

LESS WE FORGET:

"TO PROMOTE ESPERIT DE CORPS AMONGST ALL
MEMBERS OF THE ANTI-SUBMARINE WARFARE
INSTRUCTORS ASSOCIATION WHEREVER THEY
MAY SERVE"

ANON

OCT 91 MR A. W. ALLEN

WATERLOOVILLE

THE SEAMASTER



THE OFFICIAL JOURNAL OF THE
ANTI-SUBMARINE WARFARE INSTRUCTORS ASSOCIATION



"My sonar's got it at 12 feet away and closing
... 11 feet ... 10 feet ... God, it's enormous! ...
Nine feet ..."

SEAMASTER

THE OFFICAL JOURNAL OF THE ASWI ASSOCIATION

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OCTOBER 91

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CHAIRMAN'S ADDRESS

Dear Members

It is quite amazing how quickly time flies by, and indeed how drastically things change. If progression is to be made, then of course some things have to change, and like it or not, right or wrong, because of matters way beyond our control, the Operations Branch as we know it is going to change significantly. For the majority of us, the change will have little or no effect, but for some....I need say no more.

It is quite likely that RP's as we know then will slowly fade into the background and probably eventually disappear altogether, and as you may know, we now share their clubhouse facilities.

As an Association we continue to constantly change committee members due to short notice drafts and I would like to thank Peter White for his stalwart efforts as Vice Chairman (gap now filled by Dusty Rhodes) and Nigel Linger who will be vacating the post of Secretary shortly, as yet without relief! The cycle ride went well in July, thanks to all participants, drivers, sponsors etc. In particular Steve Rowe and his PWO who allowed him to do the ride. Its estimated that £1,000 has been raised.

The AGM, Dinner and Dance this year is to be held on 25th October, venue HMS Dryad Warrent Officers and Senior Rates Mes, and plans are progressing nicely, tickets are available so send your cheque NOW.

This years AGM will be held in Oliver Block Room 118 on Friday 25th October. The following is a proposed agenda. This is not final but just a dit to give you the members an idea of what is planned:

0830	Attendees Assemble	
0845	Opening Address	Chairman
0850	Opening Remarks	Commander U
0855	Opening Remarks	Chairman
0900	CW Update	SOASW
0910	Weapons Update	CPO Walton
0925	Merlin	TAC Helo
0940	Portland - The Future	WO Kennedy
1000	Pot Pouri	AFASWO
1045	Assemble for Association Business	
1200	Bar	
1330	Ex Serving Members Tour	CPO Walton
1930	ASWI's Annual Dinner and Dance	

See you all there
Steve

EDITORS DIT

Here I am again still smiling and enjoying life. Looking around the green surroundings of Dryad I realise Autumn is well on its way and I've been here 7 months! Doesn't time fly.

Its been a very busy Summer term with many new projects started, and everyone working hard to improve on the career courses.

The ASWI's Cycle Ride went well although I was walking around like John Wayne for a week afterwards!! Still it WAS worth it!

Congratulations to Jamie Hutchinson on his well deserved promotion to W.O. (well done mate).

Places are still available for the Annual Dinner. If you want to attend please let us know as soon as possible, so reach for those cheque books and put your best bib and tucker into the dry cleaners.

Lastly I am always looking for new ideas to improve your Seamaster mag so please drop me a line or ring me on ext 4647.

Hope to see you all at the Dinner

Yours Aye **Dusty.**

Sonar Scholl
HMNZS Philomel
Auckland, New Zealand

Kia-Ora Editor

Hello from the land of the Long White Cloud, after several prompts from Paul Hitchcock I thought that it was about time that I dropped my 'cousins' a line or two, just to keep you informed of life in the RNZN. I would have written sooner but I contracted frostbite in the finger tips, apparently caused by gripping the ice cold tinnies too tightly, his problem has been solved with the aid (can we still use that word?) of a polystyrene holder, times can be hard. It really doesn't seem all that long ago since I was given a cup of tea and a bickie in RNB, had my ID taken off me and told to be on my bike!! yet 18 months have passed away.

Presently I am at sea on HMNZS Tui, returning from a little jolly in Hobart, Tasmania, however life is not all roses as the Tasman Sea, can be a little bumpy this time of the year! Returning to Hobart for a minute, apart from the jolly, we were there to take part in the ANZAC celebrations, being my first one, it was quite moving and

an honour to be part of, us Poms get everywhere!

In addition to the Towed Array, I am the also head of the Sonar School with the title of TASTO, I tell you this for I have a tale to tell. Recently I had a group of young officers for three days on ASW, whilst going through the lesson packs, I discovered, to my horror, that three periods were devoted to 177m!, the last time I used it was in 68-70, on the dear old Ajax, F114. I wonder Dusty if any of your younger listeners / readers know the advantages of the 150 nb stylus on the ranger recorder over the 150 rs ??, a prize of 2 Kylie Minogue concert tickets for the first correct answer, by the way the concert is in Bognor.

Winter is rapidly approaching, as the sun is starting to go down earlier in the evenings, about 9pm and odd matelet is wearing socks with his sandals. Christmas was spent on the beach, however this was marred by the sand getting into the plum duff and making it all crunchy, just a little winge!

My one regret for being out here is that, for 20 odd years I've waited for England to beat Wales at the Arms Park and when it happened I was at sea and missed it, still the Grand Slam tie has been ordered. I'm looking forward to the World Cup in October, the first game against the All Blacks at HQ.

Well chaps that's it for now, for you that remember me look after yourselves, for you that have never heard of me, you look after yourselves also! For all this, there is still no better place on Gods earth than England in Spring.

Haere Ra **Fred Fox**

ED Dits and humour are still echoing our branch!

K & T Crafts
Sallhouse Mills
Barrow in Furness

Dear Dusty

Thanks for your assistance so far and if you want to use any of the following in the Seamaster please feel free.

For those that are interested in life after the navy my third year as a civvy is this month. In the space of one commission I did not join the RNZN as intended (the reason why I left the RN), worked for the defence industry for 2.5 years of which I had no intent, made redundant, on the dole, then onto the Enterprise Allowance as self employed.

I and an ex-pongo partner are now the heads of a multi pence organisation who have just awarded ourselves another pay drop in order to stay within our operating

budget of shillings ten. Hopefully as our product(s) get known this trend will be reversed and we can catch up with water and power bosses, however at this stage a juniors daily rate would do.

This is why you will find (hopefully) our brochure as I will use all methods inclusive of the buddy-buddy network to gain exposure, and you never know I might even sell one or two. You wont find better ('he would say that wouldn't he') and we have seriously underpriced our product so take advantage NOW. The pricing of a product is nearly always a problem in start-up businesses and this one is no exception.

At the time of writing we have just received the license from the MOD who have vetted our badges for accuracy and quality, as all badges are Crown Copyright. This also means we are accountable to them, ...somethings never change!

Anyway, enough from me as I hope to save enough pennies to meet those of you that go to the next ASWIS Dinner and give you a real sales pitch

Yours

Jake Lake

PS

Brochure available from Dusty

CPO (OPS)(S) Parry
HMS Chatham

Dear Ed and Members

As my - long awaited - Seamaster finally arrived and fell out of its OHMS envelope, the contents were rapidly devoured by Yours Truly and, having seen my name in print, this has spurred me on towards yet another literary masterpiece (?) this time on the subject of Cross Training. (And all this despite the typographical error in my last letter, these were not - I must hasten to add - down to me, being a member of the 'Yuppy Filo-Fax Type 22 Navy' I do have my own word processor in the SDR, complete with spell check!).

The letter by Jess Owen with regard to the possible way ahead for the Branch did - of course - mention Cross Training. So, having removed the Soap Box from its stowage and having leapt nimbly onto it, here are my thoughts on the matter.

First and foremost, I feel that Cross Training should be done at the Petty Officer level and NOT the Leading hand level, at least for the foreseeable future. This may seem somewhat illogical but I will endeavour to explain the method in the madness.

By the time a man gets to be an Acting Petty Officer he is far more likely to have decided to make the Navy his chosen career, I don't know what the rate of notice

giving in at the various levels but I'm fairly sure that the far higher amongst Leading Hands than it is amongst Petty Officers. Therefore it is far more sensible to devote our ever dwindling resources to someone who is more likely to give a better return of service (ie The Acting PO).

Two cross Trained Leading hands can't possibly produce three Petty Officers (two Passive, one Active) even I could figure that one out without my trusty calculator! From a Whole Ship point of view, one PO less (certainly on a TA Type 22) doesn't create any problems; after all, we're overbourne with PO Sailors and still only have four Parts of Ship. On the other hand, reducing the number of Leading Seamen (Sonar) by 50% would create an awful lot of problems, especially with the extra communal tasks that have fallen on the Ops Department (provision of two SCC Watchkeepers for example).

The Acting PO(S) who joins Dryad for his ASWDs Course is virtually re-trained anyway so why not take this opportunity to Cross Train both him and his Passive counterpart, preferably on the same course throughout so that previous expertise and knowledge from - possibly - seperate backgrounds could be used for each others benefit.

The immediate advantage of Cross Training the Petty Officers is that you get an automatic saving of one PO in a Sea-going billet, thereby alleviating the chronic shortage of man power at the Senior Rate level. The two cross trained POs would be able to relieve both the PO PSDs onboard and also the PO ASWD; the added advantage of course is that the CPO ASWSC would now come out of the Watchbill and be on call as the Co-ordinator during both Active and Passive Ops.

Another advantage of cross trained POs would be the return of the 'Triangular' promotion pattern that we are more familiar with; on a TA Frigate, ten Seamen / Able Seaman, four Leading hands, two Petty Officers and one CPO(OPS)(S) as the ASWSC.

Two immediate counter-arguments to this proposal spring to mind, the first being political, you can't force a PO into Cross Training if he does not want to be. I'm not a great believer in politics (with views slightly to the right of Ghengis Khan!) but I do believe that drastic actions are required in order to sort out the Branch and - if the drastic action involves detailing people off of courses - then I'm afraid that is what we must do, as long as the reasons are fully explained to the personnel involved.

The second counter argument is that it is more logical to cross train at the Leading Hand level because all of the Seamen / Able Seamen do both jobs anyway. Perhaps, but, why not get the AB going through for Leading Hand to complete both parts of the Task Book (which I do anyway) and then allow them to specialise for their WPE. That way they get a good insight into the requirements of both an Active and Passive Controller before they specialise at the Leading Hand level - hopefully

temporarily - before progressing on to Acting Petty Officer (where there previous knowledge of both Active and Passive should stand them in good stead).

That's it for now, a somewhat simplistic outlook you may think, however, if it gets the old grey matter ticking over about the possibilities then the article has served its purpose. Must go now because I've got an NBCDx 1-1 to organise - and that's another point...

Yours Aye

Paz

STATE OF A.S.W. PUBLICATIONS Correct to date 19 - 07 - 91

Staff Sea Check (Mandatory Publications)

FLOORs Vol 2	51
AXP 1B	14
AXP 1B (Brit Supp)	1
ATP 10C	8
ATP 10C (Brit Supp)	1
ATP 28A	2
FCD 3	8
OST Guide	15
AHP 6	1
NISUN	Original
ATP 55	Original

Publications Held by UWW Department

FLOOs Vol 1	52
FLOOs Vol 4	52
FOTI (FCD 10)	8
FOTI Supp (FCD 10B)	16
FXTI	61
ATP 10C (Brit Supp 2)	1
ATP 1C	3 (sig ch mod)
AXP 5B	72
AXP 5B (SE Supp)	22
ATP 29A	Original
ATP 29A (Support 1)	4 (reprint)
APP 4 Binder 2	4
APP-4 (A) Vol 1	Allied maritime structured messages
NP 631	NE Atlantic Wreck Data Bank
BR 1992	Divisional Handbook
CB 04023	SGU (Command Info)
CB 04841 (1)	Fighting Instructions
	1990

CB 04841(1)	182 Performance	2
CB 04985 Vol 2	Range Prediction Handbook	Original
CB 04985 Vol 3	Range Prediction Handbook	Original
CB 5036	2009 Handbook	9
CB 8452 (2) 2050	Operations Handbook	2
CB 08452 (1A) (1B)	Maintainance Handbook	3
CB 08680A (1B)	Stingray Command Information	6
CB 08589 (1B)	STWS 2 Handbook (in CB 04023)	5
CB 08342 (1B)	MTLS Command Information	Original
CB 8526	Summaries of Data U/W Equipment	1
CB 5066(1B)2,3	Mk 46 Torpedo	10
DNWP 103-87	ASW Constraints Document	4

* Not held in the ASW Office (FOST)

214(4)	182 Operations Handbook	Original
219	185 Operating Instructions	Amd 1
220 (GC1)	Mk 46 Torpedo	1
220(5)	Mk 46 Torpedo - Maintainance Instructions	4
38 (1)	Demolition Handbook	3
2000 (63)	Signature Reduction and Control	Original
2760 (2C)	184 Drill Book	7
2785 (1)	match System General Description	3
2785 (1A)	600lb Bomb Handling	1
2785 (2)	Leander and Rothesay Class	6
2785 (3)	Type 21	6
2785 (4)	Type 42	5
2785 (5) (A)	Invincible Class	3
2785 (11)	MATCH System ADAWS	5
2785 (120)	MATCH System CAAS / 2016	3
2791 (1)	1077 Operating and User Instructions	5
2802 (1)	162M Handbook	1
2803	2013 Handbook	7
2805 (2)	2008 Handbook - Operating Instructions	5
2805 (12)	2008 Performance and Limitations	5
2817	2015 Handbook	16
4023 Vol 2	SGUWW (Sonar and Weapons)	3
4023 Vol 3	SGUWW (ASW Assessment)	5
8526 (1)	Data of UWW Equipment	5
8526 (2)	Data of UWW Equipment	2
8526 (3)	Data of UWW Equipment	1
8556	SLUTT Operating Instructions	1
8575	SACAS	1
8589 (2)	STW 2 Operating Instructions	6



THE
ASW ASSOCIATION
ANNUAL DINNER & DANCE
TO BE HELD ON
FRIDAY THE 25th of OCT 1991
AT 1930hrs FOR 2000hrs



IN
THE SENIOR RATES MESS HMS DRYAD

GUEST OF HONOUR: LT CDR DAVID SARSONS RN

COST: Tickets are £20 each (a maximum of two at this price)
Additional Tickets are £21 each.

DRESS: Mess Undress/No 1s, Bow Tie (Neg Medals)
Male Guests Dinner Jackets/Dark Lounge Suits & Black Bow Tie
Ladies Evening/Cocktail Dresses

Dancing to the
DRYAD VOLUNTEER BAND
&
The Vaughan Collins
Roadshow
Disco



MENU

Tiger Prawn Cocktail
Steak Napoleon
Tomatos, Mushrooms & 4 Veg
Copa Continental
Coffee & Mints



ORDER FORM
Please send me.....tickets at £20 each
Plustickets at £21 each
All cheques made payable to ASW's Association
Names of those attending:-
Forename Surname
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Return to:-
The Secretary
ASW's Association
Lewin Building
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Southwick
Fareham
Hants



STWS 2

EDITION 9 SOFTWARE. Fleet Engineering Staff, Portsmouth, released a S2022A instructing ships to demand MOD 98, this provides all the items required to change the system to Edition 9. BR 8589 series changes have been issued to all appropriate units. Of particular interest to the ASWD is change 6 to both BR 8589(2) and the (OSD) this includes all the instructions for using the new software including totally new drill procedures. We are now teaching ASWD's how to load the software into STWS as part of the PO(S) course and the STWS 2 PJT.

GREEN PAGES - BR 8589(2) & (OSD) should have Green Page special drills inserted as per instructions, when all ships have reached the Edition 9 update CINC FLEET will signal you to remove these pages. If you do not hold these Green Pages contact NSA (ASW) SMOPS DRYAD.

EDITION 10 SOFTWARE. Designed to make STWS 2 totally compatible with String Ray, trials continue. This is both a software and hardware mod. The ASWD panel gets a new set of legends to some of the buttons, some of the functions change radically - if you end up trailing this new piece of kit make sure you read the accompanying documentation - (we have recently rewritten BR 8589 (2) a draft copy should be provided with the trial equipment) - if you don't read up first you will come unstuck very soon after switching on.

MTLS By the time you read this there will be 4 systems at sea, NORFOLK having been joined by ARGYLL, MALBOROUGH and LANCASTER. Here in Dryad we also are the proud new owners of this system sited in ASUAT 3A as part of MASCOT (MTLS and Sonar 2050 Control and Operator Trainer). MTLS will follow STWS 2 in the software updates including Green Page drills. They have recently been given the SOC check sheets for the system - a very comprehensive test that can be considered as a Confidence Check. Any comments from the T23 teams on these checks are most welcome - let's get it right today rather than leave a bag of worms for someone else to pick up.

STWS 3 Proceeding - we expect to start writing the drill books in the near future. Remember it's the T42 batch 1 & 2 only that get this piece of kit. Training will be by PJT, a one week course is envisaged.

MATCH Have you sorted out the Aiming Rules?, are you briefing the Rule to be used with the Ballistic Correction? Talk to the AC(H), unless you have told him, he probably knows nothing about the changes to String Ray, hence the requirement for 'Preset' etc. If in doubt read FOTI 0813 and FOTI 0814.

STRING RAY The issue of this new variant is proceeding. If you are unfamiliar with this new toy all I can advise is read, read and read some more. Concentrate on CBO 8680A (1B) and FOTI. Bear in mind security if you have any problems phone / drop in and have a chat/jot something on the back of a fag packet - we are here to help! Lets hope your attacks are this successful.

WEAPONS AND EQUIPMENT



AS 1091 ASUAT 3A (170/177M)

IAN CANBURN

Dusty said to keep this dit brief! So to use a very apt and often used quote - Asuat 3A (MASCOT) 2050/MTLS operator skill trainers, consists of: something old, something new, something borrowed and something blue. TOO SHORT!!

So a brief overview follows:

Asuat 3a served a very useful, but short active inservice career, caused by the demise of 170m/177m combination it was designed to use. It sat at SWOPS awaiting either sale or eventual disposal to scrap. But because of a sequence of event to complicated to write about, suffice to say the route had many tunnels of which successive lights at the end of, were turned off!

3A was offered a new lease of life, to become the 'home' of a part set 2050 & MTLS equipment eventually destined for CTTS (another saga!). Thus saving large amounts of travel to Stockport and finance from the department travel budget and much time in transit per month (if you have done 1000 miles in 5 days on the A34/M6, you will know what I mean Arry!)

The equipment has been fitted by Ferranti Thomson Sonar System (UK) Ltd and Croy Marine and consist of a part set 2050 what includes: the Operators console, two WEP

Data Process cabins, SDS Earth Recorder for recording and playback (training), the Onboard Trainers and Instructors terminal, Mainliner terminal and in July a Signal Processing simulator.

When combined we offer a fully interactive and capable of displaying prerecorded operational data or synthetically proceed targets, either overlaid on recorded data or displayed on synthetically produced backgrounds, proving to be a useful teaching tool.

MTLS unfortunately will not be so potent, but it is hoped that a link between 2050/MTLS will be produced or a desk top PC 'aguured' to simulate MTLS with targets / ship data.

Asual 3A has only really had a stay of execution, as the equipments win be removed in 1995, for return to the present manufacturer for refurbishment, before XXXX in CTTS in 199??? By then it is hoped that AS 1116, to 2050/MTLS (Generic) A10 Skill and Sub Team Trainers will deliver to SWAPS, (he said confidently).

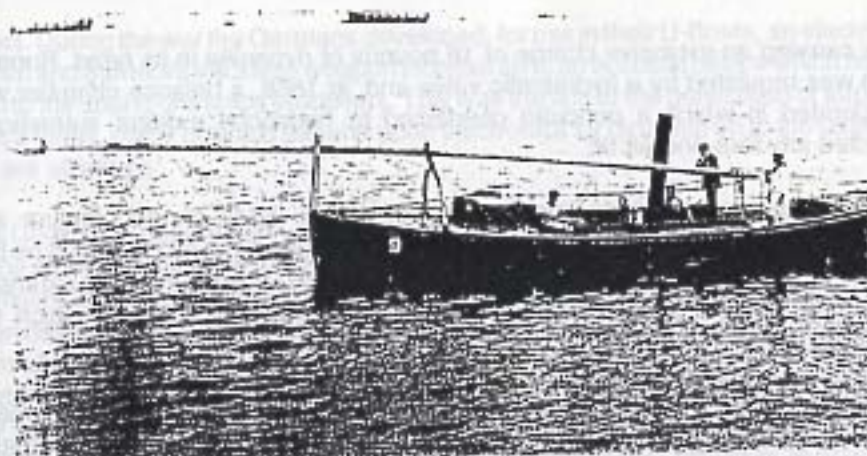
The Instructors for Asual 3A (MASCOT) will be CPO(OPS)(S) J WALKER, who will undoubtedly be busy providing seminars and pre recorded lessons via the OBT. Whilst MTLS will come fairly under the control of CPO(TASI) T WALTON.

I just hope that 3A has a busy and useful few years - who knows 2080 may need a home!!

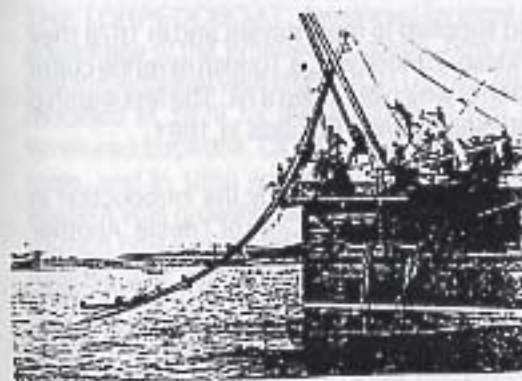
A CONCISE HISTORY OF THE TORPEDO AND THE TORPEDOBOAT

The Torpedo, as we know is a naval weapon used principally by light craft, submarines and aircraft. The first weapon to which the name of an electric-shock-giving fish was applied with an explosive charge moored in the sea, which later became known as a sea-mine. The name followed the weapon when such explosive charges were attached to the end of spars projecting from the bows of small craft (the Spar Torpedo), or were towed by a boat, the tow rope being carried out to an angle by a trawler fishermans otter board (the Harvey Torpedo). The spar torpedo was effectively used during the American Civil War (1861-5) by the confederate submersible H.L. Hunley to sink the USS Houseatonic in 1864. It was still in use twenty years later when it played an important part in the defeat of a Chinese fleet by the French in the battle of the Min River.

Long before this, however, in 1865, the first steps had been taken to produce the self-propelled, buoyant missile which the signifies today, when an Austrian captain named Luppis devised a clockwork-driven, boat-shaped craft guided by lines attached to its rudder. When this proved too crude for practical application, he turned to Robert Whitehead, the English manager of a marine engine factory at Fiume. The result was the Luppis-Whitehead locomotive torpedo, first produced in 1867, a spindle-shaped underwater missile driven by a compressed-air engine at six knots for a few hundred



A nisan launch attached to H.M.S. Vernon, the torpedo school at Portsmouth. She was used for experimental work with spar-torpedoes, weapons proved to have enormous possibilities during the American Civil War but eventually discarded in favour of Whitehead torpedoes fired from tubes.



Early torpedo launching, circa -1890
Portsmouth Hill can be seen in the background (just)



A Whitehead torpedo on board H.M.S. Thunderer; engraving from the Illustrated London News, 1870



Torpedoboot No. 56, one of a group of twenty launched in 1886. The muzzles of two of her deck torpedo tubes can be seen behind the center of the crew standing with his feet apart.

yards carrying an explosive charge of 18 pounds of dynamite in its head. Running depth was regulated by a hydrostatic valve and, in 1868, a balance chamber was incorporated in which a pendulum connected to horizontal rudders automatically corrected any fore-and-aft tilt.

The Austrian government declined to buy exclusive rights of manufacture and Whithead accepted an invitation in 1869 to bring to England the two torpedos he had by that time developed - a 14-inch and a 16-inch model. These were given extensive trials under Admiralty auspices at Sheerness, at the conclusion of which the government bought the rights of manufacture for £15,000.

The laboratory at Woolwich, which was entrusted with the task of development, concentrated at first on the 16-inch model which, driven by two contra-rotating propellers, had a range of 1000 yards at 7 knots or 300 yards at 12.25 knots. It was one of these which had the distinction of being the first locomotive torpedo to be fired in action, launched from HMS Shah in 1877 during her inconclusive action with the Peruvian monitor, Huascar.

By the time Whithead torpedos were being supplied to most navies and in 1878 they claimed their first victim when, during the Russo-Turkish war, a Turkish revenue cutter was sunk by two Russian torpedoboats, each of which obtained a hit. The first warship to be sunk was the Chilean insurgent battleship Blanco Encalada in 1891.

The directional reliability of the torpedo was greatly improved by the introduction in 1878-9 of a gyro-controlled steering apparatus invented by L. Obry of Trieste. Another type of torpedo, invented in 1881 and used for some years for harbour defence, was the Brennan, in which motive power was supplied through two lines of piano wire wound in by winch on the shore from two spools in the torpedo, thus revolving two contra-rotating propellers. By 1909 the standard Whithead torpedo was an 18-inch weapon with a range of 2000 yards at 35 knots or 4000 yards at 29 knots.

The next development to improve the performance of the torpedo was the enrichment of the compressed-air driving the engine. In British Whithead torpedos this took the form of a mixture of steam and gas resulting from water being evaporated and superheated in a 'generator' by means of a jet burning shale oil. In the US Navy the Bliss-Leavitt torpedo was propelled by a turbine driven by steam generated by forcing a spray of water through an alcohol torch. By 1914, torpedos were usually either 18-inch or 210 inches in diameter and about 17.5 or 22 feet in length, with a range of 3750 at 44 knots or 10,000 yards at 28 knots.

Except for improvements in performance, and refinements such as pre-set alteration of course after discharge and the adoption of magnetically actuated firing pistols for their warheads as an alternative for the more usual impact pistol, torpedos remained much the same until the Second World War except for the very high-performance 24-inch weapon driven by liquid oxygen which the Japanese developed and used to good

effect. During the war the Germans developed, for use in their U-Boats, an electrically driven and therefore trackless weapon incorporating an acoustic device which homed it on to the sound of a ship's propellers. This was the first of the generation of torpedos in use today, many of which depend upon electronics for direction on to the target, as we are all aware.

The US Navy's standard anti-shipping torpedo for use by submarines is a development of the 21-inch weapon in use at the end of the war, driven at extremely high speeds by machinery using hydrogen peroxide for its fuel. A number of homing torpedos have been developed, particularly as anti-submarine weapons, modern types of launching from ships or submarines possessing active and passive homing systems or wire guidance in co-operation with electronic sensors. Minaturization and modern technology has enabled small, lightweight torpedos to be devised for launching from rotary and fixed-wing aircraft or carried as anti-submarine missiles (remember IKARA), our own latest development of the lightweight torpedo is as we all know, the Stingray-Star. Earlier lightweight models were electrically propelled, but in recent times types have been adopted employing machinery driven by either solid or liquid propellants.

THE TORPEDOBOAT, developed by most navies during the decade 1880-90 to take advantage of the Whithead torpedo, now a significant naval weapon. The world's first real torpedoboat was HMS LIGHTNING, launched in 1876 to carry spar torpedos, but modified in 1879 by the addition of two above-water tubes for the discharge of Whithead torpedos. Of 19 tons displacement, she reached a speed of 19 knots on her trials, and in 1880 was renamed Torpedoboat No. 1. Also during this era, torpedo warfare was growing rapidly to such a degree of importance that on April 26th 1876, Vernon broke away from Excellent to become an independent command. The hulk Ariadne was added to provide accommodation so that Vernon became entirely an instructional ship, and in addition, the hulk Actaeon was used as a workshop. Soon the name stood not only for the old frigate herself but for all the ships which were subsequently added to her. Amongst these other ships were Donegal, Marlborough and warrior from 1874 to 1923, Vernon also had as the Whithead Experimental Tender the Vesuvius, a gunboat of 250 tons. Torpedoboat No. 1. Her success as a torpedoboat was such as to lead the British Admiralty to place an order for twelve more. They were interested for coast defence duties, the theory of the close blockade of the enemy's coast, a legacy from the days of Lord Nelson, still being the hub on which naval war strategy revolved.

The success of the torpedoboat and her immediate followers inspired other navies to adopt the type, torpedoboats in large numbers were built for the navies of Russia, France, Holland, Italy and Austria between 1881 and 1885, and in 1886 Chile, China, Greece, Spain, Portugal, Sweden and Turkey followed suit.

The implied threat of so many torpedobats in the hands of foreign navies to the naval supremacy of Britain acted as a spur on the British Admiralty, having produced the weapon, to try and discover the antidote. This took the shape, first, of producing a

larger and faster vessel, carrying a 4-inch gun in addition to torpedo tubes, to be known as a torpedoboat catcher. The first of these was HMS Rattlesnake, launched in 1886, but she did not have a sufficient margin of speed to act as an efficient antidote. Further experiments in catchers were similarly unsuccessful, and it was not until 1893, when HMS Havock and HMS Hornet were launched as torpedoboat destroyers, that the answer was found. With a displacement of 250 tons, a speed of 27 knots, and with an armament of four guns and three torpedo-tubes, they were not only too fast and powerful for any torpedoboat but at the same time usurped their function. HMS Havock was in fact the world's first destroyer.

Nevertheless, most navies continued to build torpedoboats and they remained in the British Navy until the First World War, the last class of them being built in 1908, known colloquially in the navy as 'oily wads'. In the German Navy, the name was retained to describe what by then most other navies had classed as destroyers.

A smaller type of torpedoboat produced towards the end of the First World War, and developed into a significant weapon during the Second, was the motor torpedoboat, with an upper deck armament of torpedo tubes and a very high speed. Today they are generally classed in most navies as fast patrol boats.

The classification of torpedoboats may have had a much earlier use, as according to a report in the Illustrated London News (29-12-1880), 'The first torpedoboat ever known (was) a very primitive model invented by Captain David Bushnell of the Engineer Corps, US Army, and launched in New York harbour in 1776'. However, most people would claim this as one of the earliest submarines rather than the first torpedoboats. I hope that you have enjoyed this brief history.



One of the earliest torpedoboat destroyers, H.M.S. Ardent was launched in 1894. In 1904 vessels of the Russian Baltic fleet, which was sailing to the Far East to take part in the Russo-Japanese War, opened fire on British trawlers. Ardent and a number of other destroyers were at once sent to shadow the fleet.

WHERE'S MY OPPO SERVING MEMBERS

WARRENT OFFICERS

BACON NE	FLT ENG PTSMTH
BLANCHE RR	CINCFLT
BRIERLY P	RALEIGH
BROTHERHOOD CD	DRYAD
BROWN S	CINCFLT
CAMBURN IR	DRYAD
CAPEL TP	DRYAD
CHENNEL J	FOST SEA
FOSTER J	DRYAD
HITCHCOCK P	DRYAD
HOOD DRW	DRYAD
HARTLEY C	FOST
KENNEDY PJ	FOST SEA
KILROY JD	DRYAD
LOVEDAY A	FOF1
NIXON PH	CNSA BATH
NOBLE A	CINCFLT
O'SULLIVAN GG	CINCFLT
OWEN M	DRYAD
PARK CD	COLLINGWOOD
PREECE M	FOF1
RODGERS S	DRYAD
WAKEFORD AE	ARIADNE
WILL SC	DRYAD

CHIEF PETTY OFFICERS

ALLPORT TJ	BRAZEN
ANTCLIFFE RA	DRYAD
ASTLEY AJ	FOF3
ALYING RJ	JAAC
BAKER PR	CARDIFF
BANNISTER H	COVENTRY
BAREFORD DJ	JAAC
BATES MR	CUMBERLAND
BRIERS CC	JAAC
BROMLEY JWG	DRYAD
BROWN A	DRYAD
BROWN T	NELSON
BUTLER JP	CLEOPATRA
CARPENTER G	DNR OUTPORTS
CALEY HA	DRYAD
CHARRINGTON LJ	RALEIGH
CHETWOOD J	CCF PORTSMOUTH
CLIPSTONE P	SHEFFIELD
COLLINS MC	EDINBURGH
CRAIG RC	DRYAD
CUNNINGHAM PE	LONDON

DAVIS AM	DRYAD
DOOLER R	DRYAD
DREW RJ	DRYAD
DUTSON M	SHEFFIELD
EDWARDS	CAPT SM2
ENGLISH T	SIRIUS
ENVY M	HERMIONE
FLOWER BH	FOST
FORRESTER RJ	NEWCASTLE
FURLONG PK	DRYAD
FOWLER	DRYAD
GARDNER G	CAMPBELTOWN
GEMMIL DJ	ARROW
GLEAVE AE	DRYAD
GOLDING BF	BOXER
GORRINGE JM	ALACRITY
GRAHAM R	YORK
GRAVETT AN	NORFOLK
HOWES KL	FOST SEA
HUDSON AS	MINERVA
HUTCHINSON JN	CINC
JOINER P	CONCS
KAY JC	NELSON
KAY DB	CWTA PORTS
LAURIE I	DRYAD
LARRATT R	DRYAD
LENTHAL PRF	FOST
LEWIS BW	COVENTRY
LEWIS PL	BRAVE
LEWIS TR	ARGONAUT
MARSHALL D	DASHER
MARSHALL K	ARGYLL
MARSHALL L	DRYAD
MARTIN HJ	DRYAD
McCREADY RC	CORNWALL
MOORE P	FOST
MOSS KG	JAAC
MORRISON D	DANAE
NASH S	DRYAD
NEEDHAM SE	EXETER
NEWELL RJ	EXETER
OLDREY BW	CINCFLT / NAVHOME
PARRY GR	CHATHAM
PEARCE PM	DRYAD
PHILLIPS WJ	VICTORY
POWLEY MK	BRAVE
PORDAGE TR	DANAE
PROWSE BJ	DRYAD
QUINTRELL CT	RALEIGH
RHODES P	DRYAD (Ed)
RIGBY JW	DRYAD
ROBERTS TG	RALEIGH
RODERWAY R	FENCER
SHEPHERD D	LANCASTER

CHIEF PETTY OFFICERS continued

SIMPSON AJ RALEIGH
SLATER N MARLBOROUGH
SMITH JA DRYAD
STEVENS CTC DRYAD
STANKEVITCH P GIB NAVAL BASE
SULLY P BROADSWARD
TUCKER P BRILLIANT
TUTTY PJ NELSON
TWIST PG DANE / DRYAD
WALKER JL DRYAD
WALSH BD BEAVER
WALTON A DRYAD
WHITE PJ DRYAD
WILLIAMS DP DRYAD
WILLIAMS J NELSON
WILDE JMA DRYAD
WESTBROOK AG DRYAD
WORSEY R DRYAD
YOUNG PDR BRITANNIA

PETTY OFFICERS

AINSCOUGH JC RALEIGH
ANDREWS MP AMAZON
ALLEN SM DRYAD
ANTROBUS ASD SCYLLA
ATKINSON D RALEIGH
BAILEY KP DRYAD
BAILET AB AMAZON
BAKER RF AMBUSCADE
BALL CG DRYAD
BARRACLOUGH PA MARLBOROUGH
BARRLETT CEJ RALEIGH
BARTLETT-HORWOOD DRYAD
BEADLE TA NORFOLK
BENNETT A DRYAD
BENTING PA ARGONAUT
BOX DJ DRYAD
BOYES D RALEIGH
BRETT M NORFOLK
BUCKERFIELD P BRAVE
BURLEY RE CORNWALL
BURKE JJ ROYAL ARTHUR
BURTON GR SIRIUS
BURTON RB LONDON
BUTLER G GLOSTER
CAMBURN N NELSON
CANFIELD CJ LONDON
CLARK MJ DRYAD
CLARKE MT BIRMINGHAM
COGRINGTON M CORNWALL
COLLINGS PJ CORNWALL
COSH D BRILLIANT
COWLEY MJ ARGONAUT

PETTY OFFICERS continued

CRISPIN A COVENTRY
DAVIES CD SHEFFIELD
DEAKIN MP PHOEBE
DEVINE GLASGOW / GIB
DINNAGE SP GLOUCSTER
DOYLE MM CARDIFF
DUNN BM DRYAD
EDWARDS AD ILLUSTRIOUS
EDWARDS DA SIRIUS
EGAN SN ARGONAUT
ELLIOTT MG BRAZEN
ELLIOTT PJ EDINBURGH
ELLIOTT RE SOUTHAMPTON
EMMERTON D CHATHAM
FAIRCLIFF DW DRYAD
FINN T DRAKE
FIRTH DJF JUPITER
FLINT RG DRAKE
FORSTER DW BOXER
FRAZIER PS DRYAD
FRENCH RJ DRYAD
FROST JR SIRIUS
FULLER K BROADSWARD
GARCIA N DRYAD
GOODWIN AD CUMBERLAND
GOWMAN IP DRUAD
GREAVES GA DRYAD
GREENWOOD AEF ALACRITY
GOODFELLOW DJ BIRMINGHAM
GRIFFIN M CUMBERLAND
HALE D DRYAD
HALLOWS JAT GIB NAVAL BASE
HEAVEY WJ BATTLEAXE
HILL PDP NEWCASTLE
HENRY PA COVENTRY
HODSON KL MARLBOROUGH
HOWELL MA CHARYBDIS
HUGHES G BEAVER
HUTCHINGS MJ DRYAD
JARVIS JG BOXER
JONES CEW COVENTRY
LONES DH CAMPLETOWN
KAY JL CLEOPATRA
KELLY A BEAVER
KEMP R DRYAD
KERR A AVENGER
LANCASHIRE AS ARGONAUT
LAWSON GJ NOTTINGHAM
LE-MAGE AC NOTTINGHAM
LINDEN JW DRAKE
LINGER MP DRYAD
LITTLE DI CHATHAM
LOMAS P DRYAD
LOYNES MJ DRYAD

PETTY OFFICERS continued

LYMATH PJ DRYAD
MACAULAY A RALEIGH
MADDISON SH DRAKE
MAKERWICZ RE SHEFFIELD
MALCOLM JG BATTLEAXE
MANEELY GJ DRYAD
MANNERS D HERMIONE
MARCHANT JRW ARGYLL
MAULE KH RALEIGH
MEMORY MEC LONDON
McCARTHY DPP JAAC
McINTOSH NA MANCHESTER
McLEAM W AVENGER
McLEOD IC BRAVE
MERCER IL RALEIGH
MIDDLEMAN G BEAVER
MILLS MSJ DRYAD
MORTIMER MC CUMBERLAND
MOSS AR RALEIGH
MINTER K DANAE
MOWAT KJ DRYAD
MULDOON I LIVERPOOL
MURRAY AR JAAC
MYATT AJ WARRIOR
NELSON J CINCLEET
O'BYRNE PW GIB NAVAL
OGGIANNIO S CAMPBELTON
O'SHEA MP ARK ROYAL
PAGE BR CLEOPATRA
PARKIN BERESFORD HASLAR
PEARSON RDT CLEOPATRA
PEARCE S ACTIVE
PHILLIPS MR DRYAD
PINCH A CORNWALL
PLUMB P BEAVER
PURSLOW SP NORFOLK
QUATE WT YORK
RADFORD J CHARYBDIS
RAMPTON TJ DRYAD
REILLY JJ GLASGOW
RICHARDSON GA ARIADNE
RICHES RN CHATHAM
RIMMER RD CAMPBELTON
ROBERTS PN RALEIGH
ROBERTSON MRJ EDINBURGH
ROBINSON J DRYAD
ROBINSON JP MANCHESTER
ROLFE C DRYAD
ROWE SM BOXER
ROWNTREE G SCYLLA
SADLER MB DRAKE
SCOTT MJ DRYAD
SEARLE LP ROYAL ARTHUR
SINGH T BIRMINGHAM

SOLCOMBE D
SMITH NJ
SMITH WF
SPEIRS WR
TATHAM KJ
TEMPLE GW
THOMAS ADP
TURNER DA
TYLER DP
UNDERWOOD RM
UNDERDOWN NR
WATTERS NJ
WELSH SA
WHALLEY GN
WHITTY TF
WILSON KE
WOODS G
WOODS NP
WRIGHT DA
WRIGHT D
WYLIE BJW
YATES S

GLASGOW
DRYAD
RNR S WALES
DRYAD
NORFOLK
CHATHAM
CLEOPATRA
DRYAD
DRYAD
AMBUSCADE
ARGYLL
ARROW
DRYAD
DRAKE
JAAC
FOSNI
SULTAN
ROYAL ARTHUR
SIRIUS
DRATMOUTH
JUNO
ALACRITY

EX-SERVING MEMBERS

JOHN ADAMS WATERLOOVILLE
DERBY ALLAN WATERLOOVILLE
JOHN ALSOP GOSPORT
JOHN ASHTON BEM HORNDEN
GEOFF ASHTON SHROPSHIRE
WT ALLAN PLYMOUTH
RG ARMSTRONG IVER (BUCKS)
A ARMSTRONGE GLASGOW
DON ANDERSON NEWPORT (GWENT)
FRANK BROMFIELD FAREHAM
DAVE BEKKER DRRAYTON
ERIC BOWERS COWLINGE
PAUL BRYNE BANCHORY
GERRY BRADBURY FAREHAM
RG BROWN SOUTHSEA
JACKIE CALAM FAREHAM
PETE CASS KENT
BOB CHERRY KINTBURY
ROY COUNSELL LOVEDEAN
JEFF CLEAR COSHAM
CLEM CLEMSON EXETER
DIZZY DENNETT CLANFIELD
JOHN DUNCAN THURSO
DAVE EASTHAM I.O.W.
PETE EDGE LEIGH PARK
TAFF EVANS GOSPORT
COLIN FELS SHEFFIELD
LES FORMOY FAREHAM
PETE FAIR GILLINGHAM
FLORRIE FORD PORTCHESTER
DAVE FRANCIS GOSPORT

EX-SERVING MEMBERS continued

RON FEASEY	BOURNEMOUTH	R PATON	STUBBINGTON
DICKY FISHER	St LEON on SEA	TED PHILLIPS	BEDHAMPTON
PETE GODFREY	FARLINGTON	ROY PLUMRIDGE	COSHAM
POP GLADWISH	GOSPORT	DON PIERCE	NOTTINGHAM
JIM GREEN	NORWICH	BARRY PRICE	LEE ON SOLENT
PETE GREEN	STAMSHAW	PB PURKISS	SHEFFIELD
FLASH GORDON	COSHAM	FRED QUAIN	GOSPORT
J HEPBURN	HAVANT	A QUARTERMAINE	BANBURY
BURT HEAVER	WATERLOOVILLE	C RICHARDSON	PAULSGROVE
SPIKE HUGHES	TUNBRIDGE WELLS	TED ROWE	GOSPORT
IAN HARPER	SOUTHAMPTON	JOHN REEDY	DRAYTON
CHARLIE HAYDON	CREDITON	LES RISHMAN	BOGNOR REGIS
TED HUNT	TAUNTON	RJ RANDELL	SANDERSTEAD
CARL HATMAN BEM	WORCESTER	RED ROBERTS	GOSPORT
PETE HARLING	PORTSMOUTH	L RIDGEWAY	REDCAR
RAY HAWGOOD	BRIDPORT	BILL SOMERTON	DENMEAD
BILL HILL	GOSPORT	ROY STRINGER	COPNOR
PAT HERBERT	WATERLOOVILLE	SAM SNELLING	CATHERINGTON
RON HOBDEN	TITCHFIELD	CHARLIE SOLE	GOSPORT
HOVENDEN		MICK SARGEANT	TORPOINT
DUG JACKSON	CAPETOWN	PETE SOWDON	DOVER
JIM JACKSON	SOUTHSEA	ROGER SINGLETON	CHEDDESON
JERRY JERRARD	FORDINGBRIDGE	DAVE SWANN	SWANAGE
GEORGE KENNEDY	GLASGOW	JEFF STANLEY	SUTHERLAND
JAKE LAKE	CUMBRIA	JIM SHEPERD	PORCHESTER
RON LYNN	SOUTHSEA	NM SHOULS	LEE ON SOLENT
BILL LISSAMER	FAREHAM	R THOMPSON	ALVERSTOKE
DODGER LONG	GOSPORT	R TAYLOR	SOUTHPORT
FRED LE-MAGE	STORRINGTON	REG TOWNLEY	COSHAM
GERRY LEAR	LIVERPOOL	T TEMPLETON	MANCHESTER
MICK LEGG	PLYMOUTH	K THOMAS	WATERLOOVILLE
BOB LOFTUS	BEDHAMPTON	FRED THORPE	CROBY
JRC LEWIS	PORTSMOUTH	MAURICE TREGOVE	POOLE
HARRY MINCHIN	SOUTHSEA	BEN TRAVIS	SITTINGBOURNE
JOHN McLEOD	GLOUSTER	RJ WARD	CUMBRIA
JERRY MOULSON	COWPLAIN	K WALK	PAULSGROVE
SAM McCOMBE	GOSPORT	WRAGGY WRAITH	PURBROOKE
JW MOTT	SOUTHAMPTON	JOHN WHITEHEAD	WATERLOOVILLE
REG MADGE	HORNDEN	MICK WORSEY	SIMINGTON
SG McINTOSH	LOWER KINGWOOD	SHINER WRIGHT	SOUTH LANCING
PADDY MEASEY	GOSPORT	PHIL WRATTEN	READING
G MORRALEE	CHICHESTER	CHRIS WYNN	GOSPORT
DG Mac PHERSON	GOSPORT	T WRIGHT	BELPER
PEGGY NEAL	WEYMOUTH	BUNGY WILLIAMS	PLYMOUTH
TED NEESON	GWENT	BANGO WEST	CWMLLYNFELL
B NICHOLS MBE BEM	GUILDFORD	SOAPY WATSON	LEE ON SOLENT
PJ O'BRIAN	STOCKPORT	SHINER WRIGHT	GOSPORT
DEREK O'ROUKE	DUNFERMLINE	BUNGY WILLIAMS	I.O.W.