clark.
8.	Emergency Stair (to lane).	44.	Mr. J.T. Marshall.
9.	Ladies Washroom.	45。	Mr. H.L. Brodie.
10.	Directors Washroom.	46.	Mr. J.P. Walkinshaw.
11.	New P.A.B.X. Room.	47。	Conference Room.
12.	General Office and Telex.	48。	Miss L. Burke.
13.	Mr. D. Border.	49。	Miss M. Taylor.
14.	Managing Director.	50.	Miss E. Templeton.
15.	Secretaries.	51。	Mr. A.A. McAlister.
16.	Purchasing Department.	52。	Old P.A.B.X. Room.
17.	Technical Department.	53。	Ships Stationery Room.
18.	Technical Managers.	54。	Printing and Store-room.
19.	Mr. N.K. Bowers.	55。	Stairs to Buchanan Street.
20.	Technical Library.	56.	Lift (1) to Buchanan Street,
21.	Mr. Foo Lo.	57。	Computer Room.
22.	Captain R.D. Love.	58。	Mr. J. Brown.
23.	General Accounts.	59。	Computer Programmers.
24.	Mr. W. McMillan.	60.	Mr. J.G. Marshall.
25.	Mr. R.W. Forrest.	61.	Ladies Washroom.
26.	Cash Department.	62.	Emergency Stair (to lane).
27.	Gentlemen's Washroom.	63。	Store-room.
28.	Mr. W.M. Scott.	64.	Mr. W. Anderson.
29.	Operations Department.	65.	Mail Room.
30.	Accounts and Costing.	66.	Interview Room.
31.	Emergency Stair (to lane).	67.	Mr. J. Begg.
32.	Marine Accounts.	68.	Chartering Department.
33.	Mr. D. Gray.	69。	Miss S. Clark.
34.	Personnel Department.	70.	Directors' Washroom.
35.	Typists	71。	Mr. T.S. Shearer.
36.	Mr. H. Clark.	72.	Mr. R.M. Gibson.

Reception Areas. C.)



Mr. Duncan M. Campbell

Duncan Campbell joined S.S.M's.
Marine Accounts Department in May,
1972 as a replacement for the other
Duncan, who was due to retire namely Captain Duncan M. Taylor.

Duncan (Campbell) was previously employed by The Fairfield Ship-building & Engineering Co. Ltd., Govan, Glasgow, and then by The John Brown Engineering Co. Ltd., Clydebank, as a Wages Supervisor.

Duncan is married, has two young children, and lives in Glasgow. His hobbies include D.I.Y. and stamp-collecting.

Miss Marilyn Taylor

Marilyn Taylor joined Scottish Ship Management Ltd. on 6th March, 1972 as a Shorthand Typist to the Marine Accounts Department. She was promoted on 1st June, 1972 as Secretary to Mr. J.G. Marshall, Financial Director, and in August, 1974 Marilyn joined the staff of Hogarth Shipping Co. Ltd. as Secretary to Mr. M.B. Cheales.

Marilyn's interests are varied, but top priority is given to driving, playing squash and table-tennis, and being au fait with the words of just about every popular song published, thus being well equipped to provide background music for most moods and occasions.



Mr. Walter McEvilly

Walter McEvilly was born in Salford, Lancashire, and attended schools in that area.

His first employment was with J.W. Jackman Foundry Engineers, with whom he was an Apprentice Engineer, and in February, 1940 he joined the Royal Navy as an Engine-room Artificer. During his naval service he served mainly in cruisers, destroyers, frigates and depot ships. He left the Navy in February, 1967 with the rank of Chief Engine-room Artificer and joined The Fairfield Shipbuilding & Engineering Co. Ltd. as Assistant Chief of Tests and Trials.

Walter left Fairfields in January, 1971 and joined S.S.M's. Purchasing Department as Spares Controller. He is married, has a son and daughter, and his main hobbies are golf and walking.



THE ROYAL ALFRED MERCHANT SEAMEN'S SOCIETY

The Royal Alfred Merchant Seamen's Society has been mentioned before in the pages of TRIAD and we glad to again draw the attention of readers to the Society and to print an article about it, written by their Honorary Public Relations Officer.

In the early part of the nineteenth century it would have been fairly true to say of the sailor -

'Where he goes and how he fares,
No one knows and no one cares'.

But, mercifully, things have changed since those days and the needs of the seafarers are being better understood.

Seamen's Societies and Funds have been formed to cater for 'Those who go down to the sea in ships', and indeed their dependants.

The Royal Alfred Merchant Seamen's Society has its own particular story of over a hundred years.

The original aim was to provide accommodation for retired seamen and a small pension for those men with good service who did not require residential help.

Subsequently, any seaman of British nationality who, through no fault of his own, has been rendered temporarily, or in many cases permanently, incapacitated has been considered eligible for aid. Widows of seamen may also apply. In that respect the wars exacted a heavy toll.

In 1958 the old Belvedere Home was demolished and was replaced by a building to suit modern requirements - the additional amenities are a tremendous help to a most dedicated staff and, of course, make it much more comfortable for the residents. In more recent years the Ladies' Home at Eastbourne and the Housing Association at Banstead were opened. Both establishments provide separate accommodation for each resident and public lounges are also available.

The tenants at Banstead look after their own flatlets but a married couple, who are the Wardens, are responsible for the care and maintenance. They help in cases of temporary illness. If, in later years, members require more care and personal nursing they may be moved to the Hospital Wing of the Home at Belvedere.

The general administration is done from the Head Office at Banstead, but with some 3,000 beneficiaries from all parts of the British Isles, the individual problems and needs require a personal approach from a local representative. This quite invaluable service is carried out by some 140 Honorary Agents. They give most generously of their time and care - possibly saving the Society thousands of pounds by their enquiries and in the disbursement of awards. How much their friendship must mean to a lonely pensioner or a family bearing a heavy burden of bereavement.

Perhaps for at least some the Society does provide what John Masefield had in mind when writing 'Sea Fever':

'And quiet sleep and a sweet dream When the long trick's over'.

Correspondence and enquiries should be addressed to the General Secretary, Royal Alfred Merchant Seamen's Society, 'Weston Acres', Woodmansterne Lane, Woodmansterne, nr. Banstead, Surrey, SM7 3HB.

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A.J. Weight

Just four minutes from BCAL's new Glasgow Sales Centre in Buchanan Street is British Rail's Queen Street Station - terminus for commuters and tourists alike.

The West Highland Line - the railroad to the Isles - starts here. It is a journey strongly to be recommended for railway 'Buffs' and camera toters too; quite simply, this is a trip you shouldn't miss.

From the window of your compartment you will see some of Scotland's most beautiful and wildest scenery, and you won't be in the driving seat! It is a 165 mile run up to Mallaig and if you know your history a 'wee' bit, this is a journey into Jacobite country, for your **trip** is heading towards Glenfinnan where the clansmen raised the Standard for Bonnie Prince Charlie on 19th August, 1745. So there began the ill-fated rising which had the English in a panic, came close to changing the course of British history, but failed a year later at the Battle of Culloden with the Hanoverian 'Butcher' Cumberland victorious but the Prince and his Highlandmen in terrible, tragic disarray.

Your big diesel-electric-hauled train pulls out of Glasgow, along through the tight townships of the Clyde, passing through Singer - yes, named after the famous international sewing machine company whose plant sprawls alongside the line, on past Dumbarton Rock with its most ancient castle watching over the Clyde Narrows, past the Tail of the Bank out there - the big ship anchorage known to mariners everywhere - and the line starts to climb into the Dunbarton-shire hills. Industry left behind you now, with your train paralleling the Gareloch from high up, the Gareloch once again active in Navy affairs for down there is Britain's nuclear deterrent submarine base.

Down to your left through the woods now, Loch Long. Fine camera shots of the rocky skyline of Cowal's hills and a quick glimpse of Loch Goil, a true fiord in miniature and of great beauty. Into this great deep loch come the oil tankers from the Persian Gulf, deep-draughted, from two crossings of the Equator round the Cape, they come here to discharge their oil to be pumped eastwards over the mountains to Grangemouth fifty miles away. What a haven for the tankermen, this lovely loch, to deep-breath the clean, unpolluted air after the heat of the Gulf and the thick air of the tropics.

Into Arrochar station now, short stop, and to your right the most famous loch of all - Loch Lomond. Glasgow's own Ben Lomond up there dominating all around and the broken country of Stirlingshire beyond. This is the finest scenery near to a great city in Britain. The train climbs on, through Ardlui and northbound into Perthshire. The Falls of Falloch to your starboard, bens galore to your port side. A halt at Crianlarich for a few minutes, below, the rail and road to Oban, and away you are climbing on to Tyndrum towards the wilds of the county of Argyll. This is Campbell country. The name Argyll translated from the Gaelic, means 'coastland of the Gael', probably Scotland's most scenic county and this is one part of Scotland the Romans, way back, never dared to invade. Tiny Tyndrum is a centre for climbers, but the craggy heights around and about are not for the first-timer or the careless.

As your West Highland train pulls away for Bridge of Orchy it swings through the famous Horeshoe Curve and on past Loch Tulla. Keep your camera handy now and it's hard to realise Glasgow's sprawl and $l^{\frac{1}{2}}$ millions are now only sixty miles behind. Now begins the crossing of the Rannoch Moor; deer abound here and in winter come down to the line. This is as wild and inhospitable country as almost anywhere in Western Europe and it is not the place to be caught unprepared in winter. The laying of the rail track on which your train is riding now was a formidable accomplishment back in the 1890's, Rannoch Moor being one vast, boggy plain and the engineers had to lay immense amounts of brushwood fascines, then thousands of tons of 'spoil' atop before a single iron rail could be laid down. Lonely Rannoch station, reminiscent perhaps of 'The Ghost Train' legend, then through Cruach Cutting. Watch out there for the only snow fence anywhere in Britain. Snow comes real heavy hereabouts, winds up to hurricane force, and the

snowfences are essential for the line to stay open. Just for the record, wee Rannoch station's waiting-room becomes - for an hour only on Sundays - the local church.

Into Inverness-shire now, over the Blackwater River, leaving behind the barren stretches of Rannoch and, if you're a birdlife fan, come back this way and stay around - this whole area is one huge nature reserve and bird sanctuary. At Corrour our rail track is at its summit of the whole trip, 1,350 feet above sea level, and now your diesel locomotive and its long train behind has an easy down gradient all the way into Fort William, twenty miles away. Be ready to your left for the Monessie Gorge, four miles beyond lonely Tulloch station. Lean out and look down, you might get that 'trick' shot that makes good camera for the folks back home.

Along these few miles of track snow storms have stopped the trains during the historically bad winters this century and Tulloch station once completely disappeared for days beneath the snow and ice. As you enter Roy Bridge you are in the country of the last great clan versus clan battle - Macdonnells versus MacIntoshes - and the bows and arrows were used too! It's a gory kind of history written hereabouts. Over yet another viaduct and to your starboard side the Commando Memorial at Spean Bridge - did you know that more than half of Britain's famous Commandoes were Scots? - and it is right and proper that here, in the heart of the Lochaber country where they trained, that this fine memorial should stand.

And so down into Fort William, key town of the West Highlands, tourist centre for the southern part of Inverness-shire. Your train halts awhile right along-side Loch Linnhe, fresh clean Highland breezes blow here and mountaineers from all over Britain come this way to test their skills up among the corries of Ben Nevis, Fort William's own mountain and Britain's highest. Snow lies thirty feet deep up there in places in August and on fine days down here at railroad track Ben Nevis looks so disarmingly peaceful and innocent but up there Atlantic-born gales can sweep across the craggy tops at eighty miles per hour plus.

Leave Fort William now for the final forty mile stretch to Mallaig and the end of the line. Now you'll soon be deep in loyal Jacobite country, the country of clans and white cockades. Along gentle Loch Eil, a climb to the rocky outcrops around Glenfinnan. Magic place to all true Jacobites! Down there to the left of the railway stands a slender tower, memorial in stone to this place where, in August 1745, the faithful gathered around the Bonnie Prince and the Seven Men of Moidart turned out - clansmen ready - to raise the standard of the 'true king' and start the march on Edinburgh with their hearts set on London and the over--throw of the usurper. Down through these lovely glens they came, tough clansmen, to follow their chiefs and do their bidding for Prince Charles Edward, newly come from France. Your train window brings all this history and all this magnificent scenery of sea loch and glen and wherever you travel in Scotland you'll see no better scenery. You are now on the true 'Road to the Isles' of legend and song. If your name is Macdonald or Macdonell, Gordon or Grant, Cameron or Stewart, maybe you had an ancestor hereabouts that fateful day! And, by the way, the clans still gather here on the Saturday nearest to that historic date, August 19th, every year and it's a gathering to impress with its colour, its quiet simplicity.

Next station Lochailort now, only a few minutes before the head of Loch Nan Uamh down there again to your left - you'll have to be quick - on the rocky shore is a simple cairn marking the spot where the fugitive Prince, on a sad day in September, 1746, defeated and dishevelled, his forces in complete disarray, wearily embarked for France and final exile, never to return to Scotland. Across the track, amongst the hills, is the Borrodale Burn where the Stuart Prince hid from the close-searching Redcoats, a price on his head, waiting desperately for his friends from France to take him away and run the English blockade. Away there to the west see the islands offshore - what a magnificent seascape this is - as your train crosses the estuary of the River Morar and you see those magnificent white sands. Two more miles and into Mallaig, end of the line and terminus on this wild and lovely coast - gateway to Skye and the Western Isles. You've made a journey you'll long remember and you will want to answer that hospitable Highland call - 'Haste ye back'.

BROOKLANDS

There are motor-racing circuits in many parts of the world which have become so well-known that they are practically household names. But one of the most famous still, although no longer in existence, is Brooklands.

Brooklands officially opened on the 17th June, 1907 - the world's first true motor-racing circuit - and was situated near Weybridge, in Surrey. A vast, concrete amphitheatre, it was the idea of one man, H.F. Locke-King, the owner of the Brooklands Estate between Weybridge and Walton-on-Thames. He had for long considered providing a track where the then young motor industry could test their cars to the limit and after consultation with various leaders in the industry construction started in September, 1906. It was three miles in length.

The two curved ends were steeply banked to enable cars to travel round them at speeds of up to 120 m.p.h. Indeed, at such speeds cars would follow the curve, held on their course by centrifugal force without requiring to be steered (provided, of course, they were on the correct line as they entered the banking!) These two bankings were known as the Byfleet Banking and Members! (or Home) Banking.

The influence of Brooklands on other race-tracks was world-wide and two examples which immediately spring to mind are Indianapolis in the U.S. and Mountlhery in France. The 'inauguration' of Brooklands took place on Friday, 28th June, 1907 when S.F. Edge, in a 60 h.p. Napier, lapped the course for 24 hours, covering 1,581 miles, 1,310 yards and averaging a speed of almost 66 m.p.h.

The first actual race at the track was held on Saturday, 6th July, 1907 when a crowd of over 15,500 watched the racing. At that time there was a speed limit on British roads of 20 m.p.h. so the opportunity of seeing cars moving round the track at 100 m.p.h. or more was certainly a novel one and bound to be a crowd-puller.

By building Brooklands Locke-King incurred the wrath of many of his neighbours, some as early as 1899 had objected most strongly when he used three Daimler lorries on his own estate. Although unable to prevent the building and use of Brooklands, they were successful in having all night racing banned, probably encouraged in this move by Edge's record run which must have resulted in a sleep-less night for many in the district. However, it was not until the 1920's that the fitting of silencers on cars became compulsory. On the other hand, of course, the track must have brought much trade to the district.

The first Clerk of the Course, E. de Rodakowski, must have been a horse-racing man at heart for he decreed that drivers competing must wear coloured smocks, suggestive of jockeys' apparel, and cars were not to be numbered. This made accurate following of a race difficult - or well-nigh impossible for anyone unfortunate enough to be colour blind - and it was not long before car-numbering was introduced.

By the start of the First World War in August, 1914 Brooklands was proving a real boon to the motor industry and confirming that car-racing was more than a sport in that it encouraged and resulted in improvements in design, engineering and handling. After the First World War Brooklands began to act as host to a much wider spectrum of the motor-racing and competition fraternity and it became possible to see racing there anything from a massive, aero-engined monster to a minute cycle-car or a dignified family tourer with mudguards removed.

The 1930's saw a more professional approach with the introduction of smaller, faster racing-cars and this gave Brooklands a new boost. However, the writing was on the wall for the circuit. Back in 1908 A.V. Roe had used the flying-ground in the centre of the track to test his triplane (at which time he became the first Briton to leave the ground in a powered, heavier-than-air machine). In the interests of economy, his triplane was covered in brown paper! After this flight the ground became a centre for aviators - real or would-be. Quite a number of aircraft manufacturers established factories at the field and the chief of these was Vickers. The result was that when war came again, in September 1939, Vickers Aviation took over the whole of Brooklands for aircraft production,

and after the war the Government sold Brooklands to Vickers. Unused and weed-grown, the circuit at Brooklands lay as a memorial to the countless cars and motorcycles, and their drivers and riders, who had raced there for over thirty years.

Brooklands was constructed of concrete, a bold decision in 1906 for at that time no public road in Britain had been built of this material. (In fact, the first road so consturcted is supposed to be St. Mark's Road, Chester, built in 1912 although some use, in a small way, had been made of concrete for road-making in the U.S. as early as 1898.)

Because it was a pioneer in the field, it was not known how a concrete surface would withstand the pounding it was bound to receive, but any other material would have been difficult, just as expensive, and no more reliable. Tarmacadam, too, was in its infancy and in any case, as it required a steam-roller to compact it, it would have been quite unfeasible for such places as the bankings.

Certainly, later troubles with the concrete surface were constant and this was probably due to the massive use of plain concrete without the reinforcement of steel rod or fabric. The troubles were cracking and uneven settling, both troubles being aggravated by the lack of expansion joints in such a large area of concrete.

The site in Surrey was chiefly heathland with a generous covering of trees and the first step in building was one of clearance. This was achieved in a 'traditional' manner, namely by a large labour force who lived on the site during the winter of 1906-07 in conditions of considerable squalor. A railway siding was specially laid to bring in materials and a number of locomotives were used exclusively on this work. It is an interesting theory that some of these locomotives are thought to have been used to assist in the building of the Manchester Ship Canal. Considerable use was also made of horses, who drew ordinary small builders carts but, a surprising point, considering the use to which the circuit was put, there is no record of any self-propelled road vehicles being used during construction.

In spite of the lack of mechanical assistance (apart from the railway), natural difficulties presented by the site, snow, flooding and the use of what was at that time a novel material, the contractors completed the work in forty-five weeks. The exact cost is not known, but it is thought to have been in the region of £250,000.

The following article, sent to us by Engineer Cadet R.A. Adcock, appeared originally in the Daily Mail and we are obliged the Editor of that newspaper for his permission to reproduce it here. (The appearance of this article in this particular edition of TRIAD is purely coincidential, bearing in mind a news item to be found elsewhere in this same edition!)

SAILING DOWN TO RIO.....YO HO HO AND A BOTTLE OF SCENT!

Most thrilling news item of the week? That five young ladies are taking their Second Mate's Certificate to become, with any luck, Britain's first female ship's officers. And some day soon.....

I was sipping a small pink gin in the dim ingle-nook of the Admiral Benbow, the evening quiet save for the soft thunder of the distant Devon surf and the spasmodic mew of a gull above the Sound, when the stillness was suddenly shattered by the unmistakable crash of crutch on swing-door.

A split-second later it burst open and a familiar figure hurtled into the snug on its one good leg, a terrible yellow smile on its pocky face. The mangy parrot, cursing on its tatty shoulder, gave a fearful shriek that set the pint-pots rattling on their hooks.

She swivelled expertly on her knotty peg, and fixed the eye on me. "Aha, Jim lad! she roared. 'I see 'ee ain't forgot the sea-farin' lady wi' one leg, heh, heh, heh! Buy us a black rum, Jim, an' I'll tell 'ee tales as'll make yer little eyes pop out o' yer dirty skull!'

I stood up and pulled out a chair, but her hook came down in a terrible, gleaming arc and nailed my sleeves to the table.

'Don't 'ee ever pull out a chair for Freda Silver!' she cried. I'll 'ave none of yer male chauvinist piggery, young Jim, an' ye can lay to that!'

She sat down, and the parrot swore.

'Where did you get the parrot, Long Freda?' I asked.

She downed the rum at a gulp and rolled the eye like a ballbearing.

'I picked 'im up in Ong Kong, Jim, off a 'eather Chinee. It was 'is green feathers as took me fancy. They go a treat wi' me new spring outfit. You got to watch 'is beak, though.

'Cap'n Flint'll 'ave a ladder in yer tights as soon as look at yer, heh, heh, heh!' I poured her another rum.

'What kind of trip have you had?' I inquired.

Long Freda spat, and the fire hissed. 'A curse on it from first to last, Jim, lad! she muttered. 'Two days out from Plymouth, we run into a nor'easter like 'ee never saw. Blew the crew's hair to pieces Jim, an' them not three days out o' Maison Dolores Salon. Not to mention where the false eyelashes was gettin' ripped off 'em 'an blowin' about the decks like bluebottles!

'The ship was cantin' to thirty degrees an' more, and 'ee knows what wedgies is like in them conditions, Jim. A girl can't keep her feet, it's worse than the ole bad days of stiletto 'eels, the ankles was breakin' like bloody pipe--stems!

'Just holdin' on to the rails was all we could muster, Jim, an' by the time the storm blew herself out, there wasn't a decent fingernail among us!

She clapped her good hand down upon the table, and I averted my eyes from the pitifully chipped varnish and that red roughness of the skin that only salt water can bring. I poured another tumblerful, and Long Freda took up the tragic tale.

'We was just puttin' into the Azores to take on fresh lipstick', she continued, 'when Dutch Maureen at the wheel sticks 'er left 'and out, turns sharp right and knocks down the lighthouse.

'Werl, naturally, a bit of a barney blows up then, anyone can see it's the bloody lighthouse's fault, damn silly place to stick a lighthouse, right out there in the middle of the ruddy sea where anyone can run into it!

'Anyway, the top an' bottom of it is, we was laid up two months wi' repairs an' insurance claims an' I doan know what else, an' damn-all to do of a Sat'day night in Ponta Delgada except sit in Filthy Pedro's an' booze an' swop stories an' chat up the local talent.

'The upshot of it is, Jim, by the time we puts out to sea again, the First Mate's pregnant an' 'alf the engine-room's got itself engaged to Pig Schulz from Bremerhafen an' every ten minutes a fight breaks out over who's turn it is to wear the ring an' while they're all rollin' about on the deck scratching one another's eyes out, the turbines seize up an' the boiler runs dry an' I doan know what else. Some days we ain't even got enough steam to dry our underwear'.

'I can see where discipline ----'.

'Discipline!' cried Long Freda, and the parrot sprang up at the cry and unleashed a torrent of filth in eight languages. 'Discipline was shot afore

'We was halfway across the Sargasso Sea when the First Mate comes to me saying ''ow about putting into Richmond, Virginia, an' pickin' up some maternity clothes. When I tells 'er our course is set for Barbados, she goes off weepin' an' next thing I know the half of the engine-room what's not marrying Pig Schulz comes clatterin' up on the bridge to demand the right to put in somewhere where there's white men.

'Doan I realise there's three of 'em down there practically ole maids, an' o' course that sets the bo'sun off, she never properly got over getting jilted up Scapa Flow when her intended run off wi' a stoker on account o' 'er 'havin' a bigger bust. We couldn't pull into Bridgetown for wailin' women lyin' in the gunwhales!'

Long Freda swilled the rum dregs and stared into them with monocular gloom.

'Where will it all end, Jim?' she murmured.

I cleared my throat.

'You have your hand on my knee, Freda', I said.

She looked up slowly and winked her terrible eye. 'Ye know what sailors are', she said.

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FOR YOUR FIRST TRIP CADET PONSONBY,
I'M SENDING YOU WITH CAPTAIN ...
WINTERBOTTOM ---- A COLD, STERN MAN!

FORGING ANOTHER LINK

Some readers will recollect that the cover photograph on TRIAD no. 9 (Summer, 1970) featured the then new Kingston Bridge over the River Clyde at Glasgow as seen from m.v. "CAPE HOWE" in her iron ore discharging berth at General Terminus Quay.

Since then, the bridge has become a familiar landmark and also a very useful means of permitting the rapid movement into and out of the city centre. It also forms a vital link in the system of new ring roads and motorways existing or presently being constructed in and around Glasgow which, when completed, will make the city one of the most modern in the world as far as road communications are concerned.

Another major link in this chain, which is presently being forged, is the section running west from the southern approaches to the Kingston Bridge to Shieldhall (near King George V Dock) where the M.8 Motorway runs past Abbotsinch (Glasgow) Airport and on to the Erskine Bridge and has now been in existence for a few years.

This latest link at Shieldhall involves the clearing away of a great deal of property (some old, and ready for removal, some not so old) and is creating a considerable amount of local upset. It also involves a tremendous amount of excavating and filling to form the foundations for the new motorway and, although some of the 'fill' required to make these foundations might be obtained in the immediate area, this particular stretch of country is very flat and therefore provides very little of the total amount of 'fill' needed. In addition, the nature of the ground in the immediate area calls for even more 'fill' than might otherwise be necessary to ensure firm foundations so a question was posed - from where is the 'fill' to be obtained? It was well known that a vast quantity of suitable material lay thirty miles to the east of Shieldhall with Glasgow and the River Clyde lying between. This source was the huge shale-oil pit bings which have dominated the West Lothian landscape for decades and which are composed of material ideal for road construction - if little else. But the great problem was, how to get $1\frac{1}{2}$ million tons of the stuff from West Lothian to East Renfrewshire in sufficient quantities and at a high enough speed to enable road construction to proceed at a brisk pace? Immediately, the awful spectre arose of columns of vast dump-trucks trundling endlessly, twenty-four hours a day, seven days a week, through an already conjested Glasgow and over the Kingston Bridge.

As is so often the case, the obvious solution proved to be a simple one; namely, avoid road transport altogether and use the railway. One says 'obvious' because there is already in existence a direct rail connection between the construction site at Shieldhall and the pit bing earmarked lying at Deans, a village in West Lothian. Suitable sidings did require to be provided, but this was a comparatively simple matter - one at the construction site and the other into the centre of the bing. Agreement was reached between the three parties concerned - British Rail, the motorway contractors and the bing owners.

The result is a round-the-clock operation. Every twenty-four hours nine special trains, hauled by two diesel locomotives working out of British Rail's Bathgate depot, leave the siding at Deans bing and commence a two hour journey to Shieldhall. Each train is made up of thirty-six standard four-wheel hopper wagons, making a total weight of blaes hauled by each unit of 750 tons.

Very largely, this operation is going on totally unnoticed by the public, except perhaps for an occasional glimpse of a blaes train waiting at signals to let an electric commuter passenger train through. Their very unobtrusiveness is a measure of their success - a success which is all the more commendable when it is appreciated that the fitting of these blaes trains into the general working of the heavily used electric lines north and south of the Clyde has called for considerable skill in traffic control.

QUIZ.

- 1. Name the two points in Sydney Harbour joined by the Sydney Harbour Bridge.
- 2. What is the link between the American Civil War and the German airship "Graf Zeppelin"?
- 3. What happened at Tottenham Corner, Epsom, on 31st May, 1913?
- 4. What was the "Brabazon"?
- 5. What is the national bird of Iceland?
- 6. Name the largest county in North Ireland.
- 7. What is the trade union of British actors?
- 8. Who was Lord Haw Haw?
- 9. In place-names ending in 'wich', such as Sandwich, Greenwich, etc., what does 'wich' mean?
- 10. Which town lies at the confluence of the Rivers Rhine and Moselle?
- 11. St. Pancras is a well-known London railway terminus. Which railway built it?
- 12. Name the famous pianist and composer who became president of his country.
- 13. On which river is the Kariba Dam?
- 14. Name the highest mountain in North America.
- 15. What are 'Appleton Layers'?
- 16. In which year was the St. Lawrence Seaway opened?
- 17. In which Dutch town was Rembrandt born?
- 18. Name the first 'Liberty' ship to be built.
- 19. What is the greatest height at which a bird has been observed flying?
- 20. Which French Revolutionary figure held a medical degree from St. Andrew's University?

(Answers on Page 23)

CAPTAIN DUNCAN MCGREGOR

After an absence abroad of ten years, it came as a very pleasant surprise to hear that Captain and Mrs. Duncan McGregor were paying a visit to Scotland and that there would therefore be the opportunity of seeing them again after such a long time.

As the accompanying photograph shows, they were both in excellent form and it was a great pleasure to be able to welcome them.

Captain McGregor was born in **Taynuilt**, Argyllshire, and joined H. Hogarth & Sons as a Second Officer in 1927. His first Hogarth ship was the "Baron Inchcape", then ten years old, and he sailed on her at that time for two years as Second Officer in order to get in time to enable him to sit for his Master's ticket. He sat for this in 1929 - successfully, of course - and then joined the first "Baron Forbes" (built 1915) for a voyage with the late Captain Cairns as Master and the late Arthur Luke as Chief Engineer.

In 1930 Captain McGregor joined "Baron Stranraer" as Chief Officer (at Antwerp) with the late Captain Watkins in command and remained on that ship for about one year, after which came some home leave (unpaid!). After this leave he joined "Baron Blythswood" (late Captain A.A. Campbell) as Chief Officer and after a spell on her was relieved by Chief Officer (later Captain) Robert Gibson (who now lives in retirement in Port William, Wigtownshire). In 1937 he joined the then new "Baron Elphinstone" as Chief Officer, sailing under the late Captain J.T. Muir and Mr. David Ness as Chief Engineer. (Mr. Ness lives in retirement in Oban, Argyllshire).

This proved to be Duncan McGregor's final voyage as Chief Officer, for before long he was appointed Master of the "Baron Loudoun" and then in 1938, he took command of "Baron Inchcape", relieving the late Captain Stanley Hill. This appointment marked the commencement of a long association between Duncan McGregor and the "Baron Inchcape" - twelve years - and, indeed, to many at that time the names 'McGregor' and 'Inchcape' were synonomous. This period of course included all the Second World War years when, together, and with many other gallant men, they sailed many thousands of miles and carried many thousands of tons of cargo in a very real contribution to the war effect. One serious incident during these war years which springs to mind was when the "Baron Inchcape" was badly damaged by bombs whilst in dock in Liverpool during one of the many heavy bombing raids suffered by that city.

In 1948 the "Baron Inchcape" underwent a very extensive refit at Birken-head and Duncan stood by her during that time. Another occurence of even greater importance in his life also took place in 1948, for in that year Duncan and Mrs. McGregor were married.

After such a long spell in command of a large ship (and the "Baron Inch-cape" was a large ship by cargo vessel standards of those days) there must have been almost a feeling of constraint when Duncan took command of two of the smaller vessels of the fleet in succession, the "Baron Tweedmouth" and "Baron Yarborough". This meant shorter voyages such as crossing the North Atlantic to Miramichi, etc. for pitprops and back to, say, Grangemouth. This was an important trade in those days.

A return to the larger ships of the fleet came, however, when Duncan relieved the late Harry Moore on the "Baron Belhaven" (built 1925) in Glasgow and he remained in command of that ship for two years, at the end of which he took her to Hull for an extensive 'beat up'. During the "Baron Belhaven's" repair period the "Baron Maclay", similar in size and most other respects to "Baron Belhaven", was commanded by Captain McGregor, he having taken over the ship from the late Captain James Reid.

He returned to the "Baron Belhaven" and was on her when he took ill. However, he made an excellent recovery and was soon fit enough to take command of the new "Baron Ogilvy" at Readhead's Yard on the Tyne (See TRIAD No. 7 for an account of that ship's subsequent fate after passing out of Hogarth ownership).

A period of leave followed command of the "Baron Ogilvy", after which Captain John Pearson (who lives in Paisley and has contributed to TRIAD) handed over the then new "Baron Inchcape" (built by Lithgows, Port Glasgow, in 1956) to Duncan at Grangemouth, with Mr. Carnie as Chief Engineer.

This spell of command preceded joining the then new "Baron Belhaven" at Readhead's Yard in 1960 and, from command of her, Duncan took over the "Baron Inverclyde" which at that time was plying between the Clyde and Lisbon. This ship proved to be his last command for, sadly, in November 1962 he took very seriously ill and for a time thereafter a run out to visit him at Killearn Hospital was a 'must'.

The spirit which is so much in evidence still stood him in excellent stead at that time, for he overcame what to many others would have been an insuperable obstacle. In 1964 Captain and Mrs. McGregor moved abroad to Lourenco Marques - Mrs. McGregor's home - and they have been resident there since. It should be mentioned that the McGregors have a son, who is a chartered accountant, and a daughter, who accompanied her mother and father on their visit to this country.

They returned home to Lourenco Marques at the end of July and it is to be hoped that they will pay us another visit before too long.

In a letter received after their safe return home to Lourenco Marques, Duncan expresses his regret and disappointment that, owing to lack of time during their visit, he was unable to call on, or see, all his old shipmates and friends.



Captain and Mrs. Duncan McGregor

CATCH THE BASS SPECIAL

The first attempt to catch it ended in failure, Rosebud II broke down! She had first shown signs of Gallic temperment on a return trip from Inverness early in the year. I blamed the brand of petrol. It was not the kind Rosie usually liked, but I was forced to offer it from a small garage outside Perth and that was that. On second thoughts, it was probably not a mechanical breakdown but a nervous one, brought on by the shock of her realising that we were in the Common Market at last and that soon her native land would be flooded with U.K. cars while the ailing pound forced the price of herself and her kin ever upward in this country. It was too much and so, as a mark of protest, she shuddered to a stop just at the start of the M90 motorway.

Hastily putting our Renault mechanical knowledge into the pool (the level of which just came up to our ankles) my companion and I came to the conclusion it was a fuelfault - petrol or a choked jet. The air cleaner was removed and attempts made to clear the blockage. Apart from getting our hands dirty and almost losing a shirt sleeve to a hungry engine, she still would not fire. At this juncture, enter from the roadway north, a friendly motorway patrol car who gave advice regarding a call to the nearest garage for a tow but I was not listening to any of the other details. I was too busy converting the distance/time factors into money and the amount it came to - £10.57 - gave me enough incentive to have another go. The spirit of L. Renault must have been hovering over us for she started first time and soon we were across the bridge and safely on the road home.

Now, several months later, after having behaved herself as every well-bred young French lady should, she was again being bitchy - something Rosebud I, of fond memory, never was. But she slipped up in one respect at least, for we were near a garage. An examination by the proprietor indicated that immediate surgery was required. I did the operation myself and, while Professor Barnard is more famous, my petrol pump transplant - courtesy of the genuine A.C. spare parts bank - shows no signs of rejection after three months. It took me about an hour (those metric nuts and bolts are difficult) and by that time I knew my son and I had missed the Bass Special.

However, the high winds and heavy rain on the day of Rosebud's indisposition had led to the cancellation of the Special which was why the following Sunday found us at North Berwick Harbour about to board a motor launch en route for the Bass Rock, where we had permission to land and spend the day. Our provisions did not go as far as Bass Special but, in an act of reckless bravado, I had included two cans of shandy!

Along with her sisters, North Berwick Law and Traprain Law, the Bass Rock now bears silent witness to a birth of noise and fire in the Carboniferous Age, when the gentle, fertile acres of East Lothian did not exist and only molten rock and ash covered the land. Millions of years passed; the ice came and went; the sea advanced (the ridge immediately north of East Linton was once the shore line) and then retreated. The softer sedimentary rocks were eroded, leaving the Bass as a giant plug of volcanic rock rising to a height of 350 feet in almost perpendicular cliffs from the sea.

Seen from North Berwick, a distance of three miles, the Bass may look small, but it is more than a mile in circumstance - a measurement which seemed ten times as much as we later stepped warily over its summit, picking our way between nests, ducking the swoops of their angry tenants.

Here, over this same ground, had walked St. Baldred who, as a hermit, lived on the rock over 1,500 years ago. When he died in 606 or 608 A.D., legend has it that three neighbouring parishes quarrelled over who was to bury his body. A Pictish sage intervened and requested permission to spend a night alone in prayer over the corpse. This was granted and in the morning when the parishioners returned they found not one, but three bodies. So honour was satisfied and each group left in triumph to bury their 'St. Baldred'.

Standing guardian on the south side of the Firth of Forth, it is natural that the Bass should have a long and turbulent history. It is mentioned in writings

dating back to the reign of Malcolm Canmore and the first recorded owner was Sir Robert Lauder, who was granted a charter for it around 1316. This family (Lauders of the Bass) retained ownership of the rock for hundreds of years and must have been connected with the erection of a pre-Reformation chapel which was dedicated to St. Baldred in 1542 as well as being responsible for the building of the fortress. We stood in the chapel ruins allowing our imagination to wander back into the mists of time, but we could not do the same in the castle for it was dismantled in 1701.

Earlier, in 1671, Charles I claimed the Bass as Royal Property and it was sold to the Crown for the sum of £4,000 sterling by the then owner, Sir Alexander Ramsay of Abbotshall, Provost of Edinburgh. The bloody pages of the Bass Rock's history now unfold when, under another Lauder (dale) known as the Captain of the Bass, the fortress was turned into a prison for Presbyterian ministers. Between 1672 and 1688 some forty political/religious prisoners died in the dungeons on the rock. In 1691, during the reign of William and Mary, a party of four Jacobite prisoners escaped from their cells and captured the fortress when all the garrison was engaged in unloading coal. For the next three years they held the Bass for the Old Pretender and defied all attempts by Government forces to retake it. Aided by supply ships from France, this unique quartet even carried out raids on the Fife and Lothian coasts! In 1694 a more effective blockade finally starved them into submission, but they negotiated favourable terms and walked out free men! The fortress continued as a state prison until demolished seven years later. In 1706 the Bass was sold to Sir Hew Dalrymple, whose descendents still own it. From then up until the end of the First World War the rock was let out to tenants who earned money by fishing, grazing sheep (Bass Mutton was a famous 18th century Edinburgh delicacy) and by killing young sea birds and collecting eggs. The last tenant of the Bass, a Mr. Easton, was a North Berwick fishmonger.

But the true owners of the Bass Rock are, of course, the birds, for almost every available inch is occupied by razorbills, guillemots, cormorants, puffins, eider ducks and various gull species. But the bird of the Bass is the gannet, or solan goose, and as I gazed on a breeding colony of 80,000 pairs I realised why the Bass is a mecca for international ornithologists. It is thus only fitting that this superb sea bird's Latin name - 'Sula Bassana' - should be derived from the word Bass. Even as long ago as 1792 the gannets of the Bass Rock were famous both for their numbers and as a food. A Robert Heron, of London, writing in that year describes, firstly, the Bass itself as follows:

"There is a small island in the Firth of Edinburgh, called by the Scotch Bass island, not more than a mile in circumference: the surface is almost wholly covered during the months of May and June with nests, eggs and young birds so that it is scarcely possible to walk without treading on them: and the flocks of birds in flight are so prodigious as to darken the air like clouds, and the noise is such that you cannot, without difficulty, hear your next neighbour's voice. If you look down upon the sea from the top of the precipice you will see it on every side covered with infinite birds of different kinds, swimming and hunting for their prey: if sailing round the island you survey the hanging cliffs, you may see in every crag or fissure of the broken rocks innumerable birds of various sorts and sizes, more than the stars of heaven when viewed on a serene night: if from afar you see the distant flocks, either flying to or from the island, you would imagine them to be a vast swarm of bees".

The taking of the young gannets, in all probability by men from the hamlet of Canty Bay opposite the Bass, is described thus:

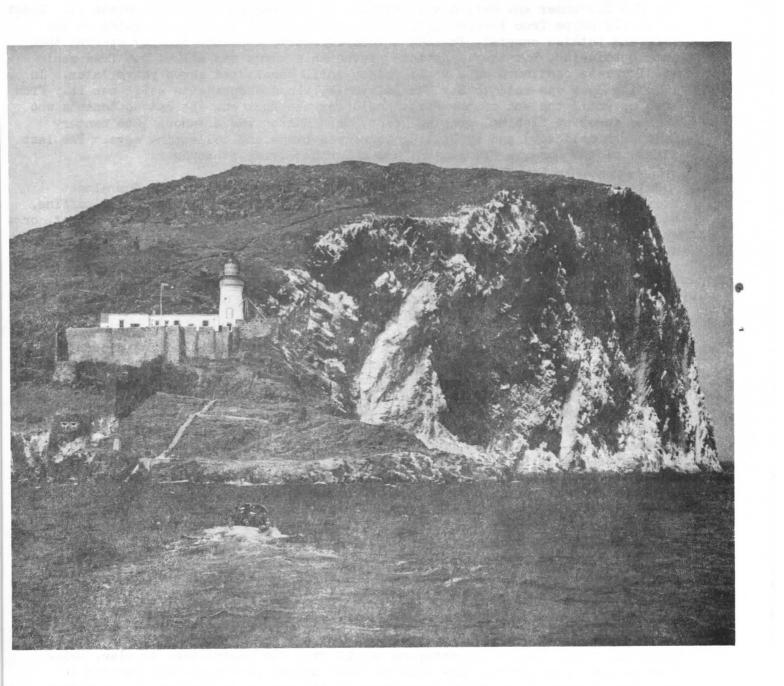
"This is dear-bought food, earned at the hazard of their lives, either by climbing the most difficult and narrow paths (to appearance), they can hardly cling and that, too, at an arraying height over the raging sea: or else, being lowered down from above, they collect their annual provision thus hanging in mid air: placing their whole dependence on the uncertain footing of one person who holds the rope by which they are suspended at the top of the precipice. The young birds are a favourite dish of the North Britons in general - during the season they are constantly brought from the Bass isle to Edinburgh, sold at 20d. apiece, are roasted and served up a little before dinner as a whet".

Leaving the gannet-gatherers swinging from their rope, we move to the last chapter of the Bass Rock - that of the lighthouse. Surprisingly, it was not until July, 1897 that the authorities decided to erect two lighthouses on the Haddingtonshire coast, one on the Bass Rock, the other on shore near Dunbar, as

was opened in 1901 and a light was first shown from the Bass Rock on 1st November, 1902. It took almost four years to build and cost £8,087-10-4d.

One accident is known to have taken place on the Bass. In 1898 a young stone-mason was working on the foundations of the tower when he slipped and fell some fifteen feet onto a narrow ledge overlooking an eighty-foot drop into the sea. That he survived this fall there is no doubt, for he lived until 1965, dying peacefully in bed in his 91st year. He never saw or heard the 'Catch the Bass Special' jingle on television but, if he had, I wonder if it would have recalled to memory his days on the Bass and his escape from death just as 75 years later it gave his grandson the idea for this article.

The foregoing article first appeared in the Autumn, 1973 edition of Forthright, the magazine of the Lothian & Peebles Police Constabulary, and we are obliged to the Editor of that publication and to Police Inspector W.A. Harkness, who wrote it, for their permission to include it in TRIAD.



The relief Keepers' launch approaches the Bass Rock Lighthouse

QUIZ ANSWERS

- 1. Dawes Point (southern shore), Milson's Point (northern shore).
- 2. Graf von Zeppelin (1838 1917) the originator of the airship, dirigible or zeppelin, after whom the "Graf Zeppelin" was, of course, named. At the age of 23 he sailed to New York with a letter of introduction to President Abraham Lincoln and joined the Union side as an 'observer'. As President Lincoln accepted him, he did not require to use the other letter in his possession addressed to General Robert E. Lee!
- 3. Emily Davison, a suffragette, threw herself under the hooves of the king's horse Anmer during the Derby and was killed.
- 4. A large airliner 177 feet long, with a wingspan of 230 feet and weighing 290,000 lbs., it was built by Bristol and named after Lord Brabazon. It was not a success, various technical faults coming to light, and it never entered service, as intended, between London and New York non-stop. Only two were built and in 1953 they were both scrapped. The only surviving part of this large airliner is in the Science Museum, London.
- 5. The Falcon.
- 6. County Tyrone.
- 7. British Actors' Equity Association, generally known as 'Equity'.
- 8. William Joyce, British-born, who broadcast for the Germans during the Second World War. He was executed for treason after the war.
- 9. Village, or dwelling-place.
- 10. Coblenz.
- 11. The Midland Railway, which became part of the L.M.S. system in 1923.
- 12. Jan Paderewski, of Poland.
- 13. The Zambesi.
- 14. Mount McKinley, 20,320 feet high. The mountain forms the centre-piece in Mount McKinley National Park, Alaska.
- 15. They are layers found in the ionosphere and were discovered by Sir Edward Appleton.
- 16. 1959.
- 17. Leyden.
- 18. The s.s. "Patrick Henry". She ran her trials on 26th December, 1941, having been built by Bethlehem-Fairfield Shipyards Inc., Baltimore, Maryland. Her building time was 245 days 150 on the slipway and 95 fitting-out. Her maiden voyage took her round the Cape of Good Hope with stores for the British Army in Egypt, thus making her the first American ship to transit the Suez Canal after the U.S. entered the Second World War. She was scrapped at Baltimore by the firm which built her in October, 1958.
- 19. 26,000 feet. A chough was sighted at this height by the British Everest Expedition on Mount Everest in May, 1953.
- 20. Jean Paul Marat (1743 1793). He is better known as the man who was stabbed to death in his bath by Charlotte Corday during the Revolution and who has a place, depicting this incident, in the Chamber of Horrors, at Madame Tussauds Wax Museum, London.

BIG SHIPS.....BIG BUSINESS.....IN NORTH AMERICA'S HEARTLAND

The Great Lakes, 95,000 square miles of fresh water, lie deep in the heart of Canada and the United States. The ships which ply these inland seas - the inimitable lakers - carry enough iron ore to feed the world's steel mills and enough grain to feed the world's people.

The comments and opinions which follow were expressed to a 100Al writer on a brief visit to North America. The Great Lakes is a vast, complex and constantly fascinating subject, and trying to 'cover all the bases' in a few thousand words is quite impossible. Instead, a number of Lakes shipping personalities talk about their jobs, their ships, their operations and themselves - and in doing so reveal something of this unique and little-known freshwater world.

A few paragraphs first to set the scene - the foreigner's eye view. Not surprisingly, the overwhelming first impression of the Great Lakes - an impression which doesn't change with time - is one of their awesome size and scale. The five lakes, Superior, Huron, Michigan, Erie and Ontario, form by far the largest mass of fresh water in the world. Together they are larger than the United Kingdom; Superior, the largest lake at 31,700 square miles, is bigger than Scotland. From the Head of the Lakes - Duluth, at the western end of Superior - it's 1,150 miles to Kingston, at the eastern end of Lake Ontario. From Kingston via the Seaway to Seven Islands, which marks the eastern limit of laker operations, is another 600 miles. So if your laker is 'downbound' from Duluth to Montreal with a cargo of grain, and then carries on empty down the St. Lawrence to Port Cartier to load an upbound' cargo of iron ore, she has a journey of about 1,800 miles - almost an ocean voyage.

The lakes fleet totals about 400 ships, of which about 75 per cent are lakers, or bulk carriers as they're known in the outside world. About half the ships are American owned, and half are Canadian - and almost all the Canadian vessels are classed by Lloyd's Register. Ships classed for solely Great Lakes/Seaway operation are readily identified by the distinctive diamond load line symbol.

Though the fleets are more or less equal in size, their operations follow in general a different pattern. The American fleet is largely captive, owned by the great steel companies and used primarily to carry iron ore, coal and limestone - the raw materials for making steel - from source to steelworks. The Canadian fleet, in contrast, is not captive, is frequently family-owned, and operates roughly 50/50 in the ore and grain trades. Because of this greater flexibility, and because Canadian ships generally are more modern and efficient and the crews are paid slightly lower rates, the fleets are more competitive and enjoy a greater share of the overall Lakes business than their American counterparts.

Since the opening of the St. Lawrence Seaway, more and more foreign-flag ocean-going ships ('salties' to the Lakes men) are to be seen. However, they rarely try to compete in the traditional Lakes trades.

Despite the fact that there are many modern vessels on both sides of the Lakes, the age of just as many more is startling to anyone used to the 20-year life of salties. The oldest ship is 76 years old; more significantly, well over 100 lakers have celebrated their 50th birthday - and most of them are still in spotless condition and are working busily away. The reason for this longevity? The fresh water doesn't cause corrosion on anything like the scale of salt water, consequent—ly their steel lasts almost indefinitely; their small, triple-expansion engines are extraordinarily long-lasting; and the three - or four-month winter layup gives ample time for maintenance and repair.

The climatic conditions are another unique feature of the Great Lakes. From December to April most of the shorelines freeze solid - particularly in the 'Upper' Lakes, where almost all of the ore and grain originates - so the lakers are laid up and stay locked firmly in the ice until the spring thaw. Because of the vast continental land masses of the U.S. and Canada, violent and spectacular storms are another feature of the Lakes, and wave states on Lake Superior have been found on occasion to be almost as severe as on the North Atlantic.

On her downbound trip through the Lakes, our laker will descend a total of 602 feet. At the eastern end of Lake Superior, she will drop 21 feet on her way into Lake Huron through the locks at Sault St. Marie, 'the Soo'. From Huron down to Erie is a 9-foot drop. By far the biggest 'ladder', however, is from Lake Erie into Lake Ontario, where the ship will drop 325 feet as she transits the Welland Canal and its locks. She will drop the remaining 250 feet on her way down the St. Lawrence Seaway.

The Soo locks provide a striking view of the density of Great Lakes shipping. There are actually four locks side by side, and an average of 17,000 ships pass through every year. In one afternoon recently, sixteen ships locked through in two hours, the 700-foot long lakers waiting in line, like buses at a bus station, before being eased gently and deftly into the locks with a bare couple of feet clearance on either side.

The Welland Canal, with eight locks along its 27-mile length, by-passes Niagara Falls. Here, because the locks are in line rather than side by side, a central highly-automated control avoids congestion by supervising the transit of all shipping throughout the length of the Canal. Capacity is forty lockages a day; the average is twenty-nine.

The locks and canals and the Seaway are crucially important to the whole Great Lakes operation because the vessels can't move from lake to lake without them. However, though the locks allow interlake movement, they also, with their stringent width and depth restrictions, impose severe limitations on the size of Lake vessels.

At present, if a laker is to operate throughout the Great Lakes system, it must not exceed a maximum width of 75 feet and a draught of 26 feet. This in turn limits the length to 730 feet - and poses all sorts of problems for owners, particularly when they are planning new construction.

Enough now, from the highly-impressed outsider - and time to hear from the practical men of the Lakes.....

Wesley R. Harkins, Public Relations Officer, Fraser Shipyards, Inc., Superior, Wisconsin.

I think the twin towns of Duluth, Minnesota, and Superior, Wisconsin, make an appropriate introduction to the Great Lakes, because they exemplify what it's all about. Duluth is the American 'lakehead', the far western end of Lake Superior, and owes its development to the existence - about 100 miles away - of the Mesabi Range, still the world's biggest iron ore deposit. Come to that, you could say that at least half the shipping on the Great Lakes owes its existence to Mesabi, because most of the ships were originally built to carry the ore from Duluth/ Superior to the steelworks of the U.S.A. and Canada.

The ore was found in quantity about a century ago, and the range still provides 80 per cent of North America's needs. In fact, Mesabi is so rich that it could probably supply the whole world with iron ore if necessary.

The most spectacular **symbols** of this vast industry are the big ore docks at Superior, operated by the Burlington Northern Railway; and at Duluth and Two Harbours, operated by the Duluth, Missabe & Iron Range Railway. These include the largest ore docks in the world, with piers half-a-mile long that dwarf even the largest lakers which come to pick up the ore. Every day 14 to 18 trainloads of ore, each made up of 200-odd cars and weighing 12-14,000 tons, roll down the Burlington and the Missabe rails from the Mesabi Range and onto the piers, where they're discharged into hoppers. The hoppers in turn discharge into the empty ore boats - it's all done by gravity.

The throughput of ore is fantastic: These two railroads shipped almost twenty-eight million tons in 1973 - the Burlington Northern 12 million tons and the Missabe over 17.5 million tons - and remember the average Great Lakes 'year' is only nine months. Burlington Northern's record year came in 1953 when, at the time of the Korean War, they shipped 32 million tons. The fastest loading was 29 ships in 24 hours.

Curiously, the record for the fastest single loading was set more than 50 years ago - in 1921 to be exact - and it was set by an LR-classed ship which is still operating; the "D.G. Kerr". Built in 1916, the "Kerr" was, and still is, one of the eleven ore boats owned by US Steel which are classed at Lloyds Register. US Steel has about fifty ships in its Great Lakes fleet.

Anyway, they somehow managed to load more than 12,500 gross tons of ore into the "Kerr" in $16\frac{1}{2}$ minutes - and the record still stands. Incidentally, this loading was done at ore dock number two of the DM & IR at Two Harbors, just a few miles round the lake from Duluth/Superior.

The "Kerr" - she'll soon be sixty years old - is typical of the older US Steel-owned lakers: she's still in immaculate condition and is probably good for some years yet. Of course, the fresh water operation is the key factor - and the three month winter layup gives owners plenty of time to maintain these ships - but it still warms the heart to see these reliable and tough old ladies hard at work up and down the Great Lakes.

Most of the ore boats which load at Duluth/Superior are American-owned. However, Canadian-owned lakers pick up here, too, for steel-making plants on the Canadian side of the Lakes. There's a big grain traffic as well, and foreign-flag oceangoing bulk carriers are increasingly regular visitors. But you could say as a generalisation that the biggest proportion of North America's iron ore comes from Mesabi and nearby ranges to be shipped from Duluth/Superior; while most of the continent's grain is grown on the Canadian prairies and shipped through Thunder Bay, the Canadian lakehead, a couple of hundred miles around the lake. The Canadians now get much of their ore from Labrador, on the east coast, and ship it west - but again, in terms of sheer quantity, chilly old Duluth/Superior is the principal ore port.

Figures for 1972 show bulk cargo movements pretty clearly. Bulk tonnages carried on the Great Lakes totalled very nearly 200 million tons. Almost half of this, 90 million tons, was iron ore; the other tonnages were: coal, 43 million tons: lime-

-stone, 37 million tons; grain, 26 million tons.

The overwhelming tonnage of ore, 76 million tons, was shipped from Lake Superior, which means essentially Duluth/Superior and nearby Two Harbors, Silver Bay and Taconite Harbor. The westbound tonnage from Labrador was 12 million tons. (With reference to the latter, TRIAD readers are reminded of the article Iron from the North which appeared in the October, 1968 edition - Ed.).

Most of the grain, 21 million tons, was also shipped from Lake Superior, but in this case 16 million tons, more than 75 per cent, went from Thunder Bay - about

80 per cent in Canadian lakers, the rest in foreign-flag vessels.

Nearly all the coal was shipped from Lake Erie ports, almost half of it going to Canadian industry.

Duluth/Superior seems to me to be the very essence of the Great Lakes: it has to be the most important port on the Lakes - it's one of the most important in North America - and there's constant activity here. In addition to the lakers, we're now seeing more and more salties, which come here from all over the world and add more variety and colour to the scene.

It wouldn't be everyone's cup of tea, I realise; we have a long, hard winter, with temperatures down to 30 and even 40 below zero, heavy snow from November to March, and the coldest winds you can imagine. But there's no pollution and folks are real friendly.

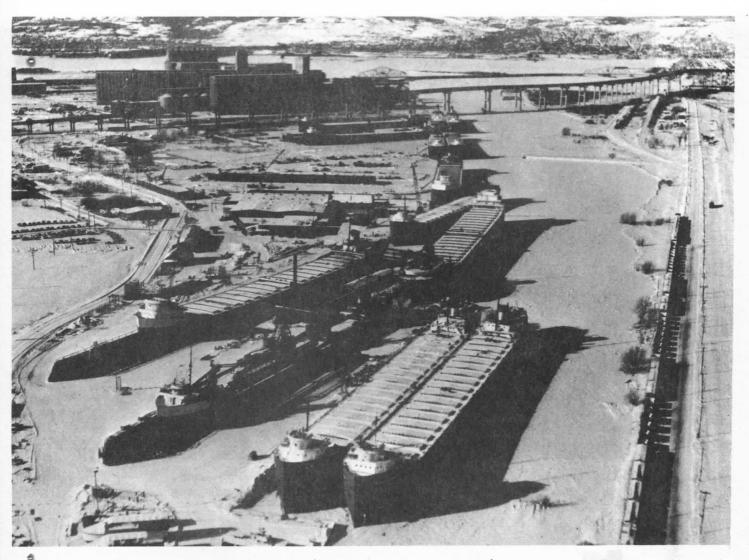
And on those dazzling, achingly cold winter days, when there literally isn't a cloud in the sky and the air and the snow sparkle and crackle, I drive over the high bridge which links Duluth with Superior, and see scores of lakers icebound in their winter berths, waiting for the spring thaw that will release them from their hibernation - then I know I don't want to live anywhere else!

George Patterson, Lloyd's Register Surveyor in Thunder Bay, Ontario.

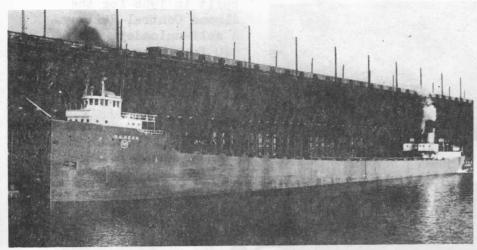
I'm a one-man band here, which suits me very well; I have an office in the yard at Port Arthur Shipbuilding and I have a pretty busy time because there's a great deal of shipping activity. I'm from England originally: worked for Shell in the U_*K_* , emigrated to Canada, and joined L_*R_* in Montreal. I came out here to the lakehead five years ago.

Thunder Bay is the Canadian equivalent of Duluth/Superior - but grain is the name of the game here. Yes, there is iron ore - we ship 4.5 million tons a year - but it's grain that steals the thunder (incidentally, Thunder Bay is so called because of the wild electric storms which come crashing in from the prairies from time to time). We get ten grain trains a day, each of 100 cars; they come from Winnepeg and further west, anything up to 1,500 miles. About 15 million bushels of grain are shipped out every week in 15 - 20 lakers, depending on their size. I would think that Thunder Bay ships more grain than anywhere in the world.

The only time it's a little quieter here is in winter, when the whole bay freezes up to five feet thick and all the lakers are locked in. But then there's absolute pandemonium when the spring thaw comes: as soon as the icebreakers come

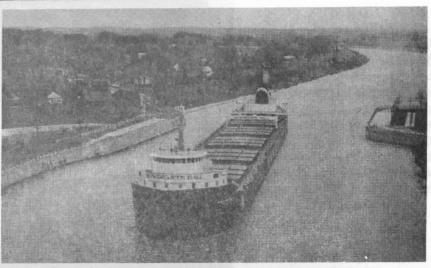


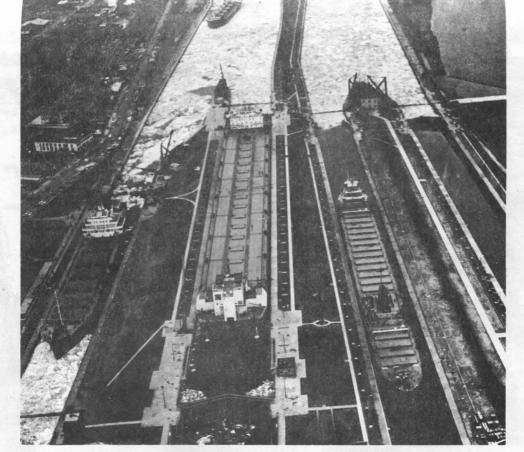
A mid-winter scene at Superior (western Lake Superior) with thirteen lakers locked in the ice. Temperature, about thirty degrees below.



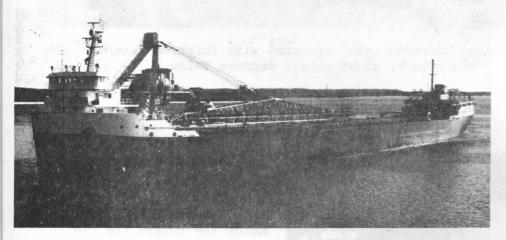
The "D.G. Kerr", 13,600 tons deadweight, owned by U.S. Steel. She holds the record for the fastest single ore load—ing - 12,500 tons in $16\frac{1}{2}$ minutes!

The laker "Beavercliffe Hall", 27,300 tons dead--weight, transitting the welland Canal. She is owned by Hall Corporation (Shipping) Ltd.



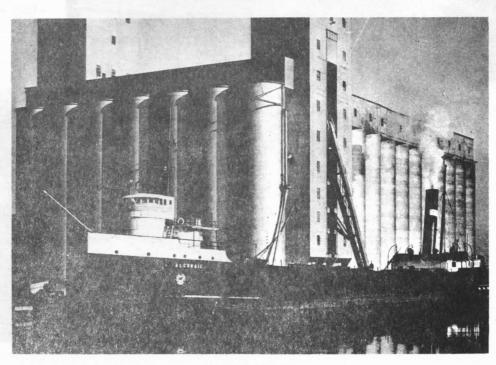


Locking through at the Soo. In the centre is the Poe Lock, with a 1,000-foot laker just managing to squeeze in. On the left is a 'salty'.



The laker "Algorail", built in 1968 for the Algoma Central Railway. A self-unloader, she is 640 feet long, 16,000 G.R.T. (22,900 dwgt,)

The old "Algorail", built in 1901 and scrapped in 1963. She was 346 feet in length and 3,500 G.R.T. These two photographs give some idea of how lakers have developed over the years. A number of lakers similar in age, size and appearance are still to be found trading on the Great Lakes.



completed so they can be on their way before the others. There may be thirty lakers laid up here, and obviously they can't all be surveyed at the same time, so they have to wait their turn. As it is, I work literally round the clock, day after day, until the last laker has had a real thorough going over.

They're remarkable boats, these lakers. They come in several more or less standard sizes, but the optimum size is about 730° x 75° x 39°, designed for a fresh water load draught of 26 feet in the summer season. This is the maximum size for a laker which is going to operate throughout the Great Lakes system, and a good many of the modern lakers are being built to this size. Yes, I know the Americans have built some 1,000-footers, but they're limited to Superior, Huron, Michigan and Erie.

If you didn't know anything about lakers, you would think they looked very unseaworthy. They seem much too high in the water; much too long for their beam and draught. Yet they're very strong, resilient ships - and highly manoeuvrable. Their masters and crews are real specialists, and the agility of these quite big boats is something to see. They virtually never have tugs or pilots, and you see regularly mates slide these things into spaces with clearances which most people would need to park a car.

Despite the long winter - it's nearly five months long and goes down to 40 below - I like Thunder Bay. It has many advantages over 'down below' in the U.S. and 'down east' in eastern Canada. My wife and the kids love the open air life: in half an hour we can be on the ski slopes, and Ontario has half a million lakes - besides Lake Superior. I feel a little isolated sometimes: it's 800 miles to the main office in Montreal, 600 miles to Toronto office and 1,500 miles westwards to Vancouver office. I may well be L.R.'s. most far-flung surveyor!

Leonard N. Savoie, President, Algoma Central Railway, Sault St. Marie; Member, L.R. Canadian Committee, Member of Great Lakes sub-Committee.

Yes, our name may be somewhat misleading - particularly as we have the most modern, and the fourth largest Canadian fleet on the Great Lakes. The origins of Algoma Central were in 1894, when industry began to utilize the water power of the rapids at 'the Soo', as we call Sault St. Marie. This area was just wilderness then and a railway was built into the interior to bring down lumber to a paper mill which used the rapids as a power supply. While they were building the railway, they discovered iron ore - so then they needed a fleet of ships to bring in the coal and limestone to smelt the ore. Iron ore from the mines at Wawa destined for Algoma Steel, which is the Soo's largest employer, still represents a major part of our southbound rail freight traffic.

Today, we have nine ships and one building. Five of them, plus the new one, are self-unloaders. Our oldest ship was built in 1952 - but she was converted to a self-unloader in 1963. All our other ships have been built since then. We have built on average a ship every second year for the last ten years; there has certainly been market growth to justify them.

There seems particularly to have been a great growth in traffic for our self-unloaders. I think this trend will continue as older, smaller lakers and dock unloading facilities become obsolete and bigger ships, 730-footers, which can unload anywhere, become more viable. Self-unloaders are expensive, of course: our new one will cost nearly \$15 million, which is a great deal more than the conventional laker.

Like most of the Lakes fleets, our principle cargoes are ore and grain. Like them, too, our voyages are in three legs: grain from Thunder Bay to Montreal; ore from Seven Islands to the Lower Lakes; empty from there back to Thunder Bay.

Sure, we would get into the deep-sea business if we saw the opportunity, but business is good on the Great Lakes at the moment. You have to remember, too, that our fleet isn't suitable for deep-sea operation. Our lakers may be 730-footers - but they're narrow and shallow draught. Their maximum is about 28,000 deadweight - but an ocean-going ship of the same length would be about 60,000 deadweight.

Of course, business patterns could change. At the moment, the Canadian Lakes fleet has an advantage over the U.S.-owned fleet. We have the biggest share of the cross-Lakes trade between the U.S. and Canada, and vice versa. The only trade we can't engage in is that purely between U.S. ports. We're more competitive because we have a more modern and efficient fleet. For instance, Canadian ships carry American grain from Duluth to Montreal because the U.S. have difficulty in being competitive at existing grain rates.

However, this could lead one day to a much more modern and bigger U.S. fleet and then there would be a really competitive situation. At present we have a good fleet; we don't have any 'dogs'. In the main, the U.S. fleet is an older one, but the U.S. have built several new ships in recent years - including, of course, the .

My background? Well, I'm a Johnny-come-lately in the shipping world. I came here $\frac{1}{\sqrt{2}}$ years ago after years in Windsor, Ontario in the autoparts business. But I like this business - and I like the Soo. Though it's out of Canada's cultural mainstream, it's an ideal place to bring up a family. We don't have the same sort of problems as people do in the big cities. We get a long winter here: the snow comes early in November then we never see the ground again until the end of March. But my three kids love it: I don't think they miss a weekend skiing right through the winter.

There's no pollution in this part of the world - just thousands of square miles of wilderness. Tourism is becoming a major industry: it's ironic that our Algoma Central Railway, which runs through spectacularly beautiful scenery but was never built to carry passengers, has been developed into a key tourist attraction and is probably the only railway in Canada making a profit on overall rail passenger operations.

Donal G. McAllister, President, McAllister Towing Ltd., Montreal; Member, L.R. Canadian Committee.

Our company has gone through a kind of transformation in recent years. We were the largest tug company on the Canadian side of the Lakes: ten years ago we had ten tugs, as many as eight of them working here in Montreal docking ships. Now we only need three tugs for the same job.

Montreal has a 35-foot draught limitation: it isn't a specialty port; so many of today's specialty ships go elsewhere. But the biggest loss of activity is due to the container. Instead of coming nearly 1,000 miles up the St. Lawrence to Montreal, most of the container ships unload at Halifax or at container ports on the eastern seaboard of the U.S. and the boxes come in by rail or road.

Some container ships do still come to Montreal. Before the container, Montreal longshoremen usually loaded 4-5 million tons of cargo in a year at more than sixty berths. Now, at just two berths, Manchester Liners can unload two million tons of containers in a year! The best hope is that Montreal will retain its present status as a port. There will be products - steel for instance - that are not container-izable and hopefully these will offset to some extent the decrease in all the different traditional cargoes.

So what are we doing with our tugs? We're keeping them busy towing on the Lakes. There has been very little towing here; tug and barge transportation hardly exists. In the U.S. - I come from New York - we think of towing as one of the basic means of transportation - but there isn't a tug and barge industry here.

What we do is transport things which cannot go by **truck** or rail. If it's too big or too heavy then we'll tow it on a scow. Probably the heaviest single item we have moved is an 800-ton nuclear reactor. We just towed a 300-ton crane 2,000 miles from St. Catherine's to St. John. We have also towed a lot of old lakers on the first leg of their journey to the scrapyard. In the last year we have towed close to twenty: we pick them up at Lake ports like Benton Harbour, Toledo, and Duluth and tow them 1,000 miles or more to Montreal where they are taken over by ocean tugs for the tow to Spain. Other areas we have moved into are the salvage business and pollution control.

Lawson A. Kaake, Vice President and General Manager, Upper Lakes Shipping Ltd., Toronto; Member L.R. Canadian Committee; Member Great Lakes sub-Committee.

Our history is quite recent by Great Lakes standards: we started operations in 1931 with a small laker; typically, we carried grain from the lakehead to Toronto. Today we have twenty ships, almost all of them L.R.-classed, and almost all of them intended only for Great Lakes service.

We do have three ships which are combined Lakes/Ocean vessels: two of them are self-unloaders specially strengthened; their principal job is to carry coal from the U.S. to Canada and gypsum or iron ore pellets in the other direction. How-ever, we still regard ourselves as a Great Lakes operator; with a capacity of nearly 500,000 deadweight, we are the second-largest on the Canadian side. I think that there is some merit in continuing to develop our East Coast trades, but I think they will always be secondary.

Most of our ships are modern, but we do have some veterans which seem to go on for ever. Our oldest is the "Goderich": she is nearly seventy years old and still going strong; in this fresh water you can keep them alive almost indefinitely. She's had major renewals, of course, and has just been converted to an oil-burner. She still has her original 1,800-h.p. triple expansion engine and she'll carry about 11,000 deadweight of grain or iron ore at 10.5 m.p.h. for, I should think, another ten years.

These old, smaller boats are ideal to service the smaller ports - Goderich itself is one of them; Sarnia is another. Naturally, we watch these veterans very carefully - but used with discretion they may last for ever.

We have our own shippard at Port Weller, on the Welland Canal, but we are not

We have our own shipyard at Port Weller, on the Welland Canal, but we are not at present building for ourselves. We are, however, building for others: we have just finished two ro-ro ships for export, we have a tanker for Imperial Oil and we have a passenger/car ferry for Canadian coastal service. Beyond that, we are not too heavily committed.

One of our problems is gazing into the crystal ball and trying to determine

what type of ships to build for future efficient operation.

Take the big U.S. Great Lakes fleets, for example. Most of them are owned by the steel companies - U.S. Steel, Republic, Bethlehem, Inland - and the prime purpose of the lakers is to supply the steelworks with their raw materials; the ore from the iron ranges near the American lakehead. In the last five years they have started to build very large lakers in the 1,000-foot, 50,000 deadweight range. Now these ships can only operate on the Upper Lakes, west of the Welland.

On the other hand, if U.S. owners continued to build the standard 730-foot lakers, these smaller ships would be outdated when the Canal and the Seaway are widened, as they probably will be at some time in the future. They are in a peculiar position: build bigger ships with a limited operational area, or build smaller ones which may be out-of-date prematurely. To a large extent, we all have a similar problem.

I would say that the next step in lake shipbuilding is to allow for 1,000-foot locks - but how soon is very difficult to say. Also, the dual-purpose lake/ocean vessel is a very attractive proposition - but designing dual-purpose ships for shallow draughts presents difficulties. Nevertheless, we have improved: today in a modern laker you have ten times the capacity of an old canaller, and travel sixty per cent faster.

Most of our ships are classed with Lloyd's Register, and I think that L.R. generally does a good job. The L.R. Canadian Committee, of which I'm a member, does a useful job too - but perhaps more opportunities to participate in discussions

of new or controversial developments would enliven meetings a bit.

A final word from Tom Leighton, Lloyd's Register Senior Principal Surveyor for Canada, who operates from the Society's main Canadian office in Montreal.

When I came to Canada five years ago after some twenty years' service in several countries with the Society, it was immediately apparent that in many respects life was to be very different from anything I had previously experienced.

Like most newcomers to Canada, I had first to adjust to immense size, the initial impact of which is almost intimidating. After all, in which other country can you travel over 2,000 miles inland from the coast on mostly open water and still have reached only half way towards the other side? Where else also does one find a large fleet of ships of a very special type making such a vital contribution to the industrial life of two vast nations?

These lakers are indeed a unique 'breed' of ship, having quite different rules and regulations for construction and classification, including periodical survey

requirements, from ocean ships.

An interesting feature of our survey work on lakers is that we enjoy a close and continuous relationship during the whole life of the ship. The relationship commences with approval of construction plans which, together with computation of freeboards and assignment of Load Lines, is dealt with entirely in Canada. Surveys during construction, followed by periodical surveys during service, are all performed by the surveyors serving the Great Lakes and River St. Lawrence areas, survey reports being forwarded to Montreal office for checking and maintenance of survey records. In fact, for the Society's surveyors here the survey of lakers is a kind of 'cradle to the grave' affair - although since these ships have a life expectancy of sixty to seventy years, few surveyors see their charges through a complete life cycle!

The Society has a very long association with the Canadian shipping industry - in fact the first exclusive surveyor outside Great Britain was appointed to Quebec in 1852. Today surveyors cover the Great Lakes on the Canadian side from Quebec, Montreal, Toronto (Oakville), St. Catherines and Thunder Bay at the head of Lake

Superior, more than 2,000 miles from the Atlantic coast. In addition, we have surveyors at St. John's, St. John, Halifax, Vancouver and Victoria.

Canada is a remarkable country, with tremendous potential and vast resources

Canada is a remarkable country, with tremendous potential and vast resources still undeveloped. Having regard to the world's energy and food shortages, there will undoubtedly be great changes here in the next few years.

We are indebted to the Editor of 100 Al, the magazine of Lloyd's Register of



"MANAGER? - CERTAINLY SIR! ---WHICH ONE DO YOU WANT? -- SCRUFFY,
PINHEAD, SMOKEY JOE, NAGGER"



Photograph : Glasgow Herald

"Cape St. Vincent" entering Alexander Stephen & Sons' drydock in Govan, Glasgow shortly before being handed over to her new owners last June. "CAPE SABLE" arrived at Moji on the 22nd October to complete discharge, the first portion having been landed at Sakaide. She sails on the 24th October for British Columbia where she will go on Time Charter with Canadian Transport and load at British Columbian outports for Melbourne, Hobart and Adelaide.

"BARON WEMYSS" has completed re-engining at Amsterdam and, after loading partcargo at Antwerp, completed loading at Hamburg and sailed from that port on the 20th September for Japan. She expects to arrive at Moji on the 1st November to commence discharge, thereafter completing at Osaka and Kawasaki on or about the 14th-15th November at the latter port. From Japan she moves to Nauru to load for Eastern Australia, indicated Cairns and Brisbane.

"CAPE WRATH" is presently on passage from Pointe Noire to Toyamashinko and Niigate and is due at the former port on or about the 31st October. From Japan she sails for Christmas Island to load phosphate for New Zealand, indicated Auckland and Whangarei.

"CAPE YORK" passed Cape Town on the 20th October on passage from Port Pirie to Antwerp or Avonmouth and should arrive at her discharging port on or about the 6th-7th November. On completion, she sails to Pointe Noire to load for Japan.

The following is an extract from a letter received by Captain R.D. Love in June from the Port Meteorological Officer, Cardiff:

"We are very sorry to lose the "Baron Cawdor" from the Voluntary Observing Fleet, and we are very grateful to all the Masters and Officers who have served in her, for the contributions, which they have made in this work. I would also take this opportunity, on behalf of the Director-General of the Meteorological Office, of expressing our appreciation to you for your continued interest and support of the work of the Voluntary Observing Fleet".

Yours faithfully, (signed) D. Southon, Port Met. Officer, Cardiff.

The following comes from Fairplay International Shipping Weekly of the 19th September, 1974.

SELF-DESTRUCT BUTTON WANTED Automation seems to be very much in the news again and a ferry master friend tells me of a recent occasion docking, head in, in a South Coast port. The weather was good and he made his approach fast, leaving it to the last minute to 'kill' his ahead motion into the berth with a brisk full astern pitch on the c.p. propellers. The ship stopped perfectly, the linesmen hove their respective heaving lines and the master brought the pitch controls back to neutral, a satisfied smile on his face. This was quickly wiped off as he realised that, due to some nameless fault in the machinery, his screws were still churning away at full astern pitch. Leaping to the wheel-house console, he rapidly beat out a concerto on the old fashioned push-button telegraph to the engine-room. No effect. He thumped the emergency stop button almost flat into the manoeuvring desk. Still no effect. To the amazement of the reception party on the dock, the ship shot out of the berth almost as fast as she had entered it, heading at a rapidly accelerating rate towards the granite breakwater astern.

The master, who by now was almost speechless and was waving the combinator controls around like the handle of a fruit machine that failed to pay the jack-pct, somehow managed to steer the vessel stern-first through the harbour entrance, aided by a westerly current and the special God that perpetually smiles on ferry captains. About half a mile out in the English Channel, after the fastest turn-round in history, the ship came mysteriously to rest. The subsequent inquiry, conducted by the master in an atmosphere of near-hysteria, revealed that the engineer, whom the master supposed had been diligently wrestling with the controls, had been trapped in the lift!

The following article appeared in the 10th October, 1974 edition of Fairplay International Shipping Weekly.

SCOTTISH SHIP MANAGEMENT RE-ENGINING PROJECT COMPLETE

On 12th September the completion of the re-engining of the "Baron Wemyss" marked the completion of an extensive contract awarded by Scottish Ship Management Ltd., Glasgow, to the Amsterdamsche Droogdok-Maatschappij N.V. and Stork-Werkspoor Diesel. The order placed last year involved the replacement of the main engines of eleven bulk-carriers managed by S.S.M.

The Stork-Werkspoor Diesel TM 410 medium-speed engines were chosen by Scottish Ship Management on the basis of technical comparison with competing engines and from practical experience gained after the "Cape Grenville" was re-engined in Norway in 1971. The re-engining of the 12 ships was a significant contract for S.W.D. because it embodied the largest order for the TM 410 engine received hitherto. In total, 24 units, two diesel engines per vessel, have now been supplied with a combined output of 150,000 h.p.

From July, 1973 onwards the 11 bulk-carriers consecutively called at the yard of the Amsterdamsche Droogdok-Maatschappij for the job, that despite its complex nature, took an average of seven weeks per vessel.

The contract called for the technically complicated job of renewing two mediumspeed engines in each vessel together with important changes to the auxiliary machinery consisting of new lubricating oil coolers and pumps, new jacket cooling water pumps, lubricating oil filters, new sludge tanks and a new cooling water installation for the fuel valves - all within a very tight delivery schedule.

Close co-operation between A.D.M., S.W.D., Owners technical staff and the ship-builders facilitated detailed pre-planning. Inspection visits to the vessels were organised to complete the compilation of engineering data and give the opportunity to mark off those parts which had to be removed and afterwards refitted. In the meantime, the A.D.M. drawing office prepared detailed drawings for the start of prefabrication of new engine foundations, tanks, pipelines, etc. well ahead of each vessel's arrival at the yard.

The pre-planning revealed that instead of hoisting the old engines vertically out of the engine-room and lowering the new ones in place, a much quicker procedure could be realised by cutting away the forward engine-room bulkhead and transporting the engines through the after cargo hold. The horizontal movement was achieved by jacking the engines onto small carriages which rolled along a channel bar track. The large opening in the bulkhead also facilitated removal of disconnected pipes and auxiliary machinery which were stored in the cargo hold.

In general, the yard was able to have the old engines removed within six days after arrival of the vessel, the old engine seatings removed and the new prefabricated seatings fitted in place and welded twelve days later, so that within three weeks the new engines were in place. The remaining period up to the delivery date was a rush against the clock to fit the new auxiliaries, pipelines and all necessary equipment.

Except for the first vessel, when a number of unknown circumstances prevented the yard from delivering the vessel within the agreed time, all the other vessels were delivered within schedule. It was interesting to note that the expected serious effect which is so well known in standard production materialised on this contract. Experience and routine made it possible to reduce the number of man hours on each following vessel.

M.V. "BARON CAWDOR"

Master	D.	Innes
1st Mate	B.	Bedworth
2nd Mate	Α.	Ali
3rd Mate	I.	Waters
Radio Officer	C.	Houston
Ch. Eng.	R.	Taylor
2nd Eng.	T.	Campbell
3rd Eng.	M_{\circ}	Khan
4th Eng.	H.	MacInnes
4th Eng.	C.	Smith
Jun. Eng.	I.	MacPherson
Elect.	D.	Rowand
Cat. Officer	J.	Blair
2nd Steward	Α.	McCloskey
Ch. Cook	C.	Green
2nd Cook	J.	Hanna
Nav. Cadet	H.	Watson

M.V. "BARON DUNMORE"

Master	J.	Jones
1st Mate	N.	Brewer
2nd Mate	Α.	Henderson
3rd Mate	N.	Wilson
Radio Officer	Ao	MacKinnon
Ch. Eng.	N.	Ogilvie
2nd Eng.	R.	Pollock
3rd Eng.	J.	Patton
3rd Eng.	I.	Macrury
4th Eng.	E.	Carter
Jun. Eng.	P.	Wilkinson
Elect	G.	Rowe
Cat. Officer	F.	De Goey
2nd Steward	V.	Bettis
Assist. Steward	\mathbb{W} .	MacLean
Ch. Cook	D.	Taylor
2nd Cook	E.	Crosby
Bosun	$M \cdot$	Ali
Nav. Cadet	R.	Miller
Eng. Cadet	W.	Moncrieff

M.V. "CAPE HOWE"

Master	P.	Richardson
1st Mate	R.	Duncan
2nd Mate	M.	Roche
3rd Mate	E.	Henderson
Radio Officer	Α.	Kershaw
Ch. Eng.	F.	Hardacre
2nd Eng.	J.	Robertson
3rd Eng.	C.	Bishop
4th Eng.	E.	Holdsworth
Jun. Eng.	Α.	Marrs
Jun. Eng.	P.	Tunstall
Jun. Eng.	D.	Hume
Elect.	M.	MacLennan
Cat. Officer	J.	Weir
2nd Steward	R.	Van-Mock
Ch. Cook	W.	Sutherland
2nd Cook	J.	Harrison
Nav. Cadet	D.	MacKenzie
Nav. Cadet	R.	Bentley
Eng. Cadet	J.	Drysdale

M.V. "CAPE NELSON"

Master	N.	Walsh
1st Mate	T.	Lloyd
2nd Mate	J.	Anderson
3rd Mate	В。	Ellis
Radio Officer	В。	Breslin
Ch. Eng.	K.	Malhotra
2nd Eng.	J.	Williams
3rd Eng.	T.	Quigley
4th Eng.	D.	Stark
Jun. Eng.	D.	Barrie
Jun. Eng.	J.	Allan
Jun. Eng.	В。	Chalmers
Elect.	G.	Bridge
Cat. Officer	R.	
2nd Steward	E.	Kelly
2nd Cook	J.	Adamson
Bosun	P.	McPhee
Nav. Cadet	В.	Sharp
Eng. Cadet	R.	Adcock

M.V. "CAPE SABLE"

Master	J.	Jennings
1st Mate	I.	Taylor
2nd Mate	D.	Lloyd
3rd Mate	D.	Fenton
Radio Officer	J.	Forrester
Ch. Eng.	E.	Kellie
2nd Eng.	D.	Smart
3rd Eng.	G.	Clement
3rd Eng.	Α.	Gartside
4th Eng.	J.	Kelly
Jun. Eng.	W.	Sewell
Elect.	R.	Knight
Cat. Officer	Α.	Randle
Assist. Steward	P.	Findlay
Ch. Cook	D.	Hardie
2nd Cook	B.	Pickles
Bosun	E.	
Nav. Cadet	C.	Groundwater
Nav. Cadet	I.	Naughton-Rumbo

M.V. "CAPE WRATH"

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Master	A. Peebles
1st Mate	W. Andersen
2nd Mate	N. Lawson
3rd Mate	D. Gordon
Radio Officer	I. Leese
Ch. Eng.	D. Chalmers
2nd Eng.	W. Hughes
3rd Eng.	N. Ramsay
3rd Eng.	E. Martin
4th Eng.	D. Ricketts
Jun. Eng.	A. McCombie
Elect.	W. Fraser
Cat. Officer	P. Coles
2nd Steward	J. McMahon
Ch. Cook	C. Bain
Bosun	G. Williams
Nav. Cadet	T. Farley
Nav. Cadet	A. Slater

M.V. "CAPE YORK"

Master	Α.	Hunter
1st Mate	R.	Mitchell
2nd Mate	C.	Pyper
3rd Mate	J.	Paget
Radio Officer	R.	Boatman
Ch. Eng.	G.	Mitchell
2nd Eng.	Α.	Cortopassi
3rd Eng.	G.	Ramshaw
3rd Eng.	R.	Dempster
4th Eng.	F.	Taylor
Jun. Eng.	S.	Askew
Elect.	В.	Martin
Cat. Officer	W.	Gilmartin
Bosun	M.	Horreh
E.R.S.	M.	Hussein Hersi
Nav. Cadet	B.	Andrew
Nav. Cadet	H.	Hardie

M.V. "BARON RENFREW"

Master lst Mate 2nd Mate 3rd Mate Radio Officer Ch. Eng. 2nd Eng. 3rd Eng. 4th Eng. 4th Eng. Elect. 2nd Elect. Cat. Officer G.P. Steward G.P. Cook G.P.Cat. Boy G.P.Cat. Boy C.P.O. G.P.I. G.P.I. G.P.I. G.P.I. G.P.I. G.P.I. G.P.I. G.P.I. G.P.I.	G. Roger D. Taylor P. Cookson D. Fitzpatrick J. McCool T. Harris D. Anderson J. Reid D. Moore J. Barr F. Shelley D. Gibb-Mawhinne W. Gray R. Cutting W. Mitchell J. Brodie E. Cassidy E. Brennan G. Weston J. Dunford G. Senter T. Cox J. Docherty G. Hamilton N. Scott L. Gentleman D. Carmichael
	A 7 W M - Provide
Nav. Cadet	C. Williamson
Nav. Cadet	A. Dinnes
Eng. Cadet	G. Douglas

M.V. "BARON ARDROSSAN"

Master	T. Baker	
1st Mate	A. Weir	
2nd Mate	D. Oriatto	
3rd Mate	S. Hall	
Radio Officer	R. MacMeikan	
Ch. Eng.	F. Young	
2nd Eng.	C. McCrae	
3rd Eng.	R. Kennedy	
3rd Eng.	M. Currey	
4th Eng.	н. нау	

Elect.	D.	McLellan
Cat. Officer		Robson
G.P. Steward	Α.	MacKenzie
G.P. Cook	T.	Healey
G.P.Cat. Boy	Α.	
G.P.Cat. Boy	E.	Dorning
C.P.O.	Α.	~ .
G.P.I.	J.	Challis
G.P.I.	J.	Sander
G.P.I.	G.	French
G.P.I.	J.	Thomson
G.P.I.	K.	Barry
G.P.I.	R.	
G.P.I.	D.	Cameron
P.O.		Young
Eng. Cadet	J.	

M.V. "CAPE HORN"

Master	B. Lawson
1st Mate	D. Jones
2nd Mate	A. Logan
3rd Mate	G. Adams
Radio Officer	R. Burton
Ch. Eng.	G. McEwen
2nd Eng.	W. Jones
3rd Eng.	G. McPherson
4th Eng.	J. Miller
4th Eng.	R. Newall
Jun. Eng.	R. Healey
Elect.	G. Horwood
Cat. Officer	J. Smith
G.P. Steward	J. Brown
G.P. Cook	T. Meharry
G.P.Cat. Boy	S. McLetchie
G.P.Cat. Boy	D. Jackson
C.P.O.	J. Morrison
G.P.I.	J. Russell
G.P.I.	J. Smith
G.P.I.	R. Turner
G.P.I.	W. Power
G.P.I.	I. McIntyre
G.P.I.	T. Coughlan
G.P.I.	C. Gallagher
P.O.	J. Bailey
Nav. Cadet	G. Shearer
Nav. Cadet	J. Watson

M.V."CAPE RACE"

Master	M.	Turton
1st Mate	J.	Purdon
2nd Mate	A .	Nisbet
2nd Mate	D.	MacIsaac
3rd Mate	P.	Brennan
Radio Officer	D.	Anderson
Ch. Eng.	M.	Martin
2nd Eng.	D.	Anderson
3rd Eng.	J.	Watson
3rd Eng.	G.	McNeil
4th Eng.	J.	Barsby
Elect.	J.	Parker

M.V. "CAPE RACE" (Cont'd)

Cat. Officer	I.	McDonald
G.P. Steward	B.	Waldron
G.P. Cook	J.	David
G.P. Cat. Boy	Α.	Fraser
G.P. Cat. Boy	A.	Ridley
C.P.O.	L.	Ali
G.P.I.	V.	Straker
G.P.I.	R.	Jankie
G.P.I.	R.	Manifold
G.P.I.	L.	Ward
G.P.I.	L.	Lewis
G.P.I.	Α.	Williams
G.P.2.	D.	Lochnivar
G.P.2.	P.	Talbot
P.O.	R.	Dow
Nav. Cadet	D.	Peatroy
Eng. Cadet	M.	McLay

M.V. "BARON BELHAVEN"

Magtan	G.	Downie
Master		
1st Mate		Walker
2nd Mate		Mullen
3rd Mate		Hanna
Radio Officer	T.	Davies
Ch. Eng.	R.	Towns
2nd Eng.	W.	Adamson
3rd Eng.	Α.	Dias
4th Eng.	H.	Keenan
Jun. Eng.	I.	Rennie
Jun. Eng.	Α.	Christie
Elect.	R.	McIntosh
Cat. Officer	J.	McDonald
G.P. Steward	K.	Dookram
G.P. Cook	F.	Scotland
G.P. Cat. Boy	N.	Moore
G.P. Cat. Boy	T.	Singh
C.P.O.	G.	Adams
G.P.I.	C.	Kitt
G.P.I.	F.	Bryan
G.P.I.	D.	Wallerson
G.P.I.	L.	Baxter
G.P.I.	J.	Smith
G.P.I.	I.	Hamilton
G.P.2.	H.	Charles
G.P.2.	C.	Joseph
P.O.	C.	_
Eng. Cadet		Kennedy
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M.V. "BARON INCHCAPE"

Master	F.	Dalby
1st Mate	E.	Fowler
2nd Mate	J.	Melville
3rd Mate	R.	Abercrombie
Radio Officer	Α.	Honan
Ch. Eng.	В。	Denmark
2nd Eng.	W.	Nicol
3rd Eng.	C.	Greig
4th Eng.	T.	May
4th Eng.	L.	Hughes
Elect.	P.	Wilson
Cat. Officer	E.	Hutter
G.P. Steward	W.	McIntyre

G.P. Steward	F.	Symes
G.P. Cat. Boy	N.	Nagi
C.P.O.	D.	Smart
G.P.I.	P.	Lynaugh
G.P.I.	M.	Hulbert
G.P.I.	N.	Lillie
G.P.I.	M.	Irvine
G.P.I.	F.	Croucher
G.P.I.	G.	Wilkie
G.P.2.	G.	Button
G.P.3.	A.	Fitzgerald
P.O.	F.	Lax
Eng. Cadet	R.	Currie

M.V. "BARON MACLAY"

Master	I.	Tyrrell
1st Mate	I.	McLean
2nd Mate	E.	Kanijo
3rd Mate	M.	MacRae
Radio Officer	A.	MacCallum
Ch. Eng.	Α.	Metcalf
2nd Eng.	Α.	Warren
4th Eng.	K.	Kyriacou
Jun. Eng.	Α.	Dabee
Elect.	J.	Richardson
2nd Elect.	R.	Logan
Cat. Officer	I.	Neave
G.P. Steward	P.	Ralph
G.P. Cook	C.	Cheetham
G.P. Cat. Boy	C.	Cranston
G.P. Cat. Boy	T.	McFarlane
C.P.O.	J.	McFarlane
G.P.I.	J.	Somers-Harri
G.P.I.	J.	MacSween
G.P.I.	J.	Farquhar
G.P.T.	B.	
G.P.I.	J.	Hainey
G.P.I.	M.	Jackson
G.P.T.	P.	Macallister
G.P.3.	P.	Humphries
P.O.	S.	
Nav. Cadet	E.	Morain
Eng. Cadet	Α.	Sinclair

M.V. "BARON WEMYSS"

M.V. "BARON	WEM:	(SS"
Master	K.	Dootson
1st Mate	Р.	Dyson
2nd Mate	Η.	Aitchison
3rd Mate	J.	Philips
Radio Officer	D.	Poole
Ch. Eng.	W.	Anderson
2nd Eng.	A .	Hourston
3rd Eng.	J.	Dillon
3rd Eng.	A.	Cross
4th Eng.	P.	Fordham
Elect.	W.	Hornshaw
Cat. Officer	R.	Cathcart
G.P. Steward	L.	McLeod
G.P. Cook	R.	Kan
G.P. Cat. Boy	A.	Davidson
G.P. Cat. Boy	D.	McAngus
G.P. Deck Boy	D.	Paterson
C.P.O.	В.	Mahoney

M.V. "BARON WEMYSS" (Cont'd)

G.P.I.	A。	Picken
G.P.I.	S.	Buchanan
G.P.I.	D.	Ferguson
G.P.I.	T.	McKinnon
G.P.I.	J.	Milne
G.P.I.	W.	Stevenson
G.P.I.	D.	Cook
P.O.	M.	McPhee
Nav. Cadet	D.	Hiddelston
Nav. Cadet	J.	Cryan
Eng. Cadet	J.	Hannah

M.V. "CAPE GRAFTON"

Master	W. Warden
1st Mate	I. Wemyss
2nd Mate	J. Gillespie
3rd Mate	W. McKie
3rd Mate	M. Barrington
Radio Officer	D. Humble
Ch. Eng.	R. Durbin
2nd Eng.	G. Harrison
3rd Eng.	B. Edwards
3rd Eng.	L. Speechley
4th Eng.	P. Broers
Elect.	B. Hallas
Cat. Officer	W. Mitchell
G.P. Steward	D. Burgess
G.P. Cook	J. Brown
G.P. Cat. Boy	T. Conlon
G.P. Cat. Boy	J. McMenemy
G.P. Deck Boy	A. McLeod
C.P.O.	P. Sharman
G.P.I.	B. MacKinnon
G.P.I.	J. Betty
G.P.I.	D. Fullerton
G.P.I.	C. Thomas
G.P.I.	W. Chisholm
G.P.I.	H. McLennan
P.O.	R. Gibson
Nav. Cadet	D. Matheson
Nav. Cadet	R. Stewart
Eng. Cadet	P. Webb

M.V. "CAPE LEEUWIN"

Master	P. Hall
1st Mate	C. Lunny
3rd Mate	I. MacKay
Radio Officer	D. Roche
Ch. Eng.	W. Rush
2nd Eng.	D. Pennie
3rd Eng.	D. Robertson
3rd Eng.	J. Carlin
4th Eng.	R. Hay
Jun. Eng.	P. Gray
Elect.	A. Dodds
2nd Elect.	K. Short
Cat. Officer	R. Kerr
G.P. Steward	J. Moody
G.P. Cook	I. Gibson
G.P. Cat. Boy	R. Sanford

G.P. Cat. Boy	K.	McLeod
C.P.O.	J.	McCormack
G.P.I.	T .	MacKay
G.P.I.	A .	Compbell
G.P.I.	K.	Weaver
G.P.I.	D.	Lees
G.P.I.	J.	Bovill
G.P.I.	J.	Gaffney
G.P.I.	W.	Wilson
G.P.3.	Α.	Faulds
P.O.	A.	Dickinson
Nav. Cadet	J.	Campbell
Nav Cadet	J.	Millar

M.V. "CAPE GRENVILLE"

Master	S.	Readman
1st Mate	J.	McKellar
2nd Mate	W.	Runcie
3rd Mate	C.	Mitchell
Radio Officer	D。	Gudgeon
Ch. Eng.	R	Hartley
2nd Eng.	I.	MacKenzie
3rd Eng.	R.	Smillie
4th Eng.	R.	Frost
Elect.	R.	Bray
Cat. Officer	A .	McGill
G.P. Steward	J.	McGarvey
G.P. Cook	J.	Ridgeway
G.P. Cat. Boy	D.	Campbell
G.P. Cat. Boy	S.	Scott
G.P. Deck Boy	J.	McLeod
C.P.O.	D.	McGuire
G.P.I.	A.	Patrick
G.P.I.	Α.	Clark
G.P.I.	Α.	Brown
G.P.I.	J.	MacLean
G.P.I.	Mo	Boddy
G.P.I.	P.	Bennett
G.P.I.	С.	Coull
P.O.	E.	Gibson
Nav. Cadet	В.	Wilmott
Nav. Cadet	L.	Forbes
Eng. Cadet	D.	McClelland

AWAITING APPOI	NTM	ENT	2nd Eng. 2nd Eng.		O'Hara Morrison
3rd Eng.	m .	Orr	2nd Eng.		Riddle
Elect.		Wightman			
Elect.		Mather	2nd Eng.		Proctor
Elect.		McErlean	2nd Eng.		Green
Cat. Officer			2nd Eng.		Richardson
G.P.I.		Bowden	2nd Eng.		Versteeg
Ch. Cook		Maclean	2nd Eng.		Doherty
2nd Cook		Treanor	2nd Eng.		Brown
		Mawston	2nd Eng.		Jarvie
Nav. Cadet		Blance	2nd Eng.		Smith
Nav. Cadet		O'Sullivan	3rd Eng.		Harbinson
Nav. Cadet	P.	Cowing	3rd Eng.	I.	Kennedy
S. Coalman D. 2			3rd Eng.	G.	Stevenson
VOYAGE LEAV	E		3rd Eng.	J.	Holden
			3rd Eng.	H.	MacPhail
Master	G.	Anderson	3rd Eng.	R.	Porteous
Master	T.	Edge	3rd Eng.	K.	Graham
Master	A.	Fraser	3rd Eng.	P.	Harvey
Master	W.	Greatorex	3rd Eng.		Aubrey
Master	L.	Hocking	3rd Eng.		Miller
Master		Mackay	3rd Eng.		Donlan
Master		McLeod	3rd Eng.		MacDonald
Master		Sinclair	3rd Eng.		Williams
Master		Towers			Carmichael
Master		Maclean	4th Eng.		
			4th Eng.		Moffat
Master		Murray	4th Eng.		Beeley
Master		Strachan	4th Eng.		Keady
Ist Mate		MacDonald	4th Eng.		Straker
Ist Mate	P.	MacKay	4th Eng.	P.	Knapp
Ist Mate	P.	Brooks	4th Eng.	G.	Seymour
Ist Mate	A.	Michie	Jun. Eng.	G.	Barclay
Ist Mate	W.	Fleming	Elect.	J.	Leiper
Ist Mate	E.	Williams	Elect.		Walmsley
Ist Mate	G.	Marsland	Elect.		Hall
Ist Mate		Harper	Elect.		Andrews
2nd Mate		Clarke	Elect.		Matheson
2nd Mate		Flynn	Elect.		MacFarlane
2nd Mate		Coe	Elect.		Noble
2nd Mate		Wood			
2nd Mate		McCurdy	Cat. Officer		Daddy
2nd Mate			Cat. Officer		Sisi
		Bajwa	Cat. Officer		Trotter
2nd Mate		O'Neill	Cat. Officer		Smith
3rd Mate		Bramham	Cat. Officer		McLaughlin
3rd Mate		Beeley	Cat. Officer		Campbell
3rd Mate		Smith	Cat. Officer		Waters
3rd Mate		Corkhill	Cat. Officer		McGurk
Radio Officer		Ritchie	G.P. Steward	J.	Nitkowski
Radio Officer			G.P. Steward	G.	Davis
Radio Officer	D.	Wilson	G.P. Steward	M.	Hookman
Radio Officer	J.	Thomson	G.P. Cook	Α.	MacCallum
Radio Officer	D.	Hynd	C.P.O.	D.	McMahon
Radio Officer	M.	Thomas	C.P.O.	D.	Budd
Radio Officer		Trotter	C.P.O.		MacDonald
Radio Officer		McIlroy	G.P.I.		MacLachlan
Radio Officer		Anderson	G.P.I.		Craig
Radio Officer		MacNeil			Cockcroft
Radio Officer			G.P.I.		
		Tomlinson	G.P.I.		Cameron
Ch. Eng.		Wright	G.P.I.		Pyne
Ch. Eng.		Dickinson	G.P.I.		Butler
Ch. Eng.		Smith	G.P.I.	G.	Fish
Ch. Eng.	J.	Gilmartin	G.P.I.	B.	Masters
Ch. Eng.	J.	Cochrane	G.P.2.	G.	McIntyre
Ch. Eng.	W.	Wallace	G.P.2.		Wilkinson
Ch. Eng.	J.	Watson	G.P.3.		Lambert
Ch. Eng.		Good	G.P.3.		Barnett
Ch. Eng.		Campbell	P.O.		Courtney
Ch. Eng.		Weir	P.O.		Rafter
	9 0		DDAU .	200	101

P.O.	Ψ. 1	McQuade
Ch. Cook		MacLeod
2nd Cook	N.	Gardner
Nav. Cadet	C.	Campbell
Nav. Cadet	S. 1	MacDonald
Nav. Cadet	S.	Budd
Elect.		Dусе

STUDY

Elect.	W. Lothian
Elect.	R. Louden
Radio Officer	P. Murray
Ist Mate	P. Smart
Ist Mate	M. Smith
Ist Mate	J. Houston
Ist Mate	S. Wright
Ist Mate	J. Wood
Ist Mate	A. Maxwell
2nd Mate	J. Johnstone
2nd Mate	L. Morison
2nd Mate	D. Clarke
3rd Mate	P. Powell
2nd Eng.	W. Drennan
2nd Eng.	D. Drummond
2nd Eng.	D. Ball
2nd Eng.	A. Millar
3rd Eng.	D. Dunlop
3rd Eng.	J. Stone
3rd Eng.	A. Walker
3rd Eng.	D. Girgan
4th Eng.	D. Thompson
4th Eng.	P. Canning
Jun. Eng.	A. Milligan
4th Eng.	S. Taylor
Radio Officer	G. Walker

SICK LEAVE.

Ist Mate	D.	White
2nd Mate	V.	Webster
Ch. Eng.	A .	Alexander
Ch. Eng.	J.	Loughran
Ch. Eng.	J.	Cummings
2nd Eng.	G.	Law
3rd Eng.	P.	Hopley
3rd Eng.	J.	Campbell
Cat. Officer	R.	Diamond
Cat. Officer	W.	Hall-Fletcher
G.P.I.	I.	Rodger

TRAINING.

Nav.	Cadet	С.	Brown
Nav.	Cadet	G.	Gray
Nav.	Cadet	н.	McWilliam
Nav.	Cadet	D.	Smith
Nav.	Cadet	J.	MacArthur
Nav.	Cadet	Α.	Allan
Nav.	Cadet	T.	Dunlop
Nav.	Cadet	J.	Dobson
Eng.	Cadet	S.	Andrews
Eng.	Cadet	Α.	Wink
Eng.	Cadet	M.	Fyfe
Eng.	Cadet	W.	Irvine
Eng.	Cadet	L.	Macleod
Eng.	Cadet	R.	Morrice
Eng.	Cadet	P.	Shotton
Eng.	Cadet	S.	Gadd

Eng.	Cadet	\mathbb{N} .	Anderson
Eng.	Cadet	J.	Mennie
Eng.	Cadet	J.	Hardie
Eng.	Cadet	M_{\circ}	Sweeney
Eng.	Cadet	M.	O'Brien
Eng.	Cadet	G.	Davidson
_	Cadet	A.	Taylor
Eng.	Cadet	R.	Dodds
Nav.	Cadet	E.	Moodie
Eng.	Cadet	Α.	Samuel
Eng.	Cadet	R.	Taylor
	Cadet	F.	Drever
Eng.	Cadet	D.	Miller
Eng.	Cadet	E.	Graham
Eng.	Cadet	J.	Morrison
Eng.	Cadet	G.	Cowie
Eng.	Cadet	V .	McCourt
Eng.	Cadet	Α.	Smith
Eng.	Cadet	G.	Smith
Eng.	Cadet	Α.	MacPhee
Eng.	Cadet	Α.	Porter
Eng.	Cadet	D.	Bell
Eng.	Cadet	A .	Starrs
4th	Eng.	M.	Robson
Ch.	Cook	A .	Paterson

CORRECTION

The ship entering drydock on Page 32 is the "Cape Frank--lin", of course, not the "Cape St. Vincent".