

# THE NAVY

*The Magazine of  
The Navy League of Australia*

AUGUST/SEPTEMBER/OCTOBER, 1980

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The magazine of the Navy League of Australia

VOL 42

AUGUST/SEPTEMBER/OCTOBER, 1980

NO 3



USS LANGLEY, the first American aircraft carrier, leaving Brooklyn Navy Yard. (Photo — Lou Cunningham)

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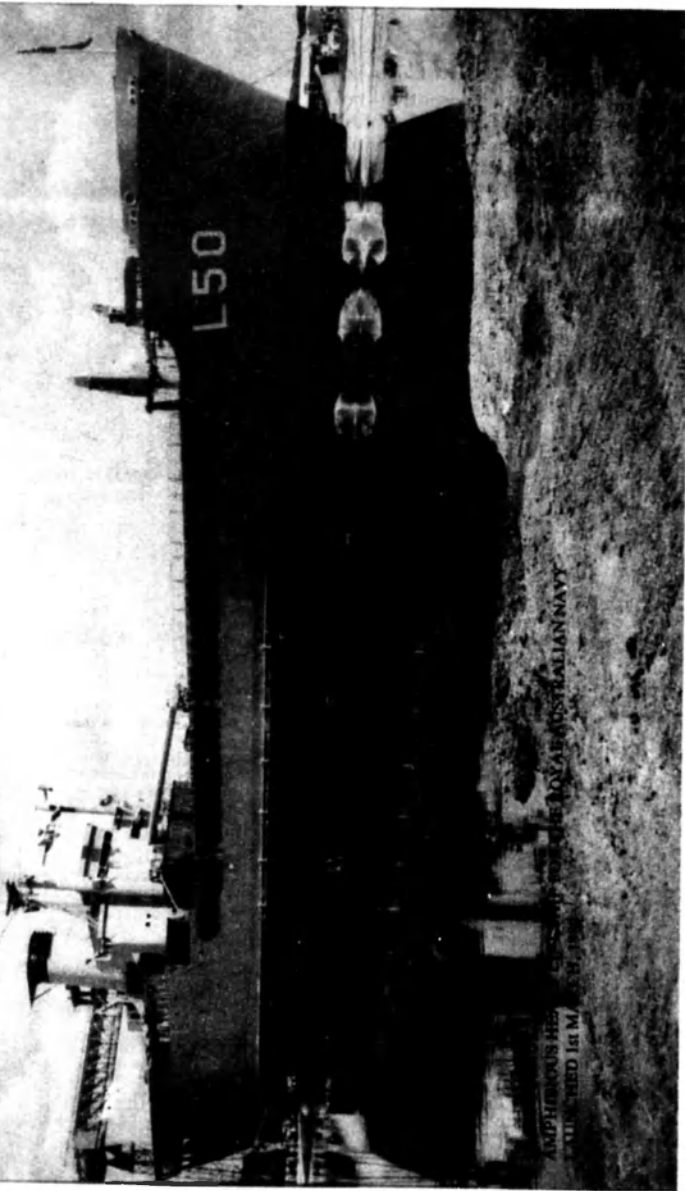
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## NAVY WEEK MESSAGE

**T**HE past twelve months have not been notable for activities calculated to produce harmony between nations, indeed few periods in recent times have seen so many de-stabilising influences at work.

Despite widespread political, economic and military disorder, there are signs that all is not lost and the most significant of these is a growing appreciation of the interdependence of nations in this day and age. International groupings for economic or military reasons, and sometimes both, are not new especially in Europe; the EEC, NATO and Warsaw pact are fairly modern examples, as is ASEAN in our own region.

In a Paper published in 1978, the Navy League of Australia suggested that for their own future well-being and security, countries sharing common interests should co-operate on a world-wide as well as a regional basis. This seed fell on barren Australian ground, but the idea was powerfully reinforced in 1979 by Britain's Admiral of the Fleet Lord Hill-Norton, who recommended a world-wide maritime alliance to counter growing Soviet seapower and a threat to the trade routes. At about the same time, influential figures in the United States expressed similar thoughts on the desirability of wider international co-operation than exists at the present time.

While there are obvious political difficulties in achieving international economic and security co-operation on the scale proposed, at least in the short term, the concept is only commonsense. Over two-hundred years ago the American statesman and author, John Dickinson, wrote "by uniting we stand, by dividing we fall". Dickinson was referring to America's struggle for independence, but the principle applies as much in 1980 as it did in 1768 and we would do well to remember the words.

GEOFFREY EVANS  
 August, 1980

### ACKNOWLEDGEMENTS

This Navy Week issue of "The Navy" was supported by Navy Public Relations, Sydney and Canberra; Historical Studies Section, Canberra; The Royal Canadian Navy; Royal New Zealand Navy; Peruvian Navy; Harry Adlam; Lou Cunningham; David Diment; James Goss; Tony Grazebrook; Vic Jefferies; Michael Melliar-Phelps; John Mortimer and Ron Wright. The deadline for the November/December/January issue will be 24th October, 1980.



**BUYNI (Violent).** Designed by Lairds and built in Russia at Novoski to the basic British "27 knotter" pattern. 350 tons, 6,000 hp, one 11 pdr, five 3 pdr, three 15 inch torpedo tubes and 12-18 mines. In the above view she can be seen in the Port of Algiers after sustaining bow damage when entering that harbour. The **BYEDOVI (Grievous)** of this class was the sistership which carried the injured Russian Commander-in-Chief to his surrender and subsequent captivity following the battle of Tsu-Shima. Further photographs of Tsarist warships appear on following pages. (Photo — Authors)

### Front Cover

**HMAS MELBOURNE** — 25 years in commission, October, 1980. (Photo — Royal Australian Navy)

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# NAVY WEEK, 1980

## NEW SOUTH WALES

### SUNDAY, SEPTEMBER 28:

10.00 am Navy Week Church Service, St Stephens' Unit-  
ing Church, Macquarie Street Sydney.  
10.30 am Navy Week Church Service, St Andrews Cath-  
edral, George Street, Sydney.

### MONDAY, SEPTEMBER 29:

10.00 am Opening ceremony of historical exhibition, No.  
2 wharf Woolloomooloo (open 29/9/80 to  
8/10/80).  
12 Noon-1.00 pm Band recital, Physical Training and Naval dis-  
plays - Circular Quay, West Park.

### TUESDAY, SEPTEMBER 30:

12.30 pm-1.00 pm Band recital and Naval display - Martin Place.  
and  
1.30 pm-2.00 pm

### WEDNESDAY, OCTOBER 1

12 Noon Barbecue for disadvantaged children, Hill area,  
Garden Island.  
12 Noon-1.00 pm Band recital, Physical Training and Naval Dis-  
plays, diver drops from navy helicopters into  
Sydney Cove in conjunction with Water Safety  
Week - Opera House area.

### THURSDAY, OCTOBER 2:

12.30 pm Changing of the Guard at the Cenotaph, Martin  
Place with Fly past of Fleet Air Arm Aircraft  
over Martin Place and the Opera House.  
12 Noon-1.00 pm Sydney Cove (Circular Quay) - diver drops and  
helicopter display in conjunction with Water  
Safety Week.

### FRIDAY, OCTOBER 3:

12.30-1.00 pm Band Recital - Martin Place.  
and  
1.30 pm-2.00 pm

### SATURDAY, OCTOBER 4 (NAVY DAY):

9.00 am-5.00 pm Naval Reserve Cadet establishments open -  
TS ALBATROSS (Wollongong), TS CANBERRA  
(Canberra), TS VAMPIRE (Tweed Heads), TS  
TOBRUK (Newcastle), TS VENETTA (Coffs  
Harbour) and TS HAWKESBURY (Gosford).  
9.00-4.00 pm Royal Australian Naval College, HMAS CRES-  
WELL at Jervis Bay, open to visitors.  
11.00 am-5.00 pm Shore establishment, HMAS PENGUIN, Middle  
Head Road, Mosman, open to visitors.  
1.00 pm-5.00 pm Ships HMAS VAMPIRE, HMAS SWAN, HMAS  
JFRVIS BAY and Submarine HMAS ORION

open to visitors at Garden Island. Displays by  
Naval Police Dogs, diver drops with Navy heli-  
copter, Physical Training display, Band recital  
and sailing by Naval Reserve Cadets.

### SUNDAY, OCTOBER 5:

10.30 am Navy Week Church Service - St Mary's Cath-  
edral, Sydney.  
9.00 am-4.00 pm Royal Australian Naval College, HMAS CRES-  
WELL at Jervis Bay, open to visitors  
1.00 pm-5.00 pm Ships HMAS VAMPIRE, HMAS SWAN, HMAS  
JERVIS BAY and Submarine, HMAS ORION,  
open. Displays as 4th October.

### MONDAY, OCTOBER 6:

11.00 am-5.00 pm Apprentice Training Establishment, HMAS  
NIRIMBA, Quakers Hill, open to visitors.  
1.00 pm-5.00 pm Ships HMAS VAMPIRE, HMAS SWAN, HMAS  
JERVIS BAY and Submarine HMAS ORION,  
open to visitors, Garden Island. Also displays  
as 4/10/1980.  
5.00 pm Close of NAVY WEEK 1980 - The Ceremony of  
Beal Retreat.

## SOUTH AUSTRALIA

### TUESDAY, SEPTEMBER 30:

p.m. Naval Officers Club Dinner.

### WEDNESDAY, OCTOBER 1:

p.m. Naval Association Reception at Naval House.  
(By invitation).  
7.30 p.m. Wine and Cheese Tasting at Pentolds Winery,  
Magill.

### THURSDAY, OCTOBER 2:

p.m. Lunchtime performance in the Rundle Mall by  
VICTORIA NAVAL BAND.  
p.m. RAN/RANR Reception at HMAS Encounter.  
(By invitation).

### FRIDAY, OCTOBER 3:

12 noon Commemoration Ceremony and Wreath Laying  
at the State War Memorial, North Terrace,  
Adelaide.

### SATURDAY, OCTOBER 4:

Race Meeting at which the South Australian  
Jockey Club will honour Navy Week.

### SUNDAY, OCTOBER 5:

7.00 pm Non-denominational Church Service to be held  
at Christ Church, North Adelaide. All welcome.

### MONDAY, OCTOBER 6:

11.00 am Golf Day at Riverside Golf Club. Open to all  
serving and past Naval persons.

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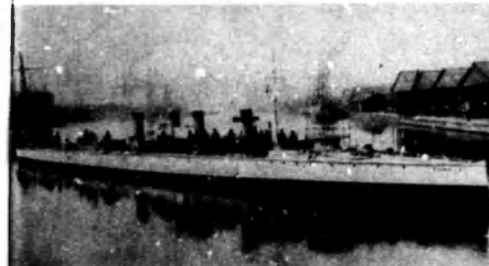


THE NAVY

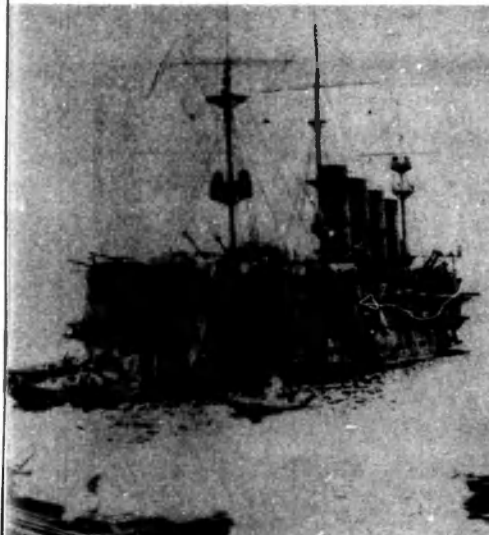
August/September/October, 1980

## THE TSAR'S OTHER SHIPS

By:  
**ROSS GILLETT &  
MICHAEL MELLIAR-PHELPS**  
(All photos — Authors' Collections)



**SOKOL (Falcon).** Brand new and as yet unarmed prior to commencing trials in 1895, this sleek little 220 displacement ton destroyer sits in the basin of Alfred Yarrow's yard in England (shortly after commissioning).



**GROMOBOR (Thunderland).** Was built at the Baltic works in 1897 to 1900. She served up to World War I and was not scrapped until 1922. A cruiser of 13,220 tons she was crewed by 877 officers and men.

(Photo — Royal Navy)

August/September/October, 1980

THE NAVY



**SAMSON.** Typical of the small river patrol craft and gunboats used by the principal European 'Treaty' powers, SAMSON's name is displayed in Roman characters on the bridge dodger for easy identification by the other nations operating on the Manchurian waterways.



**BOGATYR (A Knight).** Third of this name, and name-vessel of a 4 ship class of 6,645 ton protected cruisers, the German-built BOGATYR, squats ignominiously on the rocks of Cape Briss, only three years after her launching in 1901. Note her forward twin 6 inch turret minus the guns in order to lighten the ship.



**PAMIAT AZOVA (Memory of AZOV — A former Russian flagship at the Battle of Navarino Bay, 1827).** Designed as an armoured cruiser to carry a main armament of two 8 inch and thirteen 6 inch guns. PAMIAT AZOVA was laid down in 1886 and completed four years later. The ship was reconstructed in 1904 and in 1919 became the torpedo school ship DVINA (River). On 18th August, 1919, she was torpedoed by CMB 79 in the attack on Kronstadt. This ship, together with PAMIAT MERKURIA, were the only two ships in the Imperial Russian Navy which were entitled to wear a special battle-honour ensign.

Page Seven



# FERRANTI



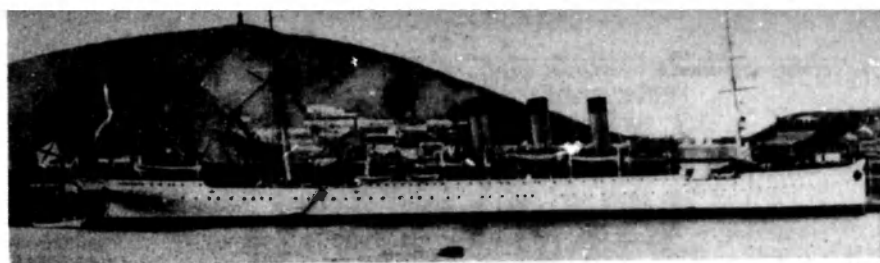
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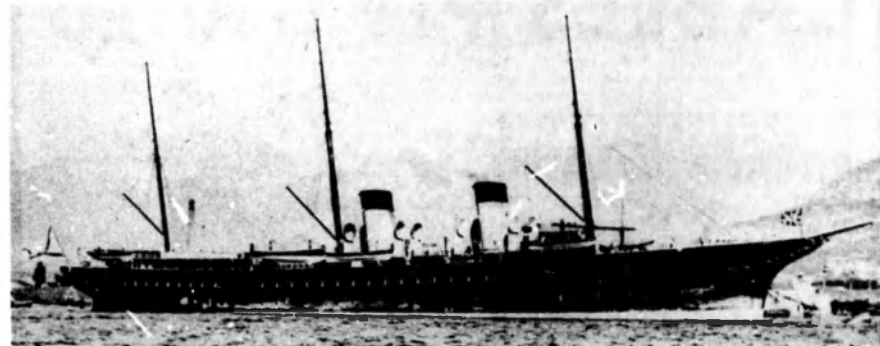
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*ANGARA (a river in Siberia). In this photograph, showing her alongside at Port Arthur, this transport and "volunteer cruiser" is at peace. But on the night of 8th February, 1904 she was caught up in the Japanese attack on the anchorage and lost an officer and several crew killed with many more wounded.*



*SHTANDART. This magnificent 5,557 ton vessel of superb proportions was launched in 1895 as the Royal Yacht and it is alleged was the design inspiration for the beautiful VICTORIA AND ALBERT of Great Britain. The German HOHENZOLBRU was similar; the principle difference being that her hull lines were marred by an aggressive Germanic :am-how. SHTANDART's three tall masts served the same purpose as those in today's BRITANNIA. She lived through the 1917 revolution and in her later years served as a naval auxiliary.*



*The Tsar's Fleet Visits Toulon. The waters are alive with small sailing craft and steam naval pinnaces from the brooding black-hulled heavy units lying at anchor. In the background is (left) the battleship IMPERATOR NIKOLAI I and (right) the armored cruiser ADMIRAL NAKHIMOV.*

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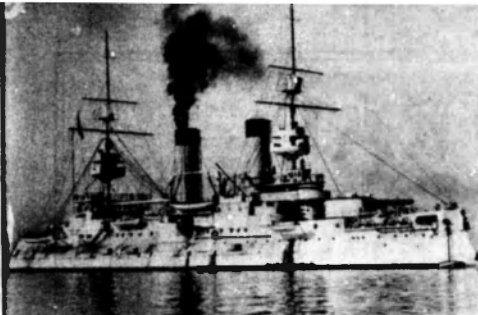
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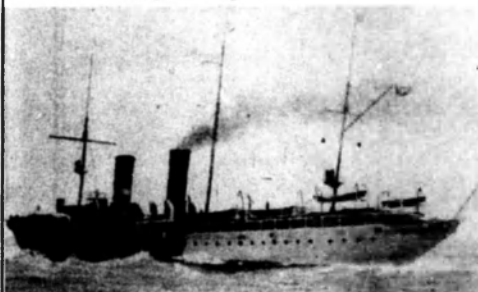
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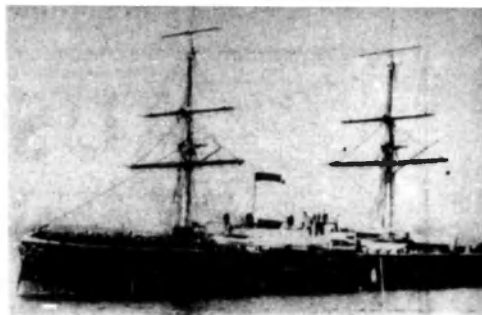
**CESAREVITCH** (Son of the Tsar). French-built at La Seyne and completed in 1901, she is seen here in tropical livery for service in the Far East. A modern 13,300 ton, 18 knot, battleship, armed principally with four 12 inch guns in two turrets, she was fitted with Krupp armour and was noted as being remarkably handy, answering the least touch of the wheel.



**ALMAZ** (Diamond). An armed yacht-cum-second-class cruiser. ALMAZ was the only ship, (apart from two destroyers) to reach the safety of Vladivostok after defeat at Tsu-Shima. For her duties in the conflict the vessel mounted four 11 pounder and eight 3 pounder guns and carried a massive complement of 336 officers and men. After transferring to the Black Sea in 1911, duties as a seaplane carrier in the Great War, she was presented to Bizerta in 1920.



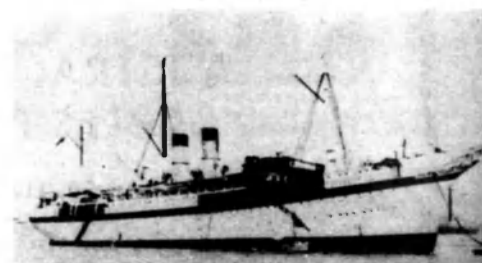
**IZUMURUD** (Emerald). The end of the protected cruiser, IZUMURUD, after grounding north of Vladivostok following Tsu-Shima. A photograph of the ship's forward half after her crew had blown her up on 29th May, 1905. As built the cruiser mounted three funnels, three masts and displaced 3,103 tons. The destruction was particularly complete. Whilst in service she and her sister JEMTCHUG (Pearl) were noted for their enormous coal consumption out of all proportion to their size and were reported to burn over 25 tons per hour at full power.



**ADMIRAL NAKHIMOV**. This armoured cruiser of 8,524 tons and completed in 1888 was said to be a copy of the British *IMPERIEUSE* and *WARSPITE*, plans of which the Russians contrived to obtain. It is as well that this exercise in design plagiarism did not succeed for the two British sisters were noted as being two of the worst designs in the Royal Navy. They were known as Britain's Bad Bargains and were not repeated.



**KORIENTZ** (Korean). The barquentine rigged gunboat KORIENTZ, seen here on a goodwill visit to France in 1900, was constructed with a pronounced ram-bow, seen clearly in this very rare photograph. KORIENTZ was built in Stockholm, Sweden, between 1885-87 and ended her days on 7th February, 1904, when she was scuttled after action at Chemulpo, (Inchon, Korea) in which the ship hardly participated.



**OREL** (City). The 1889 vintage hospital ship OREL, first vessel to be sighted by the Japanese at Tsu-Shima. Her existence in the Pacific Fleet caused many problems as she bore the same name as the first division battleship which in that contest means 'Eagle'.

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# Naval Field Guns

by HARRY ADLAM

*In years gone by the Royal Navy was often called upon to wage war in foreign lands at a moment's notice. When this type of work happened what was known as a Naval Brigade was formed and landed.*

The word brigade in this instance had no bearing on the three or four battalion infantry brigade known in military circles, and in many cases the Naval Brigade consisted of fifty men or less. The word brigade in this instance really meant a party of sailors landed for shore operations.

In the formation of a Naval Brigade a field gun was usually included, ships of all shapes and sizes were issued with a field gun for this very purpose.

The field guns varied from time to time, but it remains a fact that the navy favoured a gun of moderate calibre, fitted with wheels of 42 inch diameter. The guns came complete with limbers to carry the ammunition, and were pulled by the brute strength of a party of seamen.

The best known naval field gun was the 12 pounder 8 cwt gun. An example of this weapon is preserved at HMAS Nirimba. The 12 pounder was a three inch gun with a barrel weighing 8 cwt, and was fitted with an interrupted screw

breech block. The gun was a quick firer, the charge being contained in a brass cartridge case. It could be smartly moved about the countryside by a crew of eighteen men. Most of these were only required to tow the gun, and had an easy time when the gun was in action.

This gun is still used by the Royal Navy for its annual field gun competition, where it is dismantled, delivered by flying fox to another point and then re-assembled. Before the Second World War the RAN Reserve were the main exponents of naval field gun drill in Australia, and I for one have many memories of the Naval Reserve Field Guns Crews going through the evolutions of blowing a hole in a wall, pulling the wheels off the gun, dragging the gun through the hole and then putting it together again. As a finale the two guns would fire several blank rounds.

Before Federation, when the States all maintained their own naval forces, there were a great number of field guns in



A Q.F. 12 pounder 4 cwt Field Gun, carriage No AN4 at the explosives factory, Maribyrnong, Victoria. The RAN owned at least four of these guns. (Photo — Explosives factory, Maribyrnong)

Australia, hardly any two being of the same type or pattern. A number of these guns are still in existence, and any reader interested in this type of naval hardware would enjoy browsing around and spotting the different guns.

At Snapper Island in Sydney is a 9 pounder rifled muzzle loading field gun of 8 cwt. The gun was issued to the NSW Naval Brigade and is reputed to have been taken to China in 1900 when the NSW Naval Brigade went on service during the Boxer Rebellion. This particular weapon is carried on a field service carriage constructed of steel. The gun was built in 1885 and bears the registered number M407. As was the usual style in those days there was no recoil gear fitted, and the gun had to be re-laid after each round.

The 9 pounder was only one of the many types of naval field guns in service at this particular time (1885) and going through the records we find that there was a 7 pounder RML gun as well. Even when the 12 pounder QF gun came into the service, the 7 pounder and 9 pounder guns were still on issue. In the 1911 edition of "Jane's" we find that HMS WALLAROO still carried a 7 pounder RML field gun. From this it could very well be assumed that the 3rd class cruisers of the Australian Auxiliary Squadron, of which WALLAROO was a member, carried these particular weapons.

The Queensland Maritime Defence Force was issued with at least two field guns, and more specifically to the Naval Reserves of that state. There were possibly others, but photographs of the 1901 training camp for the Queensland Naval Reserves show two guns, one designated the Maryborough Gun and the other the Townsville Gun.

The method of arming the state forces is well seen in these two field guns, the Townsville gun is a 6 pounder Armstrong breech loading gun and the Maryborough gun is a Hotchkiss 6 pounder QF gun. The main difference in this case is that the BL gun was loaded with a charge made up in a silk bag, as compared with the QF gun with its brass case.

In South Australian waters PROTECTOR was armed with five



6 pounder B. L. Armstrong field gun, manned by the Townsville Naval Brigade in 1901. (Photo — Commander Norman Pixley)



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In the 1890's The NSW Naval Brigade on parade with an RML 9 pounder 8 cwt field gun and a Gatling machine gun. (Photo — R. Gillett Collection)

Gatling guns on field carriages. The Gatling was the first successful machine gun, and a weapon which helped the British Navy establish itself as good land fighters.

The South Australian Gatlings were chambered for the .45 inch Martini Henry Rifle cartridge, and consisted of 10 barrels revolving round a common axis. Because the barrel group was encased in a cylindrical cover it gave the appearance of being a gun rather than a machine gun, and has been wrongly labelled in some old photographs.

I have been unable to find any records of the South Australian Navy ever having owned a field gun, but this does not mean that they did not. Records are difficult to locate in these modern times, and it is possible that the South Australians did at some time have a field gun or two on their ledgers.

At HMAS CERBERUS, the main training depot in Victoria, there are a pair of interesting field pieces. One is a 9 pounder Armstrong BL gun, ex Victorian Navy. This is, or was, in fair condition, and is a good example of the type of weapon sailors took ashore on field exercises. The trial is of wooden construction and is not fitted with recoil gear.

The other gun bears a brass plate saying that it is a 6 pounder Hotchkiss ex HMAS GAYUNDAH. This could be the Maryborough weapon. The gun was taken from the depot during WW2 and mounted as a decoy battery, which formed a part of the defences of Westernport Bay. No ammunition was sent with the gun, so we can assume that it was only there for moral support.

Outside the Gunnery School Office at FND were a pair of 7 pounder field guns. I could never find out the origin of these two guns, but from the size of the wheels I would imagine that they were military equipment.

In store at Spectacle Island in Sydney is a 6 pounder QF Nordenfeli field gun.

August/September/October, 1980

This weapon had an interesting career to its credit. Originally the gun formed part of the armament of HMVS CERBERUS. In this role it was mounted on a normal ship's pedestal carriage, but in 1906 it was put on a field carriage. This is unusual, and could possibly be the only gun of this type modified by the Commonwealth Naval Force.

With the purchase of the "Fleet Unit", the sea-going forces gained the standard 12 pounder 8 cwt field gun. Each cruiser carried one of these guns, and it is on record that the 12 pounder from SYDNEY was landed at Rabaul in 1914. It was later turned over to the army in Rabaul, and it would be interesting to find out whether or not the "swaddies" ever returned it.

To my knowledge this was the only time in WW1 that the RAN sent a field gun ashore on warlike operations.

At this time the 12 pounder seems to have been issued in fair numbers. There were two at the RAN College, Jervis Bay and at least two at each Naval Reserve Depot. There was a battery at the main depot at CERBERUS. The 12 pounder was a typical naval field gun, and one of the main uses of a naval field gun was in naval funerals. Old timers will remember that long drag at the slow to Booi Hill. The funeral gun was kept in beautiful condition as befitted its duties. I was told a couple of years ago that the gunnery officer at Flinders Naval Depot decided that the funeral gun was obsolete and therefore not required. He had the little



9 pounder B. L. Armstrong ex HMVS NELSON at the New Entry School Parade Ground FND. Photo taken in 1945. (Photo — H. Adlam)

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beauty returned to stores. It was found out soon afterwards that it was needed, but, alas, it could not be found.

The most disappointing feature of this exercise was that in the 1960's four 12 pounder field guns were sold by the navy as "metal old". This seems to be in keeping with the lack of interest in relics that prevails in this modern age.

At Snapper Island is another example of the field gun designed for naval use. This weapon is designated "Ordnance QF, 12 pounder 4 cwt, MK I (N)." This gun was thought to have been used in the Boys Training Ship TINGIRA. Two of these guns were carried in TINGIRA.

There must have been at least four of these 12 pounder 4 cwt's, as the carriage of the gun at Snapper Island is marked AN I. At the Government Explosives

private venture by Elswick, and was accepted by the British Government as a service weapon, being listed in the appropriate "List Of Changes". It's use however, seems to have been confined to Australia. It is unique for a naval field gun as it is fitted with a buffer and recuperator. The gun is equipped with a light bullet proof shield.

After the Great War the Royal Navy adopted the military 3.7 inch QF mountain gun as the standard ship borne field piece. At least two 3.7's were purchased by the RAN, probably for the 10,000 ton cruisers. Some old timers can remember these guns being carried by CANBERRA and AUSTRALIA at different times.

The 3.7 was a pack howitzer, designed to be broken down into eight mule loads. In this case the barrel was made in two pieces, and the carriage was fitted with 36 inch wooden wheels. In the naval version the barrel was made in one piece (what was known in the Royal Artillery as the "Ordnance, QF, 3.7 inch Howitzer, MK III") and the equipment moved on the standard naval 42 inch wheels.

In December 1941, Chief Petty Officer Don Walker was in Flinders Naval Depot awaiting the completion of WARRAMUNGA. He had just returned from the United Kingdom, where he had completed a two years exchange appointment. For some of this time Don was an instructor at the Mecca of Gunners, Whale Island.

When the Japanese decided to become nasty and started shooting at people, the navy decided that it was time that Flinders Naval Depot really ought to be defended. This was sound thinking because the place was the main training establishment for the RAN, as it had been for the past twenty years.

There were two 3.7 inch howitzers in store at the Gunnery School, and Don Walker was told to get one of the guns together, train up a crew, take the gun and crew out to Boot Hill and defend the Depot from seaborne attack.

Don remembers that there was only one shield between the two guns, the other had probably been mislaid years before. The gun was assembled and a crew trained. Most of the crew were "green horns" just out of new entry school, not surprising as there was an extreme shortage of trained hands in December 1941.

The gun's crew were knocked into shape, the gun marched up to boothill and an emplacement dug in. The emplacement was behind a rise in the ground, and an observation post was set up in front of the rise. This meant that the gun could give reasonably accurate indirect fire.

The reason for placing the gun behind a rise was twofold. The first, of course was protection. The second reason was that



*Ex NSW Naval Brigade RML 9 pounder 8 cwt, on display at Snapper Island. This gun is thought to have been taken by the NSW contingent to the Boxer rebellion in 1900. (Photo — R. Gillett)*

Factory at Melbourne is another 12 pounder 4 cwt, and its carriage is marked AN 4. One wonders what happened to AN 2 and AN 3.

The 12 pounder 4 cwt is an extremely short barreled gun, it is only 18 calibres long, and must surely be one of the shortest wire wound guns ever made.

The barrel of this gun, No 3023, was made by the Royal Gun Factory, but the carriage was built by the Elswick Ordnance Works. The year of construction was 1914, and the complete unit was examined at Portsmouth, which appears to be the main ordnance acceptance depot.

The 12 pounder 4 cwt began life as a



*Probably the best known naval field gun, the Q.F. 12 pounder 8 cwt of 1894. Note the wheel shoes to try to stop the recoil being too violent. (Photo — Royal Naval Historical Society)*

should a tank appear over the rise the gun could lob shells under the soft belly, which the experts claimed was the tank's soft spot.

This may seem a bit far fetched today, but as Don Walker says "It wasn't when you think that at that time the army's main anti-tank weapon was that stupid Boys .55 anti-tank rifle".

The gun was placed on a full war footing, shoots were carried out, and the indirect fire control was tested. The crew lived under canvas and Christmas Dinner 1941 was eaten out in the open by the gun.

In January 1942 Don Walker was told to bring the gun back to the depot, as it was required for use by the army. The site was evacuated and the gun returned to the gunnery school.

We are lucky that a reel of snapshots of the gun were taken during the period. This seems to be the only photographic record of the incident. As far as can be ascertained the whole exercise appears to have been forgotten, and it certainly does not appear in the official history.

As a point of interest in this period of time, the Royal New Zealand Artillery formed a battery, known as 144 Independent Battery in 1942, and this battery was armed with 3.7 inch howitzers. In the New Zealand Official History of this Battery we find that "four of the guns had been used by the marines in two well known British cruisers". The bulk of this text is true, except that the field gun was manned by the seamen, and not the marines. It was usual for a cruiser to carry one howitzer, not two.

The main point that comes to the fore in this incident is that the naval field howitzers seemed to have been well used by the army, both here and in New Zealand.

When it comes to field guns being used ashore, we find that in two world wars the

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RAN put a field gun ashore for operational use once in each war. The SYDNEY'S gun was landed in Rabaul during 1914, and then turned over to the army. In 1942 the gun that had been used as a coast defence gun at FND was also turned over to the army.

In 1900 the Victorian Navy sent a contingent to China, taking field guns with them. Unfortunately there have been some wrong impressions gained about the origin of these weapons.

To put the record straight, the Victorian Government had purchased a number of 14 pounder guns on pedestal mountings from British arms manufacturers. The 14 pounder was not a service weapon. Newport did make field carriages for two standard Victorian Government barrels. The reason for exchanging the 14 pounders for 12 pounders is quite obvious. There just was no ammunition for the 14 pounders in China, and it was logical to arm the

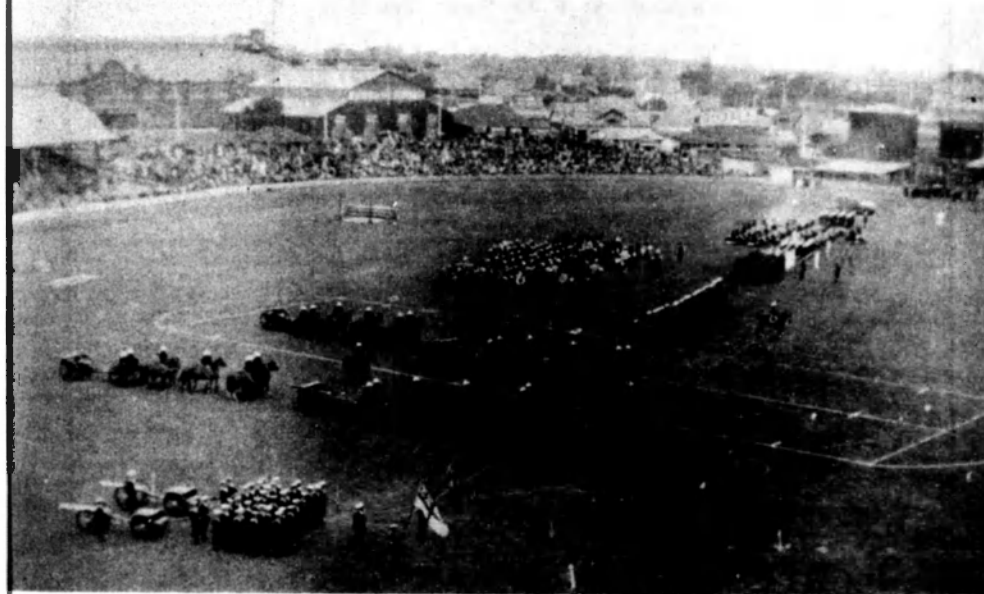


1924, the boys from HMAS TINGIRA at drill in Lyne Park, Rose Bay, Sydney, with a Q.F. 12 pounder 4 cwt. This gun is presently on display at Snapper Island. No 1 of the boys' gun crew in this photo is John Bastock, author of "Australia's Ships of War". (Photo — John Bastock)

Victorians with guns that had a ready supply of shells available.

There does not appear to be any record of the NSW Navy exchanging their 9

pounder RML field gun, but this is not surprising in the least, as even in 1900 the muzzle loading field gun was still a service weapon.



Sydney Showground, 1937. Sydney Division RANR with two 12 pounder 8 cwt Q.F. field guns. No 1 Field Cadre RAA with four horse drawn 18 pounders at rear. (Photo — L. C. Adlam)

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A Royal Navy Q.F. 3.7 inch Howitzer during exercise on the island of St Kitts. The RAN purchased three of these weapons in the late 1920's. (Photo — W. Laing)

As regards the use of naval guns ashore, a full book could be written on this subject, but the Boer War of 1899-1902 should give a fair illustration of just how "Jack" and his guns can be used when the exigencies of the service demand same.

As usual in any colonial war, the Royal Navy lived up to its reputation of being into the field from the beginning.

The cruisers landed their 12 pounder field guns, and the boys in marched off pulling their guns, and carrying their rifles and field kits slung over their shoulders. A re-print from an 1899 paper depicts the field gun battery marching out of the naval base at Simonstown. A comment from an old soldier gunner is written on the back: "Bad enough towing your hardware along, but hang humping your bluey as well".

It was soon seen that the 12 pounder wasn't the answer to the Boer artillery. Neither were the field guns of the Royal Artillery for that matter. The navy was asked to do something to help. As usual the navy did just that.

Several cruisers landed parts of their main armament, namely 12 pounder 12 cwt ship's guns, and some 4.7 inch QF guns. The old cruiser PHILOMEL, which ship was to become the cradle of the Royal New Zealand Navy in later years, landed two 4.7's. Field carriages were put together at the South African Railways workshops. These carriages were designed by Captain Percy Scott, RN, one of the gunnery giants of the Royal Navy.

The heavy 12 pounder 12 cwt gun, even though it was the same calibre, 3 inch, as the army's 12 pounder and 15 pounder field guns, was an extremely accurate weapon, and had a greater range. It also was fitted with recoil gear, which the army guns were not.

As the war progressed, the navy aided further by sending six inch ship's guns to the front. These were usually mounted on flat top rail trucks for transport, and they were thankfully received by the army.

If the Boer War did anything, it woke the British Army up to the fact that they needed better field guns than they possessed. In the period of development

immediately following the war the famous 18 pounder field gun was produced. This gun was a wonderful weapon, and it had recoil gear as well. The army were so pleased with the work done by the navy that in the 1911 Treatise on Military Carriages there is mention of "Carriage, Travelling, 4.7 inch QF."

Field guns have not been carried by ships of the RAN for some years now, but it is hoped that it will not be forgotten. At the time of writing the Garden Island Dockyard is re-furbishing a small naval field gun that has been a relic on the island for some years now. This gun appears to be a six pounder, and is fitted with a later model Armstrong breech. The gun was built as a rifled muzzle loader by Armstrong in 1881. In 1890 it was converted to a breech loader. The bore is plugged, but appears to have been about 2 inches in diameter. A brass plate attached to the carriage says that the projectile weighed 22 pounds. This surely must be an error. If we use the standard gunner's formula  $D^2/2$  we come up with 4lb. The four pounder does not appear in any gunnery text book for British service ordinance, but the bore closely resembles the old six pounder. The gun is suspiciously like the Townsville gun at the 1901 camp.

Recently re-furbished at Garden Island are two 9 pounder 8 cwt RML guns on slide mountings. These guns are of the same pattern as the naval 9 pounder field gun at Snapper Island. In the days when guns of this type were carried in ships, it was quite common to supply a field carriage as well as a ship's carriage for them. In fact the hand book describes them as ship and boat guns.

When the 9 pounder was used to arm a boat, the top carriage was placed on the deck of a steamboat, or on a specially strengthened thwart in an open launch or pinnace.

It was a simple matter to un-hook the capspires and place the barrel in the field carriage. In this case we had a three in one gun. We could mount it in the ship, we could mount it in a boat, or we could take it ashore on a wheeled carriage and keep the natives back until the army arrived on the scene.

In the Royal Navy there was a "Carriage, GI" for the 12 pounder 8 cwt field gun. This was a gunnery instruction mounting, usually placed on the top of a turret in the early "Dreadnought's", but it does not appear to have been used in the RAN.

Each year the ABC show excerpts from the Royal Tournament at Olympia. In this we always see part of the Royal Navy's Field Gun Competition. The guns used are the old 12 pounder 8 cwt's, guns that for the past fifty years have been pulled to pieces that often that they now sometimes fall apart of their own accord. It is nostalgic to see this competition, and if somebody hadn't sold four of these guns as "metal, old" the RAN might have become aware of the value of the competition. We may even have seen a RAN crew winning the coveted prize.

No more will we hear the time honoured pipe "Man and arm boats. Away landing party". This era is gone for ever, but we still have some of the guns left. Let us keep them. We need them as part of our proud past.

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# NAVY LEAGUE DIVISIONAL & CADET NEWS



## TASMANIA

During May, four members of the Tasmanian Division travelled to Western Australia to join in the annual continuous training of the WA Division at HMAS Leeuwin. During their journey they visited TS AUGUSTA in South Australia and TS's VANCOUVER, BUNBURY, ANZAC and PERTH. The four also visited HMAS Stirling.

Ten cadets with Lieut Fuller of TS LEVEN and CPO Hawkes of TS DERWENT voyaged in HMAS SUPPLY from Hobart to Sydney. An old shipmate onboard was Lieut Mike Buss whose last appointment was as Staff Officer Cadets Tasmania.

Winter time is mainly boat overhaul time and DERWENT, TAMAR and MERSEY units are each working on their boats. LEVEN are progressing on the conversion of the old wharf shed into their new HQ. A retired carpenter has been working almost full-time studding up the new partitions.

TAMAR have recently rebuilt the butts of their indoor rifle range with all new sand and timbers. It has been announced that the Tasmanian Division ACT will be held from 13th to 23rd January, 1981. TS MERSEY has been adjudged the most efficient unit in Tasmania for 1979/80.

## VICTORIA

One point of interest during the recent visit to HMAS CERBERUS was the newly established museum, where articles, photographs, etc of historical maritime interest are being gathered.

Commander L. G. Wilson is still seeking material for display and anyone willing to assist in providing same is asked to contact him on (059) 83 7011. It was a walk down memory lane for many.

## WESTERN AUSTRALIA

On 10th May, 1980, approximately 203 personnel of the WA Division of the Naval Reserve Cadets commenced Annual Continuous Training at HMAS Leeuwin, under the command of the Senior Officer Cadets (WA) LCDR G. Curran.

The cadets came from TS's VANCOUVER, BUNBURY, ANZAC, PERTH, MORROW and GASCOYNE.

August/September/October, 1980

The camp cadets took over "G" block with others accommodated on GPU 958 and at TS PERTH. The camp was also joined by four personnel from the Tasmanian Division and by a retired officer from the South Australian Division.

Unfortunately, prior to the camp, CPV 958's engine room was accidentally flooded, making it unavailable except as a static training ship. For boatwork however, the camp had available a fleet utility boat, two seaboats, a light utility boat, AWB 123, two aluminium dinghies, six bosuns, two pulling boats and eight canoes.

The cooks class showed their skill by cooking all the courses for the Divisional Staff/Unit CO's mess dinner. The cadets in the Quartermaster Gunner course participated in full bore shoot with 7.62mm SLR's at the Swanbourne rifle range, as well as being adjudged the best turned out division at Captain's Divisions on Thursday. The culmination of the expedition training was a overnight bivouac reached by a point to point hike through bushland south of Perth. These cadets were attempting to qualify for the Army Cadet Force adventure training badge.

• TS PERTH won the WA State Colours in the NRC (WA Division) with an assessment of 88.5%, thus retaining the AMP Shield.

• Two other honours taken out by TS PERTH were the Vickridge Trophy for Parade Ground Training and the D. W. Brisbane Trophy for Practical Seamanship.

TS GASCOYNE, Carnarvon, won the trophy for Showing the Most Initiative and TS MORROW, Geraldton, won the award for the Most Improved Unit Trophy.

• WA Executive Council member Mrs Joan Dowson was honoured in the Queen's Birthday Honours List when she was awarded the MBE in recognition of her services to the Red Cross and the RSL Women's Auxiliary.

• There is no question of the enthusiasm of PO Instructor Robbie James of TS PERTH, which is based in Fremantle. PO James makes a round trip of 200 kilometres from the country town of Northam every Friday to attend parades!

THE NAVY

## NAVY LEAGUE OF AUSTRALIA

Notice is hereby given that the Annual General Meeting of the Navy League of Australia will be held at the Melbourne State College, 538 Swanston Street, Carlton, Victoria in Conference Room S820, Level 8, Science Education Building at 8.00 pm on Friday, 14th November, 1980

## BUSINESS

- (1) To receive the report of the Federal Council and to consider matters arising therefrom.
- (2) To receive the financial statements for the year ended 30th June, 1980.
- (3) To elect office-bearers for 1980/81 as follows:

- (a) Federal President
- (b) Federal Vice-Presidents (2)
- (c) Federal Council Members
- (d) Auditor.

Nominations for the above to be lodged with the Honorary Secretary prior to the meeting

- (4) General Business.

By Order of the Council

J. N. M. PATTERSON  
Honorary Federal Secretary

28 King Street,  
Melbourne, Victoria 3000

## THE NAVY LEAGUE OF AUSTRALIA

### (VICTORIAN DIVISION)

Notice is hereby given that the Annual General Meeting of the Victorian Division of The Navy League of Australia will be held at the Melbourne State College, 538 Swanston Street, Carlton, in Conference Room S820, Level 8, Science Education Building at 7.30 pm on Monday, 15th September, 1980.

## BUSINESS

- (1) To receive the report of the Executive Committee of The Victorian Division for the year ended 30th June, 1980.
- (2) To receive the accounts for the Division for the year ended 30th June, 1980.
- (3) To elect the Executive Committee for 1980/81.

- (4) To appoint an Auditor.

- (5) General Business.

By Order of the Executive Committee

J. N. M. PATTERSON  
Honorary Secretary

28 King Street,  
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Page Twenty-Three



# Ramsay's moving!



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## European Report . . .

By JAMES GOSS

**A**FTER weeks of speculation as to the final fate of the aircraft carrier **ARK ROYAL** it now seems certain that she will be towed from Plymouth before the end of August to be scrapped.

A trust was set up after she was de-commissioned with the object of buying her and mooring the old carrier in the Thames to be used as a museum and conference centre. The Thames was considered ideal with the closing down of most of London's up river docks. Consideration was given to the scheme but a survey showed that **ARK ROYAL** was in a very bad state, in fact beyond repair. After it was reported that she had been sold for scrap the trust offered more than she had been sold for, but the Ministry of Defence remained adamant that she should be broken up.

On the credit side **HMS INVINCIBLE** has been commissioned, the ship has made two visits to her home port, Portsmouth and is at present working up. She is due at her home port for Navy Days at the end of August.

The latest type 42 **HMS EXETER D89** is at Portland for builders trials and is due to be handed over sometime in September. Following her will be **SOUTHAMPTON D90**, **LIVERPOOL D92** and **NOTTINGHAM D91**. This will complete the first batch of 10 ships. Following will be an improved version, 16m longer and 1m wider, these measurements increasing the tonnage by 550 tons. It has been stated that the alterations will make them better seaboats and give them increased missile stowage. The names of the improved type 42s that have been laid down are: **MANCHESTER D95**, **GLOUCESTER D96**, **EDINBURGH D97** and **YORK D104**. The first and name ship of the class **HMS SHEFFIELD D80** is due to complete her first major refit this year.

Of the County's **HAMPSHIRE D06** has been broken up at Briton Ferry during April, 1979. **DEVONSHIRE D02** is laid up at Portsmouth. She was to have been sold to the Egyptian Navy but the deal fell through. Her Seaslug missile launcher has been removed and the latest rumour is that she is to be rebuilt as a minelayer. After a short spell as a harbour training ship at Portsmouth **FIFE D20** is soon due

to begin a major refit. Her place will be taken by **KENT D12**. **GLAMORGAN D19** is due to recommission this year after her major refit during which she has shipped two triple anti-submarine torpedo mounts.

The second type 22 **HMS BATTLEAXE F89** was accepted this year. Although classified as frigates they are big ships, bigger than the type 42s. Being brought up in the days when destroyers were bigger than frigates I was amazed by her size as I watched her sail into Portsmouth. Looking at Royal Navy



The Belgium frigate **WESTDIED** (Photo — R. Gillett)

types it seems that it is now the capabilities of the ship that decide if they are to be a destroyer or a frigate. It seems that ships with a mainly anti-aircraft role are destroyers, while ships with an anti-submarine role are frigates. The anti-surface role now appears to be taking a second place in both destroyers and frigates.

**HMS ANTELOPE F170** has recently completed a refit during which she has been fitted with two triple torpedo mounts.

There has been a lot of activity in the non-warship field, with an unusual number of support ships joining the fleet. Two bulk oilers **APPLELEAF A79** and **BRAMBLELEAF A81** have been accepted. They were taken over while building for commercial owners and were launched as **HUDSON CAVALIER** and



**HMS HAMPSHIRE**, flying her paying off pennant, 31st March, 1976. (Photo — James Goss)

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HUDSON DEEP. Four torpedo recovery vessels, TORNADO A140, TORCH A141, TORMENTOR A142 and TORREADOR A143, and two degaussing ships MAGNET A114 and LODESTONE A115, have been accepted, while seven water tractors, ADEPT A224, BUSTLER A, CAPABLE A, CAREFUL A, FLORENCE A, FRANCIS A147 and GENEVIEVE A are due to commission during the year.

Across the Channel four of the new Dutch frigates are serving in the fleet. The vessels include KORTENAER F807, CALLENBURGH F808, VAN KINSBERGEN F809 and BANCERT F810.

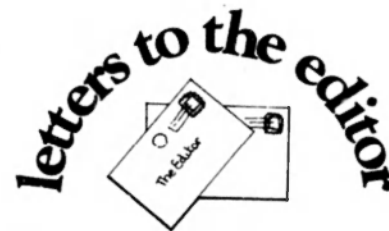
Holland's neighbour, Belgium now has all of her four Westhinder class frigates in service. They are the WIELINGEN F910, WESTDIEP F911, WANDELAAR F912 and WESTHINDER F913. Although quite small ships when compared with western frigate construction they are well armed. For the anti-surface role there are 4-Exocet. For air defence Seasparrow and I-100mm gun. For the anti-submarine

role, Bofors rocket launcher and two a/s torpedo launchers. Each is powered by Gas Turbines and Diesels and has a top speed of 28 knots. The Gas turbine is brought in when high speed is required. With diesels only they can maintain 20 knots. The vessels are light on manpower, the crew being only 160. I see their role as mainly a coastal one against fast attack

craft and submarines with a limited air defence. A deep sea anti-submarine role would be limited, as they do not operate a helicopter, although they would be useful as part of a task group of other ships with helicopters. The class will certainly give useful training to officers and men of the Belgian navy who for the past 30 years have operated only minesweepers.

Photo offer, No A1 Royal Navy			
Abdiel N21	76	Agile A88	72
Accord A90	77	Agile A88	77
Achilles F12	71	Agile A88	79
Achilles F12	78	Agile A88	80
Achilles F12	79	Agincourt D86	71
Active F171	77	Airdale A102	80
Active F171	78	Ajax F114	68
Active F171	80	Ajax F114	74
Advice A89	79	Ajax F114	78
Agile A88	70	Ajax F114	79
		Alacrity F174	77
		Alacrity F174	78
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Dear Sir,

With great interest I have read the article "K XII — The True Story" by M. Stephens and published in "The Navy", Volume 42, Number 2 (May/June/July, 1980).

This Netherlands submarine arrived in Fremantle on 20th March, 1942, where she underwent repairs on Cockatoo wharf. Between 7th September, 1942 and 19th May, 1943, four patrols were made, during which small parties were landed on the south, south-east and east coast of Java.

After the last patrol it was decided to strike her off the active list and transfer the crew to a new British boat of the T class. In May, 1944, she was decommissioned in Sydney and on 6th September, 1944, stricken off the active list. According to a report from a Netherlands Naval Officer she stayed in Sydney and after 12th September, 1944, she was sold to Luna Park where she could be visited for a shilling a person. After that we had no more news about this submarine, but thanks to the article, this gap has now been filled.

The K XII sank two Japanese ships:

1. Motorvessel TORO MARU (1939 brt), a freighter; on 12th December, 1941.
2. Steamship TAIJAN MARU (3525 brt), a tanker; on 13th December, 1941.

Yours Sincerely,  
F. C. Van Oosten

Commander R. Netherlands Navy (Rid),  
Director of Naval History

Dear Sir,

After reading Mal Stephens' interesting article on the Sydney-based Dutch submarines K IX and K XII ("The Navy" May/June/July issue) I felt some light should be thrown on the other pair which arrived in Fremantle after escaping from the Japanese invasion of the Dutch East Indies.

The two in question K VIII (sister of K IX) and K XI (sister of K XII) arrived in Fremantle in August, 1942. The battle-damaged K VIII was paid off on 27th August, 1942. She was moored in the Swan River at Keane's Point until being stripped and then towed to Jervoise Bay in Cockburn Sound during August, 1945. The boat foundered approximately 100 yards off shore and lay there until it was blown up by explosives in 1958.

The slightly larger K XI was used as a defensive submarine based at Fremantle until she was paid off in August, 1945. The 815 ton submarine was also stripped of fittings and had been partly demolished at the North Wharf near the Fremantle railway bridge when it foundered.

After several futile attempts K XI was raised and towed out to a point outside Rottnest Island known as the "ships' graveyard" and scuttled in September, 1946.

Vic Jeffery,  
Western Australian Division,  
Navy League of Australia

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# ROUNDUP



## NAVY LYNX ORDERS ANNOUNCED BY WESTLAND

Orders for 32 more Navy Lynx helicopters were recently announced by Westland Helicopters. With spares, ground support equipment and training, the orders are worth £65 million.

Of these latest orders, ten will go to the Royal Navy, which had previously ordered 60 Lynx helicopters, and 14 are for the French Navy, taking their total to 40 Lynx. A further eight are to be supplied to an un-named customer.

The total Lynx order book for Navy and Army versions now stands at 283. Of these 179 are for the maritime forces of Britain, France, the Netherlands, Federal Republic of Germany, Denmark and Norway, Brazil and the Argentine.

## HMAS FREMANTLE SAILS ON DELIVERY VOYAGE TO AUSTRALIA

The first of 15 new patrol boats for the Royal Australian Navy, the British-built HMAS FREMANTLE, sailed from the United Kingdom for Australia in early June. The patrol boat, which was commissioned into the RAN three months ago and arrived in Sydney on 27th August.

The 220 tonne HMAS FREMANTLE, under the command of Lieutenant Commander Bob Thomas, and a crew of 22, sailed to Australia via the Mediterranean, Suez Canal and Indian

Ocean. En-route she visited a number of ports for fuel and stores.

The fast patrol boat, which was built by Brooke Marine at Lowestoft, England, was laid down in September, 1978, and launched in February, 1979.

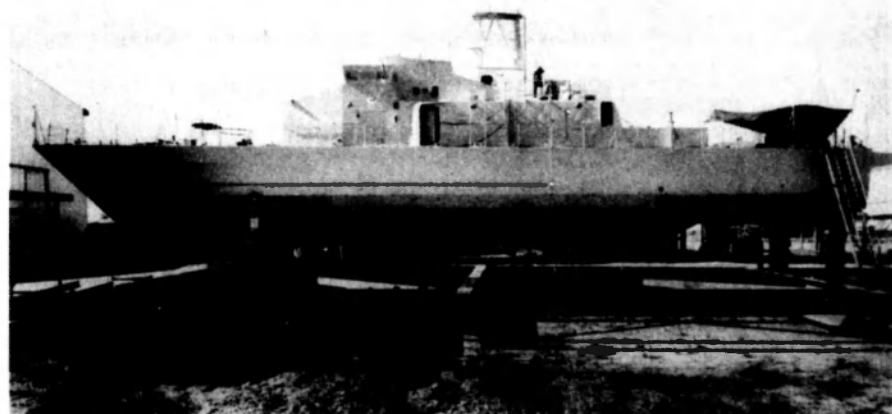
## SWAN HUNTER COMPLETE IRANIAN REPLENISHMENT SHIP KHARG

The 20,000 ton deadweight replenishment ship KHARG, ordered by the then Imperial Iranian Navy in 1974, has completed final acceptance trials and now awaits handing over to her owners.

The timing of this, however, is a matter of some political embarrassment — the builders, Swan Hunter, will doubtless be anxious to obtain the balance of her price; the US at the present time, would rather she were not delivered; and others, anticipating the last point, would say, possibly with some justification, that she could be better used by the RN. A large and powerful vessel, the KHARG is intended to act as a full replenishment ship having considerable ammunition and dry cargo capacity, as well as a multi-liquid capability.

## FIRST NUCLEAR-POWERED VESSEL RETIRED

The maritime history of the world passed another milestone on 3rd March, when the US Navy retired the USS NAUTILUS, the first nuclear-powered ship.



Second of the Fremantle class, WARNAMBOOL, is shown here being prepared for launching in October, 1980. (Photo — Navy Public Relations)



USS NAUTILUS, 1958. (Photo — United States Navy)

The submarine which took to the sea in January, 1955, was decommissioned at Mare Island Naval Shipyard in Vallejo, California, near San Francisco.

The Navy essentially had retired NAUTILUS last May, when it was decided that it had become outmoded and could not be modified to compete with modern boats. NAUTILUS has been offered as a national historic ship and be placed on public display at the Washington DC Navy Yard.

## ESSEX CONVERSION STUDY

A \$312,500 contract has been placed by the US Maritime Administration with M. Rosenblatt & Son, consulting naval architects, to undertake analysis and design studies relating to the proposed conversion of an Essex class aircraft carrier — one of a 24 ship series built during World War II — to a civilian-manned Military Equipment Transport (MET).



DUCHESS leaves Garden Island, 4th June, 1980, for the last time. (Photo — Navy Public Relations)

Important in the study will be a structural analysis of the vessel to ensure its capability to withstand the deck loadings imposed by a mix of oversized military cargo. Also pertinent will be the design of a suitable cargo-handling system, modification of the propulsion and auxiliary machinery installations, establishment of crew requirements and the design of working and accommodation areas.

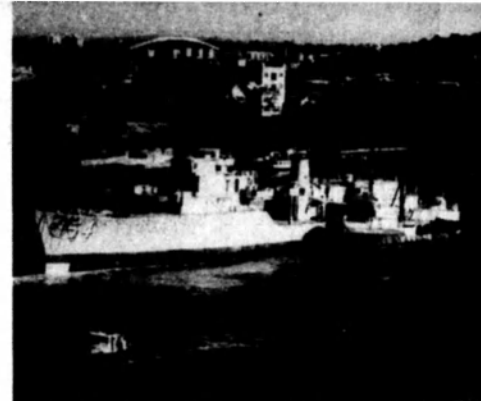
## AUSTRALIAN SHIPBUILDER STUDIES FEASIBILITY OF BUILDING SUBMARINES IN AUSTRALIA

The Minister for Defence, Mr D. J. Killen, announced on 8th July, that an Australian shipbuilding company, Vickers Cockatoo Dockyard Pty Ltd, of Sydney, was examining the feasibility of building conventionally-powered submarines in Australia.

Mr Killen said the present Oberon class submarines were being progressively modernised with new sensors, weapons and a computer-based fire control system. In addition, highly effective long-range Mark 48 torpedoes were being purchased from the USA. The submarine would also be capable of launching Harpoon anti-ship missiles.

Mr Killen said: "While the Oberon class submarines have many useful years of service ahead, if we are to seriously contemplate Australian industry having a major role in their replacement it is not too early to investigate the feasibility of building conventionally-powered submarines in Australia".

Mr Killen said that a team of experts from Vickers recently had visited a number of overseas submarine designers and builders to assess the practicability of Australian involvement in the local construction of non-nuclear powered submarines.



After being prepared for her tow to Taiwan, the former destroyer and training ship bids farewell to Sydney Harbour on 9th July, 1980. (Photo — R. Gillett)

Vickers had been awarded the contract because of the company's experience in submarine refits in Australia, and its links with the United Kingdom parent company which had extensive experience in submarine construction.

These studies would also cover the continuing requirement to refit the Oberon class submarines at Vickers Cockatoo Dockyard in the event of a later decision to build more modern submarines there. The studies, which implied no commitment to a replacement submarine at this time, were expected to be completed early next year.

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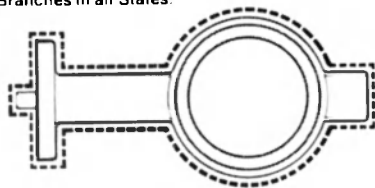
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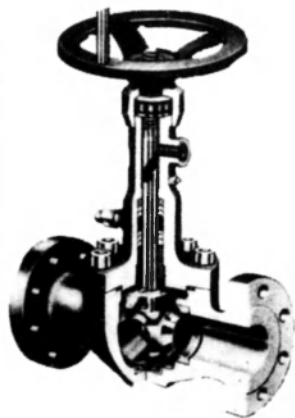
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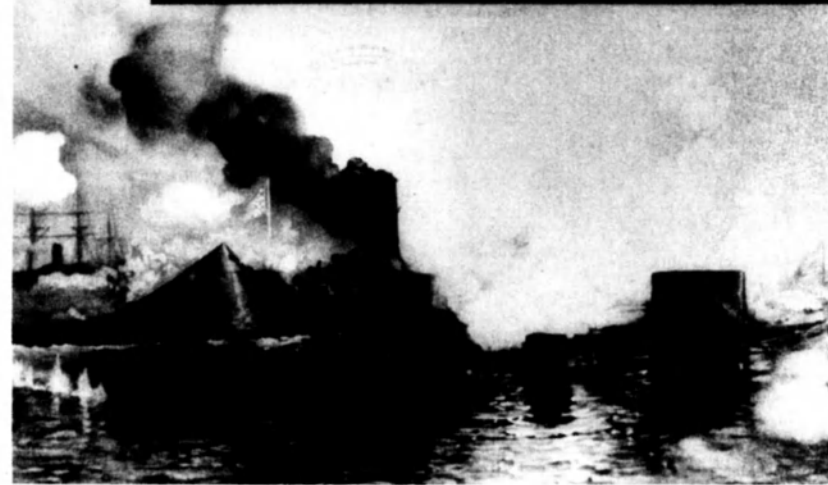


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An artists impression of the duel between the ironclads USS MONITOR versus CSS VIRGINIA, at Hampton Roads, Virginia, 9th March, 1862. (Photo — President F. D. Roosevelt 1936).

## The Visit Of The Great White Fleet To Australia

By DAVID DIMENT

THE visit of the United States' "Great White Fleet" to Australia in August and September, 1908, may be seen as a calculated step on the part of the Australian Prime Minister, Alfred Deakin to "nudge" the British Government into a position of support for Australia's naval aspirations while, at the same time, furthering the cause of closer US/Australian co-operation.

The "Great White Fleet" as it was popularly known, consisted of 16 pre-dreadnought battleships — practically the whole US battle-fleet. The names of the ships give an instant geography lesson of the United States: *Connecticut, Kansas, Vermont, Minnesota, Georgia, New Jersey, Rhode Island, Nebraska, Louisiana, Ohio, Missouri, Virginia, Wisconsin, Illinois, Kentucky and Kearsage*. Travelling with the fleet were several auxiliaries including a hospital ship.

The main purpose of the world cruise of the fleet was, primarily, to show the flag. In addition, however, the fleet became an instrument of US foreign policy designed to overawe the Japanese who were, following their defeat of Russia in 1904, the chief naval rivals to America in the Pacific.

When Prime Minister Deakin invited the Fleet to include Australia on their itinerary, the British authorities were very concerned because, by strict protocol, the invitation should have been issued through the British Foreign Office. However, the British authorities, faced with the fact that the invitation had already been issued, overcame their consternation at Australia's show of independence and confirmed Deakin's invitation.

The enthusiasm of the public welcome given to the Fleet in Sydney and Melbourne fully justified the invitation. The welcome in Sydney was a dress rehearsal for the arrival of Australia's own navy in 1913. The Great White Fleet arrived in Sydney on 20 August, 1908. Sydney had been transformed with \$50,000 of bunting, wood and plaster. Plaster eagles perched on every lamp post

in Pitt Street, renamed American Avenue for the week of the visit. Plaster arches were also built along the street each topped by either a model of a battleship or a WELCOME sign. A replica of the statue of liberty rose to a height of 5 stories in front of the Daily Telegraph building.

The actual arrival of the fleet was well reported in the press. They spoke of the "wave of enthusiasm which swept around the harbour as the fleet made its stately entry", which was witnessed by nearly 500,000 people. An American reporter who travelled with the fleet, Franklin Matthews stated:

"It is almost impossible to put into words anything that will tell the story of the enthusiasm and the sentiment that inspired a demonstration which overwhelmed not only those who received it but those who gave it also. . . ."

Matthews went on to say: "On every point up the harbour there seemed to be a band playing 'The Star



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*The Flagship of the Great White Fleet USS CONNECTICUT. (Photo — United States Navy).*

Spangled Banner" and from headland after headland, hill upon hill, slope after slope, there came a burst of cheering which lasted all the way in . . . and lasted the whole week . . ."

*Connecticut*, the fleet flagship, was moored off Kirribilli Point with the other ships in parallel lines down the harbour. The ships were brightly illuminated at night. The visit was jam-packed with marches, ceremonies and speeches by the 13,000 visiting sailors and their hosts. In one amazing spectacle at the Sydney Cricket Ground, 7,000 Sydney school children formed the words "Hail Columbia" and crossed American and Australian flags on the oval with their own bodies taking the place of paints!

In addition, the sailors marched and attended a State Banquet. There were numerous side excursions to the Blue Mountains and other tourist spots and as well some upsetting incidents during the exhausting visit — reports of a sailor from the Kentucky threatening some locals with a razor and complaints from some local merchants that some sailors were using confederate money. However, these incidents were played down. Reflecting on the busy week, Matthews reported that: "the reddest blood that runs in Anglo-Saxon veins runs here and all this energy had apparently been bottled up for weeks and months and let loose with a volcanic force when the fleet arrived . . ."

However, the welcome given to the fleet was, by all accounts, surpassed by the welcome of Melbourne. Rear-Admiral Charles Sperry, aware of the civic rivalry between Sydney and Melbourne was anxious, after an exhausting week in Sydney, of the welcome Melbourne would

provide in an attempt to be better than Sydney. Sperry's anxiety was fully justified!

The visit nearly started on a tragic note, although it had its humorous side. The grand entrance by the 16 battleships went wrong when 4 of the 16 battleships carried away the first mooring anchors dropped and hurtled towards the crowded wharves. Luckily, the ships just managed to sheer away at the last moment.

The incident was a true omen of the overwhelming Melbourne welcome. Matthews speaks of the visit as a whirlwind and merry-go-round with too much hospitality. Sperry counted 17 dinners, dances and parties in a single day. That the ordinary American sailor enjoyed himself may be readily gauged from the number of desertions. Sydney had 30 deserters but Melbourne had 300, perhaps because, according to press reports, the Melbourne girls "threw their arms around the bluejackets and permitted themselves to be kissed"(!).

The sailors certainly had a wild time in Melbourne. One unfortunate result of this was the disastrous parade by the fleet on 31 August, with lurching and reeling sailors marching to a "drunken" rendition of "Columbia, the Gem of the Ocean". President Teddy Roosevelt was so shocked by the behaviour of the sailors when the report of the procession reached him that he made the penalties given to the sailors even harsher.

The Great White Fleet left Melbourne on 5 September, but the infamous rolling seas of the Great Australian Bight did not help the sailors' physical state. Luckily, however, the Fleet had to call into Albany, Western Australia, to replenish

coal. This operation took 6 days and although the local authorities of Albany apologised for not having the entertainment resources of Sydney and Melbourne, that exactly was what the Americans wanted — a rest from the social whirl.

However the visit of the Great White Fleet to Australia was not just a social success. The visit gave notice to the British authorities that Australia's desire for her own fleet was genuine. The visit also showed the Australian people the greatest number of battleships they had ever seen — a fact that somewhat embarrassed the British. The visit of the fleet was one step in the creation of the Royal Australian Navy and did much to engender popular support for that cause. Another success of the visit was the contact it provided between the Australian and American people. Matthews stated:

"... the inherent kinship between the two peoples was made manifest as a genuine and hearty thing . . ."

Another phrase of Matthews sums up the visit of the fleet as a whole: "... the men of the Government, from the Governor-General to the lowest official, meant what they said. Australia . . . was mighty glad to have the fleet come . . ."

The opinion was certainly backed up in enthusiasm by the populace of Sydney and Melbourne.

#### SOURCES

*Sydney Morning Herald*,  
Hart, Robert, *The Great White Fleet: Its voyage around the world*, Boston, 1905.  
Matthews, F. *Back to Hampton Roads: The Cruise of the United States Atlantic Fleet from San Francisco to Hampton Roads, July 7, 1900 to February 22, 1901*. New York, 1900.

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## BOOK REVIEW ARTICLE



USS MONITOR, 1862. (Watercolour — Dr O. Parkes)

## USS MONITOR

*The Ship That Launched A Modern Navy*

By Lieutenant EDWARD M. MILLER,  
USN

Published by Leeward Publications Inc

Reviewed by HARRY ADLAM

**W**HEN given this book to review I was delighted, as the subject of "MONITOR" has always been one of my pet interests. This particular book is the most complete work on the subject I have encountered to date. From beginning to end I thoroughly enjoyed every word, as in Lieutenant Miller we have an author who is completely devoted to his subject.

The book really commenced in 1973 when a team of eight midshipmen at the US Naval Academy carried out Operation Cheesebox, an exercise devoted to what was really a design study and historical research of USS MONITOR, a ship that had been lost at sea 111 years before. Evidently the eight midshipmen carried out a thorough research, and came up with some very interesting results.

All the written evidence that could be obtained was brought together and even tank tests were carried out to ascertain the seagoing qualities of the ship, but at this stage the actual wreck of the ship had not been located, although it had been reported at different times, and in different locations. In 1974, the wreck was positively identified and is now designated as a marine sanctuary.

Lt Edward's book is the complete record of the whole operation, and the author is well qualified to put this work before the public. Not only was he engaged in the research done at the Naval Academy, he was actively engaged in the search and location of the wreck, and must be now regarded as the "Monitor Expert". It is very refreshing to see that an officer of such tender years has carried out this work. Too often have we seen the ground work carried out by the junior officers and ratings, and

then a senior officer writes a book giving the impression that it was all his own work.

As for the book itself, we find that it comprises two main sections. The first part deals with the designer of the ship, the Swede John Ericsson, a man who must be regarded as one of the greatest inventors of all time. We follow his career from the early days in Sweden, and here we find his great talent was appreciated at an early age. At sixteen years he was given control of six hundred men whilst also charged with providing the full working drawings for the famous Gota Canal in Sweden.

We follow Ericsson as he starts to invent engineering masterpieces such as his "Caloric" (or hot air) engine. He was designing all types of steam plants, but this hot air engine can be regarded as the main reason why he eventually ended up in the United States. Ericsson was doing his military service in 1820 when he decided to put his invention on show in England. He was given one year's leave of absence from the army, and off he went, never to return.

In England he designed and built a steam locomotive, "The Novelty", and also designed a screw propeller. His work was to no avail, as he received very little consideration in England, local inventors were preferred to "foreigners". In England Ericsson met up with Captain Stockton, USN, who induced the Swedish genius that he would be better off in America. Then follows his career in the United States.

We see how Ericsson gained the contract to build the armoured ship that gave its name to a whole class of ships, the Monitor. We follow the construction of the ship, we see the new innovations built into it. From an engineer's point of view, it

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Crew members on deck, cooking in the James River, Virginia, 9th July, 1862. (Photo — Library of Congress.)

would appear that USS MONITOR was the first ship to be fitted with the now familiar balanced draught system. To keep the upper works as low as possible, "MONITOR" was given two very short funnels, draught being obtained by both forced and induced draught fans. One interesting point arises in the fact that Ericsson was not to be fully paid for the ship until it had been tested in action, and if it failed he had to return what had been paid to him. In actual fact, Ericsson was the owner of "MONITOR" when she fought the Confederate "VIRGINIA".

The events as to the trials and commissioning of "MONITOR", as well as the voyage to Hampton Roads are fully described. The famous action between the two ships is naturally well and truly covered. "MONITOR's" career is fully covered and her final voyage, which resulted in her loss is well described indeed. Much use has been made of letters and statements from persons involved and this ensures that the reader has a very good background to the actual loss of the ship and its rescue.

The second section deals with the attempts to locate "MONITOR", and here we realise that a great task was undertaken. Although there had been many reported findings of the wreck, it was virtually impossible to locate the old turret ship, and when it was finally located it was found to be at least twenty miles from the supposed position.

In this section, we find modern technology being used to locate an old time problem. Deep water photography was to be the final solution, and I was very impressed by the mosaic made up from all the underwater photographs taken. This shows the full picture of "MONITOR" as she lies on the bottom of the sea today, and is a truly remarkable achievement. Considering that "MONITOR" is lying on the sea bed 210 feet below the surface, the location and identification has been a really worthwhile effort on the part of all concerned.

As for the presentation of the book itself, it is excellent. The only thing missing that one would expect to find is the usual full page of specifications. The text supplies just about all the information that one would require, so that slight omission can be passed over. Early photographs seem to be very hard to locate but there are some very good quality shots taken aboard after the famous fight. As all are taken near the turret the reader gets a very good idea of the massive construction of this important piece

of naval equipment. It may be fair to say that after "MONITOR's" turret had proved its value all major sea powers embarked on turrets as the main means of mounting the main armament of heavy ships. A whole new line of ships were built all over the world, and in all the design stemmed from "MONITOR". Perhaps Lieutenant Miller should have used the sub title: "The Ship That Changed Naval Warfare".

I feel that Edward Miller is one of those modest types who puts down on paper what actually happened and leaves it at that. He doesn't try to push his own stocks up with flowery words. It is to be hoped that he will continue to write on naval subjects, as he has an easy manner that holds the reader's interest and it is this manner that makes "USS MONITOR" such a delightful book to read.

The illustrations in "USS MONITOR" are first class, but consist of very neat drawings for the early part. There are, however, some reproductions of the original building drawings, and the author notes the finger marks appearing on some of these. Owing to the rapid schedule that had to be followed to build the ship, Ericsson did most of the drawings himself and then sent them straight down to the workshops where they became the production drawings. Surprisingly, quite a few of these original drawings are still in existence.

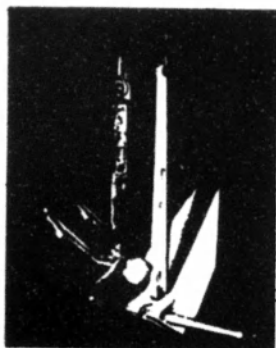
"USS MONITOR. The Ship That Launched A Modern Navy" is one of the best books put out for some time, and it is a book that will be of great interest to many readers of wide preference. It is of interest to the general naval student, but is equally attractive to the reader who appreciates the romance of engineering or underwater exploration. It is a well presented work and one that will be well remembered by all who read it. It is a must for all public libraries and it is to be hoped that it will be read by many of the younger generations as it combines the old world with the modern world, and shows how modern equipment can be used for other than warlike purposes.

I thoroughly recommend "USS MONITOR" as being one of the best works of the decade.



Deck scene USS MONITOR 9th July, 1862. (Photo — Library of Congress.)

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## The Role Of UNITED STATES' MARITIME POWER IN THE INDIAN OCEAN

By A. W. GRAZEBROOK

*The past six months have brought news that has major implications for the United States Navy's role in the Indian Ocean in particular and for the Australian region in general:*

- The United States' Naval Shipbuilding Programme for the next five years has been increased.
- The United States has formed and deployed a major Indian Ocean Task Force.
- Claims that this is to be a permanent deployment are supported by plans to upgrade further the United States Navy's base at Diego Garcia and studies of the feasibility of base porting United States Navy ships at Cockburn Sound.
- Authoritative United States visitors to Australia have expressed the United States intention to increase both the quality (ie deploy newer and more effective ships) and number of ships in the Seventh Fleet — the Fleet responsible for providing and directing US Task Groups in both the Western Pacific and Indian Ocean.

These changes have important implications for Australian Maritime Power. The capabilities of the US ships to be deployed in the Indian Ocean could tell us a lot about their intended role. Published US statements and a study of what the US



USS BERKELEY. (Photo — Royal Australian Navy).

Navy has actually been doing in the region tell us a lot more:

- In both composition and outlook the USN is primarily a "high" force — a force designed and trained to meet the intensive threat from Russia with which the US and the rest of NATO has been confronted in the Atlantic, Arctic and Mediterranean for several decades, and which the US must be able to meet in the North Western Indian Ocean and adjoining waters now that Russian air superiority fighters have access to Afghan airfields and are within range of the North Western Indian Ocean.
- A study of President Carter's revised and enhanced Five Year Naval Shipbuilding Programme shows that

the emphasis on the "high" capability is to be maintained.

- Those offices in the US Navy who recognise the importance of an ability to operate more numerous but less capable maritime forces in the "low" scenario — eg protection of trade — are not in the ascendancy amongst those who make the major decisions in the Pentagon.
- There is a growing re-acceptance in the United States of both the potential and the need for strategic projection of maritime power in the Indian Ocean, Western Pacific.

Whilst this last development is unquestionably a return to sound strategic thinking, and very much to Australia's advantage, it is also a change most welcome to the professional leaders of the US Navy. The preponderant NATO emphasis of President Nixon and his successors, and the coincident temporary ascendancy of the "doves" in the US Executive and Legislature, had forced the US Navy to justify its existence in preparation for an emergency in the NATO North Atlantic and Western European environment.

It was being argued that:

- There was neither scope nor need in the NATO environment for a major maritime power projection capability — NATO already has ports and airfields in all the land areas to be defended. The distances across the sea areas surrounding Europe were so short that aircraft carriers would not be required in the attack role.
- Any European war would be so short, even if strategic nuclear weapons were



USS MIDWAY, 1975. (Photo — United States Navy).

August/September/October, 1980

THE NAVY

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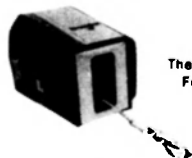


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Oiler USS NAVASOTA, 6th November, 1976. (Photo — R. Gillett)

not involved, that the need for protection of ongoing maritime trade would not arise.

- Thus the surface and seaborne air units of the USN had an almost subsidiary role of only fighting through to Western Europe the reinforcements and supplies that the US Forces already in Western Europe needed to upgrade on mobilisation.
- SSNs were essential to spearhead the ASW effort needed to track and destroy Russian SSBNs.
- The need for the United States Marines Corps was questionable, it being alleged that heavily equipped land forces, suitable for grand scale land warfare in Western Europe, were a more cost effective use of increasingly scarce (in a newly all volunteer defence force) manpower.

Now the change is coming. It is being increasingly recognised in the United States that maritime power, deployed with the full range of seaborne air, surface, submarine and amphibious forces, is the optimum way to support the United States' national interests and allies in the Indian Ocean and Western Pacific Regions. Maritime power offers the United States a means of providing very effective forces, without the disadvantages of large scale commitments of land and shore based air units to allies the morality of some of whose governmental methods are subject to US electorate doubts, and with the immense strategic flexibility of deployment that is inherent in maritime power of the type available to both modern Imperial Russia and the United States.

The potential of that flexibility was demonstrated very effectively late in 1979, when following the seizure of the United States Embassy in Teheran, the United States wished to deploy forces in the north west Indian Ocean area. Within a few weeks, the US local Middle east Force had been increased to the two Carrier Battle Groups shown in Table A. This list is compiled from Press Reports.

Table A also illustrates another very important aspect of US maritime forces in the Indian Ocean and Western Pacific in particular (and to a lesser but significant extent of US Naval Forces in general). That aspect is the high average age and

approaching block obsolescence problem of the US Fleet.

The average age of the ships listed in Table A is 16.66 years since the ship first commissioned. Perhaps more significant, the larger ships are the oldest — one carrier is 35-years-old, and the other is 19-years-old. Furthermore, of the five ships fitted with area defence surface to air missile systems, only two operate the modern STANDARD missiles. The remainder operate the obsolescent TARTARS. With Russian air superiority, aircraft only 450 miles away in Afghanistan, this is a vitally important aspect.

Furthermore, only one ship is armed with surface to surface guided weapons.

The age of the force listed in Table A illustrates excellently the significance of the US decision to deploy newer forces to the Indian Ocean Western Pacific Region.

There is already some evidence of a readiness to do this, with the deployment of the aircraft carrier USS NIMITZ, only five-years-old, to Middle Eastern Waters. However, it must be noted that this

improvement can only be achieved by depleting other areas such as the Mediterranean or Eastern Atlantic.

Whilst the Indian Ocean Western Pacific Area unquestionably offers the United States the optimum use of her higher capability maritime forces, the need to provide these by depleting other areas (also of vital importance to the United States and, in terms of treaty commitments, enjoying a priority over the Indian Ocean and Western Pacific) does re-emphasise again the point made repeatedly by our sister League (The United States Navy League) and by the more perceptive and far sighted US Legislators.

That point is that the United States is dangerously short of maritime forces. The point is emphasised in detail by the composition of the two carrier battle groups listed in Table A. It is noteworthy that only one purpose built underway replenishment oiler is included (although the freighter tankers have the ability to replenish ships at sea at lower rates). The anti-submarine escorts provided have maximum tactical speeds of only 27 knots — normally regarded as insufficient for a carrier battle group, the lead ship of which has a speed superiority over her anti-submarine escorts of five knots in optimum conditions and markedly more in any adverse weather conditions.

In addition to this evidence that the US has had to put together carrier battle groups of ships some of which were not designed for the purpose in 1980, the low naval shipbuilding programmes of the past five years or so, with the resultant decline in the capacity of the United States to build new warships, mean that

TABLE A

### UNITED STATES FORCES IN THE INDIAN OCEAN — DECEMBER, 1979

United States Ship	Category	First commissioned
MIDWAY (CV41)	aircraft carrier	1945
KITTY HAWK (CV63)	aircraft carrier	1961
BAINBRIDGE (CGN25)	nuclear powered guided missile cruiser (S)	1962
JOUETT (CG29)	guided missile armed cruiser (S)	1966
RICKETS (DDG5)	guided missile armed destroyer (T)	1962
PARSONS (DDG33)	guided missile armed destroyer (T)	1959
BERKELEY (DDG15)	guided missile armed destroyer (T)	1962
DAVID R. RAY (DD971)	destroyer — SPRUANCE Class (H)	1977
GLOVER (FF1098)	frigate — anti-submarine	1965
AINSWORTH (FF1090)	frigate — anti-submarine — KNOX Class	1973
MILLER (FF1091)	frigate — anti-submarine — KNOX Class	1973
STEIN (FF1065)	frigate — anti-submarine — KNOX Class	1971
KNOX (FF1052)	frigate — anti-submarine — KNOX Class	1969
AYLWIN (FF1081)	frigate — anti-submarine — KNOX Class	1971
LA SALLE (AGF3)	command ship	1964
NAVASOTA (TAO106)	freighting oiler — civilian manned	1946
MISPELLION (TAO105)	freighting oiler — civilian manned	1945
PASSUMPSIC (TAO107)	freighting oiler — civilian manned	1946
WABASH (AOR5)	underway replenishment oiler	1971
SAN JOSE (AFS7)	combat stores ship	1970
(S)	armed with the STANDARD surface to air area defence system	
(T)	armed with the TARTAR surface to air area defence system	
(H)	armed with HARPOON surface to surface guided missiles fired from cannisters	



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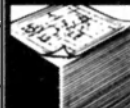


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the US must now be unavoidably and dangerously short of warships for some years to come — at least until the ten years or so that are required for the improved shipbuilding programme to bear fruit.

Therefore, with the declared intention of the United States to deploy more, and more modern, forces in our region, the key question for Australia becomes the roles and the priorities amongst these roles, to which the United States will assign her naval forces in the Indian Ocean in the light of the fact that even the improved forces are most likely to be insufficient to perform all the roles that need to be performed.

A whole range of factors, from the nature and capability of the forces available, through the US political scene and the nature of the growing Russian maritime threat, to the professional preferences of the leaders of the United States Navy, suggest that the United States' priorities in the Indian Ocean are likely to be:

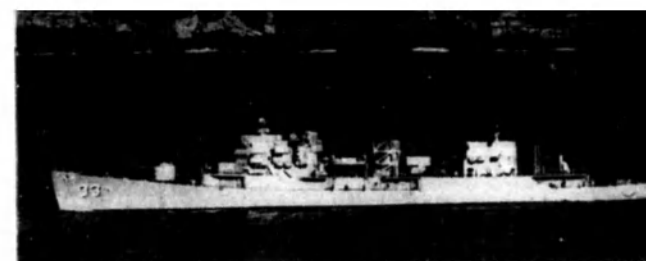
1. Tracking and destruction of Russian SSBNs and SSNs.
2. The strategic projection of maritime power, in the form of carrier battle groups and amphibious and the rapid deployment force, in support of allies or defence of United States interests in the north west Indian Ocean.
3. The protection of military Sea Lines of Communication (SLOC) with US land and land based air forces in Asia, the Indian Ocean and the Middle East.
4. The protection of military SLOCs with US allies.
5. The Protection of oil movements from the Middle East to the United States and Western Europe.
6. Protection of other merchant shipping movements.

The probable relegation of the protection of trade to the sixth priority is of special significance to Australia and highlights a fundamental difference between Australian and United States interests in the Indian Ocean and Western Pacific.

Australia is absolutely dependent upon seaborne trade. Over 40 percent by weight of our imports are oil. Our biggest customer, Japan (upon whose prosperity we depend) is wholly dependent upon imported oil without which she would be incapable of processing the raw materials which she buys from us.

As we see every time there are industrial difficulties, the economies of several Australian States quickly slow down and eventually virtually stop if coastal movement of seaborne oil is impeded.

On the other hand, whilst the United States' seaborne trade in the Indian Ocean and Western Pacific is unquestionably valuable to her, it is nowhere near as significant to the United States as our seaborne trade is to Australia.



USS PARSONS, 30th June, 1975. (Photo — R. Wright.)

In this context, the impact of US Maritime Forces role priorities upon Australia becomes clearer as do the probable roles of Australia's maritime forces whether the US is active in a major war involving the region or neutral in a regional war.

In the former instance, we must be able to protect our vital imports and coastal trade and, perhaps, make a contribution to protection of allied oil movements. The United States will not have enough forces to undertake the protection of trade after the requirements of higher priority roles have been met.

In the latter instance — a regional war — we must again be able to protect our

own trade. And that leads inescapably to one final and vitally important point. We must be able to protect our trade well out to sea — all the way from the Arabian Sea. It is manifestly insufficient to have only the ability to protect our trade with shore based air once it comes within the last five hundred miles or so of the ocean voyage. Hostile forces would simply destroy our tankers before they get to the five hundred mile point.

That means Australia must have oceangoing maritime forces able to provide their own air cover well out to sea. In other words, we cannot protect our trade without a replacement aircraft carrier for HMAS MELBOURNE.

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HUASCAR. (Photo — Peruvian Navy)



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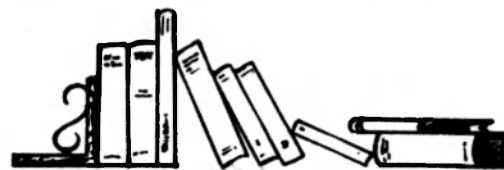
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## AIRCRAFT CARRIERS OF THE US NAVY

by STEFAN TERZIBASCHITSCH  
Published by Conway

Reviewed by "PALUMA"

STEFAN Terzibaschitsch is a well known German Naval writer who specialises in the ships and equipment of the United States Navy. In *Aircraft Carriers of the US Navy* he has produced a very enlightening reference work.

Each carrier is allotted a space to itself giving very brief notes on its war employment, details of radar installed and the camouflage used. Each class is described as a whole and in the text one finds many of the details that are normally tabulated, in the rear of the book is a full table detailing displacements and measurements. Included in the rear technical section is a list of the various air groups and squadrons carried by all the fleet carriers and this is of course a very welcome addition.

Details of special equipment carried by each class are described and the changes in gunnery are well and truly covered, including the basic statistics of the weapons under discussion. By way of a change the book is divided into two basic sections, carriers up to 1950 and carriers after 1950. In the latter section we find not only new construction but alterations carried out on existing carriers. This of course covers the very large "ESSEX" class built in the second world war. One is left with the feeling that the "ESSEXs" were very good ships, and well worth the money expended on their modernisation. The various modernisation schemes are detailed and it seems odd that in most cases it took longer to update the ship than it did to build it in the first instance. Taking "INTREPID" as an example we find that her SCB-27C and her SCB-125 rebuilds took no less than 3 years and five months as against the 20 months taken to build the ship.

The selection of photographs is nothing short of excellent and apart from the, to be expected, full views of the ships, we find many photos of various details such as superstructure, deck edge lifts, angled

flight deck arrangement and an unusual view of the "island" fitted to the nuclear-powered "Big E". There are many line drawings, all of first quality, to describe the ships during the different periods of their careers. Taken all round, this is one of the best illustrated books I have had the pleasure to review.

*Aircraft Carriers of the US Navy* deals only with the fleet and light fleet carriers, and does not include the escort carriers. It is to be hoped that there will be a second volume of this work that will cover the CVE's. Two rather unusual carriers are covered. They are "WOLVERINE" and "SABLE", surely the only aircraft carriers ever commissioned using paddle wheel propulsion. These two flat tops were used for pilot training on the American Great Lakes and had no hangar stowage for aircraft, being purely and simply floating flight decks. Their inclusion is very commendable as these unusual ships receive very little coverage in the normal run of reference books.

Going through the photos I was very impressed with the range selected, and as I normally favour one shot in particular it took some time to come up with a "pet". I finally settled on two. One was the second "YORKTOWN" going astern at 20 knots, the other was the massive flight deck of "FORRESTAL". The photos, by the way, are all black and white, but don't let that deter you.

I found *Aircraft Carriers of the US Navy* a well presented, well researched book, worthy of the Conway imprint. A must for carrier buffs.

## "THE FLEET SUBMARINE IN THE US NAVY"

By Cmdr J. D. Alden,  
USN (Retd)

Published By:

Arms & Armour Press

Reviewed By:

ROSS GILLET

Price: \$42.00

The book under review is a well written and profusely illustrated technical history of the USN fleet submarine. Each class is described in full and in most instances is accompanied by line drawings. Photographs

## BOOK REVIEWS

depict the boats at most stages of construction and at the various times during their careers.

The multitude of configurations to which the Gato, Balao and Tench classes were modified post-war are also all fully explained and illustrated. It is this chapter, I feel, which proved one of the most interesting.

Over 250 boats of the three classes were altered to twelve new roles, including that of Guppy, Radar Picket, Cargo, Oiler, Hunter Killer, Reserve Trainer, Guided Missile and Amphibious configurations. Some boats were in fact modified to one role and later redesignated another.

Further chapters are devoted to US Fleet Submarines transferred to foreign navies and boats which have been preserved as memorials. In respect to the latter, fourteen of the boats preserved are open for inspection. A fifteenth vessel, not open, is USS PAMPANITO, which unfortunately has right of access to it halted by Harry Bidges, one of the San Francisco Port Commissioners, who claims the display of the submarine to be glorification of war.

The text throughout "The Fleet Submarine in the US Navy" is very readable and interesting. Finally a table at the book's end provides a complete fleet list of all boats. I can recommend no better book for the submariner.

## "FIGHTING SHIPS OF AUSTRALIA, NEW ZEALAND AND OCEANIA"

By GRAEME ANDREWS

Published By:

A. H. & A. W. REED

Reviewed By:

JOHN MORTIMER

PRICE: \$3.95

This is the third edition of a series produced by Graeme Andrews on the Australian and New Zealand Navies. The present edition has been considerably expanded and also includes details of the Papua New Guinea, Fijian, Solomon Islands and Tongan maritime forces.

Introductory chapters are provided on "Patrolling the Pacific Ocean — A Problem for Smaller Nations" and "The Argument for Sea Control". The former

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chapter commences with a number of observations on the problems of policing the vast economic resource zones in our region and then proceeds to introduce the various regional navies. In summary the author suggests that there may be a place for small craft of the Hawker de Havilland, 'Carpentaria' or 'Arafura' classes in the inventories of regional navies, including those of Australia and New Zealand. This is a rather tenuous conclusion in view of the deficiencies expressed by both these navies with their larger existing patrol craft, (ie 'Attack' and 'Lake' classes) in relation to their seakeeping and endurance capabilities — a point which is subsequently discussed by the author in his examination of these vessels.

The chapter on "The Argument for Sea Control" does not, as its title suggests, examine maritime strategy, but rather makes a critical appraisal of recent and foreshadowed hardware developments in the RAN and RNZN. Overall, the author assesses that both navies have suffered a decline in capability in recent years.

These introductory chapters are followed by a presentation on the ship characteristics of the various maritime forces covered, together with some details of defence infrastructure and aircraft. The data on ships has been considerably expanded from earlier editions and now includes details of modernisations of the

larger vessels, their radar and sonar systems. This chapter provides the main body of the book, but does suffer from a few editorial mistakes — an almost inevitable feature of such factual presentations.

The book is well presented with photographs of almost all ships discussed. One minor criticism however is that the publishers with a few of the photographs have cut off part of either the bow or stern section of some ships.

On balance the book is a welcome addition to the limited amount of information available on regional navies and at a modest price is well within the finances of all interested readers. It is recommended reading particularly to those with an interest in existing vessels of the RAN and RNZN.

## FUTURE TITLES

New books to be reviewed in "The Navy" will include:

"A Century of Ships in Sydney Harbour" by Ross Gilllett & Michael Melliar-Pheips. A pictorial record of all types of vessels which have graced the waters of Sydney Harbour since 1859. \$16.95 — 160 pages — 220 photographs.

"British Cruisers of World War Two" by A. Raven & J. Roberts. A detailed account of the design, construction and technical history of the cruisers that served in the Royal Navy during World War II. \$85.00 — 448 pages — 375 photos — 40 plans.

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## WARSHIP PICTORIAL

(i) CANADA 1910-1980



HMCS RAINBOW, first cruiser in the Royal Canadian Navy.  
(Photo — Royal Canadian Navy).



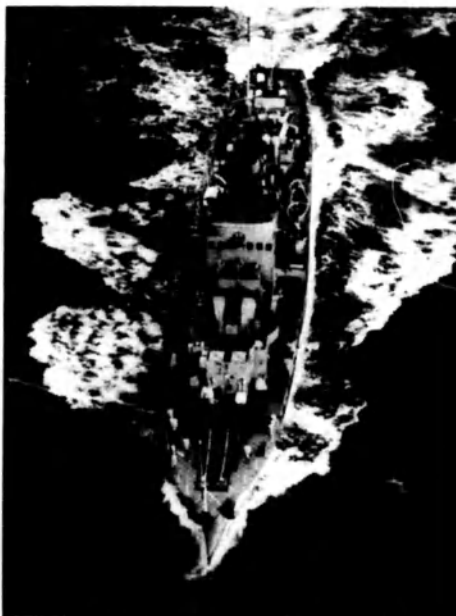
HMCS ST. FRANCIS, formerly USS BANCROFT, a fourstack  
destroyer, served with the navy from 1939 to 1945. She was lost  
on passage to the shipbreakers on 14th July, 1945. (Photo —  
Royal Canadian Navy)



The Flower class corvette CHICOUTIMI was armed with one  
single 4 inch gun, one single 2 pdr AA, plus machine guns and  
depth charges. Top speed was 16 knots. She was launched on 16th  
October, 1940, by Canadian Vickers and was broken up in  
Canada June, 1946. (Photo — James Goss).



HMCS MICMAC at speed. This ship was one of seven improved  
Tribal class destroyers. Her career spanned from 1943 to 1964. In  
1947 she was heavily damaged in a collision and was refitted and  
rearmed December, 1949. Both forward turrets were removed  
and replaced by a Rocket launcher (A turret) and anti-aircraft  
guns (B turret). (Photo — Royal Canadian Navy).



A post-war view of the River class frigate PENETANG, 1944-56.  
In the last year the warship was transferred to the Royal  
Norwegian Navy and renamed DRAUG. In 1966 she was deleted.  
(Photo — Royal Canadian Navy).

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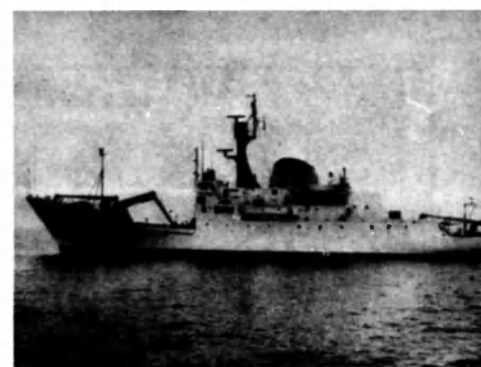
HMCS YUKON pulls away from the replenishment ship HMCS PROTECTOR and another frigate. (Photo — Royal Canadian Navy)



Name ship and leadship of her class, HMCS IROQUOIS, was constructed by Marine Industries Ltd, Sorel, Canada, and commissioned on 29th July, 1972. The ship is powered by two gas turbines with a top speed of 29 knots plus. Two Sea King helicopters are housed in the large hangar aft of the bridge. (Photo — Royal Canadian Navy).



HMCS OJIBWA is an Oberon class submarine built in England by H. M. Dockyard, Chatham. The name of OJIBWA was taken from a tribe of North American Indians. OJIBWA and her two sisters carry Mk 37C ASW torpedoes only. (Photo — Royal Canadian Navy).



A small research ship for anti-submarine research, HMCS ENDEAVOUR was first commissioned in March, 1965. She is able to turn in 2.5 times her own length. Unarmed, ENDEAVOUR carries one small helicopter and has a range of 10,000 miles at 12 knots. (Photo — Royal Canadian Navy).



HMCS PROVIDER cost \$17.5 million to build. She normally carries three Sea King helicopters, although six aircraft can be stored. (Photo — Royal Canadian Navy).



An improvement on that of the prototype PROVIDER, HMCS PROTECTOR can ship 13,100 tons FFO, 600 tons diesel, 400 tons aviation fuel, 1,040 tons of dry cargo and 1,250 tons of ammunition. Top speed is 21 knots. Note twin 3 inch 50 calibre gun at the bow. (Photo — Royal Canadian Navy.)



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FILM REVIEW by Michael McBrian Phillips

# “The Final Countdown”

**F**ASTEN your harness and lower your visor because, folks, in this remarkable film you are catapulted into the Mach 2, JP-4, and afterburner world of the up-front 1980s Carrier Air Group. This is Tomcat Territory; the habitat of the twin-tailed hol-rod and its 4½-acre mobile home called the USS “Nimitz” (pictured).

The theme of this film is unusual to say the least, and in the hands of a less capable director would have resulted in a very expensive piece of pure farce. Briefly, the story revolves around the supposition that, because of a sudden and extremely violent electrical atmospheric disturbance at sea, a modern, fully armed and equipped nuclear-powered aircraft-carrier is projected backwards through a time-war and re-appears the day before the cataclysmic December 7, 1941 attack on Pearl Harbour.

She is faced with the fact that, less than a half-hour's jet-powered flight away from her is steaming the main force of the Imperial Japanese Navy's carrier fleet. The Commanding Officer of the “Nimitz” is thereby presented with a problem not covered in the Annapolis syllabus, to wit: do nothing or use the awesome 1980s fire-power at his veritable fingertips and thereby invalidate all the history books for at least the next forty years?

The answer is suggested with great finesse in this eminently enjoyable example of 70 mm cinema. The incredibly complex flight-dock activity of a giant front-line carrier as it launches and recovers its huge flock of diverse aircraft types is not recreated for the camera, because the viewer is treated to beautifully

filmed scenes of actual operations that, in spite of the apparent confusion on the flight-deck, obviously result in machine-like precision aircraft launches.

The in-flight sequences are nothing short of breath-taking and are photographed to a standard not seen since the film “Battle of Britain”. It is worth noting that the famous American firm of Tallmantz Aviation with its converted B-25 camera-ship was employed on both films.

The twin-engined Grumman F-14 “Tomcat” carrier-fighter with its variable-sweep wings exhibits whip-snap handling characteristics that have to be seen to be believed, and in this film you really see why this aircraft (and others like the land-based F-18 and F-16) is such a worry to the Soviets.

Kirk Douglas takes the role of the CO of the “Nimitz” and Martin Sheen (of “Apocalypse Now” fame) is the Defence Department Systems Analyst who boards the carrier shortly before the incident. Charles Durning plays the totally disbelieving pre-war United States Senator, with the delectable Katherine Ross as his Secretary(?). The remainder of the cast take their roles with equal conviction but the real stars of the film are a great ship and her beautiful birds with the actual crew performing their everyday duties.

The skeptical patron might look askance at a plot which surmises that a warship of today's black shoe navy might be expected to re-fight a brown shoe war but, in this film, the concept is treated very well. Don't miss this one; it will be money well spent.



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The class are exceptionally economical in personnel, amounting to a 50 per cent reduction of manpower in respect to other ships of their size and complexity. In 1979 a seventh ship of the type was ordered from Rio de Janeiro, to be used as a training ship.

### Mk 10 Specifications

Dimensions:	Length overall	424 feet
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	Full Load	3,800 tons
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	4 MTU Diesels, 18,000 shp	
	30 knots on gas turbine	
Speed:	22 knots on diesels	
	5,300 miles at 17 knots (2 diesels)	
	4,200 miles at 19 knots (4 diesels)	
Endurance:	1,300 miles at 28 knots (gas turbines)	
	Naval Stores	
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Provisioning:	Weapons	
	45 days	
	Provisions	
Complement:	60 days	
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	2	
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LIBERAL, July, 1978. (Photo — Vosper Thornycroft)



CONSTITUICAO, a general purpose version. (Photo — Vosper Thornycroft)

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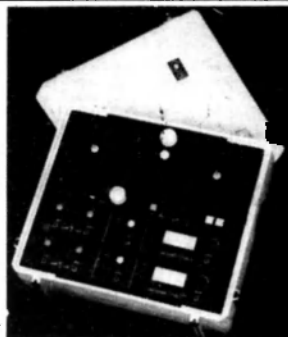
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## Cruisers Of The Royal New Zealand Navy

(All photos courtesy RNZN)



Although her sea-going career in New Zealand service amounted to only a matter of weeks in 1914, 'PHILOMEL' was to serve for 25 years as the depot ship at Auckland



HMS "DIOMEDE", Arrived in New Zealand in 1925 and reverted to the Royal Navy in 1936. "DIOMEDE" was finally scrapped in May, 1946



HMS "CHATHAM", Arrived in Auckland in January 1921, to start the line of light cruisers on the New Zealand Station. She was relieved in 1924 by "DUNEDIN"



HMS "DUNEDIN", served in New Zealand from 1924 until she paid off in April 1937. A very popular ship, no doubt aided by her New Zealand name. This fine old ship was sunk in action in November 1941



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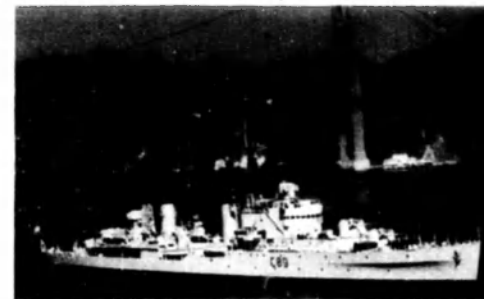
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"BLACK PRINCE", sister ship to "BELLONA", and acquired at the same time. Alternated with "BELLONA" as the single cruiser in commission. Declared surplus to needs in 1961, and was sold in New Zealand to Eastern buyers



"BELLONA", a modified "DIDO" class light cruiser, acquired by the RNZN after the end of WW2. Armed with 5.25 inch guns, this class saw the end of the 6 inch gun cruisers on the New Zealand station. Returned to the United Kingdom in the mid 1950 s



HMNZS "ROYALIST", commissioned 17-4-56, was a modified "DIDO", but had been modernised before transfer to New Zealand. She remained as the sole cruiser in the RNZN until paid off in March 1966. In January 1968 she was towed away from Auckland for scrapping, bringing an end to forty eight years of cruisers on the New Zealand Station

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Probably the best known of the New Zealand cruisers, "ACHILLES", seen here paying off in Auckland, 17-7-46. She played a very important part in the destruction of "GRAF SPEE" in 1939, and suffered heavy battle damage in the Solomon Islands campaign. Underwent a large refit in the UK 1943-44, but rejoined the RNZN in May 1944. As the Indian "DELHI" she is still afloat



HMNZS "GAMBIA", largest of the "Kiwi" cruisers, commissioned 22 September 1943, with the crew from "ACHILLES". After the cessation of hostilities "GAMBIA" reverted to the Royal Navy

### CORRECTION

The February/March/April issue of "The Navy" featured the Royal New Zealand Navy Today and unfortunately included a number of errors/omissions: OTAGO & TARANAKI; although, described as "Whiteby" class by "Jane's", they are more properly classed as "Otogo" class.

WAIKATO; has had her mortar removed and is fitted with 2 x 3 torpedo tubes mountings.

OTAGO; is scheduled to remain in an operational role until 1981/82, and TARANAKI has been reduced to a "Resources Protection and Sea Training" role. She has also had her mortar and Seacal removed, the latter being replaced by a 40/60 bolox. There is no intention to replace the "Lake" class patrol craft.

The Editor would like to express his thanks and apologies to the RNZN for these additions and amendments.

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