# THE ASSIST

March 1997 Issue No. 9

## **** *Serving the RAST Fleet* ****

### A WORD FROM THE RAST FLEET LIAISON

Greetings from LAKEHURST! Once again spring is making a comeback at Lakehurst, and it's time to answer some questions the Fleet has sent in:

*When charging the RSD accumulator you do not have to remove the cover plate **if** you have a **valve extension** in your tool box. It was **added** to the tools list and can be ordered under NSN 2640-00-242-7618, and is listed as tool M134 on the tools list.

* Once again the **track plate lifting tool** has come up. The NSN is 5120-01-378-8867; or use NAWC drawing no. 524275 to manufacture them locally. However, if you would like a copy of the drawing, either talk to your ASIR or give us a call (see pg. 2).

I hope this will answer a few of your questions. You keep sending your questions to us and we will get you an answer.

On a final note, this will be my last issue of THE ASSIST. I will be moving on to my next Naval adventure, which will be with the USS DEYO in April. I would like to take this time to thank everyone at NAWC LAKEHURST, NAVICP, SIMAs, TYCOMs, ASIRs, and THE FLEET for their continuing support in making the **RAST** system the **best** in the Fleet. 'Til I see you in the Fleet, be safe.

***Submitted by:***
***EN1(SW) Fales***

*Editor's note:*

*On behalf of all the folks here at Lakehurst that have worked with EN1 Dan Fales for the last 3 years, I would like to thank Dan for his Fleet Liaison efforts to improve all things RAST. Dan has answered many RAST tech's questions, as well as given NAWC engineers and logisticians the important, practical, fleet perspective when troubleshooting, designing, and expediting supply issues. Thanks Dan, and we wish you fair winds and following seas on the DEYO.*

*Incidentally, the fleet liaison position here at Lakehurst will remain, however Dan's replacement has not been named as we go to print.*

**Internet Access:**

The March 96 issue (no.6) of "*THE ASSIST*" can be found on the Navy Lakehurst Home Page at:

**http:// WWW.LAKEHURST.NAVY.MIL**

All issues of "*THE ASSIST*" should be available on this page shortly.

## inside...

### TO SEND OR NOT TO SEND

(*That* is the question.)

Both SIMAs have reported that many of the RSDs they receive for overhaul are missing some of the "accessory" RSD parts. In an effort to clear up what attaching parts should be put in the box with your tired, old RSD when it goes to overhaul; and which items should be kept onboard to be used when your shiny, RFI RSD arrives dockside, the following list is provided:

***Turn in to SIMA with old RSD:***

Pins, Tow Bar Assy (fwd & aft)
Fairlead Tube
Safety Bar
Lifting Eye Bolts

***Remove from old RSD and keep onboard ship:***

Electric Cable Clamp
Electric Cable
Hand Pump Handle
Manual Actuating Lever

Remember**,** the SIMAs must procure any items that are not turned in with the RSD which in turn raises the cost to overall each RSD. And in the case of the tow bar assembly pins, the SIMA's unusually high demand has depleted the supply system.

*Thanks to **EN2 Cole** and **EN1 Fish** (SIMA-Portsmouth) for their inputs to this article.*

**All ships must turn in their**

**Traverse Cable Tow Bar Assy Pins**

**to SIMA with the RSD to be overhauled.**

## CHUCK DILL RETIRES

Chuck Dill, longtime RAST logistician, retired on 28 FEB 97. Chuck was working RAST logistics when the tailguide cable exit sheaves aboard USS UNDERWOOD (the first production RAST) were shiny chunks of steel! Over the 14 years that RAST has been deployed in the Fleet, RAST techs, supply officers, NAWC engineers, the HLS SIMA shops, and NAVICP - Mechanicsburg (and SPCC, and ASO depending on how far back you go) have been depending on Chuck to answer their logistics questions. Many times Chuck has been the one behind the scenes resolving the Fleet's problems - either expediting a CASREP or putting the right contacts together to close an issue. To be sure, we will miss his smilin' face here at Lakehurst.

Fortunately, Chuck's replacement on the program is Jim Joyce who was assigned to RAST in the '80s, which should make the transition seamless.

***"THE ASSIST" is an unclassified, quarterly, publication issued by the RAST team of the Recovery Branch, SE/ALRE In-Service Engineering Division, Engineering Group - Naval Air Warfare Center, Aircraft Division, Lakehurst, NJ.***

***The information herein is unofficial and is provided to assist the RAST community in the operation and maintenance of the RAST system.***

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# INSTALLATION OF RSD(s) & TRAVERSE CABLES AND RELATED MAINTENANCE

The purpose of this article is to make life easier for the RAST techs that are faced with these 3 work items: (1) Replace the RSD Traverse Cables, (2) Clean the RAST Track Troughs, and (3) Correctly wire the RSD.

## RAST RSD TRAVERSE CABLE INSTALLATION

1. WITH ALL RAST TRACK PLATES REMOVED , ATTACH THE FWD AND AFT TRAVERSE CABLES , AND THE ELECTRIC CABLE WHILE THE RSD IS POSITIONED OVER THE RSD MAINTENANCE PLATES. WIRE THE RSD AS INDICATED BELOW :

| RSD TERM. NUMBER | WIRE NUMBER | WIRE COLOR | PIN LETTER | FUNCTION |
|---|---|---|---|---|
| 1 | 23 | BLACK | A | RSD CHASSIS GRND. |
| 2 | 8 | WHITE | B | MOTOR SUPPLY |
| 3 | 15 | RED | C | MOTOR SUPPLY |
| 4 | 16 | GREEN | D | MOTOR SUPPLY |
| 6 | 306 | ORANGE | E | BEAMS LATCHED |
| 10 | 334 | BLUE | F | BRAKE LAMP |
| 11 | 234 | WHT/BLK | G | BRAKE SOLENOID L2 |
| 21 | 307 | RED/BLK | H | LAMP RETURN |
| 12 | 350 | GRN/BLK | J | AUTO BRAKE |
| 13 | 309 | ORN/BLK | K | BEAMS CTR |
| 14 | 420 | BLU/BLK | L | PS S11 |
| 15 | 229 | BLK/WHT | M | BEAMS LATCHED STBD |
| 16 | 231 | RED/WHT | N | SOLENOID L1 |
| 17 | 239 | GRN/WHT | P | BEAMS OPEN |
| 18 | 215 | BLU/WHT | Q | BEAMS LATCHED PORT |
| 7 | 22 | BLK/RED | R | FROM L2 & S10 . SEE FO 5.6 |
| 20 | 214 | WHT/RED | S | TO S10 SEE FO5.6 (A1) |
| 23 | 434 | ORN/RED | T | BRAKE REL & L3 |
| 22 | 305 | BLU/RED | U | LOW PRESSURE S11 (LIGHT) |

**NOTE : WHILE ALL TRACK PLATES ARE REMOVED THIS WOULD BE A GOOD**

**OPPORTUNITY TO ACCOMPLISH THE REQUIREMENTS OF PMS 4926-U1 WHICH IS TO CLEAN THE TROUGHS AND LUBRICATE THE CABLES .**

2. Reeve the traverse cables through all sheaves.

3. Re-install all RAST track plates and manually position the RSD fully forward.

4. Block up the take-up sheaves with 2 ea. 2" x 4" x 10 5/8" pieces.

5. Position the traverse cable tension sheave fully aft.

6. Manually release the traverse winch brake.

7. Position the traverse winch with the clamps up.

8. Install the aft cable with two wraps on the drum, pull as much slack from the cable as possible. A small come-along attached to the cable end and to a beam clamp in the overhead could be useful. Extend about 1" of cable past the cable clamp.

> NOTE : The fwd cable is attached to the bottom of the drum, port side. The aft cable is attached to the top of the drum, stbd side .

9. Ensure that the full length of track is clear and that there is communications established between the operator at the LSO control station and the flight deck.

10. Ensure that the traverse cables are on all sheaves and that the electric cable reel is properly tensioned, and not obstructed.

11. Traverse the RSD fully aft from the TCP in the local mode. Hand feed the fwd traverse cable.

12. Install the fwd cable with two turns on the drum as in step # 9.

13. Tension the cables at the tension sheave to 150 ft-lbs.

14. Remove the blocks from the take - up sheaves.

15. Traverse the RSD fwd to the middle of the track.

16. Re-tension the cables.

17. Traverse the RSD full fwd and full aft from the LSO control station, then back to middle of the track.

18. Re-tension the cables.

19. Manually apply the traverse winch brake.

***Submitted by:***

***Bill Barnett, Jim Diefenderfer, Jim Lambert***
***NAWC - ASIR Field Office - Portsmouth, VA***

We have distributed nine (9) newsletters covering a wide range of RAST maintenance tips, technical guidance, supply and logistical info, status of on-going system upgrades, RAST historical background, survey feedback, and answers to your various questions - 38 articles in all. An index of all published articles is listed below:

Issue No. 1 (Jul '94)
1. Word from the Fleet Liaison - Introduction
2. LRC No. 57 Introduces "-14" RSDs
3. RAST RA CAL Kit Survey Results
4. Tip of the Quarter - Proper servicing of the RSD accumulator

Issue No. 2 (Jan '95)
1. Maintenance Tip: Cycle your equipment
2. RSD Electric Cables
3. ECA Fuses
4. Tip of the Quarter - Proper servicing of the Rope Accumulator
5. Word from the Fleet Liaison - Documenting System Maintenance

Issue No. 3 (Apr '95)
1. Your RAST System's Biggest Threat - Hydraulic System Contamination
2. On the Horizon - A look at the ongoing efforts to improve the system:
   RSD Block II Upgrade, Flexible RSD Electric Cable, Electric Cable Passing Tube Elimination of ECR and Gutters
3. Tip of the Quarter - How to Avoid Electric Cable & Gutter problems
4. Word from the Fleet Liaison - RSD Electric Cable Failures

Issue No. 4 (Jul '95)
1. How do you Gage a Failure? - RSD Pressure Gage failures
2. Touch and Go's - Track Plate Lifting Tool, TGW Pump Bearing Failure
3. Keeping RAST Systems Up and Running
4. Word from the RAST Fleet Liaison - CASREPs and CASCORs

Issue No. 5 (Nov '95)
1. Stripped Marotta Valve Threads
2. Everything You Ever Wanted to Know About Traverse Cable Lube
3. Maintenance Review Conference for RAST System
4. Listing of Latest HLS Tech Manuals

Issue No. 6 (Mar '96)
1. How Big is Your Connector? - Changing RA Cables
2. RAST AVCERT Preparations
3. RSD Turn-In Procedure
4. HRS ISD and Lamp Bar Turn-In Procedures
5. Touch and Go's: Protecting RAST during SRAs and Smoking Prelube 19 Rags

Issue No. 7 (Jun '96)
1. Hydraulic Fluid Filtration Cart Info
2. Machinery Room Improvements Upgrade Status
3. Demand Only Requisition procedure
4. Tip of the Quarter - Proper servicing of RSD accumulator (Issue no. 1 repeat)
5. Word from the Fleet Liaison - Fleet feedback questions answered

Issue No. 8 (Oct '96)
1. Five Reasons Why You Will CASREP Your RSD
2. It's the Little Things That Count (Importance of proper maintenance)
3. Tip of the Quarter - Avoiding Hydraulic Contamination

Issue No. 9 (Mar '97)
1. Word from the Fleet Liaison - RSD accumulator charging valve, track plate lifting tool
2. RSD Overhaul - Accessory parts SIMA needs
3. RSD Wiring Guidance
4. Traverse Cable changeout and related maintenance
5. Tip of the Quarter - How to Avoid Electric Cable & Gutter problems (Repeated from Issue no. 3)

*If you see a subject that interests you, or are missing an issue(s) that you would like to have, give us a call or mail the enclosed feedback sheet to us detailing your request. Please give us some feedback (your own maintenance tip, comments on "THE ASSIST", a topic for a future article, or the biggest pain in your RAST neck) as compensation for "shipping and handling".*

# *TIP OF THE QUARTER*

*Although this "tip of the quarter" appeared in the third newsletter (April '95), it is worth repeating since RSD electric cable/clamp/gutter failures still occur too often.*

Discussions with ASIRs and SF following failures to the RSD electric cable, cable clamp, and/or gutters indicate that most of these failures could have been avoided if a few simple precautions had been taken.

***The down time to replace the cable, clamp and/or gutters far exceeds the time that a few simple checks take to ensure the system is ready for operation!***

**Recommended checks:**

1. Before moving the RSD ensure the ECR is **NOT PINNED.**
2. Ensure ECR is tensioned correctly (a downward pull on the vertical cable run is a quick indicator).
3. Vertical cable run under ECR is clear of FOD and/or spring scale.
4. No FOD in trough - look through slot
5. For FFG 7 Class: ensure STBD ECR (located in the sonobuoy store room) is free to turn. We recommend installing a removable screen to keep stored items away from the reel.
6. When possible, ensure the ECR is turning whenever the RSD is traversing. The flight deck observer should quickly verify electric cable movement when beginning any traversing operation.

High tempo ops may make these simple tasks inconvenient, but consider the level of discomfort you will experience as you explain to your CO that the reason RAST is down for a week is because you left the spring scale tied to the electric cable.



THE ASIST

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