

newsletter

No. 104—SEPTEMBER, 1978

The Newsletter And Its' Future

In the interests of economy, it is our intention to revert to our previous method of publication by issuing Newsletters prepared in the office rather than having them specially printed.

It is hoped to continue to ensure that at least once a month ships receive news from the office which will be more up to date than at present.

This present Newsletter, therefore, will be the penultimate one in its present form. Commencing with the November issue, publications will be sent out from the Chairman's Office and this will co-incide with arrangements made with the General Council of British Shipping to supply items of interest to not only the sea-faring staff, but also to Office Staff in connection with all matters in which shipping in all its aspects is the main consideration. For instance, a lot of interesting statistics apertaining to the operation of shipping worldwide are issued from time to time by the G.C.B.S. and many other items which it is felt will be well received by our readers.

Sea-faring staff already get information in connection with wage negotiations but this is not always so fully covered and, therefore, it is intended to give as much information as possible to assist members to appreciate the problems that arise from time to time in matters of this nature.

If information is envisaged as being of some urgency, then it is not the intention to wait for an official Newsletter publication, as Newsletters on such occasions could be issued more frequently than once a month. The main object is to ensure that readers receive important information as soon as possible.

It is, of course, intended that the present dispositions of officers and ship's positions will continue to be circulated.

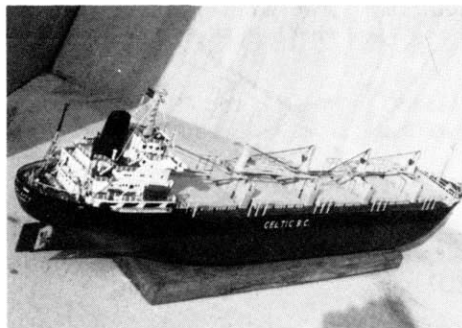
CONTRIBUTIONS TO R.N.L.I.

The Chairman has acknowledged the following donations which have been passed on to the R.N.L.I. through the Horton and Port Eynon Branch:-

m.v. "Atlantic" via Capt. G. F. R. Ellerby £24.

m.v. "Orient City" via Capt. J. Porteous £32.

Many thanks to the officers of the two vessels.



Model of m.v. "Devon City" made by Mr. D. E. Stannard 2nd Off. whilst serving on the vessel.

RUSSIA AND BACK WITH LOVE

A heart warming story was told to the editor by Mr. Patrick Lewis 2nd/Officer.

His wife's father Mr. John Schterbina came to Wales from Russia in 1947. He obtained a job as a miner in a Colliery near Pontypridd and met Jean Simmons whom he married in 1950. A daughter, Tania (Mr. Lewis' wife) was born in 1951.

In 1956 John Schterbina felt homesick, and wanted his family in Russia to know he was alive and well, and returned to his native land with his wife and daughter.

Two years passed by and Mrs. Schterbina became homesick and returned to Pontypridd with Tania, but John was unable to accompany them.

During the next few years his job as a geologist took him all over the U.S.S.R. with the result that Tania and her mother lost contact with him.

In 1965 Tania spent six weeks on a Cultural Exchange holiday in Russia, near the town where her father's family lived, but was unable to contact him.

A few years later Tania received a letter from her father saying he had settled in Siberia.

In 1971 Tania went on holiday to Minsk hoping to meet her father, but due to bad communications he did not find out about her until a week after she had left. Once again she was disappointed but was determined to see him again. She decided to try and bring him to this country for a holiday. After trying for two years her dream was realised when John arrived in Cardiff on the 14th August this year.

His arrival came as a surprise. It was known he was trying to come over, but his sudden appearance on Mr. & Mrs. Lewis' doorstep gave them a shock, albeit a very pleasant one.

(continued overleaf)

Russia and back with love—continued

John has now been re-united with all his family, relatives and friends living in Pontypridd and Cardiff. He is enjoying his holiday and delighted to be drinking British beer once again. One of the first

meals he requested was fish and chips.

Sadly the holiday comes to an end on September 4th but he hopes to return in two years—especially so if on his next visit, there will be a grandchild or two to greet him.

m.v. Victoria City's encounter in Puget Sound

A converted Canadian minesweeper leaving Puget Sound 28.7.78 on a treasure-hunting expedition was chased and cited by the Coast Guard following a two-day series of incidents.

Officials said the ship nearly collided with a freighter, failed to respond to radio calls and violated an order to stay in port until a qualified pilot was sent aboard.

The 152-foot James Bay came under Coast Guard scrutiny the Wednesday after she forced the 569-foot freighter **Victoria City, northbound in Puget Sound** to veer out of the traffic lanes off Point No Point to avoid a collision with the smaller ship.

Coast Guard officials said the pilot of the Victoria City reported the James Bay failed to respond to radio or whistle signals at the time, but the pilot declined to file a complaint.

However, "in view of the James Bay's lack of response to signals and failure to comply with required participation in the Puget Sound Vessel Traffic System, the Coast Guard Vessel Traffic Center

directed the James Bay not to leave her anchorage at Port Townsend, where she had retired to await better weather, unless she had a qualified pilot aboard," officers said.

At 10.30 a.m. yesterday, the James Bay was detected under way from Port Townsend, again without checking into the Vessel Traffic System. The 82-foot Coast Guard cutter Point Countess pursued and overtook the ship with the assistance of a Coast Guard helicopter.

"The offending vessel was boarded five miles northwest of Dungeness Spit, and citations were issued," the Coast Guard reported. The citations carry maximum civil penalties of \$10,000 and \$5,000, officials said. No individuals were named.

The James Bay, registered to the Tortuga Corp. of Honduras, is being operated by Seaborne Ventures, Inc., which plans to use it to raise a sunken Spanish galleon in the Caribbean.

The ship had been at the Lake Union Drydock for six months being outfitted for the treasure hunt.

Sent in by Capt. R. E. Skinner

CAPACITY BUNKERS

One day, not so long ago, under the supervision of the Chief Engineer the 4th Engineer of the Devon City was taking bunkers. In the middle of the operations the C/E asked the 4th how much bunkers were on board. To which he replied thus:-

"Well Chief, it's like this. In No 1 we have 10 tons. In No 5 we have the same as what is in No's 4 and 2. In No 4 we have what is in No's 2 and 3 less what is in No 1. And in No 6 we have the same as No's 1, 2 and 5 combined."

"What was in No 6 again" said the Chief, "All that is in No's 2, 3 and 4" replied the 4th. "What you mean" said the Chief "is that if you take 4 times No 1 added to No 2 from No's 3, 4 and 5 you'll get No. 6."

"Yes" answered the 4th.

With this the chief was happy and now knew exactly how much bunkers were on board. Putting down the telephone he let the 4th continue with the bunkering operations.

HOW MUCH BUNKERS WERE ON BOARD?

P BRADLEY
DEVON CITY

See page 7 for answers.

INCREASING SUNSPOTS

(by Keith Edwards,
Superintendent Engineer)

The following article appeared in the August 1978 edition of "London Calling", the programme guide for the BBC's external service.

Mr. John R. Mathews, R.O. m.v. Elena, sent in the article from Yokohama on the 26th July and in his accompanying letter he writes:-

"The article will be of interest to the hundreds of readers of the Newsletter who rely on international shortwave broadcasting for information and entertainment during long ocean passages."

YOU MAY be unfortunate enough to turn on your radio one day and find that there are no shortwave signals at all. Your first reaction may be that your radio has gone wrong, but don't be too hasty. It may be that our old friend, the ionosphere, is suffering from the present upsurge in activity on the sun and the associated sunspots. These spots come in 11-year cycles and when they appear there are also phenomena known as an SID's (Sudden Ionospheric Disturbances).

This piece of technical jargon is a way of describing what happens to the ionosphere when it is bombarded by X-rays from an eruption on the sun. The X-rays penetrate as far as the D layer about 80 kms above the earth's surface, and cause a rapid increase in its ionisation, with the result that some or all of the shortwave signals are unable to pass through it on their normal passage between earth and ionosphere.

If you happen to be listening at the time when the X-rays arrived (or, in other words, at the beginning of a typical SID) you would observe, first of all, the disappearance of low frequency signals from local stations; then quite rapidly each band in turn would disappear, up to and including the highest bands used for shortwave broadcasting. After an interval of perhaps 10 or 20 minutes, or sometimes as long as 90 minutes, this process would be reversed with the higher frequencies appearing first, gradually being followed by the low frequencies.

While the X-rays took only about eight minutes to reach the earth from the sun, particles were also ejected at the same time — and these travel in the solar wind and will reach the earth about two days later. They are then guided by the earth's magnetic field into the regions around the North and South Poles. These energetic particles are the cause of the aurora which residents of the extreme Northern and Southern latitudes may have seen at night. What is not so well known is that these same particles cause long-lasting magnetic storms, which disturb the reception of shortwave signals travelling near these auroral zones. Sudden Ionospheric Disturbances can affect only that part of the earth that is directly illuminated by the sun, because X-rays don't go round corners—in other words, all SID's are observed during daylight. Magnetic storms on the other hand have their most serious effects at night.

A number of sudden ionospheric disturbances have already occurred this year and, unlike the last sunspot maximum which took place in 1968, this cycle seems to be showing a much greater degree of activity and may turn out to be something approaching the previous maximum in 1957. The 1957 cycle brought about all sorts of interesting phenomena—reception of European television in South Africa, reception of New York taxi cab radios in Europe and so on—but it also caused frequent and widespread disruption of shortwave communication. The extent to which such disruptions will interfere with the reception of shortwave broadcasting depends upon the activity reached by the sun during its present increasing phase of sunspot activity.

Another consequence of the increase in the number and size of sunspots is the need to change our frequency schedules to take account of the consequential changes in the ionosphere. The low frequencies, 6 MHz, etc, cannot now be heard at anything like the same distance by day because the lower layers of the ionosphere (D and E layers), have been affected by the generally increased level of sunspot activity. The D layer exhibits a blanketing effect by day, weakening low frequencies much more than the higher frequencies, and the E layer reflects the signals at shorter ranges than the usual F layer.

The overall result is that for international broadcast services to be heard successfully, they must resort in many cases to the use of the higher frequency bands if the signals are to be strong enough for satisfactory reception by the listener.

At present, Sudden Ionospheric Disturbances seem to be happening about once a week. They may happen more often if sun-spot activity increases dramatically. The effects will continue for at least two years or so, as will the need for more extreme changes in the frequency schedules from season to season. As far as the ordinary listener is concerned, the BBC's worldwide network of relay stations will do much to lessen these effects, by shortening the average distance between transmitter and receiver.

Sunspot activity is a phenomenon which is still not fully understood. It may be associated with longer term changes in weather or climate. It is certain that we are all going to be aware of its effects on shortwave reception for the next few years.

So don't be in too much of a hurry to take your receiver to the set repairer if you hear nothing on the shortwave bands. It may be our old friend the sun going through a high part of its regular 11-year cycle.

Mr. Mathews recalls the first time he experienced this phenomena—he writes:-

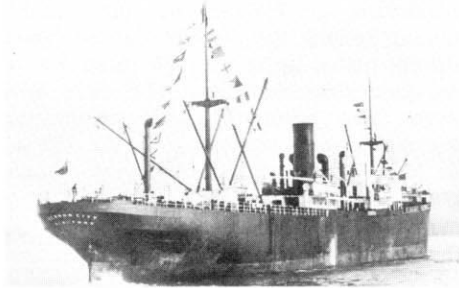
"I was then an inexperienced radio operator, I am now an old experienced radio operator. It was evening aboard the m.v. "Great City" sailing through the Western Mediterranean. On switching my receiver to short-wave for Portishead reception, there were no signals at all just a loud hiss in the headphones. A quick check showed that other North European Stations were not being received either. Just as I was about to withdraw the receiver from it's case, and panic had already set in, Captain Thornhill came into the radio room and invited me to see the brilliant spectacle of the "Aurora Borealis". Great

pillars of light streamed up from the night horizon, it was a sight I shall never forget. Then it dawned on me that it was not a mere valve or resistor that was interfering with communication onboard "Great City", it was in fact the Mighty Architect Himself, once again reminding us how feeble is man that is born of a woman. One could only think of the line from "Nidaros"....." and they that behold IT marvel."

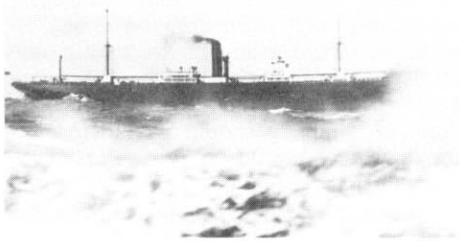
From the Archives

This feature has proved very popular with many readers. Present sea-going staff have expressed great interest and the "old uns" have also derived great pleasure from re-kindled memories.

One request has been received for photographs of the "Vernon City" and we hope the following two photographs will meet the request:-

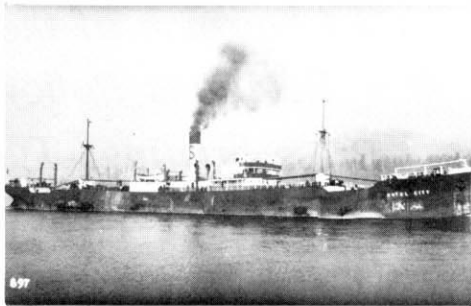


s.s. "Vernon City". Arriving New Westminster B.C. to load first cargo—General and Lumber. Underway Fraser River 1929.

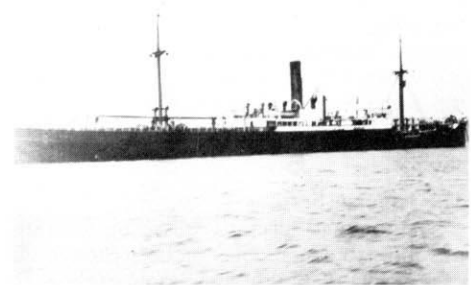


s.s. "Vernon City". Underway in head wind and sea—Later a war casualty when torpedoed in Atlantic 28.6.43. All 52 crew saved.

Vessels with strange names to us today:-



s.s. "Royal City" Ex German "Gerfrid" Built 1913. Captain T. S. Dixon, Master 1927. Underway in B.C. waters.



s.s. "Riol". Ex German Steamer. Built 1907. At anchor Vancouver Harbour awaiting loading berth. 1926.

A PSALM OF LIFE

Tell me not, in mournful numbers,
Life is but an empty dream!
For the soul is dead that slumbers,
And things are not what they seem.

Life is real! Life is earnest!
And the grave is not its goal;
Dust thou art, to dust returnest,
Was not spoken of the soul.

Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sand of time.

Footprints, that perhaps another,
Sailing o'er life's solemn main,
A forlorn and shipwrecked brother,
Seeing, shall take heart again.

Let us, then, be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait.

—Longfellow

Remarks by Mr. Graham Turnbull, Chairman of the GCBS Industrial Relations Policy Committee, at a Press briefing, Tuesday 18 July, 1978

Competitive Edge

Some of you, and certainly some of your colleagues, may have heard the inaugural address which our President, Ronnie Swayne, gave at our annual meeting on 24 May.

He began his speech by re-emphasising the devastating effect which the current tonnage surplus is having on British Shipping and ended it by stressing the necessity for us to retain our competitive edge if we are to survive.

I want to take up three points from his closing theme as being highly relevant to the job which I have, in leading the employers' representatives in their negotiations with the maritime unions.

The Tonnage Surplus

The tonnage surplus, caused by the ratio of supply to demand having been thrown out of gear by the shipbuilding boom of the early '70s and the fall in the volume of world trade following the OPEC increase in oil prices in 1973/4, is now acute and will be with us well into the '80s. Charter rates currently obtainable in the tramp market scarcely cover a ship's running cost, let alone any question of financing charges or profit: record numbers of ships are laid up—11 per cent of UK tonnage but 30 per cent of Norwegian and 43 per cent of Swedish.

A company cannot even sell one ship to keep the others going as the bottom has fallen out of the sale and purchase market.

The Myth of Wage Harmonisation

We are, however, not doing as badly as some other Northern European countries and the Scandinavians. They have more ships laid up and more jobs at risk.

A main reason for this is that their costs are higher than ours, and the principal factor here is that their rates of pay are higher. Whether their earnings will buy their seafarers significantly more, after tax and other deductions, in the countries where they live and maintain their families is another question, but there can be few if any employees in this country in any industry whose opposite number in, say, Germany, is not on a much higher wage.

Against this background, the pressure for harmonisation of seafarers' wages in the EEC just doesn't make economic sense. We would be mad to throw away the competitive

advantage which our industry enjoys in this respect: such a policy could only result in more money for some but no jobs for a whole lot more.

The ITF

There is another area where the true interests of all of us who earn our living from this industry—employers, seafarers, or shore staff—are under attack, this time by the International Transport Workers Federation (ITF).

Increasingly our UK companies are able to obtain the management of non-UK flag ships: this is good for business and provides jobs for our officers and ratings. But there have been two occasions recently when such ships, paying exactly the same rates that apply throughout the companies' UK fleets, have been blockaded in Finland by the Finnish unions because the rates of pay on board do not match up to the ITF rates. Let us be quite clear that these ITF rates have never been negotiated with anyone but are laid down unilaterally by the ITF as a level with which employers should comply or else.

In the first of these cases, a ship called the "BRITTENBERG", the Merchant Navy & Airline Officers' Association supported the Finnish unions though the National Union of Seamen did not.

In the event commercial pressures forced the employers to pay the ITF rates to get the ship out. The management contract went to a foreign competitor and some of the officers concerned lost their jobs.

In the second case, a ship called the "FORT HAMILTON", the UK unions were not able to prevail upon the Finns to agree that their freely negotiated agreements with the employers should be respected, and the matter was only resolved on condition that the ITF would hold an inquiry and if they concluded that the company should pay their rates, this is what it would do.

We believe that the ITF policies are dominated by the Scandinavian unions who are trying to force other people's rates up to make their own position less uncompetitive. Thus their policies cannot be in the overall interests of British seafarers. We are trying to persuade our unions accordingly and we hope that they will get the message.

1978 Negotiations

Back home, we shall be receiving claims from our unions for settlements effective 1 November, for the officers, and 2 January for the ratings. The considerations which I have outlined will be uppermost in our minds.

We may also have a Government Pay Policy to contend with—but we do not yet know whether there will be one or what it might be.

But any limitations which this may impose may have to take second place to the financial pressures of our own industry.

As background, and in both cases, productivity payments were agreed, you will recall that our officers got 18 per cent last June/November (the settlement covered 17 months) and our ratings 13 per cent last January.

Joint Activities

These are the circumstances which may make news for you in the months ahead. But a lot of joint constructive work goes on quietly all the time. I should like to stress that scarcely a week goes by without there being several meetings with our unions in this building on various topics.

We are involved together in the Merchant Navy Establishment, the Merchant Navy Training Board and the National Sea Training Trust. In our Sealife project we are striving together to break new ground in improving the quality of the working life at sea.

We are working together to implement the new disciplinary procedures which we have agreed, in a joint working group by industrial agreement, now that the new Merchant Shipping Bill has been delayed by lack of Parliamentary time.

We recently completed a long and detailed joint consultation with the Department of Trade over new crew accommodation regulations which will come into effect next year. And our combined representations to the Department of Health and Social Security have resulted in the reprieve of the Dreadnought Hospital for seafarers.

A new and important factor of our activities is the series of regular discussions on Economic Aspects of the Shipping Industry between our President with other leading figures and the General Secretaries of the seafarers' unions.

We are all in the business together of trying to make a livelihood in a fiercely competitive international industry and our common interests are far greater than the issues which divide us.

Staff News

Luncheon in honour of Three Senior Masters



Commodore J. Vaughan receives his flag. L to R Commodore Higgins, Capt. Parkhouse, Mr. C. R. Chatterton and Commodore Vaughan.

On 8th August the Chairman, Mr. C. R. Chatterton, presided at a luncheon to mark the retirement of Commodore M. J. Higgins M.B.E. and Capt. A. B. Parkhouse. At the same time Capt. J. Vaughan was appointed Commodore of Reardon Smith Fleet.

Commodore Higgins joined the Company as a deck apprentice in November 1934 and was promoted Master in November 1959 and appointed Commodore of Reardon Smith Fleet in September 1975.

He was awarded the M.B.E. in the 1978 Queen's Birthday Honours List.

He is married with two daughters and lives in Liverpool.

We wish Commodore Higgins fair winds for the future with good health and happiness in his retirement.

Captain A. B. Parkhouse joined the Company as a deck apprentice in April 1932. He was promoted Master in March 1960.

He is married with two sons and a daughter and lives in Appledore, North Devon.

We wish Capt. Parkhouse the best of good fortune in his retirement with abundant health and happiness.

Commodore J. Vaughan is a son of the Rhymney Valley, born in Pontlottyn where his mother still lives.

He joined the Company as a deck apprentice in September 1937 and was promoted to Master in November 1961.

He came ashore as Superintendent for approximately 4½ years before returning to sea. Whilst superintendent he was involved in the building of three of the "CARDIFF" class ships at Govan ship-builders.

Commodore Vaughan is married with two daughters and one son and lives in Plymouth.

We congratulate him on his appointment as Commodore of Reardon Smith Fleet and wish him well.

NEW STAFF

We extend a welcome to Mr. Peter Harding, Accounts Department, Head Office, also to the following sea going staff—

M. J. Gabica, 2nd Engineer
G. F. Smith, 3rd Engineer
A. McRae, Electrician
J. F. Bowman, Electrician
R. G. Miller, Electronics Officer
T. P. Young, Junior 4th Engineer
M. McKeone, Junior Engineer
C. G. Fletcher, Junior Engineer
G. Biggins, Junior Engineer
M. Taylor, Junior Engineer
A. M. Russell, Deck Cadets
R. A. Holloway, Deck Cadets
E. J. Naughton, Deck Cadets
P. C. Weychan, Deck Cadets

CERTIFICATE SUCCESSES

Congratulations to the following:-

Mr. H. C. Convery, 1st Class Motor
Mr. P. D. Slade, 2nd Class Motor
Mr. A. Doubler, 2nd Class Motor
Mr. M. J. Yates, 2nd Class Motor
Mr. R. H. Ashlin, 2nd Class Motor
Mr. R. J. Elliot, O.N.C. Nautical Science
Mr. R. J. Elliott, Class A D.O.T.
Mr. D. J. Herring, Class A D.O.T.

GCBS Briefing Paper

MN OFFICERS' PAY & CONDITIONS

There are some 44,000 officers and cadets in the British merchant fleet.

Minimum standards of pay, leave and other conditions are negotiated on the National Maritime Board between the General Council of British Shipping, representing the employers, and the four officers' unions—the Mercantile Marine Service Association, the Merchant Navy & Airline Officers' Association, the Amalgamated Union of Engineering Workers and the Radio & Electronic Officers' Union.

Earnings

The great majority of officers enjoy conditions superior to the NMB minima through company agreements. The salary differential alone can be as much as 30 per cent.

The current average earnings for particular ranks are:-

Master	£10,490
Chief Officer	£ 7,960
Second Officer	£ 6,170
Fourth Officer	£ 4,520
Chief Engineer	£ 9,810
Junior Engineer	£ 4,520

A high proportion of officers enjoy incremental scales which means that on an individual basis, they have received annual increments in addition to the pay increases laid down by pay policy over the last three years.

Tax Benefits

Under the 1977 Finance Act, substantial tax concessions were granted for overseas service beyond 30 days in a year. Most officers benefit from these to a significant degree, and very few indeed do not benefit at all. The maximum benefits on the basis of average earnings and assuming all service outside the UK, are the following net cash figures:—

Master	£760
Chief Officer	£560
Second Officer	£440
Third Officer	£350
Chief Engineer	£690
Second Engineer	£530
Junior Engineer	£320

To obtain such increases in take-home pay by salary improvements would require rises in the region of 13 per cent.

Leave

Present leave entitlement is a day off for every two worked—i.e. 122 days in a calendar year. Again this is the NMB minimum: company leave entitlements are generally higher.

MN RATINGS' PAY & CONDITIONS

Total number of UK ratings in British Ships is about 32,000.

Average Earnings (including overtime and leave pay) of foreign-going AB from 1 January 1978 are £97.40 per week on Crew Agreement.

Basic Pay for a 40-hour week, for a fully qualified AB is £47.72½ (including full Efficient Service Pay).

Over 8,000 ratings (about 25 per cent of the total) receive special rates under special agreements. This includes seamen in ferries where earnings are about 20 per cent above the national average; and about 3,000 seamen in general purpose crews (where they work on deck or in the engine room according to need) with average earnings 15 to 20 per cent higher than the national norm.

Leave

Basic NMB minimum is 72 days per year of service, including 45 days in lieu of week-ends at sea. The latter is, of course, in addition to the overtime paid for such work.

Many ratings receive more than the minimum leave entitlement, and figures in excess of 90 days per year served are not uncommon.

Fringe Benefits

A new pension fund for ratings came into effect in April and provides significantly better benefits than the new earnings' related State scheme.

Tax Relief for overseas service beyond 30 days in a year gives the foreign-going AB on average earnings, who is married with no family and spends all of his sea service abroad, a maximum cash figure of about £310 per year.

Issued by the General Council of British Shipping

SHIPS POSITIONS AT 23rd AUGUST, 1978

Cardiff City. This vessel is on Time Charter account to Salen. She sailed from Port Said on 17th August for Cape Hatteras for orders.

Devon City. On Time Charter account to Motortank. This vessel sailed from Mina Al Fahal (Muscat and Oman) on 21st August bound for a South African port.

Eastern City. This vessel is on Time Charter account to Almare. She sailed from Port Said on 20th August and is due at Porto Vesme in Sardinia on 25th. She is expected to re-deliver on 29th.

Fresno City. On Time Charter account to China National. She transitted the Panama Canal on 19th August, and is expected to discharge her cargo of phosphates in China from 15th September, completing 25/30th.

New Westminster City. This vessel is on Time Charter account to Alianca and is expected to sail from Tubarao on 24th August for Vera Cruz (ETA 10th September) calling en route at Salvador for bunkers. She then loads wheat U.S. Gulf or Montreal or Montreal for Brazil.

Port Alberni City. This vessel is on Time Charter account to New York Navigation. She arrived at Khorramshahr on 20th August and should complete discharging by 2/3rd September after which she re-delivers passing Muscat 4/5th. Her ETA in Bombay is timed for 7th and she will be free 7/8th after a crew change.

Prince Rupert City. On Steel Service No. 60. She arrived at Long Beach on 21st August and expects to sail on 25th proceeding to Oakland 26/27th, Portland 28/29th, Seattle 30/31st and New Westminster 31st/2nd September. This is followed by Berth Service No. 96 with the following itinerary - New Westminster 3rd September, Eureka 5/6th, Coos Bay 8/9th, Cowichan Bay 11th, Vancouver 12/16th, transitting the Panama Canal 28/30th for London.

Tacoma City. This vessel is on Berth Service No. 95. She arrived in Vancouver B.C. on 18th August and expects to sail on 25th with the following itinerary - Long Beach 29th, Canal 6/7th September to discharge Forest Products at Dublin 20/24th, La Pallice 26/27th and London 29th/1st October after which she completes discharge at Rotterdam 2nd/4th and Emden 5/7th October.

Vancouver City. On Time Charter account to Seaboard. The vessel transitted the Panama Canal on 11th August with a cargo of Forest Products for La Pallice, her first port of discharge, where she is expected to arrive on 24th August. She sails the following day for Tilbury 27th/1st September then Velsen 2nd/3rd and Bremen 4/7th. After discharge she may require engine repairs lasting 2 or 3 days.

Victoria City. This vessel is on Time Charter account to Yulsan. She arrived in Inchon on 22nd August to discharge her cargo of wheat and corn, and expects to complete and re-deliver 29/30th. Next business is not yet known.

Welsh City. This vessel was re-delivered from C.N.N. Time Charter on 22nd August at Lisbon, from which port she sailed that day for U.S. Atlantic coast port for orders.

Amparo. The current itinerary of this vessel is - Manzanillo 20/24th August, Guaymas 26/29th, Ensenada 1st/3rd September, Yokohama 19/20th, Nagoya 21st/23rd, Yokkaichi 24/26th, Osaka/Kobe 27/30th, Keelung 3rd/5th October then possibly Hong Kong 6/15th October.

Atlantic. At present the vessel is discharging at Coatzacoalcos, and the intention is for her to sail on 25th August to load grain in New Orleans from 27th August to 2nd September. She would then discharge in Vera Cruz 5/10th and Coatzacoalcos from end of September to mid October but this is not yet known for certain.

Elena. The itinerary of this vessel is as follows - sailed from Hong Kong 22nd August, expects to arrive Busan 24th sailing next day for Kanda 26/27th, Kobe 28/30th, Yokohama 31st/2nd September, Osaka 3rd/5th, Ensenada 21st/22nd, Manzanillo 25/27th and Acapulco 28/30th.

Gela. This vessel sailed from Flushing on 23rd August after dry docking and repairs and anticipates visiting the following ports:- Hamburg 25/29th August, Bilbao 2nd/5th September, Rotterdam 8/9th, Antwerp 10/12th, Le Havre 14/16th and Vera Cruz where she is expected on 30th September.

Maria Elisa. This vessel sailed from Coatzacoalcos on 21st August and has the following itinerary:-arrives and sails Vera Cruz 22nd/23rd, Tampico 24/25th, Progreso 27/29th, Hamburg 13/15th September, Bremen 16/17th, Antwerp 18/19th after which she dry docks for 6 to 8 days.

Sara Lupe. This vessel sailed on 22nd August from Naples and should visit the following ports:- Leghorn 23rd/25th, Genoa 28/29th, Marseilles 30/31st, Barcelona 1st/4th September and Vera Cruz 20/25th.

A man from Pakistan, on a visit to Belfast, paused to watch a fireman playing a hose on a burning house. Seeing the Pakistani, the fireman turned to him and said, "Hold this hose for me please. I must have a pint of Guinness." He thrust the hose into the Pakistani's hands and vanished.

Some minutes later a car rushed on to the scene and a fire brigade superintendent leapt out. He glared at the Pakistani and barked, "And where the devil are you from?"

"I'm from Pakistan," was the reply.

"Begorra, that's quick," said the Super, "the boys from Ballynafeigh aren't here yet!"

A man had been waiting over half an hour for a bus. When it finally arrived he asked the conductor: "Does this bus go to Paddington?"

Ignoring him, the conductor called out loudly, "Upstairs only."

The would-be passenger repeated his question, but the bus conductor was too busy to hear him and all he said was again "Upstairs only" in a loud firm voice.

At last, thoroughly exasperated, the passenger said, "All right, where does the downstairs go?"

A man was doing a little carpentering at his house when a friend walked up and said: "You hammer like lightning."

"You mean I am fast?" the man asked.

"No," the friend said, "I mean you seldom strike in the same place twice."

The young man just leaving drama school was full of himself. "Dad," he proclaimed proudly, "I've been picked for a part in a play straight away. I'm to play a man who has been married for twenty-five years." "That's not bad, son" said the father dryly. "Keep at it and one of these days you'll land a speaking part."

CAPACITY BUNKERS SOLUTION

Call Tank No. 1 A, No. 2 B, No. 3 C, No. 4 D, No. 5 E and No. 6 F.

This gives the equations.

$$A = 10, E = D + B, D = B + C - A, F = A + B + E,$$

$$F = B + C + D \text{ \& } F = C + D + E - (B + 4A), F = A + B + E = B + C + D$$

THEREFORE $A + B + E = B + C + D$

$E = D + B$ so substituting for E in the last equation gives

$$A + B + D + B = B + C + D$$

$$A + 2B + D = B + C + D$$

$$C = A + B$$

$D = B + C - A$ Substituting for C

$$D = B + A + B - A = 2B = D$$

$$E = D + B = 2B + B = 3B = E$$

$F = B + C + D$ substituting for C & D

$$F = B + A + B + 2B = 4B + A = F$$

$$F = C + D + E - (B + 4A) = 4B + A$$

Substituting gives

$$A + B + 2B + 3B - B - 4A = 4B + A$$

$$5B - 3A = 4B + A$$

$$B = 4A =$$

40 TONS

Substituting the value of B in all the equations gives the value of Each tank.
ANSWERS. TANK No. 1 (A) 10 tons No. 2 (B) 40 tons No. 3 (C) 50 tons No. 4 (D) 80 tons No. 5 (E) 120 tons and No. 6 (F) 170 tons.

TOTAL BUNKERS ON BOARD = 470 TONS



"I didn't say you've logged a helluva lot of knots. . . I said you've notted a helluva lot of logs!"

THE GREY SQUIRREL

The addition of a new animal to the vermin list is a matter of considerable importance, and every gamekeeper will agree that that introduced alien the American grey squirrel should be given a prominent position on every "tally," while with many of the less fortunate game preservers it certainly heads the list at the present time.

The grey squirrel was first introduced into this country in 1890, at Woburn, near Bedford and from this point, augmented by nearly twenty secondary centres distributed throughout the country, it has now spread over practically the whole of South-east England and the Midlands; more than half the county of Yorkshire is occupied, and Cheshire has started up as an independent unit from which these pests have already crossed the border of North Wales. Scotland has two thriving centres in Dumbartonshire and Fife, while in Ireland, it is well-established in a central position in County Longford. The comparatively local

colonies at Bournemouth and Exeter hold what are practically key positions to the South and West of England.

Altogether, the position at the moment does not look at all hopeful and judging by the progress which this invader has made since its first appearance, there seems little doubt that it will cover the whole country within the next twenty or thirty years. Unfortunately, the prevention of this increase does not lie entirely in the hands of the gamekeeper, as the majority of the country is unpreserved, and while owners of land and public parks authorities continue to foster the grey squirrel there seems little chance of checking its advance.

There are two major crimes of which the grey squirrel has been convicted time after time. First the destruction of birds' eggs and young birds; the nests of practically all the smaller birds are an easy prey to such an active robber and in many areas where these squirrels are numerous the reduction in the numbers of birds has been most alarming. But the smaller birds are not the only sufferers—pheasant and partridge eggs are perhaps the most appreciated and readily obtained luxuries for such animals and there is ample evidence that not only the eggs, but the young chicks of game birds are frequently taken, while even the hen-roost is not immune. The second indictment concerns the wide-spread damage to trees, by peeling the bark of young beeches and sycamores and biting off the leading shoots of conifers. In the garden and orchard, it is a pest of a kind never experienced before, taking fruit of all kinds, ripe and unripe and rooting up many garden plants.

It is hoped that this brief summary of the habits of this persistent pest will be of service as a warning to those who are at present outside the range of its distribution, and that they will have no hesitation about meeting the inevitable invasion of their territory with a ready supply of powder and shot. The gamekeepers who are already acquainted with this rodent can do little more than they are doing at present, and if this article helps to stimulate the continuance of their efforts in this direction, it will not have been written in vain.

Biologist. June 1930

How you handle your problems by day determines how you sleep by night.

Overheard in a London restaurant:

"Waiter, could I have some mustard please?"

"Certainly, sir; English or Common Market?"

THE DECREASE OF THE SWALLOW TRIBE

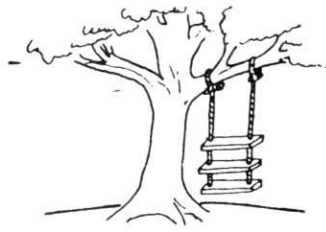
Of late years there has been an outcry that the swallows and martins which come to us each spring are decreasing in numbers. With the exception of the sand-martin, which although ill-equipped for the task, still maintains its preference for burrowing in river banks and sandpits, others of the tribe have completely changed their nesting habits. For there is no doubt that the swallow originally nested in caves and the house-martin's muddy structure was affixed to cliffs. To-day, stable and sty are accepted as substitutes for a cave, and a wall takes the place of a cliff so that it is rare to find a nest in its wild state. From America it is recorded that within recent years, cliff swallows which used to affix their nests to cliffs and boulders now utilize the buildings of man.

No doubt, however, this crowded industrial age is becoming inhospitable to many birds and to none more than swallow and house-martin. Where open buildings are scarce and insect food not available, the swallow is seldom seen. Nor is the house-martin always welcomed beneath the eaves; in many cases the nests are deliberately pulled down for the sake of "tidiness".

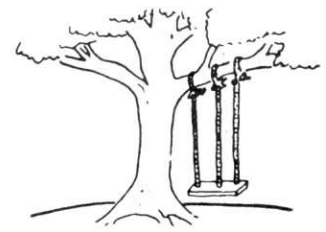
But in the absence of any kind of census it is difficult to say whether the birds have actually decreased in numbers or not. There are good and bad crops of birds as well as of grain and fruit. Numbers fluctuate from year to year and the most plentiful season is remembered whilst others are forgotten. In 1902, an outcry was raised that migrating swallows were being electrocuted in thousands to supply the demand for food and fashion—the wings being used to ornament ladies' hats. A similar statement which was circulated widely last year was investigated and proved to be without foundation. The cause of the decrease in numbers, if any, is unknown on the Continent as in this country.

June, 1930

The Project



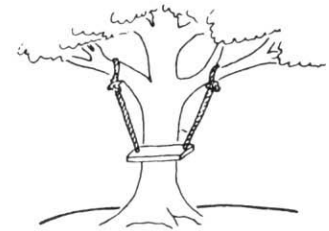
1. As the Social Committee requested.



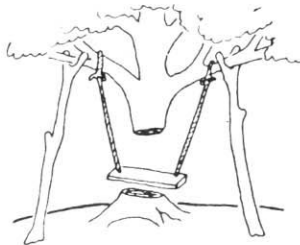
2. As the Work Study Committee envisaged it



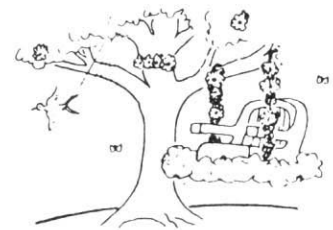
3. As Management Services approved it.



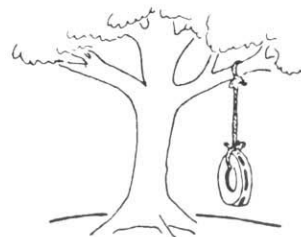
4. As Technical designed it.



5. As Supers installed it.



6. As Personnel Dept. described it.



7. What the Crews really wanted.

Youth is not a time of life; it is a state of mind, it is a temper of will, a quality of imagination, a vigour of emotions, a predominance of courage and adventure over timidity and ease.

You are as young as your self-confidence, as old as your fear. As long as your heart receives messages of beauty, cheer, courage, grandeur and power from the earth, from man and from the Infinite, so long are you young.

A local funeral director's hearse developed a bad squeak, so he got a man from the garage to see if he could fix it. The garageman laid down on the carrier so he could listen in comfort while the director took him for a drive. Discovering where the squeak was, the garageman sat up at the first red light. The drivers of four nearby cars fainted.

The hot dog is by far the most popular sausage product in Canada. It is estimated that on the average every Canadian consumes 60 hot dogs a year.

Experience enables the wise to recognise an error that has been repeated.

Many people who possess the gift of gab don't know how to wrap it up.

VESSEL	CARDIFF CITY	DEVON CITY	EASTERN CITY	FRESNO CITY	NEW WESTMINSTER CITY	CITY PORT ALBERNI CITY
MASTER	J.J. BIRRELL	J.S. MURRAY	D.B. JACK	M.C. HURST	J. PORTEOUS	D.L.G. JONES
CHIEF OFFICER	M.J. BELLAMY	E.W. WALMSLEY	R.V. DUNGAN	R.E. PAKER	J.E.S. YORK	T.J. HUNTER
SECOND OFFICER	K.T. O'HIGGINS	J. ROSS	F.T. BERNAMAN	A. APEL	I.M. STEWART	K. JONES
THIRD OFFICER	J.C. NEALE	D.J. HERRING	A. TAY	T.J. TUBBALL	J. EARDLEY	R.J. ELLIOTT
FOURTH OFFICER						
ELECTRONICS OFFICER			F.J. BARKER			
RADIO OFFICER	C.G. MACEY	N.C. SANDERS		B.J. CARTER	P.D. HARTWELL	D.P. BIDMEAD
JUNIOR RADIO OFFICER						
CHIEF ENGINEER	D. HARRISON	R.J. TRIGG	D.N. HENRY	M.G. SEAMAN	D.R. INGLIS	D. ARCHBOLD
JUNIOR CHIEF ENGINEER			D.P. WOOD		R.M. PADDOCK	
SECOND ENGINEER	A.G. HODGSON	R.A. REES		K. ROWNEY		R.U. BELL
JUNIOR SECOND ENGINEER						
THIRD ENGINEER	R. TAYLOR	D.E. SIMONS	R.S. ALLEN	D.C. LEWIS	G.D. MORGAN	R.E. RUSSELL
JUNIOR THIRD ENGINEER						
FOURTH ENGINEER	C.E. ASHTON	M.J. HUGILL	C. REES	M.D.W. EVANS	R. THOMAS	R.G. WELLS
JUNIOR ENGINEER	B. METCALFE	S.G. MORRIS J/4	H.N. PLENTY X4	T.P. YOUNG J/4	B.J. PEXTON	P. PRICE
JUNIOR ENGINEER	R. MAW	M. TAYLOR	J.J. JONES	M. McKEONE	K.R. TONKS	R.I. HALL
JUNIOR ENGINEER						
ELECTRICAL ENGINEER	J.P. O'MAHONEY	R.D. PARKER	J.A. GRAINGER	J.F. BOWMAN	D.G. JARVIS	D. OSBORNE
JUNIOR ELECTRICAL ENGINEER						
CATERING OFFICER	F.W. LEVER	P.F. AKERS	C. HARRY	D. HARTSHORNE	P.D. SMITH	D.C.M. TRINICK
DECK CADET				A.P. MILLER	R.J. TAYLOR	
DECK CADET				B.F. COLLINGS	D.T. SHORHOUSE	
DECK CADET						
DECK CADET						
DECK CADET						
ENGINEER CADET			M. WILLIAMSON	T.A. SAVAGE		
ENGINEER CADET			M.P. OWENS	C.K. LEE		
VESSEL	PRINCE RUPERT CITY	TACOMA CITY	VANCOUVER CITY	VICTORIA CITY	WELSH CITY	ATLANTIC
MASTER	K.B. WHITTING	J.J. KALNINS	L.R. STAINES	R. SKINNER	A.L.G. GOSSET	T. LAWSON
CHIEF OFFICER	K. MILBURN	W.D. HOWELL	J.S. PEARSALL	M.W. SLAYMAN	W.G. WOOD	P.M. HAVERSTOCK
SECOND OFFICER	E. BINGLEY	K.J. CRIBBIN	P.J. GODDING	N. DAVIES	J. HENDERSON	J.C. FAGLER
THIRD OFFICER	A.P. MORRIS	T.J. WARD	P.M. BATES	T.L. LAWRENCE	P.D. CODD	N.M. HOWARD
FOURTH OFFICER						
ELECTRONICS OFFICER					D.R. WILKINSON	
RADIO OFFICER	J.A. HESLOP	V.F. CULLEN	M. WILKINSON	I.F. BULLOCK		W.P. BUDDEN
JUNIOR RADIO OFFICER						
CHIEF ENGINEER	J. CORNACK	R. CHAMBERS	J. SCOTT	G.N. TROTT	M.E. RAYNER	N.E. SHILSTONE
JUNIOR CHIEF ENGINEER					R.E. DIAMOND	
SECOND ENGINEER	D.E. HORNE	N. NESBITT	H.C. CONVERY	P.H. EVANS		J.B. HOCKING
JUNIOR SECOND ENGINEER	E.L. MALLETT					P.D. SLADE
THIRD ENGINEER		K.A. VELDA	A. McNALLY	G.F. SMITH	M.B. PERROTT	
JUNIOR THIRD ENGINEER						
FOURTH ENGINEER	K.W. NEWTON	P.W. PLACE	D.C. PULLEY	M.G. EVANS	G.K. BENTLEY	W.R. PARKIN
JUNIOR ENGINEER	M. MORGAN	K.R. WARNER J/4	D.F. BARKESS	D.G. DAVIES	R.M. STRONG	J. GREENSLADE X4
JUNIOR ENGINEER	D.A. HAYDEN	P. CURRAN	P.H. MUNRO	K. WILTSHIRE	G. BIGGINS	R.P. PHILLIPS J/4
JUNIOR ENGINEER						C.G. FLETCHER
ELECTRICAL ENGINEER	P.D. KYLE	J.P. CRAWFORD	N.J. DOYLE	J. McIVER	P. TYERMAN	A. McRAE
JUNIOR ELECTRICAL ENGINEER						
CATERING OFFICER	D. KELLY	R.G. MOYLON	G.R. PASMORE	D. GOWSELL	N.H. FROST	A.A. GOULDIE
DECK CADET	P. MARTIN	S.F. LOWRY	M.S. MORGAN		J.C. BROWN	
DECK CADET	C.G. EVERETT	J.D. BATEMAN	J.M. VINCENT	C.E. BROAD	P.P. COOK	
DECK CADET		I.D. BIRD	J.D. SMITH	P. COLLINS	M.A. EVANS	
DECK CADET				M.R. HART	C.S. WEEKS	
DECK CADET				R.W. PRICE		
DECK CADET						
ENGINEER CADET	M.P. HENRY	G.J. MCKENZIE		A.P. BRANDRAM-JONES	D.J. KNOX	
ENGINEER CADET	M.J. LOCKWOOD					

VESSEL	GELA	ANFARO	ELENA	JOSEFA	MARIA ELISA	SARA LUPE
MASTER	E.A.G. BOYER	T.F. McNULTY	G.S. GARLICK	M.E. JONES	R.K. STUART	SARA LUPE
CHIEF OFFICER	R.S. McRAY	D.W. ELLIS	J. SHARPLES	G.T. PARKER	D.J.A. NICHOLL	W.J. CROSS
SECOND OFFICER	R.G. HAYTON	T.A. BURLEY	P.C. COLES	J.P. ANDREWS	A. THOMSON	D.C. TOON
THIRD OFFICER	M.R. LOVIBOND	K.G. WHITTINGHAM	I.C. MILLER	M.L. FRAZER	J.A. KOOBY	E.M. RICHARDSON
FOURTH OFFICER						M. WEAVER
ELECTRONICS OFFICER		R.G. MILLER				
RADIO OFFICER	E.A. WILLOCKS		J.R. MATHEWS	R.H. SMITH	J.M.A. CLARK	A.J. COTTLE
JUNIOR RADIO OFFICER						
CHIEF ENGINEER	P.W. EVANS	D.N. AMEY	E.R. MORGAN	W.J. GILL	H.L. FLETCHER	M. McQUEEN
JUNIOR CHIEF ENGINEER						
SECOND ENGINEER	M.R. GREEN	M.J. GABICA	D.G. WEDLAKE	T. GRAHAM-RUSSELL	P.J. WALKER	M. MURRELL
JUNIOR SECOND ENGINEER						
THIRD ENGINEER	K.D. AUST	W.H. TUCKER	R.C. BUTCHER	A. DOUBLER	J.L. MAGILL	
JUNIOR THIRD ENGINEER				S.C. WARD	J.A. JONES	D.M. ELEY
FOURTH ENGINEER	W.J. LAIT	S.J. STAINES	K.R. NEGELE			G. GAYWOOD
JUNIOR ENGINEER	R.H. REED	J.L. COATES A4	J.M. CAVANAGH	S.R.W. JENKINS	R. GODSALL	E.L. LLOYD
JUNIOR ENGINEER	A. KEAST	D.J. JARVIS	K.J. MIDWINTER		N.C. WILLIAMS	D. CAFFYN J/4
JUNIOR ENGINEER						
ELECTRICAL ENGINEER	M.G. DAVIES	P. WILLMOTT	C.G. SEATON	G. SHADDOCK	J.D.W. McLAREN	E.R. BATEY
JUNIOR ELECTRICAL ENGINEER						
CATERING OFFICER	J. BONNER	P.P. DELANEY	R.A. PEACH	R.G. PIERCE	A.H. FOX	J. BUCKMASTER
DECK CADET	S.J. VOSS				G.D. RANDELL	A.R. REDMAN
DECK CADET					J.D. BENNETT	P.C. WEYCHAN
DECK CADET					S.F. BRODERICK	A.M. RUSSELL
DECK CADET					M. COX	E.J. NAUGHTON
DECK CADET					P.A. VAUGHAN	R.A. HOLLOWAY
ENGINEER CADET		P.M. DESCHAMPS				
ENGINEER CADET						

Below are listed Officers and Cadets presently at home either on leave or study leave. Every endeavour is made to ensure that the list is as accurate as possible at the time of printing.

MASTERS	P.J. BOROUGHS, J. CANN, K.W. FULKER, W.D. JONES, A.D. LIGHTFOOT, O.J.T. LINDSAY, J. VAUGHAN, D.L. BELL, R.A.H. VANNER, T.W.D. JOHN, R.I. CRAWFORD.
CHIEF OFFICERS	R.T. ALFORD, M.C. INGRAM, A.P. JAGGERS, A.M.W. MITCHELL, F. SCOTT, I.C. STUTT, R.P. GRAHAM, I. WOOLLARD, T. HAXELL, D.H. AUREY.
SECOND OFFICERS	J.R. ASHLEY, P.A. BULLARD, A.C. PROSSER, E. BINGLEY, A.L. BRUCE-SMITH, E.J. DUNK, G.D. EVANS, A.A. FIELD, S.P. GORFORD, J.W. GURTON, P.P. LEWIS, M.F. MARCO, J.G. SHIRLEY, G. SIZER, A.K. SMITH, D.H. SMITH, N. JERRUM, I. COWAN.
THIRD OFFICERS	W.P. BARNES, S.R. BREEDON, M.J. CLARKE, G.P. EYLES, N.R. JACKMAN, T.H. JOWETT, D.P. KIRLEY, P.C. ROBERTS, I.A. SMITH, J.M. SMITH, C. SWINDELLS, H.D. JOHNSTON, C.A. PRESCOTT, P.C. HARDING.
RADIO OFFICERS	P. BRADLEY, R.G. CHUGG, R.W. McINNES, R.J. PREECE, M.W. SAVORY, K.H. SELLAR, D.S.H. THOMSON, G.P.S. WATTS, S.G.W. WHITMORE, D.C. SHORT, W.P. CAMERON, B.D. EVERETT, E.G. BROMHAM.
CHIEF ENGINEERS	G.M. CUTHBERTSON, J. FITZSIMMONS, G.J.H. McBRIDE, D.M. PARSONS, L.G.I. TAYLOR, L.M. WILLIAMSON, D.J. JENNINGS, J.J. BAGHURST, E.M. DRAPER, J.C. CULLEN.
SECOND ENGINEERS	W.A. BRUCE, P.R. BRYANT, K. DURWARD, J. FOOTS, G.J. GRIFFITHS, D.P. JONES, K.D. MORGAN, G.J. MORRIS, T.J. NEWELL, P.J. PRENDERGAST, J. KING, J.N. HAUGH.
THIRD ENGINEERS	C.J. BURTON, A.C. COOMBS, A. EDWARDS, A. HOBIN, R.M.B. JENKINS, J.L. MAGILL, W.M. POWELL, G.E. STEVENSON, R.J.D. STRANGE, M.J. YATES, C.C. FRENCH, J.H. DAVIES, D.B. EVANS, D.A. ROBERTS.
FOURTH ENGINEERS	R.H. ASHLIN, A.M. BAXTER, A.J. BUDGE, M. CAUSER, D.J. COOMBS, A.D. COWLING, S.J. DAVIES, I.S. EXTON, P. JOHN, R.H. MOORE, T.E.J. SPERRIN, A.G. VINCENT, M.J. TWICHTT, M.G. SMITH, I.C. PEARCE, P.J. RIGBY, A. PRICE.
JUNIOR ENGINEERS	R. BROWN, J.W. CABLE, P.J. COLE, J.A. COLDRICK, A.D. COWLING, M. CRAWFORD, W.N. CROSSLEY, J.H. DAVIES, B.W. DAVIES, K.D. HILL, P.W. JENKINS, R.J. O'BRIEN, J. RETTALICK, G. REYNOLDS, M.D. STAINES, W.A. STONE, G.G. WATERS, A.J. WHITE, D. WRIGHT, B.P. MORSE, P.N. McCORMACK, C.J. BROWN, B.L. AHERN, C.L. TAYLOR, R.A. BARRON, R.M. STEAD, C.R. BRENNAN.
ELECTRICIANS	K.F. BEAN, C. CAUDY, B. CAWHERLEY, J.T. LORRAINE, P.G. STOKER, I.M. VAUGHAN, E.M. BENNINGTON, D.G. GRANT, K.W.G. HAMPTON, T. WILLOUGHY, J.P. PRESTON.
CATERING OFFICERS	L. HAYWARD, P.J. KEOGH, G.J. LYONS, J.A. PATRICK, L. SLAWINSKI, L.B. SURREY, D. MacPHAIL, A.P. HUGHES, C.R. PASMORE, L.E. SEABROCKE.
DECK CADETS	R.W. DAVIES, P. BORLEY, S.J. SMITH, J.J. HUDSON, M.R. DUNSTALL, S.J. LAWS, R. HUGHES-JENKINS, R.K. VILLIARS, G.M. RIVELL, A.M. TANNER, J.J. MOORE, M. SEALEY, R.E. SPRIGGINS, A. WILLIAMSON, T.J. FULLER, G.R.J. FAULKNER, G.R. GARLAND.
ENGINEER CADETS	C.J. WREN, C.B.C. JONES, J.C. THOMAS, A.R. PARKER, D.R. JAMES, W.E. WILKINS, I.J. MORGAN, A.J. SALTER, M.R. PENNY, M.G. ADAMS, I.P. JASPER, N.J. MILLWARD, R.L. MANSON, R.E. PARSONS, J.A. THOMAS, G.A. BROOKS, A.M. FRANCIS, K.J. AYRES, A.J. KETCHEN, M. RICHARDS, A.J.F. TUCK, M.R. PREECE, T.C. LANSDELL, H.D. McLUNDIE, P.W. KNIBBS, J.A. AKIURST, M.S. DUKE.