

PATUZYUW RUWFADP0001 0391735-UUUU--RHMFIUU.
ZNR UUUUU ZUI RHHMMCB2391 0401627
P 081336Z FEB 05 ZYB PSN 476884H37
FM NAVAIRDEPOT NORTH ISLAND CA
TO RUCOSSA/COMNAVAIRFOR SAN DIEGO CA//421R//
RUWFEAA/COMNAVAIRFOR SAN DIEGO CA//421R//
RHMFIUU/COMNAVAIRES NEW ORLEANS LA//N42/N422B/N4314//
RHMFIUU/COMMARFORPAC//ALD-E//
RUHEKBC/COMMARFORPAC//ALD-E//
RHMFIUU/COMMARFORLANT//ALD-E//
RHMFIUU/NAMTRAGRU PENSACOLA FL//N422B//
INFO RHMFIUU/CMC WASHINGTON DC//ASL-34//
RHMFIUU/COMNAVAIRSYSCOM PATUXENT RIVER MD//3.2F//
RUCOSSA/COMNAVAIRLANT NORFOLK VA//N422B//
RHMFIUU/NAVAIRWARCENACDIV LAKEHURST NJ//11725/3144/4822/4872//
RUWFEAA/NATEC PAC SAN DIEGO CA//3.7/3.3//
RHMFIUU/CG FIRST MAW//ALD-E//
RHMFIUU/CG SECOND MAW//ALD-E//
RHMFIUU/CG THIRD MAW//ALD-E//
RHMFIUU/CG FOURTH MAW//ALD-E//
RHMFIUU/NAVFAC MIDLANT NORFOLK VA//505/30M//
RHMFIUU/NAVAIRDEPOT NORTH ISLAND CA//32000/48730/97600//
RUAYAAE/COMFAIRWESTPAC ATSUGI JA//N42/N422B//
RUYNAAR/COMFAIRWESTPAC ATSUGI JA//N42/N422B//
RHMFIUU/CNATRA CORPUS CHRISTI TX//N422//
RHMFIUU/NAVICP MECHANICSBURG PA//05932N//
RHMFIUU/FMP MMF CHARLIE
RHMFIUU/COMSTRKFIGHTWINGPAC DET AIMD LEMOORE CA//010/05C/AVO//
RHMFIUU/FLTIMAGCOMPAC SAN DIEGO CA//OIC//
RHMFIUU/ELU ONE//N421SVG//
RHMFIUU/HMX ONE QUANTICO VA//G/S/AVO//
RHMFIUU/MALS ELEVEN//AMO/AVO//
RHMFIUU/MALS TWELVE//AMO/AVO//
RHMFIUU/MALS THIRTEEN//AMO/AVO//
RHMFIUU/MALS FOURTEEN//AMO/AVO//
RHMFIUU/MALS SIXTEEN//AMO/AVO//
RHMFIUU/MALS TWO FOUR//AMO/AVO//
RHMFIUU/MALS TWO SIX//AMO/AVO//
RHMFIUU/MALS TWO NINE//AMO/AVO//
RHMFIUU/MALS THREE ONE//AMO/AVO//
RHMFIUU/MALS THREE SIX//AMO/AVO//
RHMFIUU/MALS THREE NINE//AMO/AVO//
RHMFIUU/MALS FOUR ONE//AMO/AVO//
RHMFIUU/MALS FOUR TWO//AMO/AVO//
RHMFIUU/MALS FOUR NINE//AMO/AVO//
RHMFIUU/NAF WASHINGTON DC//40A//
RUAYABC/AIMD ATSUGI JA//70/AVO//
RUYNAAM/AIMD MISAWA JA//70/AVO//
RUVNSAD/AIMD DIEGO GARCIA//OIC//
RHMFIUU/AIMD WHIDBEY ISLAND WA//N01V//
RUWFAEB/AIMU FALLON NV//AIMD/AVO//
RHMFIUU/NAS ATLANTA GA//40//
RHMFIUU/NAS JRB FORT WORTH TX//40//
RHMFIUU/NAS SIGONELLA IT//AIMD/AVO//
RHMFIUU/MCC ONE//OIC//
RHMFIUU/MCC THREE//OIC//

RHMFIUU/NAVAIRWPNSMAINTUNIT ONE GU//00//

BT

UNCLAS //N13052//

MSGID/GENADMIN/NAVAIRDEPOT NORTH ISLAND CA/48730//
SUBJ/SUPPORT EQUIPMENT BULLETIN(SEB) NR 880,(TD CODE 63),
/WUCS 33AGO,33AJO,33ACO,33AKO MOBILE FACILITIES,
/NEUTRAL-GROUND SEPARATION, INSPECTION OF MF WITH NQOD
/PANELBOARD (400HZ-60HZ-28VDC), (30003 PN 1339AS364-1,-3)//
REF/A/DOC/AG-360MF-IIN-000/01AUG1996//
REF/B/DOC/NAVAIR 19-25-177/01MAR1995//
REF/C/DOC/SEB NO 877/-//
REF/D/DOC/MIL-HDBK-419A/-//
REF/E/DOC/NAVAVNLOGCENINST 13050.2/-//
REF/F/DOC/MIL-S-8512/-//
AMPN/-//

NARR/THIS SEB SEPARATES NEUTRAL CONDUCTOR FROM GROUND WITHIN
ELECTRICAL ENCLOSURE CONTAINING (30003) PN 1339AS364-1 AND -3 NQOD
MODEL POWER PANEL. REF A IS MOBILE FACILITY SITE PLANNING AND
INSTALLATION INSTRUCTIONS. REF B IS MOBILE FACILITY OPERATION AND
INTERMEDIATE MAINTENANCE MANUAL. REF C IS SUPPORT EQUIPMENT BULLETIN
TO DETERMINE TYPE OF PANELBOARD. REF D IS MILITARY HANDBOOK FOR
GROUNDING, BONDING, AND SHIELDING. REF E DESCRIBES TECHNICAL
DIRECTIVE REPORTING. REF F IS GENERAL SPECIFICATION FOR DESIGN OF
SUPPORT EQUIPMENT.//

POC/L. BJURMAN/GS-12/NAVAIRDEPOT NORIS/-/TEL:DSN 735-5215

/EMAIL:BJURMANLA@NAVAIR.NAVY.MIL//

AKNLDG/-//

RMKS/

1. COG CODE: NAVAIR DEPOT NORIS/CODE 48730/R. VOTAW/GS-12/DSN
735-3921/COMM (619) 545-3921; NAVAIR DEPOT NORIS/CODE 32000/H.
SALDIVAR/GS-12/DSN 735-4000/COMM (619) 545-4000

2. CATEGORY: URGENT

3. DOCUMENTATION AFFECTED: REFS A AND B.

4. PURPOSE: TO DIRECT ONE-TIME INSPECTION OF MFS CONTAINING TYPE
NQOD ELECTRICAL POWER DISTRIBUTION PANELBOARD (30003) P/N
1339AS364-1 AND 1339AS364-3 FOR NEUTRAL AND GROUND ELECTRICAL
SEPARATION. SEB DIRECTS INSPECTION AND SEPARATION OF NEUTRAL
CONDUCTOR FROM GROUND AT MF ELECTRICAL TERMINAL BLOCK NR 1. IT DOES
NOT ALTER TEST OR MAINTENANCE EQUIPMENT.

5. APPLICATION:

A. BASIC EQUIPMENT:

QTY	S/N	NSN	MIL DES	NOMENCLATURE	CAGE	P/N	TEC	WUC
452	UNK	5411-01-355-4320	NONE	MOBILE FACILITY- SIDE OPENING "A"	30003	1339AS -500-1	GMJU	33AGO
363	UNK	5411-01-355-4321	NONE	MOBILE FACILITY- SIDE OPENING "B"	30003	1339AS -501-1	GMJV	33AJO
1987	UNK	5411-01-355-4323	NONE	MOBILE FACILITY- TURNKEY "B"	30003	1339AS -701-1	GMJS	33ACO
58	UNK	5411-01-355-4319	NONE	MOBILE FACILITY- DBLE WIDE(80)DOOR	30003	1339AS -1000-1	GMJ7	33AKO
271	UNK	CANCELLED	NONE	MOBILE FACILITY BASIC "A"	30003	1339AS -100-1	GMJW	NOC
421	UNK	CANCELLED	NONE	MOBILE FACILITY BASIC "B"	30003	1339AS -100-2	GMJX	NOC

FOLLOWING MFS ARE EXCLUDED: (1) MFS HAVING MFG301-1 DECAL ON
ELECTRICAL PANELBOARD. MFG301-1 DECAL IDENTIFIES THAT NEUTRAL IS NOT
GROUNDED IN MF AND SEPARATION WAS DONE PREVIOUSLY. (2) MFS

CONTAINING NQOD-TYPE PANELBOARD THAT WERE CONFIGURED PRIOR TO JUNE 1996. DATE OF CONFIGURATION CAN BE FOUND IN MF LOG BOOK AND INVENTORY RECORD THAT COMES WITH MF. REFER TO SHEET TITLED 'SE CUSTODY AND MAINTENANCE HISTORY RECORD'.

B. TRAINERS: N/A

C. SPARES: N/A

6. COMPLIANCE:

A. BASIC EQUIPMENT: INTERMEDIATE LEVEL MAINTENANCE ACTIVITIES AND ABOVE AS SOON AS POSSIBLE, BUT NO LATER THAN 120 DAYS AFTER RECEIPT OF THIS DIRECTIVE.

B. TRAINERS: N/A

C. SPARES: N/A

7. MAN-HOURS REQUIRED:

A. BASIC EQUIPMENT:	NUMBER OF MEN	SKILL	TTL MHRS???
INSPECT	1	EM3(NAVY)/6XXX(USMC)	0.3 EACH
CORRECT	1	EM3(NAVY)/6XXX(USMC)	0.3 EACH

B. TRAINERS: N/A

C. SPARES: N/A

8. SUPPLY DATA: VIA NAVAL MESSAGE, REQUISITION MFG301-1 DECAL THROUGH SUPPLY SOURCE (1) ONLY AFTER ACCOMPLISHING NEUTRAL-GROUND SEPARATION AND PROVIDING SERIAL NUMBER OF MF. REQUISITION ALL OTHER PARTS THROUGH SOURCE (2). QUANTITIES OF ALL ITEMS ARE DETERMINED BY ON-SITE SURVEY OF MFS CONTAINING NQOD CIRCUIT BREAKER PANEL (PN 1339AS364-1,-3).

SOURCE (1)

CAGEC: 91145

NAVAIR DEPOT NORTH ISLAND

CODE 32000, H. SALDIVAR

P.O. BOX 357058

SAN DIEGO, CA 92135-7058

619-545-4000

DSN 735-4000

(91145) P/N MFG301-1 NOMEN NEUTRAL DECAL NSN NONE

SOURCE (2)

NAVAL SUPPLY SYSTEM

PART NR	CAGE	NOMEN	NSN	COST
35 1/2 GREEN	75037	TAPE,ELECTRICAL	5970010139366	\$.09
RT1400	26863	STRAP	5975001563253	\$.88
COST FOR EACH MF THAT REQUIRES BUS INSTALLATION				\$.97

9. REIDENTIFICATION: N/A

10. DETAILED INSTRUCTIONS:

A. BASIC EQUIPMENT:

WARNING

TO PREVENT INJURY OR DEATH, MOBILE FACILITY (MF) 60 HZ AND 400 HZ POWER SOURCES SHALL BE SECURED IN THE OFF (DE-ENERGIZED) POSITION, BE DISCONNECTED FROM MF, AND SHALL HAVE WARNING TAGS ATTACHED. READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS OF REF A CHAPTER 6 PARA 6.3.2 AND REF B WORK PACKAGE (WP)004 00 ELECTRICAL POWER SHUTDOWN AND CABLE DISCONNECTION PROCEDURES. BEFORE PERFORMING SEB ENSURE MF MSGID/GENADMIN/NAVAIRDEPOT NORTH ISLAND CA/48730// SUBJ/SUPPORT EQUIPMENT BULLETIN(SEB) NR 880,(TD CODE 63), ELECTRICAL SUPPLY IS GROUNDED PER REF A CHAPTER 3.

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(1) ENSURE REF C SEB HAS BEEN ACCOMPLISHED BEFORE STARTING THESE INSTRUCTIONS.

(2) SHUT OFF ELECTRICAL POWER TO MF BEING INSPECTED IAW SHUTDOWN PROCEDURES IN REF B, WORK PACKAGE (WP) 004 00, PARA 58.

(3) IF MF IS POWERED BY AN INU MF, DE-ENERGIZE ELECTRICAL POWER AT THE INU MF OUTPUT CIRCUIT BREAKER CONTROLLING POWER TO MF BEING INSPECTED AND ATTACH WARNING TAG TO INU MF OUTPUT CIRCUIT BREAKER PER REF B, WP004 00, PARA 59.

(4) DISCONNECT POWER CABLES FROM CONNECTORS LOCATED OUTSIDE THE MF IAW REF A CHAPTER 6, PARA 6.3.2.2.

(5) LOCATE THE POWER ENTRY PANEL (P/N 1339AS383-1) WHICH IS DIRECTLY BELOW THE POWER MONITOR PANEL INSIDE MF (REF B, WP 020 00, FIG 2).

(6) REMOVE FASTENERS SECURING POWER ENTRY PANEL ENCLOSURE COVER AND REMOVE COVER.

(7) LOOSEN SCREWS SECURING POWER MONITOR PANEL COVER AND SWING OPEN.

(8) LOCATE TERMINAL BOARD NR 1 (TB1) MOUNTED WITHIN THE ENCLOSURE DIRECTLY BEHIND THE POWER MONITOR PANEL COVER (REF B, WP 020 00, FIG 2).

(9) REMOVE TWO NUTS SECURING COVER ON TB1 AND USE MULTI-METER TO TEST TB1 TO VERIFY THAT POWER IS NO LONGER PRESENT.

(10) LOCATE THE NEUTRAL STUDS FOR 60 HZ AND 400 HZ WHICH ARE AT EACH END OF TB1 (REF B, WP007 00, FIG 4B). THE NEUTRAL WIRES ARE COLOR CODED WITH WHITE TAPE BAND. IF NO WIRING EXISTS FOR 400 HZ AT TB1, ONLY THE 60 HZ NEUTRAL NEEDS TO BE SEPARATED FROM GROUND.

(11) LOCATE THE E3 GROUND STUD WHICH IS NEAREST TO THE BOTTOM OF THE POWER ENTRY PANEL (REF B, WP 020 00, FIG 2).

(12) LOCATE GROUND JUMPER WIRES WHICH EXTEND BETWEEN EACH OF THE 60 HZ AND 400 HZ NEUTRAL STUDS ON TB1 TO THE E3 GROUND STUD. TRACE WIRE TO E3 GROUND STUD IN POWER ENTRY PANEL. REMOVE WIRE TIES TO LOCATE THE GROUND JUMPER WIRES IN WIRE BUNDLE IF NECESSARY. ENSURE EACH WIRE IS PROPERLY IDENTIFIED AS GROUND JUMPER WITH GREEN TAPE (P/N 35 1/2 GREEN).

(13) UNSCREW NUT ON 60 HZ NEUTRAL STUD OF TB1 THAT SECURES GROUND JUMPER AND REMOVE GROUND JUMPER WIRE FROM 60 HZ NEUTRAL STUD. UNSCREW NUT ON 400 HZ NEUTRAL STUD OF TB1 THAT SECURES GROUND JUMPER AND REMOVE GROUND JUMPER WIRE FROM 400 HZ NEUTRAL STUD. AFTER DISCONNECTING GROUND JUMPER WIRES, PLACE NEUTRAL WIRES BACK ON ORIGINAL STUDS. TO PREVENT CONTACT WITH TB1 TERMINALS DURING TESTING, TEMPORARILY POSITION DISCONNECTED END OF GROUND JUMPER WIRE AWAY FROM TB1.

(14) TEST FOR CONTINUITY BETWEEN NEUTRAL AND GROUND IAW REF D, VOLUME 2, SECTION 2.2.2.2.4 AND THE FOLLOWING: USE MULTI-METER AND MEASURE RESISTANCE BETWEEN E3 GROUND STUD AND 60 HZ NEUTRAL TERMINAL ON TB1. THEN MEASURE RESISTANCE BETWEEN E3 GROUND STUD AND 400 HZ NEUTRAL TERMINAL ON TB1. IF ONE OR BOTH RESISTANCES ARE LESS THAN 10 OHMS, NEUTRAL WAS NOT SEPARATED FROM GROUND. PROCEED DIRECTLY TO NEXT INSTRUCTION (NR 15). BUT IF BOTH RESISTANCES ARE 10 OHMS OR GREATER, NEUTRAL WAS SEPARATED FROM GROUND. DO NOT RECONNECT GROUND JUMPER WIRES TO TB1 AND USE ELECTRICAL TAPE (P/N 35 1/2 GREEN) TO INSULATE THE ENDS OF EACH DISCONNECTED NEUTRAL-TO-GROUND JUMPER WIRE. POSITION AND TIE JUMPER WIRE WITH STRAP (PN RT1400) TO SECURE AND AVOID ACCIDENTAL CONTACT WITH TB1 THEN PROCEED DIRECTLY TO INSTRUCTION NR 16.

(15) IF NEUTRAL AND GROUND WERE NOT SEPARATED (LESS THAN 10 OHMS BETWEEN THEM), THE GROUND JUMPER WIRES SHALL BE RECONNECTED TO TB1 NEUTRAL STUDS TO REDUCE NEUTRAL CURRENT FLOW THROUGH EQUIPMENT CONTAINING THE GROUNDED NEUTRAL. RECONNECT THE EXISTING GROUND JUMPER WIRE BETWEEN THE TB1 60 HZ NEUTRAL AND THE E3 GROUND STUD. ALSO RECONNECT THE EXISTING GROUND JUMPER WIRE BETWEEN THE TB1 400 HZ NEUTRAL AND THE E3 GROUND STUD.

(16) ENSURE REMAINING NEUTRAL WIRES ARE SECURED TO ORIGINAL TERMINALS ON TB1. SECURE WIRES WITH EXISTING NUTS. REATTACH COVER OVER TB1. SECURE COVER WITH EXISTING NUTS. REATTACH POWER ENTRY PANEL COVER AND FASTENING HARDWARE. REFER TO REF B, WP 020 00, FIG 2. CLOSE POWER MONITOR PANEL AND SECURE FASTENING SCREWS.

(17) REATTACH POWER INPUT CABLES LOCATED OUTSIDE THE MF IAW REF A, CHAPTER 6, PARA 6.3.2.

(18) ENERGIZE ELECTRICAL POWER TO MF AND REMOVE WARNING TAGS PER REF B, WP004 00.

(19) AFTER PERFORMING SEB ON ALL APPLICABLE MFS AT EACH SITE, REPORT VIA CHAIN OF COMMAND THE MODIFICATION RESULTS OF ALL MFS USING ONE MESSAGE PER SITE. ADDRESS MESSAGE TO NAVAIR DEPOT NORTH ISLAND CA CODE 32000. MESSAGE SHALL IDENTIFY THE FOLLOWING: (A) MF SERIAL NUMBER, (B) MF CONFIGURATION NUMBER, (C) WHETHER OR NOT NEUTRAL WAS SUCCESSFULLY SEPARATED FROM GROUND IN MF, (D) MAILING ADDRESS OF REQUESTING UNIT.

(20) UPON RECEIPT OF MESSAGE, NORTH ISLAND CODE 32000 WILL SEND DECAL, PN MFG301-1, FOR ONLY THOSE MFS IN WHICH THE NEUTRAL AND GROUND WERE SUCCESSFULLY SEPARATED. DECAL SHALL BE PLACED ON DOOR OF MAIN POWER DISTRIBUTION PANEL INSIDE MF TO INDICATE NEUTRAL HAS BEEN SEPARATED FROM GROUND WITHIN THE MF.

11. WEIGHT AND BALANCE: NO EFFECT ON WEIGHT AND BALANCE

12. RECORDS AFFECTED: RECORD ACCOMPLISHMENT IN SUPPORT EQUIPMENT HISTORY AND RECORD BOOK OPNAV FORM 4790/51. REPORT COMPLIANCE THROUGH VIDS/MAF OPNAV FORM 4790/60 AND THROUGH TECHNICAL DIRECTIVE STATUS ACCOUNTING SYSTEM PER REF E.

13. VERIFIED BY: MALS-14, MCAS CHERRY POINT, NC. OCTOBER 2004. MSG 171121ZAUG2004.

14. TARGET COMPLETION DATE: 31 DECEMBER 2005.

15. RELATED INSTRUCTIONS/INFORMATION: REF F SPECIFIES USE OF NATIONAL ELECTRICAL CODE (NFPA 70) WHEN DESIGNING SUPPORT EQUIPMENT ELECTRICAL SYSTEMS. NATIONAL ELECTRICAL CODE GROUNDING REQUIREMENTS WERE CHANGED IN 1999 AS FOLLOWS: WHEN SEPARATE STRUCTURES ARE SUPPLIED FROM A COMMON SERVICE AND A GROUNDING CONDUCTOR IS RUN WITH SUPPLY CONDUCTORS, THE NEUTRAL SHALL NOT BE CONNECTED TO EQUIPMENT GROUND OR GROUND ELECTRODE AT THE STRUCTURE. MOBILE FACILITY (MF) POWER INPUT AND TRANSFER CABLING CONTAINS GROUNDING CONDUCTORS THAT INTERCONNECT EACH MF GROUND AND STRUCTURE. EACH MF CONTAINING A GROUNDED NEUTRAL AND RECEIVING POWER FROM A COMMON SERVICE IS IN MSGID/GENADMIN/NAVAIRDEPOT NORTH ISLAND CA/48730// SUBJ/SUPPORT EQUIPMENT BULLETIN(SEB) NR 880,(TD CODE 63), VIOLATION OF NFPA 70, ARTICLE 250.32(B)(1) GROUNDING REQUIREMENTS. MFS MUST COMPLY WITH NFPA 70 ARTICLE 250.24 WHICH PROHIBITS GROUNDED NEUTRAL CONNECTIONS IN MFS ON THE LOAD SIDE OF THE SERVICE EQUIPMENT DISCONNECTING MEANS.//

BT

#0001

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