# SERIAL WAVES

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1 1 No 8 Wednesday 11th September 1940 Price 1d the partiod membioned, the H A. P has carried out 159 raids on Airdressa, 56 on airon

## THE TEST NO ALL AND SEE TO LES OUR MAGAZINE LAND HE PROPERTY OF THE PROPERTY O

It is the intention of John Dory to publish a souvenir magazine issue of "Serial res". We want this publication to be something worthwhile - a record for all time the voyage in H. M. Transport No 12.

For this printed issue we need more contributions - articles, strious and humorous, ems, limericks. We make a special appeal for photographs, skotches, drawings, two me sketches and colour work. Contributors can consult the Editor and hand in their orts to 24 Bn Orderly Room on C Deck after 2000 hrs each evening.

## WAIFR RITUAL SURVIVES

Never look a Gift Officer in the face.

The 24th have a Corporal who is willing to box anyone - what an undertaker.

Somebody blundered - the Navy reported a light on the starboard last night - its a grate business is 'nt it Ship?

MARY NOTICE - All library books must be returned by 1700 hrs Thursday 12 Sep 40. The library has rendered good service. Show your appreciation by returning your book on time. TRUTH - by Mo No 7

Who was the witty private in the 24th who told another two in confidence that he had mad a Morse message from the --- to the effect that we were being joined by four more destroyers last Monday. And don't the two confidents wigh they hadn't told.

And speaking of rumours, we are now offering a prize of 5 Milliona Razor blades ( slight used) and a hot water bottle ( can be filled ready for use at any of the cold water sets) to any reader who can think of any D---- place we are NOT going to.

PUZZLED AUSSIE. No, Kia Ora is not the Enzed equivalent for the Aussie word friend.

There's no doubt the sea brings out the best in man.

Ten young Aussies from --- woke up to find a new berth, But never bewailing, the re actively aling, And quietly increasing girth. cook (conducted a la balates Diamit) the question

This weeks "Cheer Germ" - our next port of call is a prohibition area.

NED - No, we don't think it would be any use advertising for money lost on a Crown and Anchor board.

Someone might have pinched their song but we don't think they can sing anyway; we've r heard the tune since we came aboard.

HEARD ON "A" DECK - Look at Mr C--- just seems as if someone poured him into his orm. Yes, and forgot to say when. Lim of award need prof saf side - wrone of pluroffs writed

Wanted to borrow - Any sort of a container. Apply Spr I. Bullock 13th Rly

Beware of Neptuqo, water sprite, the Ruler of the Seas, Those changing moods can make one feel Distinctly ill at ease.

He loves to churn the waves to foam And doubtless from his watery lair, He laughts with fiendish glee to see The sufferers from mal de mero

#### LATEST WAR NEWS

Air attack on London is presented in German broadcasts as a great and exhilerating act. There has been no disposition in London to minimise civilian casualties cause by German raids, but the R A F will not be deflected from its purpose of confining attacks on Germany to military objectives. Germany has attempted to demonstrate in efficiency of British raids by publication of casualty figures. Germany declares the between May lo & Aug 31 the total loss inflicted by British air raids was 78 killed, 29 gravely, and 22 slightly, wounded. These figures, if correct, would be received only with satisfaction in London, for the killing of civilians is no part of British strategy. The nature & number of R A F attacks on Germany is directly Known. During the period mentioned, the R A F has carried out 139 raids on Airdromes, 54 on aircraworks, 57 on munition factories, etc., 139 on oil plants or depots, 15 on blast funds on power plants & 25 on other targets.

The recently arrived Canadian contingent numbered 11,000 men.

The Lord Mayor of WARSAW, who cheered the defenders during the seige, has been shot the Germans to celebrate the 1st anniversary of Poland's defeat.

While German raiders bombed babies in London last night, the R A F attended to the German dockyards at Hambourg & Wilhelmshaven.

The R A F now possesses a new & highly efficient type of incendiary bomb. Samples have been duly delivered in Germany.

A Canadian destroyer has returned home after a lengthy absence - Bag, 6 submarines. Bravo the Maple leaf.

## FORESTRY - 14

To us of the 14th Forestry, this sea journey comes as part of the usual routine of military life: travel is in our bones. 'Nay back when we were suddenly called toge from all the darkest corners of N Z (and some of the worst pubs) we were immediated thrust into tents - no doubt to make us feel at home- but soon we started on a long series of technical manoeuvres. On the occasion of our first inoculation, with the injunction of the M O to go home and keep warm in bed still echoing in our ears, we fell back (in persistent rain) to prepared positions in a hut. Those who did not actually go to hospital fell back a bit further to another hut soon afterwards, and week after our first evacuation we retook the tent lines, fighting all that night the rain, which made intensive aerial attacks, and scored some nice hits through the holes in the canvas.

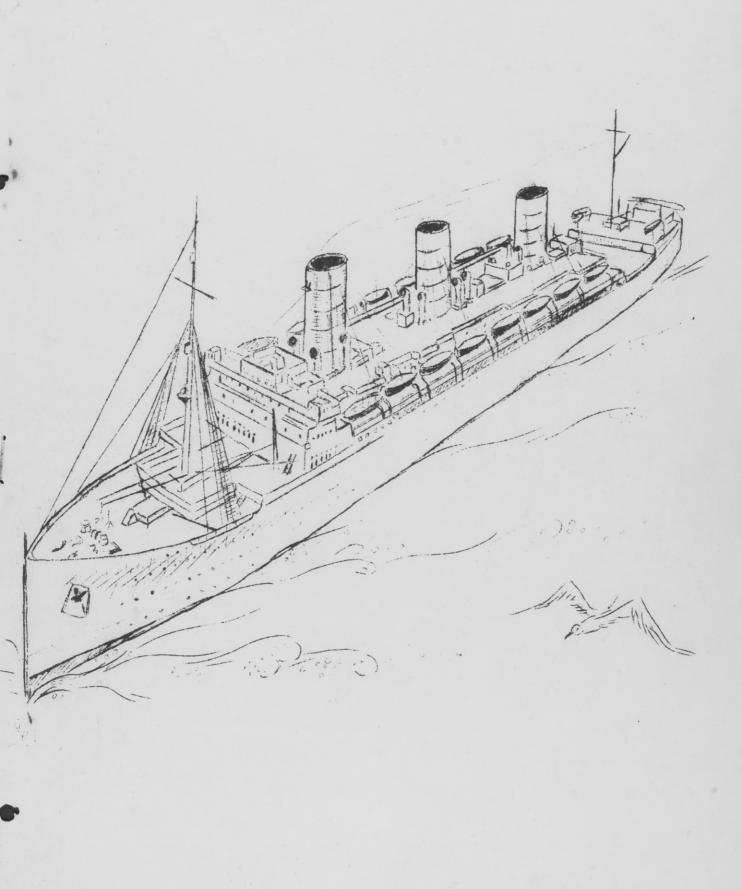
Encouraged by the success of these campaigns (scarcely 40 of our complement being hospital) the authorities decided that we were fit for bigger things, and an onslaw was made on the Trentham Grandstands. Despite the loss of a fair quantity of equivalence were occupied by the evening; the men sleeping, as the Routine Order so apthy expressed it, "like sardines". A further sally by some who had missed the first a slaught, quickly reduced the Kiosk to a shambles, and coal, generously supplied by hospital authorities, constantly (if stealthily) made its way (by night) to the full twas after this period of successes that we dispersed to our various homes bear the mysterious insignia of our Unit, and the more obvious sweepings of the bullring Upon return a memorable occasion was brought about by a concerted movement upon the cook (conducted a la Mahatma Ghandi) the question of who called the sausage-curry stew-merchant a cook was raised, and a decisive fall was awarded to the messees.

Having thus made Trentham too hot to hold us, and thirsting for greater fields of we jumped aboard this lugger and asked the Captain to take us anywhere he knew the was a good war on, and we would be players. He forthwith rang up some other ships knew, to make a party of it, and here we are, in Owen Jones's locker, travelling a travelling; and be damned if I can tell you where.

The latest addition to the names of psychopathic ills is ergophobia - a condition being allergic to work - This has long been known to military gentlemen, but under less scientific title of "Swinging the lead".

Tomorrow - Special Sports Edition of "SERIAL WAVES" - Don't miss it :

Edited by John Dory, printed & published by Pte Davy Jones, at the Neptune Press, for Units of 3rd Echelon, 2 N Z E F.



Serval Warres Special Supplement Dur Ship Thanks to the courtesp of Imploins Thomas and by the help of his Officers, "School We is is broud to be able to fresent this discription of Transfer No 12. It is dedicated by the author to "All Blanks of the 3rd Echelon, a N. Z. E.F. about this ship, wishing them Good Luck, Good Aunting and a safe return. May we wish the same to our banadian hosts of the b. I'd boy who have done so much to make our voyage a pleasant one. September 11th 1940. 

In response to the many questions asked by all ranks of the New Zealanders whose company aboard we are enjoying for a brief space of time the following particulars

it is hoped will be of interest .

Built by the Fairfield Ship Building and Engineering Coy of Glasgow ,to the order of the Canadian Pacific Steamship Co for their Transpacific Service, the keel was laid in 1929 and H M T 12 was completed in 1930. The length overall is 666 feet, length between perpendiulars is 644 feet. The moulded breadth is 83 feet 6 inches and the breadth on the Promenade Deck is 87 feet 7 inches. The gross tonnage 26032.28 tons and the displacement at load line is 30,575 tons. The height of the foremast from load line is 190 feet, main mast 192 feet and the weight is 26 tons, you can reach the lower Crow's nest by ladder inside the fore mast. Old sailing ship men will be disgusted to know that the Crow's nest is fitted with a steam radiator. The bow anchors weigh 7 tons each and the total weight of the two anchors and cables is 137 tons.

There are 26 Lifeboats two of which are motor boats fitted with wireless sets . The height of the for rad funnel from the sun deck is 56 feet, middle and after funnels 58 feet 6 inches and the diameter fore and aft is 26 feet. The after funnel is a dummy hich contains a number of exhaust fans, truncking, hot water tank and lift machinery for the engine room . There are 12 water tight bulkheads, the double bottam of the ship is divided into 40 compartments or tanks . Some of these tanks are filled with fresh or salt water, others with oil fuel or salt water . when we left Fremantle we had 3700 tons of fresh water on board and over 4000 tons of oil fuel . Approximately 250 tons of fresh water are consumed daily and oil fuel consumption varies according to speed, at present it is about 140 tons daily. Besides having a double bottom the ship is double sided up to D Dock from just forward of the Bridge to the after end of the Tourist Promonade Dock and this space is subdivided into 46 tanks for fresh water and oil fuel storage . H M T 12, is a twin screw ship and each set of main engines consists of High, Intermediate and Low Pressure Parsons Turbines . On the end of each turbine shaft, is a double helical or herringbone pinion, which meshes into a main gear wheel 13 feet 6 inches in dismeter and weighing over 59 tons . This gear wheel is bolted to the propellor shaft direct and the turbines make 12.4 revolutions to 1 revoultion of the propellor . The Tunnel Shafting is 212 inches diameter the tail end shaft, that is the length that carries the propellor, is 23 3/16 inches diameter . The total weight of the propellor shafting for each engine is 154 tons .

To transmit orders from the Bridge to the Engine Room a triple tone telegraph for each engine is fitted and after "Stand By"Engines followed the next order, "Slow Astern" Port and Starboard Engines, sufficient steam had to be admitted through the manoeuvering valves to set in motion the total weight of 575 tons of mining punts before the propellors commenced to revolve and you set out on your great adventure from Wellington.

The propellors are solid bronze, casting weight being 25 tons and the finished weight 20 tons . They were the largest solid propellors at the time that they were made, being 20 feet in diameter and each revolution drives the ship shead 20 feet . At full speed the engines develop about 30,000 tons horse power, the propellors turn about 120 revolutions per minute and the ship travels about 22 to 23 knots depending on weather conditions . A nautical mile is 6080 feet, a land mile 5280 feet . Steam to drive the main engines is supplied by 6 Yarrow Watertube Boilers of the fire drum type . The steam pressure is 425 lbs per square inch and is superheated to 750 degrees farenheit, when you think that your kettle boils at 212 d.f. you will realise that 750 degrees is a high temperature to deal with and so all parts in contact with this steam are made of special heat resisting metals . To give you some idea of the size of each boiler furnace, six tables of Bridge could easily be arranged in the furnace and still leave room to walk around the players . Each furnace has 6 burners through which the oil fuel is sprayed at about 110 lbs pressure . There are sufficient bricks in each boiler to build a fair sized house . Then steering at full spead these 6 boilers are evaporating about 250,000 lbs of water an hour. The steam after passing through the engines exhausts into 2 condensers containing 6,220, tubes 13 feet 6 inches long and  $\frac{3}{4}$  inch diameter through ch sea water is being pumped at the rate of 15,000 gallons per minute . The exhaust steam striking these tubes condenses to water which is reheated and pumped back into the boilers . There are 2 Scotch or fire tube boilers only one of which is in use at a time to supply steam to Hydraulic pumps, oil fuel pumps and other auxiliary machinery, also steam to the Laundry Galleys, ships heating system and distilled water for the Water tube boilers. There are 22 Watertight doors operated at 800 lbs hydraulic pressure and they can be closed individually or all together, and every day at sea they are tested at 10 am, if you listen about that time on deck you will hear numerous small bells ringing as the doors slowly close . Should we run short of fresh water, we have 2 Evaporators capable of converting 100 tons of salt water to fresh water per day but it is not very palatable and so, care in the use of supplies we have aboard should be excercised .

Now lets turn to the electrical installation There are two 600 kilo watt Turbo generators and four 300 kilo watt Diesal generators or sufficient electrical power for the needs of a small town . 22,000 lamps were required to fill all the sockets fitted, there are 300 electric motors ranging in size from \( \frac{1}{4} \) to 130 horse power . 300 cabin fans were fitted to say nothing of such things as ladies curling tongs and other equipment too numerous to mention. The Galley is a big power consumer, all the ranges being electric and there are many small machines for various jobs that go with the preparation of food . The switchboard room is one

of the finest afloat both in layout and equipment . Now lets take a look around the Navigating Bridge. As soon as you climb the ladder leading up to the Bridge, you see two brass standards, one is the Engine Telegraphs the other, the Telegraphs leading to the Fo'cstle and After Decking Bridge. Inside the Wheel House there are a number of Navyphones (Telephones to you) communicating with all parts of the Ship. There are two Steering Wheels and complete telemeter systems which operate the electric hydraulic pumps for working the 49 ton rudder which can be moved from Hard a Starboard to Hard a Port in a few seconds. There's the fire detecting cabinet which not only warms the Officer in charge when a fire starts but indicates the location of the fire. This cabinet is fitted in conjunction with the Sax Rich Extinguishing System. There's also another cabinet with location indicators and alarms in connection with the alarms placed throughout the Ship. Gyro and Standard Compasses are fitted. There's a course indicator which records on a chart the Ship's steering. When the watertight doors are closed from the Bridge each morning, a small lamp lights up, on a plan model of the Ship, as each door closes . The navigation lights have their indicator also and in peace time, should one of the lights fail this indicator instantly reveals it . Kent Clear View Screens are fitted in the Wheel House so that in the worst rain or snow storms the view ahead is not obliterated. A very interesting instrument is the Echo Sounding Machine which when in use, gives a very accurate measurement of the depth of water under the Ship . Briefly this is how it works - a high voltage current strikes a blow on a series of plates enclosed in a cylinder which is welded inside the bottom of the Ship . This note travels down to the bed of the ocean and rebounding, comes up again to be picked up by another cylinder also in the bottom of the Ship. This echo is carried back to the recording instrument on the Bridge in the form of a weak electric current . This current leads to a pen which marks a slowly revolving chart graduated off in fathons ( 6 feet ). It depends on the depth of water how many soundings per minute can be obtained, and varies from 45 for deep water to 260 in shallow water. The chart itself becomes very interesting after it has been in use awhile, because like a relief map, it clearly shows hills and valleys, plains and plateaux forming the bed of the ocean.

Vireless plays a very important part in the navigation of a ship so lets peep into the wireless room - A very formidable array of mysterious looking instruments and gadgets await you. There's the Direction Finding gear, which is so valuable an aid to navigation, long and short wave sending receiving sets, a gyro repeater and many other mysterious gadgets that are used in the course of a voyage. In times of peace a business man travelling aboard can be in constant touch with all the important cities

of the world.

Ever wonder how much paint a ship this size requires? Here are the figures for the exterior only, 2,100 gallons of paint & 38 gallons of varnish. You can about troble these figures for the Ship's interior.

There are about  $5\frac{1}{2}$  miles of fresh water and  $5\frac{1}{2}$  miles of salt water pipes in the Ship, 5200 taps of various sizes and it takes over 100 tons of water to fill the 1st

Class Swirming Pool .

Lets call on the Chief Steward and have a yarn to him - He and his assistants are responsible for ordering, receiving on the dock, loading aboard, safe stowage and keeping in good condition an incredible amount of provisions of all kinds. To mention only a few figures will give you some idea of the enormous quantities of foodstuffs and stores on board under the care of the Catering Department Leaving Wellington. All kinds of meats totalled 50 tons, Poultry 2½ tons, Fish 2 tons, Dairy Produce 14½ ons, Vegetables 14½ tons, Potatoes 45 tons, Rice 73 tons, Sugar 7 tons, Cocoa 400 lbs, Coffee 1200 lbs, Tea 5100 lbs and this is interesting also, 539,000 bottles of Beer, 996,000 Cigarettes2,000 lbs of tobacco to say nothing of Sauces, Essences, Pickles etc. As the Ship endeavours to satisfy even the most fastidious passenger, small quantities of rare foods are stocked and very rarely does the passenger ask for something the Catering Department is unable to produce.

The Laundry is also under the Chief Steward's control and, on a single round voyage to the Orient and back to Vancouver 238,931 pieces of laundry have been handled

besides the private linen of passengers and crew .

Lets call at the Purser's Office now for information and this what we are told The full crow numbers about 600. In peace time the Ship has accommodation for 300 First
Class, 160 Tourist and 700 Third Class passengers . Passports, tickets, information,
mail, train reservations, transferring other ships, stop overs, money exchange, custom
declarations, safe deposit of money and valuables, adjusting berthing difficulties are
all cared for on behalf of the passengers. Crew wage accounts, stowage of cargo plans,
charges on excess baggage, all the Ship's financial business and many other tasks fall
to this office.

On the lighter side, Dances, Concerts, Ricture Shows, Bingo, Hot Dog Parties, Deck Sports and we must not forget the wonderful Childrens Parties all organized by the Chief Purser, and now there's a war on, many Army and Navy men receive assistance in their duties from the same office.

We will walk along "A" Deck to the Ship's Medical Dept. There's a Consulting Room and Surgery fitted with up to date equipment, including adjustable operating table with a shadowless high power lamp overhead. Sterilizers and medicine cabinets containing fearsome looking bottles and things. Our good friend Dr Mc Kenzie is Ship's Medical Officer ably assisted by two Canadian Nurses and a Hospital Orderly.

Since commencing her maiden voyage 14th June 1930 from Liverpool, H M T 12 completed a total distance of 1,030,603 miles on her arrival at Fremantle 4th September 1940. Of that distance 55,885 miles is the distance steamed in service of King and Empire and, she is willing and eager to go, where-er her services are requir-

ed in the cause of free men.

Perhaps you would like to know a few records she has made as Blue Ribbon Ship of the Pacific and here they are - Leaving Yokohama at 3-00 pm 9th April 1931 she arrived at Victoria British Columbia 6-48 pm 16th April,7 days 20 hours 16 minutes for a distance of 4200 miles at an average speed of 22.27 knots. Left Yokohama 10th April 1938 arrived Honolulu 15th April distance 3383 miles, time 6 days 8 hours 33 minutes, average speed 22.76 knots. The fastest trip open sea - Left Honolulu 4-46 pm 15th March 1933, arrived Victoria B C 3-19 am 20th March, distance 2329 miles, time 4 days, 8 hours, 3 minutes. Average speed 22.38 knots. The fastest days run was made on the 10th May 1936, when H MT 12 steamed 544 miles in 23 hours, 20 minutes at an average speed of 23.31 knots, and the horse power developed was 28,899.

The 80 mile trip from Victoria to Vancouver has been accomplished in

3 hours, 19 minutes - homeward bound -.

Thanks are due to Mr Shaw, Chief Engineer, Mr Goddard, Chief Officer, Mr Moes, Chief Purser and Mr Crowsen, Chief Steward for making available many valuable records

and for the helpful suggestions offered, from which this article was written .

Before closing here's just one more item of interest - It takes 100 tons weight to sink this ship 1 inch and here is a problem for you to solve - If 100 tons is required to sink this ship 1 inch, how many inches did she sink when 2650 New Zealanders in marching equipment embarked at Wellington .

Signed.

YARDARM