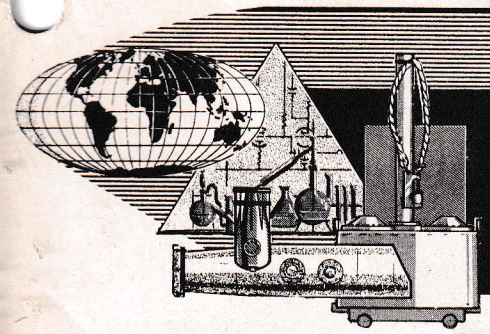
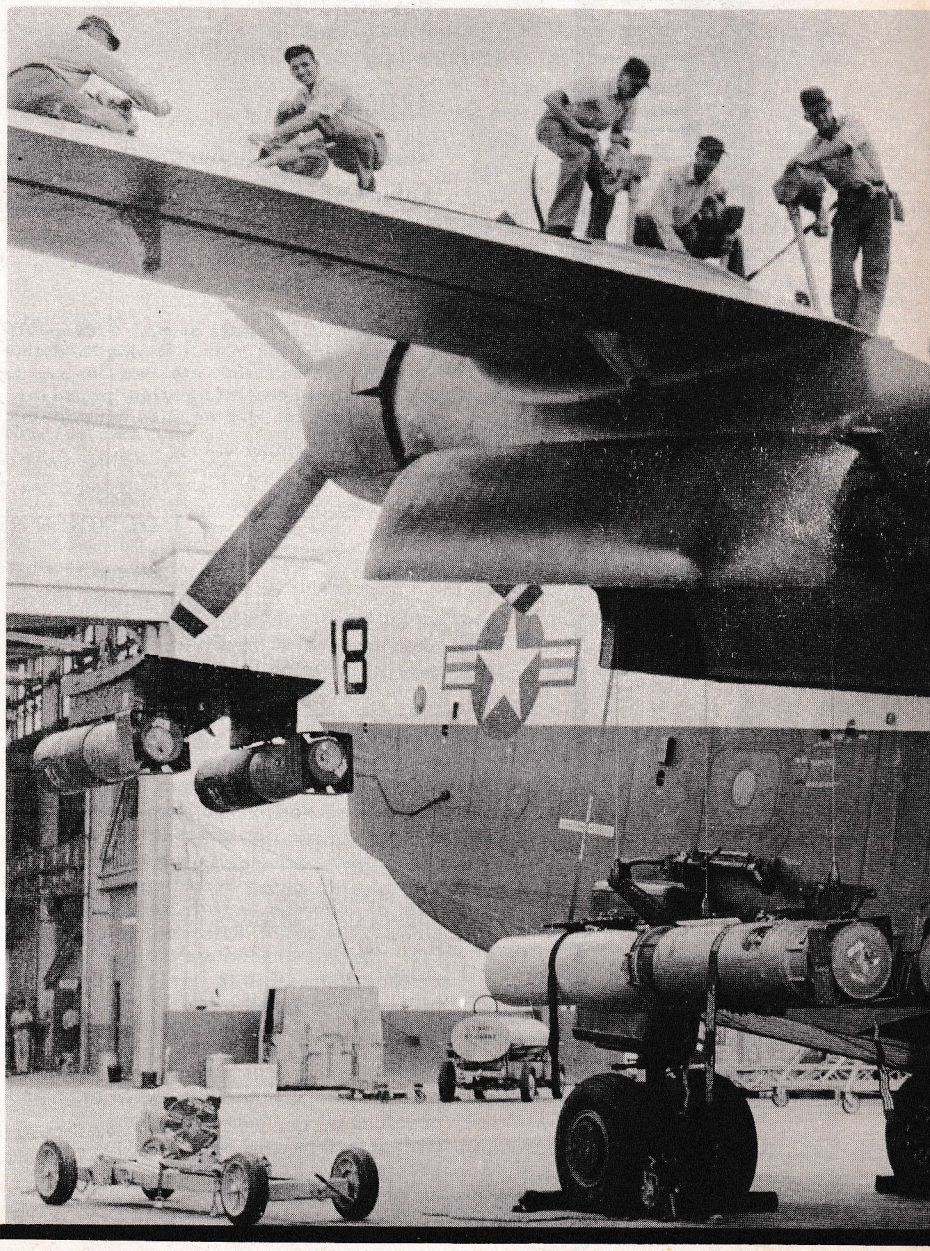
327 No. 4-62



mine and depth-charge

THE TROUBLESHOOTER

- More On Color Coding
- NAVSTRIP
- Inventory Control Changes



AN OFFICIAL *BUWEPS* PUBLICATION

in this issue . . .

mine and depth-charge
THE TROUBLESHOOTER

Published by the Naval Mine Engineering Facility, Yorktown, Virginia.
George T. Ragon, CDR., USN.....Officer-in-Charge
Haines A. Miller.....Technical Director
Frank N. Potter.....Editor
Roland R. Rollins.....Art Director

REGULAR FEATURES

ARTICLES

COVER PHOTO: AOs at NAS Jacksonville load mines aboard a Navy P5M, just redesignated P5A. Rising to outboard wing station are two Mk 53s. On way into bomb-bay are two 36s and two 52s. Reason for loading: to provide first-hand information for use in a new 15-volume edition of OP 1118 (one volume for loading each mine-laying aircraft type) now in preparation by NMEF.

— 1 OCTOBER 1962 —

By direction of the Chief, Bureau of Naval Weapons, Troubleshooter is an official BUWEPS publication. Technical content pertinent to the assembly, testing, and delivery of US naval depth charges and mines is both authoritative and directive in nature, and reference may therefore be made to a particular issue as the authority for adoption of ideas promulgated therein. Content which does not fall in this category (e.g., items of general interest such as are reported in *SOUNDINGS*) is reasonably verified before publication but is not to be considered official nor representative of official BUWEPS doctrine.

Troubleshooter is also the official journal of the Rudminde Program, a world-wide defect-reporting campaign designed to promote a high level of undersea warfare readiness in US naval depth charges and mines. The basic instrument of the program is NAVORD Form 2776. Everyone who encounters problems with these weapons is encouraged to report them via this form direct to the Naval Mine Engineering Facility as prescribed by NAVORDINST 8500.7.

Troubleshooter is published quarterly by the Naval Mine Engineering Facility's Publications Division and printed by NPPSO-5ND, as approved by the Secretary of the Navy on 21 February 1962. Contributions, questions, address changes, and requests for distribution should be addressed to: Editor, The Troubleshooter, Naval Mine Engineering Facility (Code Ts-2), Yorktown, Virginia, U.S.A.

THE OFFICIAL JOURNAL OF THE *RUDMINDE* PROGRAM

SOUNDINGS

The Changing Scene In Undersea Warfare

SEA MINE SAGA: In his new book "America's Use of Sea Mines" Dr. Robert C. Duncan, former scientist at the U. S. Naval Ordnance Laboratory, gives a comprehensive treatment of the use of mines through the end of World War II.

Dr. Duncan describes the various wars and campaigns where mines were used and also brings into the picture the men responsible for keeping the interest in mine warfare alive.

The book is available from the Superintendent of Documents, GPO,for $1.75.

LAGOON SHOON: Two men and a woman walked on the water of the Pentagon's river-entrance lagoon recently in a demonstration of a product which may have military applications.

The water walking was done on rigid urethane foam shoes which can support 350 pounds and allow a man to move over the water's surface at about three mph.

Kean Stimm, President of Water Shoes Inc. and the inventor of the shoes, showed military personnel that the shoes could enable soldiers to cross rivers, lakes or swamps at walking speeds with both hands free to handle their weapons.

He pointed out that soldiers using the water shoes could move easily through wild swampy terrain where foliage is too thick to allow boats and the water too deep for wading.

Two or more of the shoes can be lashed together to form a raft for transporting equipment and supplies or casualties. With the shoes it would be possible to conduct water level inspection of ships, bridges, docks and other objects surrounded by water.

While the shoes are not now being used by military units, they are being sold for use in a number of new water sports.

FINDERS KEEPERS: Salvage operators, inland-lake skin divers, river prospectors, and other brethren of the damp epidermis are upping their scores by using a compact, portable, electronic instrument known as the UD-11 underwater metal detector.

This boon to sea scroungers is completely waterproofed for use in salt as well as fresh water. It can detect both ferrous and non-ferrous metal through mud, silt, sand, rock, coral, concrete, wood, and any other relatively non-conductive material.

STOP, LOOK and LISTEN: Scientists have bugged the wit chat of a quintet of suspicious, West Coast porpoises. This undersea snooping took place near a "fence" of widely placed aluminum poles set up off the coast of Mexico's Baja California.

The porpoises stopped about a quarter of a mile from the poles and sent out a scout. After a half hour of consultation in shrill penetrating whistles, interspersed with more scouting, the methodical mammals maneuvered through the harmless "barrier" with a modicum of concern.

William Evans, a scientist with the Lockheed-California Company, described the porpoise pattern as a natural, echo-location, sound-wave system—a sort of built-in sonar similar to the sea bat's "radar."

"CUBMARINE": An 18- by 5-ft. two-man (operator and observer) sub is being developed by the Office of Naval Research. Designed primarily for the study of marine life, this pee-wee craft will be used mostly to observe communities on medium-depth bottoms. Sharks, particularly, will be in for an invasion of their piscatorial privacy by peeping bathynauts. Especially to be investigated are seasonal changes of bottom sediments.

The cubmarine's small size, maneuverability, hovering capacity, 20-mile range, 230-ft maximum depth submergence, and 8-hour staying-power will make it ideal for leisurely underwater exploratory pursuits.

Lights and cameras can be attached and adaptations can be made to the cub that will permit the installation of various collecting devices. Submerged, the cub will be able to make 5 knots; on the surface: 6 knots. Her hull will be able to withstand 100 psi.

MODERN MARINERS: An experimental water-purification plant has been installed at the Coast Guard's Ocracoke Lifeboat Station on the Outer Banks of North Carolina. It is the world's first known continuous sea water conversion of its type.

The system employing an electric field which causes the ions of mineral impurities to pass through plastic membranes, is designed to produce 2,000 gallons of purified water daily.

To paraphrase a line from The Rime of the Ancient Mariner "Water, water everywhere and many a drop to drink."

BARNACLE JAM: False targets, caused by noise and movements of deep-sea creatures, interfere with sonar and related acoustic operations. The creatures not only produce sounds of their own but scatter and absorb other underwater sounds. This poses problems for sonarmen listening for "enemy" submarines.

At the world's first, permanent, deep-water, biological, acoustic-video research station, scientific personnel are monitoring both the behavior and the noises made by these creatures.

The station is located on the ocean floor in the Florida Straits, using both hydrophones and a television camera to pick up underwater activity. The station relays its information through a cable connected to the Lerner Marine Laboratory on Bimini Island in the Bahamas.

Data collected at the Lerner Laboratory will be used in studies directed toward solving these problems.

At first, studies will be made of general underwater background noise. Tape recordings and behavior studies of marine animals will be made through the station's hydrophones and video cameras.

Future studies will concentrate on identifying and analyzing individual sounds made by various sea life. Marine animals, such as snapping shrimp and barnacles, all native to the Florida Straits, emit sounds which increase the total underwater sound level.

Sound levels will be recorded at numerous depths for comparison with recordings made from test animals.

The Office of Naval Research is sponsoring the program as part of its Hydrobiology Program.

WHALE OF A PROP-POSITION: When a Navy landing ship was on location this summer in the Aurora 7 spacecraft recovery area some 400 miles off the Virginia coast, Petty Officer Bobby King heard a loud thump under the steering compartment. The DONNER, her starboard shaft locked, sent divers overboard. The trouble: a 9½-foot, 600-pound whale was wrapped around the propeller.

DOBBIN DECOY: Legend has it that an old nag used to be led nightly over the high dunes along a part of the North Carolina coast, a lantern hanging from his neck. Ships at sea, mistaking the swaying lantern for a ship riding at anchor in a safe harbor, would attempt to come in, thereby running themselves aground on the treacherous shoals of the Dare Coast—easy prey for the land pirates of Nags Head.

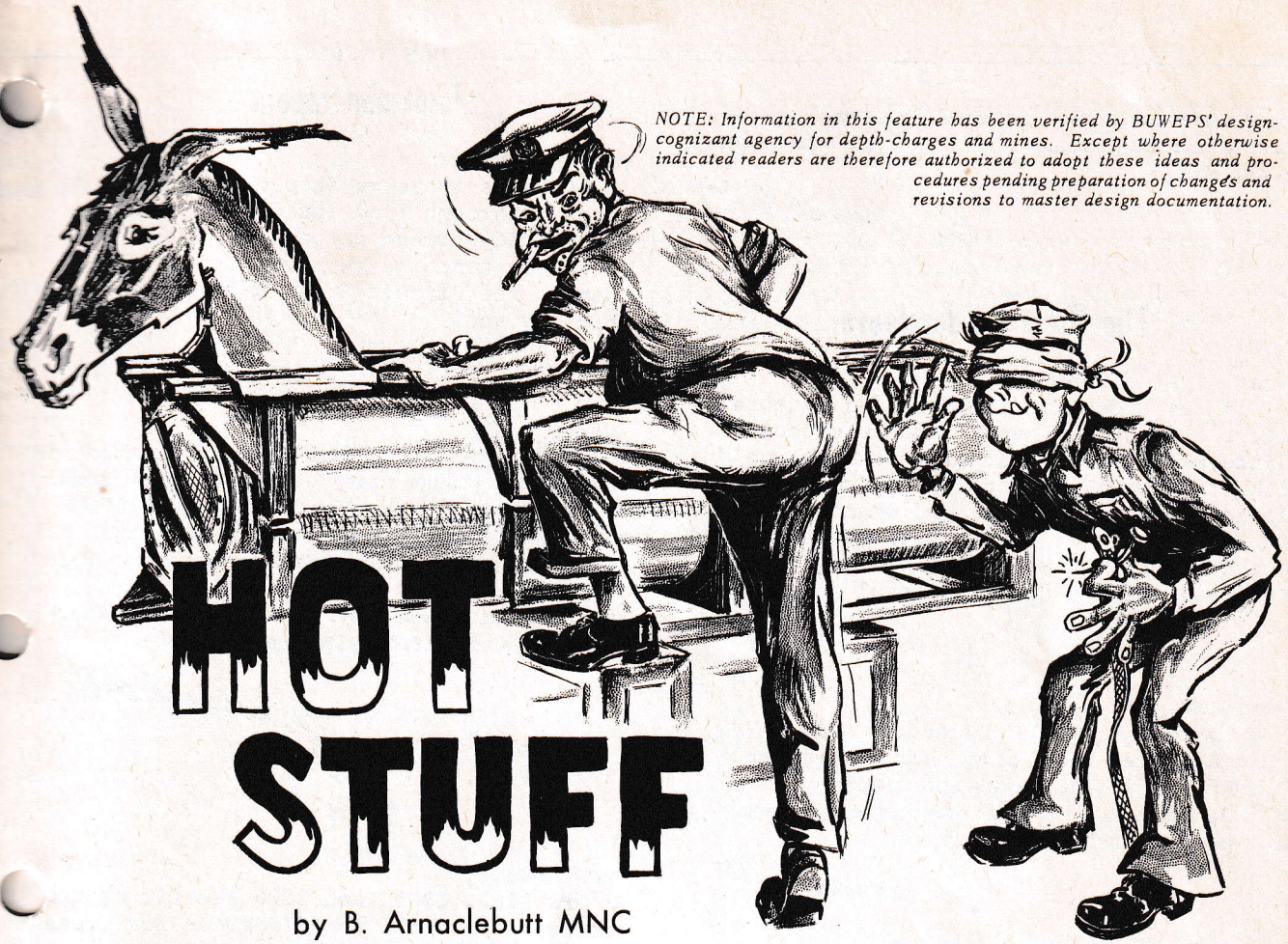
OF SHIPS and STATES: Before the Navy ceased naming ships after states, forty-seven of the 50 had had the honor of having their names emblazoned on battlewagons. Alaska had to be content with a cruiser, and the old mothballed MONTANA was called a "first class armored cruiser."

It wasn't exactly a "from Maine to Texas" progressio though, because far from being the last, the TEXAS wa commissioned with the MAINE in 1895 as a "double-bottom ed armored vessel." Later both became known as "second class battleships." The first real battleship also commissioned in 1895, was the INDIANA. The MASSACHUSETTS and the OREGON were her sister ship After these came the IOWA and the KEARSAGE (nam after a mountain in New Hampshire . . . the only ba wagon not named after a state).

As for Hawaii, the keel of a large cruiser of that n was laid in 1943 but construction was suspended in when the ship was over 80 percent complete. And MONT lost out twice. A battleship of that name was begun 1920 and cancelled two years later; another was au ized in 1940 but construction was suspended in 1943

But even though "Hawaii" was left on the beach, capital city was honored in 1937 by a light cruiser, HONOLULU, that saw Pacific action in World War I went into mothballs in 1946. The Aloha State also romantic names on four of the Navy's auxiliary amm ships—DIAMOND HEAD and the MAUNA LOA now Atlantic, and HALEAKALA and MAUNA KEA in the P

TROUBLESHOOTE



NOTE: Information in this feature has been verified by BUWEPS' design-cognizant agency for depth-charges and mines. Except where otherwise indicated readers are therefore authorized to adopt these ideas and procedures pending preparation of changes and revisions to master design documentation.

HOT STUFF

by B. Arnaclebutt MNC

Have tail-will pin

Dear B. Butt:

Ever since reading Millie Amp's "Straps, haps" back in T-Shooter 1-60 and her "Braid for you boys" in the 4-60 issue, I've been hoping to see an article telling me just where to secure these mine-grounding straps—not on the filling-hole fastenings, that's for sure, but where?

R. I. P. MN1

Dear Rip:

Right now, two straps are authorized for grounding mine cases to mine crates: DWG 1419775 for use with Mine Crate Mk 10-3 only, and DWG 1419777 for other Mine Crates. Only the second strap is available from stock at Hawthorne, Oahu, and Yorktown, Z1350-767-8197.

Design documentation calls for attaching ground straps to clock-well securing studs. Many of you men, however, have been attaching them to the tail cover fastenings. This makes sense to me. How we're supposed to install those well barriers with a ground strap in the way is a ozy.

From where I sit, it looks like you'll soon be getting a T-Shooter ground-strap article that'll officially tell you to attach that available strap to a tail cover fastening—and also just where the strap's other end should be secured on each mark of mine crate in the system.

B. Arnaclebutt

Like fastenating

Dear Butts:

Figure 13 of OP 1736 (2d Rev) shows CA-631's and CA-585's strain loops secured to end screws on the Jones block (TB-24-1). How can you do this when these screws are only $\frac{1}{2}$-inch long?

A. Mineman

Hey Man!

I can't. So I replace those screws with long ones, No. 8-32 x 7/8" G5305-261-3550. When I do, a strain-loop grommet sometimes crowds a bakelite separator

enough to break it when the screw is tightened, so it's best to trim the grommet first. You could even remove it altogether.

B. Arnaclebutt

The Great Guidersleeve

Dear B. Arnaclebutt:
In our stockpile for Mark 6-5 anchors there's a part we can't find reference to. Since we're almost out of this item, we'd like to know if it's presently required. If so, what's it called and what's its stock number? It's a cast-iron sleeve used with the pawling mechanism and goes over the pawl rod and under the pawl spring.

S. R. H. MNSN

Dear Scott:
Thanks for the photos of your mystery widget. You called it a sleeve, and so do we. The stock number is 71350-603-6674. The drawing still requires it. Use it. It functions as a spacer to prevent the pawl spring from possible binding on the pawl rod.

B. Arnaclebutt

Digger OD

Dear B. Arnaclebutte:
After making a thorough search of our OD's, OP's and past issues of the Troubleshooter, I am still unable to determine the purpose of the Capacitor Assembly, 1406769, LD 487823.
The assembly is located between the terminals marked "+" and "G" on the TB-8 Mod 0, Drill Mine, Mk 36-1, when using the float assembly. Help!

L. A. F. MN1

Dear Leland:
You didn't delve deep enough, man. T-Shooter 1-59, page 5, has a "coffin" at the bottom just full of the goodies you need. If you don't have this back issue, let me know.
In a nutshell: that capacitor prevents a radio-frequency current (induced by the closure spark of the CD-10's Switch A) from firing the float cutter's explosive fitting.

B. Arnaclebutt

Peat and repeat

Dear Barnacles:
It seems to me we shouldn't have to do steps 2 through 7 of the Circuit Break Balance Adjustment on page 32 of OP 1736 2d Rev inasmuch as we have already done them in the Circuit-Break Balance Test. What say you?

A. L. D. MN1

Dear A. L. D.,
A worthy observation. But I say that a closer look will show you that you don't have to make the Circuit-Break Balance Adjustment unless the CB fails to pass the Balance Test. When you have to make the adjustment, then you just gotta give the CB the Balance Test again. Right?
Something definitely wrong in your 1736, though, is step 15 of that Balance Test. Make the change as Clark Starter tells you in Pub-S-Crawlin' in this issue.

B. Arnaclebutt

Brrr!

Dear B-Butt,
OPs 2567, 2805, and 2806 specify storage temperatures of 21 to 55 degrees for Pressure Detectors Mk 1 Mod 0. Isn't this narrowing things down pretty fine? If cold storage is needed couldn't they be stored right with the batteries?

C. E. I.

Dear C. E. I.
You bet. Storage at minus 30°F with dry batteries is okay but with two reservations: 1) after removal they should be left in their containers until they reach room temperature; 2) they should not be repeatedly thawed and frozen again.
As for the pubs you mention, the revised version says just that.

B. Arnaclebutt

Guess Performance

Dear Chief B. Arnaclebutt:
In using Test Set 194-0 to test Mine Mk 50-0 with the CD-14 set for zero days delay arming, the test set doesn't distinguish between the open and closed positions of the HS-1 switch in the Hydrostatic Switch Mk

2. The HS-1 switch closes several breaks in the mine circuits. In my book, this failure to identify a possible closed switch introduces a safety consideration.

T. O. H. MN1

Dear T. O. H.:

Changes have been made in the test set's design to correct the trouble you point out. An ordalt is being prepared to incorporate these changes in the Mk 194-0s. Until the modified sets are available, set the delay-arming time at three days to insure an open clock switch. If three days is too long for the desired use of the mine, you'll just have to realize that the HS-1 switch could be in the closed position.

B. Barnaclebutt

Mod in our eye

Dear Barnacles:

Why not convert Clock Starter Mark 1 Mod 3 to Mod 4, and Mod 5 to Mod 9? Seems like a little CS standardization would save time, money, and stock space.

D. O. M. MN1

Dear Dave:

We recently ran a standardization study on CS-1's active mods. Here's the result: Mod 3 will continue to be the preferred component for Mine 18-0, and will be the field alternate to Mod 4 for Mines 10-9; 25-0, 1, and 2; and 36-1, 2, and 3.

When Mod 3 is issued for Mines 10-9; 25-0, 1, and 2; and 36-1, 2, and 3, it should be converted to Mod 4 by replacing the knurled nut and wooden washer with a castellated safety collar Z1350-038-6955, or cotter pin Z5315-245-1402 or Z5315-187-9526.

Your suggestion that Mod 5s be converted to Mod 9s is fine. Right now, though, we have plenty of Mod 9s in stock.

Any suggestion for component standardization or elimination of needless gear will always get a big eye here. This sort of scrutiny is the brand we go for, Dave. Thanks!

B. Barnaclebutt

Trim the fat

Dear Chief:

In your "Now ain't that a hole in the head!" article, in T-Shooter 2-62, you said you were going to try to get that foolish 52-dollar price of the Clock-Starter Depressor "fixed up." Why bother? The shop-made job of Chief Bill's that you showed is all any mineman needs. We've got one ourselves and like it fine. You say you're in favor of weeding out components that aren't needed. How about tools? Let's begin by getting Z1350-093-1043 out of the system.

T. U. O. MNC

Dear "Owleye":

Let's! I wouldn't be the least bit shook up if that over-priced depressor will be heaved out of the system. I wouldn't be a bit surprised, either, if it got the treatment right soon. Take a bow!

B. Barnaclebutt

Crush on Santa Claus

Dear Butts:

About this business of crushing BA-249/U batteries in Mk 36-1 mines; instructions in OP 1684 say to clamp the batteries with the CD-14 battery brackets but not tightly enough to deform the battery casings. But how tight is tight enough? —And don't tell me that it's a matter of feel!

U. N. H. MN1

Dear U. N. H.:

Your question put to the designers seems to have generated some problems beyond "how tight is tight," and too late for this issue came out a "job right"—so if you can bear with us until then watch for your answer in our "Santa Claus" issue.

B. Barnaclebutt

MINE-ASSEMBLY INVENTORY CONTROL CHANGES

PROPOSED OSO catalog changes and a revised OD 12067-G will reflect several present and pending cognizance-symbol switches. These cog changes fall into three groups as follows:

On 1 July 1962, 303 mine-assembly items and 15 mine tool sets were transferred from BUWEPS inventory control (J-cog) to OSO control (A-cog) per BUWEPSNOTE 8550 of 16 May 1962. This transfer is firm; so, when you order any of these items, requisition from OSO instead of BUWEPS.

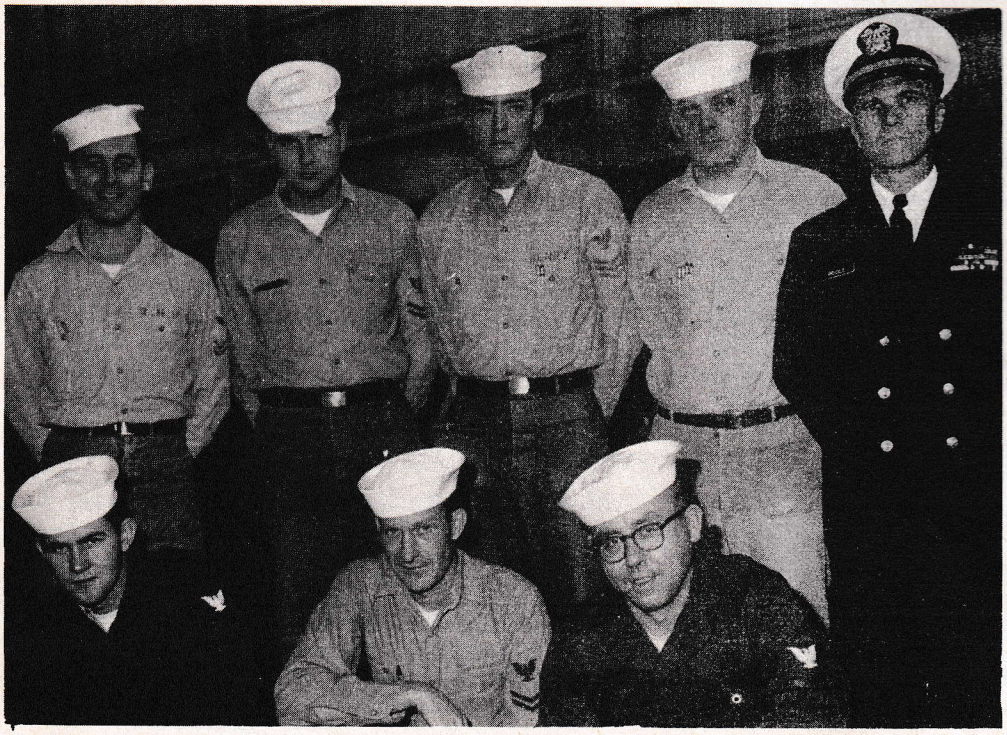
On 18 May 1962, a BUWEPS/BUSANDA letter directed OSO to transfer about 215 mine-assembly items from Z to A cog. According to our latest information from OSO, 15 November 1962 is the tentative date set for this transfer. We don't have a firm list of these items yet but we'll pass it along when we do have—and anything else that jells in this cog-hopping deal.

All mine items remaining under BUWEPS inventory control have been redesignated the cog symbol 4T in place of J. This is nothing but a wholesale redesignation of all mine items under BUWEPS as 4T instead of J. You don't need a list on this; your next revision to 12067-G should show this change, plus the deletion of all the items transferred to OSO cog.

Placing mine-assembly material in A-cog instead of Z-cog should provide some relief from funding problems in mine assembly, since this changes the material from NSA to APA. Quoting from the joint BUWEPS/BUSANDA letter:

"Incident to the J Cognizance Stock Coordination Review Board meetings held in September 1961 and February 1962, it was determined and agreed that ordnance material peculiar to the assembly of all mines (service and drill) under the inventory control of the Ordnance Supply Office will be categorized as cognizance A material. The purpose for this categorization are: (1) to limit mine-assembly ordnance material under OSO inventory control to one cog under one account (APA) due to the nature of the mine war readiness program and the controls imposed on it by higher authority; (2) since mine-assembly items, as differentiated from repair parts, are required to meet war readiness logistic plans, the change of cognizance designation and accounting responsibility is designed to facilitate funding and acquisition, by mine-assembly activities, of the material required to assembly mines."

This does not mean that all mine material will become APA — only mine assembly items which are peculiar to mines. Repair parts and items also used in other weapons systems will remain cognizance Z, KZ, or whatever and therefore remain NSA.



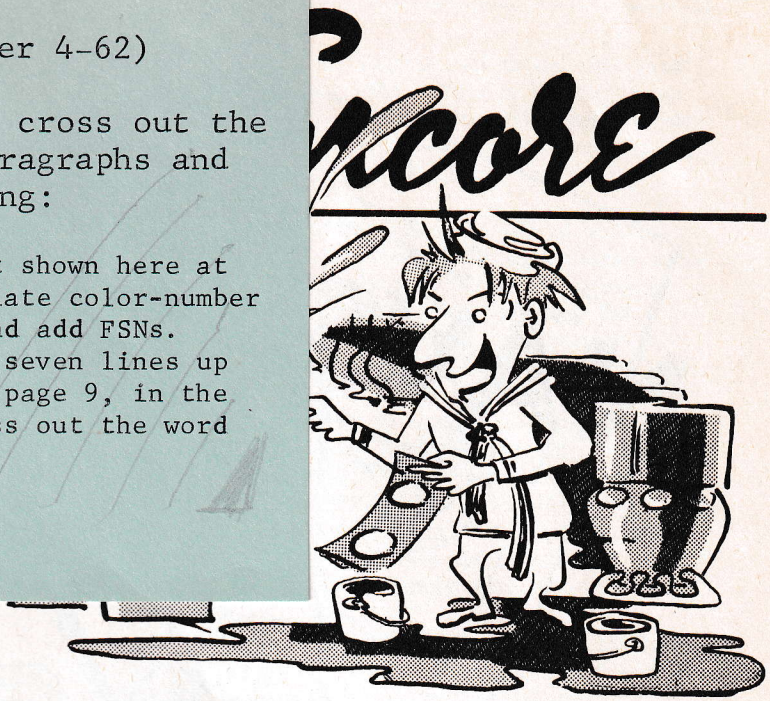
THE BOYS AT LONG BEACH: L to R Back row: W. H. Hewett, MN2; G. E. Waughtel, MN2; P. M. Henry, MN1 L. Johnson, QM3; and LTJG W. W. Poole. Front row: S. Trestrail MN2; R. F. Parsons, MN2; P. E. Crum, MN3 Not present: CWO A. F. Putman, D. L. Valentine MN3, and G. D. Wells, MN3.

ERRATA
(Troubleshooter 4-62)

On page 7, column 1, cross out the 5th, 6th, and 7th paragraphs and paste in the following:

Referring to the list shown here at the right, make appropriate color-number and MIL-Spec changes, and add FSNs.

On page 8, column 2, seven lines up from the bottom, and on page 9, in the middle of column 1, cross out the word red.



T-SHOOTER was never "right-er" than when we hinted in the beginning of our feature on color coding (Issue 3-62) that we had delved into quite a can of peaches. We've been told that what we came up with amounted to some solid chunks a guy could get his teeth into; but some mighty juicy questions have more than dribbled in too.

For one thing, we hadn't said anything about camouflaging. We do have some dope on this; but it's going to take a lot more digging before these hide-and-seek details get straightened away and can be divulged as SOP in the T-Shooter.

The biggest question, by far, has been about locations for stenciled information. So NMEF has been doing just what we promised at the end of the article: standardizing the stenciling locations and specs in all mine and depth-charge master drawings. If push will do it, we'll have a feature on stenciling in the 2-63 T-Shooter.

And then, try as we may to avoid it, there's that inevitable list of nit-pickin' number changes and such that follows in the wake of wading through a swamp of sources to get the material for a feature article. So, get out your copy of the 3-62 issue and make the following corrections:

In the 3-62 color-coding feature, page 8, column 1, line 8 under Paint by the number, change MIL-P-15930 to read MIL-P-16189.

In column 2, same page, 4 lines up from the bottom, change color 35231 to read 35109; 7 lines up from the bottom, cross out the word red.

On page 9, column 1, second line of the paragraph headed Practice Projector charges, change MIL-P-15149 to read MIL-E-10687; third line of this paragraph, cross out the word red.

On page 11, column 1, read from the middle paragraph to the bottom of the column changing all requirements for 2-inch spots or 2-inch stenciling to read 1-inch. (This also applies anywhere else where we have called for 2-inch markings; all such specs should be reduced to 1-inch.)

On page 11, column 2, cross out the last four lines of the second paragraph and write in: "....FSMT mines, but the lettering is black. And on both FSMTs and explosive mines, paint a 3-inch yellow spot over the word NOT in DETONATOR NOT INSTALLED when the det goes in, and paint the spot out and the word NOT back in when the det comes out." (On drill and FSMT mines the word NOT should actually be scraped off before painting over.)

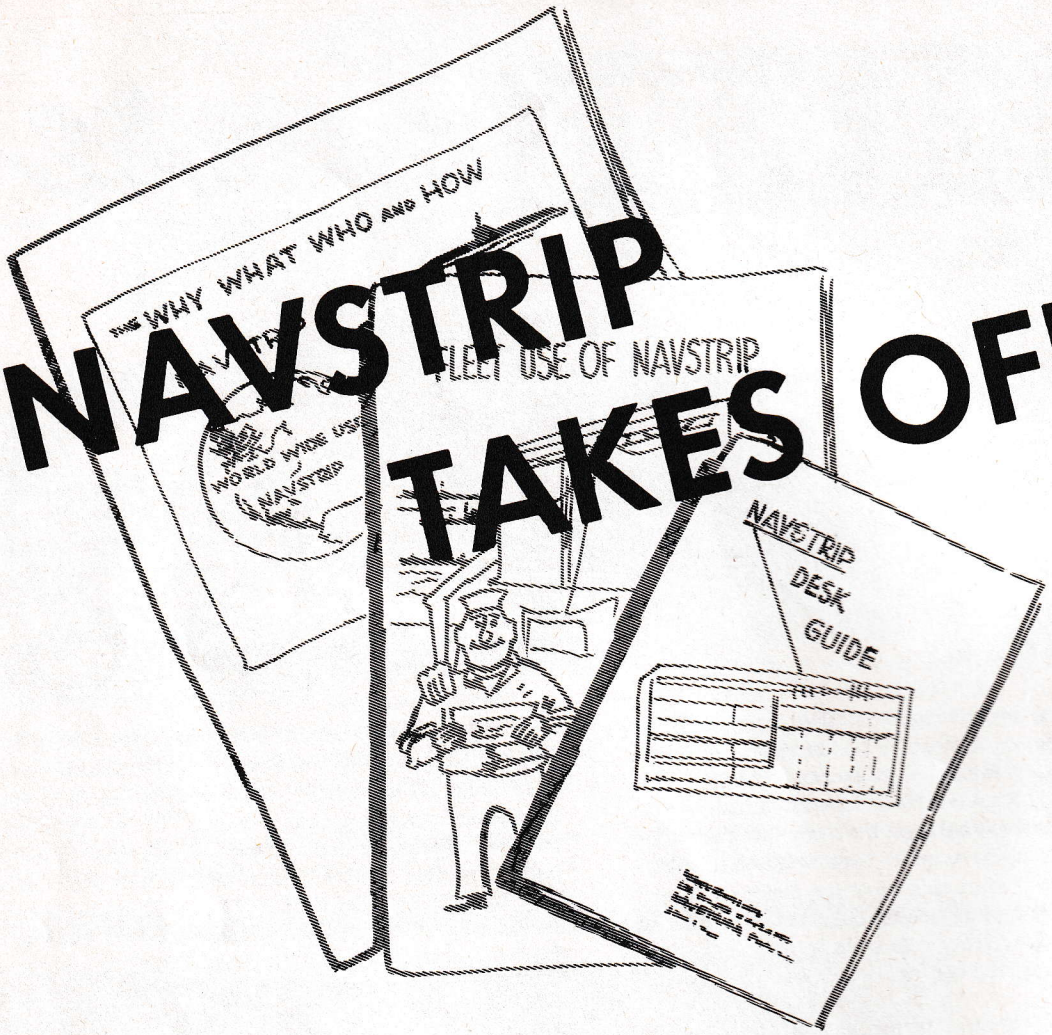
Next is some help for those who've been digging deep into the federal paper pile for stock numbers for the paints. We couldn't find 'em either—in time for the deadline, that is. But we've got all but one now, and so have you:

Color	Shade	Spec	FSN
Olive Drab	34087	MIL-E-10687	G8010-297-2116
Black[1]	37038	MIL-P-16189	G8010-290-4247
Black[2]	27038	MIL-P-2856	G8010-285-4908
Yellow	23538	MIL-P-2853	G8010-285-4899
Orange	32246	MIL-E-10687	G8010-845-4237
Light Green	34558	MIL-E-16663	Not yet assigned
White	27875	MIL-P-1264A	G8010-285-8293
Blue	35109	MIL-E-10687	G8010-297-2119
Gray	26173	MIL-P-16188	G8010-285-4894

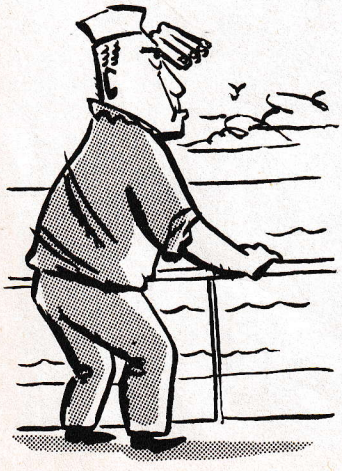
1 - Antifouling black
2 - Stenciling black

Finally, the question of whether our feature was intended to supersede Change 1 to OP 2238 on the coding of drill-mine floats. The answer: it was and it does... until such time as a new change or revision to that OP can be made.

NAVSTRIP TAKES OFF



FROM THE RASH OF QUESTIONS we've received, it's becoming increasingly evident that not enough Navy people know about NAVSTRIP. When we began to assemble a few facts about this new system, more than one well-wisher advised us that the time was not yet ripe for a T-Shooter article on NAVSTRIP—because it hadn't yet affected all the personnel it will eventually cover. Be that as it may, NAVSTRIP became effective on 1 July 1962. If yours is one of the activities not yet operating fully under NAVSTRIP, what we shall say may save you a lot of work and worry.



Is NAVSTRIP nececessary?

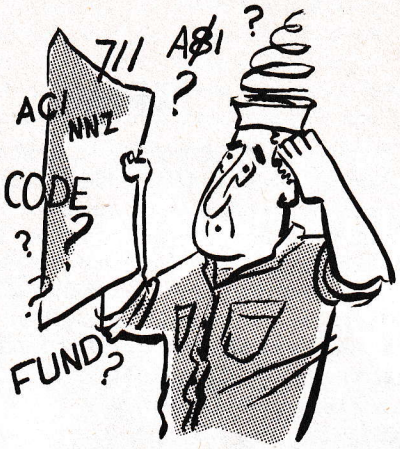
First, there's the Defense Material Management Program; and a major effort of this Program: the Department of Defense Single Manager System Project No. DMMP 60-11. This Project developed a Uniform Material Issue Priority System, and MILSTRIP (Military Standard Requisitioning and Issue Procedure). NAVSTRIP (Navy Standard Requisitions Issue Procedures) implements the Program. In other words, NAVSTRIP = MILSTRIP + additions required for <u>one</u> Navy system.

MILSTRIP is designed to provide complete coverage for supply transactions affecting the 3,700,000 stock items in the entire DOD supply system, so that a transaction can be processed, without change, by any inventory manager and/or stock point. To do this, it establishes standard policies and instructions for requisitioning and issuing material between military services (Army, Navy, and Air Force). It standardizes the various supply documents, used by the services, into three forms and

quires the use of coded information on supply documents.

From whence NAVSTRIP?

NAVSTRIP's impact on the supply system and field activities will be widespread affecting almost every phase of supply transactions. It involves:



- ▶Major changes to most local supply, clerical, and Automatic Data Processing Procedures.
- ▶Extensive education and retraining program.
- ▶Use of a coded system on new forms.
- ▶Conversion of EAM stock records.
- ▶Conversion of pipeline documents.
- ▶New data filing systems.
- ▶Increased use of electronic data transmission.
- ▶ew billing system in lieu of invoicing.
- ▶New uniform priority system.
- ▶Standardization of ICP/stock point fundamentals.

It is the most extensive change ever made in the Navy Supply System. Its success will depend on plenty of effort and cooperation from all of us.

It is the most extensive change ever made in the Navy Supply System. Its success will depend on plenty of effort and cooperation from all of us.

Is NAVSTRIP necessary? Let's put it this way; it'll sure make a lot of out-moded methods unnecessary.

Where to dig the details

We've tried to find out how many know how much about NAVSTRIP, but this could turn into a career. So here's what we know about in the way of NAVSTRIP publications:

First, there's NAVSANDA Publication 408, Parts I and II, of January 1962. This is the big, basic Bureau of Supplies and Accounts and Supplies Operating Handbook, to which two changes have already been issued (Change 1, 28 March; and Change 2, 6 June).

Next, there's NAVSANDA Pub. 409 of January 1962. This is a neat NAVSTRIP Desk Guide, complete with a Julian calendar, for handy reference for personnel responsible for originating and processing NAVSTRIP requisitions. It contains definitions, coding structures and legends that will be used on a day-to-day basis. Due to space limitations, certain codes, particularly advice/status code definitions, have been abbreviated. When complete description of these codes are required, you refer to NAVSANDA Pub. 408. Space has been provided for personnel using this booklet to enter document identifier, routing identifier, fund, and project codes most commonly used in day-to-day operations.

A real deal is NAVSANDA Pub. 410 of 19 February 1962. Fleet Use of NAVSTRIP—and it's all that the name implies. There's a Change 1 to this 32-page booklet. On the off chance that you may have 410 but not the change, here it is: On page 27, under Advice Code, cross out 2L and write in 2C. On page 28, under Type Commander, cross out COMDESLANT and write in COMCRUDESLANT; and cross out COMCRULANT and its numbers and letters.

Make sure this change is in any copies of 410 you may order.

Another short publication well worth studying is NAVSANDA Pub. 411. The WHY WHAT WHO and HOW of NAVSTRIP (World Wide Use of NAVSTRIP). This publication was produced especially for the indoctrination and training of personnel responsible for originating and processing NAVSTRIP requisitions and related documentation.

You may have heard that NAVSTRIP is complex. In scope, it is; but when a single transaction is examined, the NAVSTRIP processing is relatively simple.

The more you learn about NAVSTRIP the better. It's a big change, but we believe it's well worth the effort involved. NAVSTRIP is something that just can't be beat; so let's join it.

Millie Amps' BRIEFS

NOTE: Except where otherwise indicated, the ideas and procedures in this feature have been verified by the design-cognizant agency for depth charges and mines and are authorized for readers' use pending preparation of changes and revisions to master design documentation.

Shop chop

In T-Shooter 2-59, B-Butt's "Detrimental Journey" pointed out the danger of testing the booster installation after the det had been installed. He then listed a flock of affected OPs. Now George W. Russell MN1 at Oahu Rudmindes that the only ohmmeter test after det installation in several of the listed OPs (902, 1807, 1808, 1809, and 1853) is the extender insulation (fiber-washer) test, and that some men have mistakenly eliminated this important test as a result of the T-Shooter article. And he's right!

So cross out those OPs from B. Butt's list, leaving OPs 956, 1684, 1892, and 1935 Vol. 2 from which that booster insulation test after det installation needs to be removed. And what about OP 1765? By now you should have received a Change 1 in which this error has been corrected in that one, so you can cross it off the list too. OP changes will catch up in due time but meanwhile any who've eliminated the extender-insulation test better get it back in.

—Bless you, George!

Gentle, man, gentle!

Since B. Butt's little diatribe (now there's a five-dollar word) about a year ago when he cautioned us that "Search coils are like sopranos" those long, slim prima donnas haven't grown any muscles or callouses; they're just as temperamental

ever. But, sad to relate, Rudmindes keep rolling in about bent cores, damaged jackets, and signs of general mayhem.

Now, if there's one component where instructions are very clear regarding handling, it's these $39 to $146 coils. Maybe you don't bend 'em, or drop, pound on, or otherwise deliberately try to "liquidate" these babies; but do you sometimes stand them on end instead of keeping them horizontal and well-supported along their lengths? And do you always call a buddy to bear a hand with this beanpole component when you move it—like from the bench to the mine?

So-o-o! Easy does it, with that sensitive SC and, when the right sort of excitement comes along, she'll give you the kind of look that means business.

One, two, three, O'Leary

Here's a cute trick that might make you wonder when you get going with those new Mk 52 and 55 mines: Some men making post-recovery analysis of Fleet Service Mine Tests of Mk 52s found that the Actuation Counters Mk 10-0 registered numbers different from their planted settings.

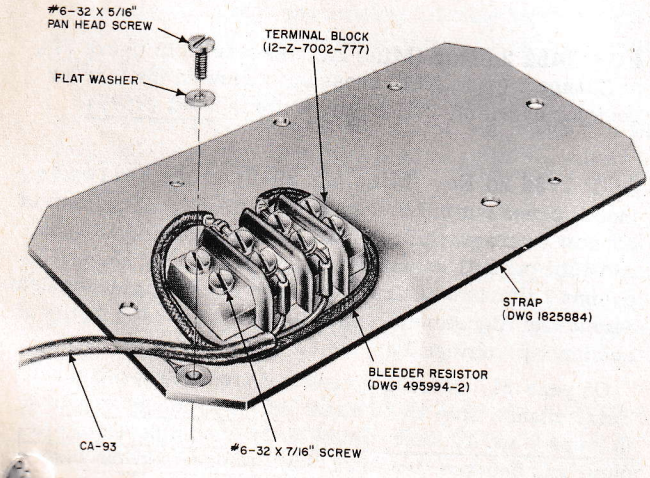
What happened wasn't due to material failure, nor improper final prep, nor poor analysis precedure—nothing mournful about those numbers, really. It's just that these Mk 10-0s are normally still in active circuits even after the mines "fired" so they keep right on counting ships, sweepers, and what have you, up to the maximum and then back down again.

Condensers à la mod

Several of you men have Rudminded us that you're no longer getting A-6 and A-8 firing mechs with 300-mfd firing condensers installed. Here's how come:

A-6-1s and A-8-0s are being converted to mods 3 and 1 respectively, and the condensers are being removed in the process. This doesn't mean you must remove the condensers from any old 1s and 0s you may have in stock, but the only way you'll get new ones with condensers is if you order the mechs for immediate use. Their condenser cover plates will then be stenciled CONDENSER INSTALLED.

Meantime we're changing applicable ODs to show that A-6 and A-8 firing mechs are normally issued without these condensers, and to list the condensers separately. When you get a condenser supply, store them in a cool dry place, or better yet, refrigerated if you can find a place. Even frozen is okay.

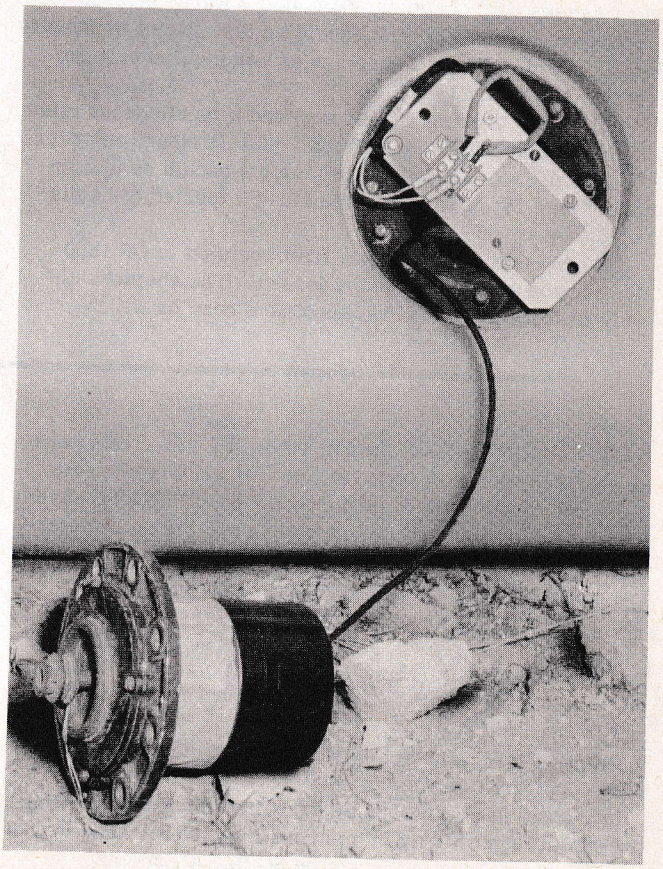


Far-out bleeder resistor

From far out in Geisha territory J. R. Gilroy sends a photo of a bleeder resistor that's also pretty far out. True, it'll still bleed just as much. And that may make some of you toughs wonder what's to get so excited about. So who's excited? It's just that there is definitely a right way to install the thing—not sticking out, but tucked under CA-93 the way the other photo shows. And while there are some things where I have no patience with a guy who thinks he has to go by the book, I'm a real stickler for "by the numbers" routines when it comes to assembling those mines.

If you're really sharp you may also notice the tape (Gilroy's photo) used to keep the clock cable out of trouble per T-Shooter 4-60. Nice going, J. R.!

Millie Amps



Pub-S-Crawlin'

with Clark Starter, MN2

NOTE: Holders of NAVWEPS OPs and ODs on depth charges and mines are authorized to make the write-in changes given here. All reflect change directives verified by the design-cognizant agency for incorporation in forthcoming official BUWEPS Publication Changes which, upon release automatically supersede pre-dated information given here.

OP 1860 revisited

In answer to the many questions we've received about revision of OP 1860: Mine and Depth-Charge Test Sets, Descriptions and Maintenance Procedures, the Naval Ordnance Laboratory, White Oak, Maryland, reports that the second revision is currently in preparation, and that it will cover all active types B and C mine and depth-charge test sets from Mk 1 through Mk 271 (53 in all) plus miscellaneous mine and depth-charge test equipment.

The new revision will consist of three volumes. Volume 1, covering 18 test sets, was distributed during September 1962. Volume 2, covering 19 test sets, will be issued in two releases: 10 chapters of Volume 2 were released for printing in August 1962 and should be distributed by January 1963. The remaining 9 chapters of Volume 2 should be distributed by July 1963.

Volume 3, covering 16 test sets and miscellaneous mine and depth-charge test equipments, will be issued in several releases the first of which (6 chapters) should be distributed by June 1963. All of Volume 3 is expected to be distributed by June 1964.

This means that a complete first revision to OP 1860 has not been and will never be issued. The chapters already issued in the first revision have been or will be incorporated in the superseding second revision. These first-revision chapters have been updated for the second revision in the following respect:

- Fleet comments have been evaluated and incorporated.
- Calibration procedures have been revised so that only equipment listed in the Navy Calibration Laboratory Universal Allowance List, Revision 1, is used.
- Recent design changes have been incorporated.
- Replacement parts lists for each test set have been added.
- Chapter numbers have been changed so that second revision chapters are numbered consecutively.

Type A (acceptance) test sets will not be covered in second revision. The type A test sets currently covered in the first revision, and those that have already been written up in rough form, will be issued as ODs by June 1964.

So have you received your copies of Volume 1 of the second revision? If not, it's stocked at the Naval Supply Depot, 5801 Tabor Ave., Philadelphia 20, Pa. While you're waiting, here are some write-ins to ease problems in other pubs in your shop.

OP 948 1st Rev (Mine Mk 10-3, 7, and 9): On page 51 cross out steps 24j (4), (6), and (9) and write in (4) Close the toggle switch and throw the TD OPERATE switch to ON. Adjust the variable resistor until the multimeter reads 7 ± 0.1 volts. Open the TD OPERATE switch. (6) Throw the TD OPERATE switch to ON. (9) Open the toggle switch and disconnect the test setup.

OP 956 3rd Rev (Mine Mk 25-0): On page 45, paragraph 42a, line 4, cross out the word down and write in up.

On page 48, paragraph 44d, cross out the word grommets and write in grommets.

In figures 8, 9, 18, and 28 draw in a thick line showing the strain loop of CA-274's second leg also attached to the screw nearest terminal E on the SC BREAK section.

OP 1452 2d Rev (Mine Accessories): In figure 77A of Change 3 (page 109d) cross out yellow in the bleeder resistor assembly callout and write in DWG 495994.

OP 1736 2d Rev (Mine Mk 39-0): In the following places cross out 0.7 and write in 0.6: Page 29 bottom of column 1 paragraph 3, column 2 paragraphs 8, 13, 13a, and 13b; page 31 column 1 paragraphs 5, 10, 15, and 2; column 2 fifth line of first paragraph of Firing Mechanism Sensitivity Adjustment, and paragraph 3; page 32 top of column 1 paragraph 1.

On page 31, column 1, under Circuit Break Balance Test, change step 15 to read: If the readings recorded in steps 9 and 14 were within 1.0 microamperes of each other and between 0.6 and 2.5 microamperes, the circuit

break is balanced; and you may replace the setting plug and proceed to Interlook Dead Period Test.

Make the above changes to Items 27, 28, 29, 30, and 31 in the back of the book—and don't forget that revision of step 15 in Item 28.

OP 1765 2d Rev (Mine Mk 25-2): Cable Assembly CA-920 should be named instead of CA-298 in the following places (CA-920 comes with preferred Search Coil SC-20-1, CA-298 with alternate SC-20-0): page 29 fig. 10, page 37 fig. 15, page 38 fig. 16, page 39 fig. 17, page 42 fig. 20, page 56 fig. 26, Item 30 fig. 10, Item 12 fig. 17, Item 16 fig. 20, and Item 31 fig. 26.

On page 32 of Change 1, paragraph 22a, last sentence, cross out flat washers and write in lock washers. Make same correction in Item 7 in the back of the book.

On page 33, in the left column under Assemblies, the last OA should be 24 not 23; in the right column, 23 not 24.

On pages 37, 38, and 53, figures 15, 16, and 25, change to show the strain loops of CA-410 and CA-16 attached to the center screws of the triangular brackets. Make the same changes in Items 23 and 29 in the back of the book.

On page 48 in the second line of column 1 cross out left-hand and write in center. In the last sentences of paragraphs e_1 and e_2, cross out right-hand and write in center. Make the same corrections to Item 23 in the back of the book.

At the end of page 55, cross out $\pm$ 10% and write in $\pm$ 20%. Make the same correction to Item 33 in the back of the book.

OP 1798 2d Rev (Mine Mk 36-2): In the notes to figures 5 and 6, cross out TB-25 and write in TB-27.

On page 58, paragraph 54_e, change the last part to read: the black clip to DET 2 and the red clip to DET 1.

OP 1807 1st Rev (Mine Mk 49-0): Add the following to page vii: WARNING Make sure each mine is properly positioned in the tube for planting. Improper positioning can cause the tripping latch to catch in the clock well and rupture the explosive-charge compartment when the mine is ejected. (Page 61.)

On page 61, under the heading Loading Mines in Torpedo Tubes (No Mines Stowed), insert the above warning after paragraph 4.

On page 28 paragraph 5 cross out 6-32 x 1/4-inch screw and washer supplied with the plate, and write in a No. 6-32 NC-2A x 5/8-inch pan head machine screw MS 35225-31.

On page 47, column 2, under Circuit Break Balance Test, change step 16 to read: If the readings recorded in steps 10 and 15 were within 1.0 microamperes of each other and between 0.6 and 2.5 microamperes, the circuit break is balanced. Proceed to the interlook Dead Period Test, page 48. Likewise change step 16 of Item 37 in the back of the book.

On page 51 swap steps 2 and 5 as follows: Renumber step 2 as step 5. Renumber the two step 5s as step 2s and change the new step 2 for Assemblies 01 and 03 to read Proceed to step 3. Indicate that the warning about CA-275 follows the new step 5.

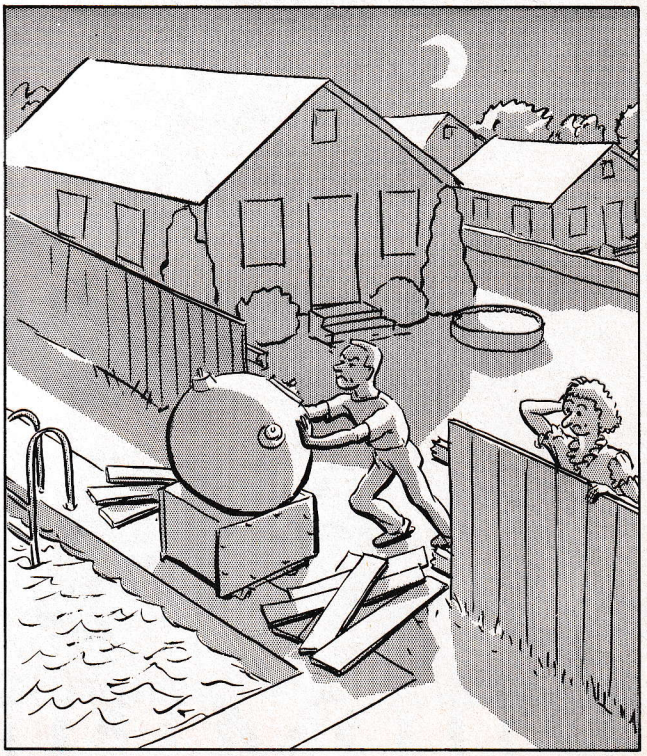
OP 1808 1st Rev (Mine Mk 49-1): Add the following to page vii: WARNING Make sure each mine is properly positioned in the tube for planting. Improper positioning can cause the tripping latch to catch in the clock well and rupture the explosive-charge compartment when the mine is ejected. (Page 59.)

On page 59, under the heading Loading Mines in Torpedo Tubes (No mines Stowed), insert the above warning after paragraph 4.

OP 1809 1st Rev (Mine Mk 49-2): Add the following to page vii: WARNING Page 56: Make sure each mine is properly positioned in the tube for planting. Improper positioning can cause the tripping latch to catch in the clock well and rupture the explosive-charge compartment when the mine is ejected.

On page 56, under the heading Loading Mines in Torpedo Tubes (No Mines Stowed), insert the above warning after paragraph 4.

OP 1853 Vols. 1 and 2 1st Rev (Mine, Underwater Mk 6-0, 4, 7, 8, 10, 11; Mine Underwater Drill Mk 6-0): The title pages of both volumes of these recently distributed manuals state that they supersede OP 1835 dated 25 November 1952 and the Advance Copy to the First Revision of OP 1853 dated 1 July 1958. To this superseding information, add: ALSO SUPERSEDES A SPECIAL EDITION OF THE FIRST REVISION DATED 15 SEPTEMBER 1960.




OMINPAC
19 NOV 19 1946
OUT ON A LIMB?
TIED UP?
BOTTLE NECKED?
BUCCED?
BRAKKkkkk
LET FLY WITH A
S.O.S.
NAVORD FORM 2776
Help!
RUDMINDE