System Definition Distribution

Subject: MMCN 1034: NAVSSI Block 4 Upgrade (DDG 91AF)

Group/Title	*Location*	
Physical Integration	232-1E	D. Haines, D. Arnal, K. Koederitz
Ship Electrical Systems	232-2E	T. Whipple, S. Haworth, M. Russek
Safety/EMX	232-2E	R. Smith, M. Sommers, L. Tavinello
SID/CM	232-2E	A. Decker, B. Wicken, T. Hrivnak, R. Proebstle, J. Winiarczyk, S. Bates, R. Haskell, J. Kelley, T. Mooney, N. Leibold, J. Chang, W. LaCorte, J. Fairman, K. Govito, D. Rodgers, K. Wicker
Support Systems Integration	232-1W	R. Dease
CS/SIP	232-2W	K. Stanne, B. Cress, J. Fechter
Test Projects	143-114	M. Bezanis, H. Buzhardt, E. Friedman
PTC	2000-255 Midlantic	P. Boardman, M. Haring, J Hadida
Configuration Projects	4000-3E Midlantic	T. Lau, L. Humphrey, M. Gray, D. Campbell
ILS	4000-2E Midlantic	M. Patel, J. Sutcliffe
System PMO	232-2W	R. Lapierre
System Engineer	232-2E	J. Agag
Production	127-104	D. Fascenda
Production PMO	127-106	J. O'Brien
Director of Combat System Engineering	525-310	T. Daniels
Production Equipment	4000-3E Midlantic	E. Winans
Technical Manual Projects	2000 Midlantic	J. P. Lord
LM Washington Office	300 M Street	M. Reed
ACSD	232-2E	All

LOCKHEED MARTIN

Naval Electronics & Surveillance Systems

Interoffice Memo

To: A. Decker 232-2E

Date: 8 March 2002

From: R. C. Jones 232-2E

Telephone: 866-6282

Subject: MMCN 1034: Install NAVSSI Block 4 (DDG-91 And Follow), Rev. A, Change 1

Enclosures:
1) CSEL Impact Statement, DDG-91 And Follow
2) IS/WAS IBDs depicting NAVSSI Block 4 changes to Navigation

AEGIS Combat System Design (CSD) is submitting enclosures (1) and (2) for SI to use in the fabrication of their products in support of MMCN 1034. Enclosure (2) reflects the NAVSSI Block 4 configuration for DDG 91 AF ships. The changes associated with this delivery are in response to the comments to the original system definition delivered on 16 January 2002 by PMW156 and SI member Susan Light. The changes are minor in nature and only effect the cable plant of the design. The comments from each party have been forwarded to both to keep everybody on the same plane of knowledge.

The impacts to reference (2) have been highlighted for clarity.

Please call me at 866-6388 if you have any concerns or questions.

Initiated: Robert C. Jones, NAV System Engineer
AEGIS Combat System Design

3/11/02

Concurred: R. J. Bartel, USN Baseline R.E.
AEGIS Combat System Design

3/11/02

Approved: Chris Manuelli, Acting Manager (Acting)
AEGSI Combat System Design

Lockheed Martin • Naval Electronics & Surveillance Systems-Surface Systems
199 Borton Landing Road P.O. Box 1027
Moorestown, NJ 08057-0927

Change Action	Note	Level Code	SCE	Item Name	Type Designation	Ref Des	SWBS	Qty	Deck Lctn	Power Sourcing Normal	Power Sourcing Alternate	Notes
From		14-06-01		Real Time Sub-System (RTS), FWD	OL-653(V)3/SSN-6		423	1	381	1S	LC11	
To		14-06-01		Rack, Real Time Subsystem (RTS), FWD	OL-653(V)4/SSN-6D(V)4			1	382	1S	LC11	DWG: 30019R0-07
From		14-06-10		Real Time Sub-System (RTS), AFT	OL-653(V)3/SSN-6		423	1	382	3S	LC31	
To		14-06-10		Rack, Real Time Subsystem (RTS), AFT	OL-653(V)4/SSN-6D(V)4			1	382	3S	LC31	DWG: 30019R0-07
From		14-06-02		Display Control Subsystem	OJ-751(V)3/SSN-6		423	1	380	1S	LC21	
To		14-06-02		Rack, Display Control Subsystem (DCS)	OJ-751(V)4/SSN-6D(V)4			1	380			DWG: 30019R0-06
From		14-06-16		Network Workstation (NWS), NAV-1			423	1	340			HP Based Processor
To	1	14-06-16	1	Network Workstation (NWS), NAV-1			423	1	340			Solaris Based Processor
From		14-06-26		Network Workstation (NWS), NAV-3			423	1	200			HP Based Processor
To	1	14-06-26	1	Network Workstation (NWS), NAV-3			423	1	200			Solaris Based Processor

NOTE 1: This change will be performed as part of an Equipment ECP

MMCN 1034: Install NAVSSI Block 4 (DDG 91 And Follow), Rev. A

AEGIS SHIPBUILDING PROGRAM
CSEL IMPACT STATEMENT

PAGE 1 OF 1

MMCN OR SHIPALT NO.
MMCN 1034, REV A C1

NOTES:

1. MISSION CRITICAL BACKBONE (MCBB) CAN AT ANY GIVEN TIME CONTAIN THE DATA FROM ANY INTERFACE CONNECTED TO THE ALIS SYSTEM.
2. INTERFACE APPLIES TO DDG 91–101
3. PER US NAVY AND PEO–W, THE ATWCS (DDG 91–95) AND TTWCS (DDG 96 AND FOLLOW) LLS (NTDS–E) INTERFACES WITH THE C&D COMPUTER SUITE HAVE BEEN DEFERRED UNTIL UNTIL IT CAN BE PROPERLY FUNDED AND ENGINEERED.
4. (P) = PORT CABLE RUN
   (S) = STBD CABLE RUN

DRAWING REVISION HISTORY

REVISION LETTER	REVISION DATE	CHANGE TYPE	ENGINEER(S)	CHANGE DESCRIPTION	SHEET(S) AFFECTED
–	2001/DEC	CDD REV B	KUNG, V.	FINALIZED DRAWING RELEASE OF THIS ELEMENT FOR YEAR 2001.	ALL
A	2002/01/04	MMCN 1027R1	MOYE, D. MCVEIGH, C.	ADDED FIBER CABLE IN SUPPORT OF THE BFTT ELECTRONIC WARFARE TRAINER (BEWT) INSTALLATION.	2
B	2002/01/14	MMCN 1034	JONES, R.	REMOVED FDDI AND ADDED 100BFX INTERFACE FOR NAVSSI BLOCK 4.	1, 2
C	2002/01/24	MMCN 1038	HYDE, C.	ADDED 100BFX INTERFACE TO VDDS SWITCH.	1
D	2002/01/30	MMCN 1036	KUNG, V.	BASELINE 7 PHASE 1 GFI UPDATE FOR THE FOLLOWING NOMENCLATURE: 1. PATCH PANEL CABINET ASSY (PPCA) WAS PATCH PANEL EQPT (PPE) 2. FIBER OPTICS TERMINAL BOX ASSY (FOTBA) WAS FIBER OPTICS INTER–CONNECTION BOX (FOICB)	1 THRU 11, 13, 14
E	2002/03/08	MMCN 1034 R1	JONES, R.	UPDATED NAVSSI BLOCK 4 CONFIGURATION EQUIPMENT.	1, 2
F	2002/03/12	MMCN 1027 R2	MOYE, D.	UPDATED SLQ–32 AND C&D NTDS–A INTERFACE EQUIPMENT AND NOMENCLATURE FROM MCE NO. 3 TO MCE NO. 12	1, 10

ARLEIGH BURKE CLASS DESTROYERS
DDG 91 THRU 102

LINE TYPE LEGEND
DIGITAL (COPPER)
ANALOG
DIGITAL (FIBER)
DIGITAL & ANALOG

DRAFTED BY:
AEGIS COMBAT SYSTEM DESIGN GROUP, ACTIVITY 691

PROJECT ENGINEER: KUNG, V.
START DATE: 1999/11/12
REVISION DATE: 2002/03/12
TOTAL NO. OF SHEETS: 15

LOCKHEED MARTIN NE&SS–SURFACE SYSTEMS Moorestown, N.J. 08057

COMMAND AND DECISION SYSTEM INTERFACE DIAGRAM

FILE: 2002DDG91–0200

Figure 3.2–3 Command and Decision System Interface Diagram (Sheet 1 of 15)

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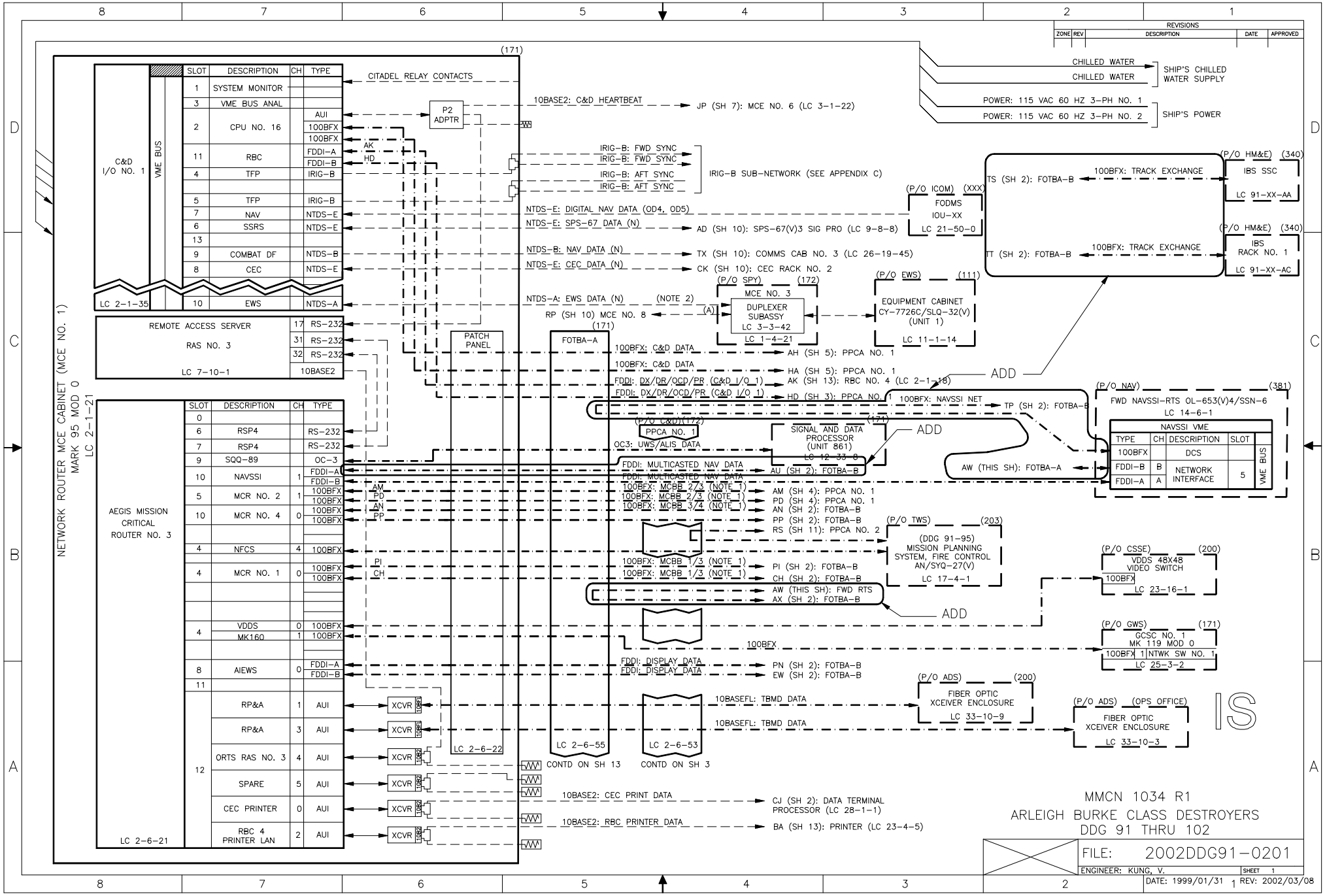

Figure 3.2-3 Command and Decision System Interface Diagram (Sheet 2 of 15)

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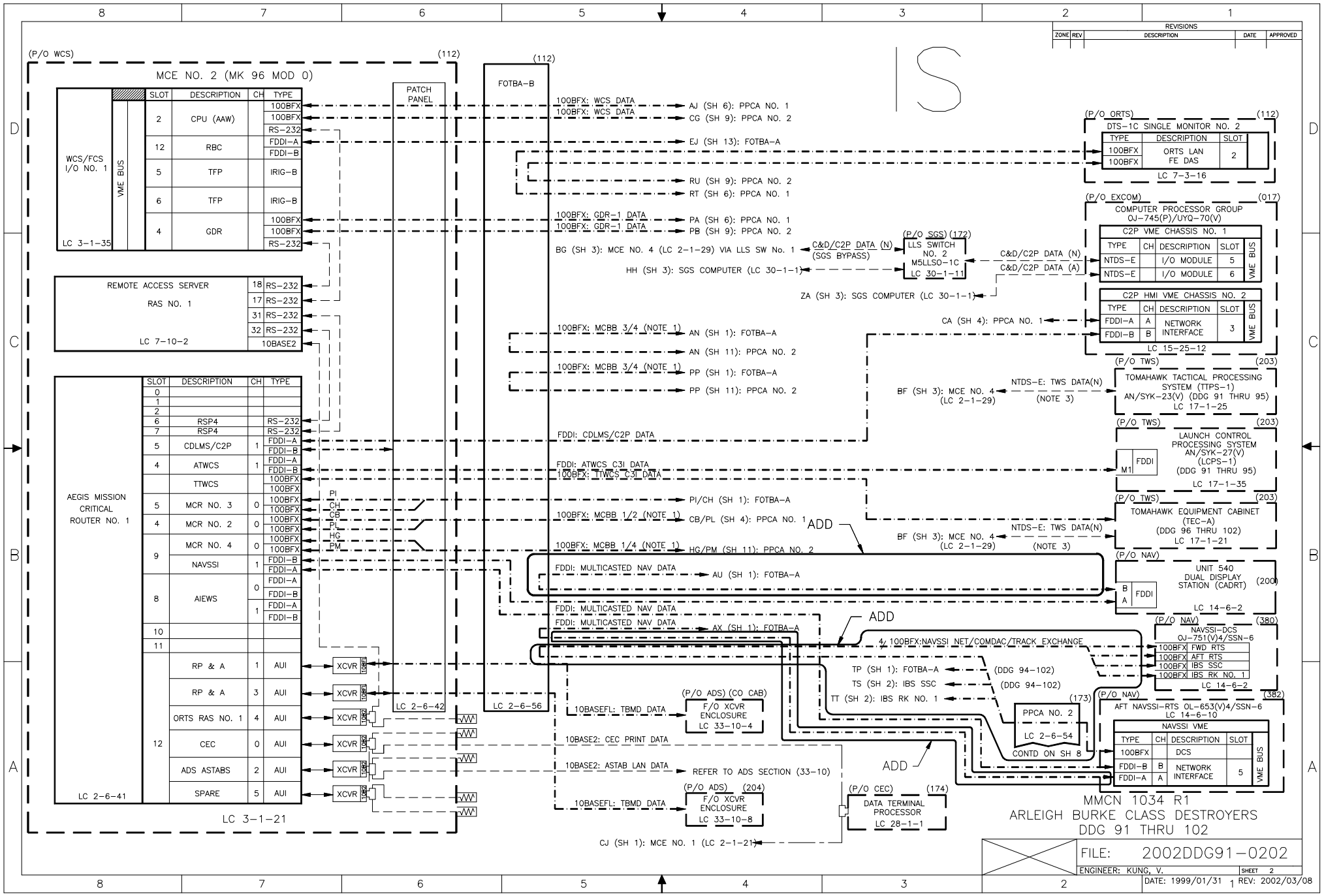

Figure 3.2-3 Command and Decision System Interface Diagram (Sheet 3 of 15)

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NOTES:

1. RS-422: N
2. RS-422: HD/HE
3. RS-422: HD/HE/K/VP
4. RS-422: LN/Y
5. RS-422: LN/Y/N
6. RS-422: LN/Y/HD/HE
7. RS-422: LN/Y/HD/HE/N/K/VP
8. LOCATE WITHIN (3) FEET OF TRACKBALL AND KEYBOARD.

DRAWING REVISION HISTORY

REVISION LETTER	REVISION DATE	CHANGE TYPE	ENGINEER(S)	CHANGE DESCRIPTION	SHEET(S) AFFECTED
–	2001/DEC	CDD REV B	KUNG, V.	FINALIZED DRAWING RELEASE OF THIS ELEMENT FOR YEAR 2001.	ALL
A	2002/01/10	MMCN 1024	ROMANO, J.	REPLACED SPS-73(V)12 CONNECTIONS WITH COTS NAV RADAR CONNECTIONS TO THE FIBER OPTIC DATA MULTIPLEX SYSTEM AN/USQ-82(V).	4
B	2002/01/14	MMCN 1034	ROBINSON, R.	INSTALLED NAVSSI BLOCK 4 CONFIGURATION EQUIPMENT.	1, 2, 3, 8
C	2002/01/22	MMCN 1038	HYDE, C.	MODIFIED DRAWINGS TO INCORPORATE VDDS UPDATES.	8
D	2002/02/20	MMCN 1012	JONES, R.	MODIFIED DRAWINGS TO INCORPORATE IBS UPDATES.	8
E	2002/03/08	MMCN 1034 R1	JONES, R,	UPDATED NAVSSI BLOCK 4 CONFIGURATION EQUIPMENT.	1, 8

ARLEIGH BURKE CLASS DESTROYERS
DDG 91 THRU 102

LINE TYPE LEGEND
- DIGITAL
- ANALOG
- FIBER
- ETHERNET
- DIGITAL & ANALOG

DRAFTED BY:
AEGIS COMBAT SYSTEM DESIGN GROUP, ACTIVITY 691

PROJECT ENGINEER: KUNG, V.
START DATE: 1999/01/31
REVISION DATE: 2002/03/08
TOTAL NO. OF SHEETS: 10

LOCKHEED MARTIN NE&SS-SURFACE SYSTEMS Moorestown, N.J. 08057

NAVIGATION SYSTEM INTERFACE DIAGRAM

FILE: 2002DDG91-1400

Figure 3.14-2 Navigation System Interface Diagram (Sheet 1 of 10)

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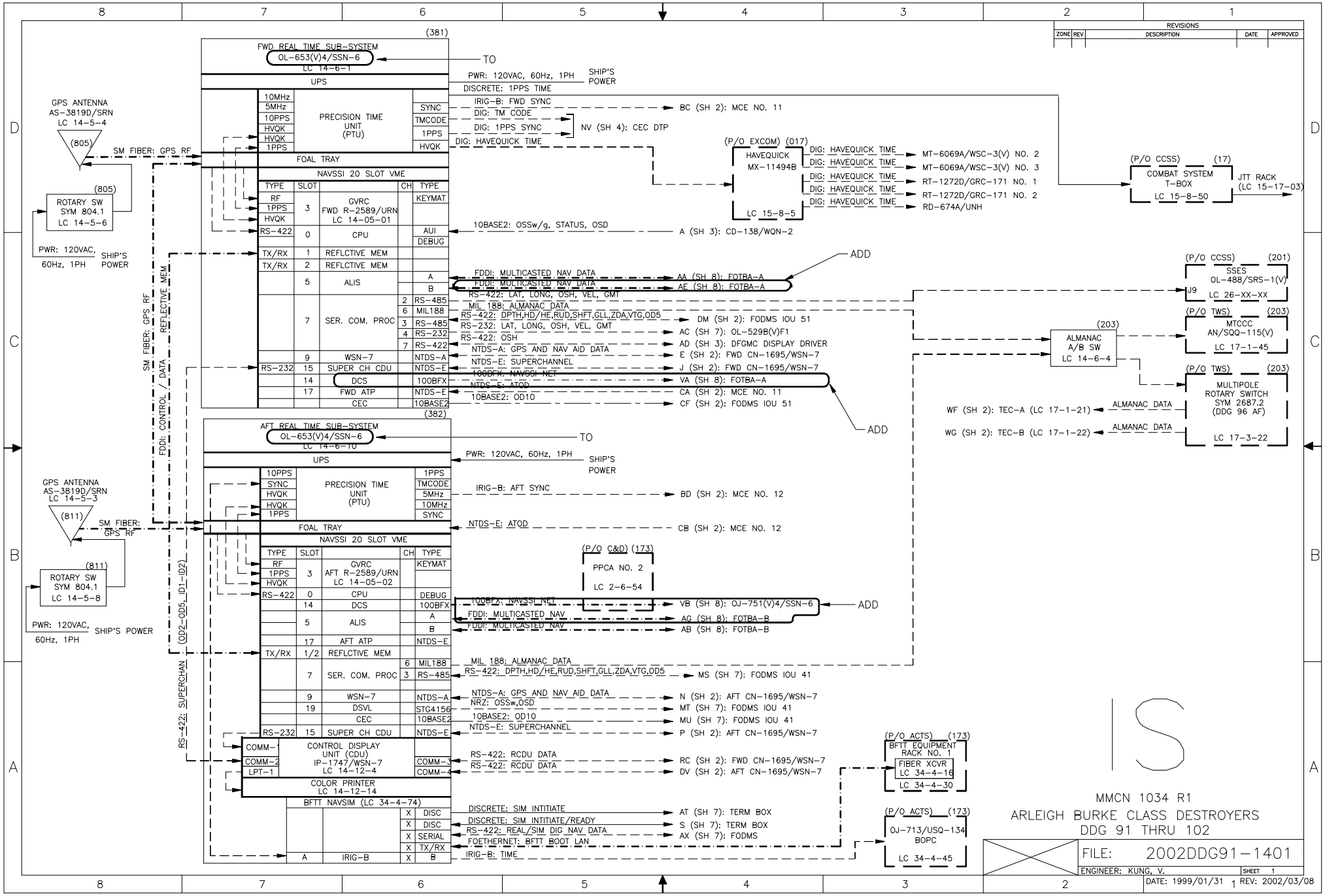

Figure 3.14-2 Navigation System Interface Diagram (Sheet 2 of 10)

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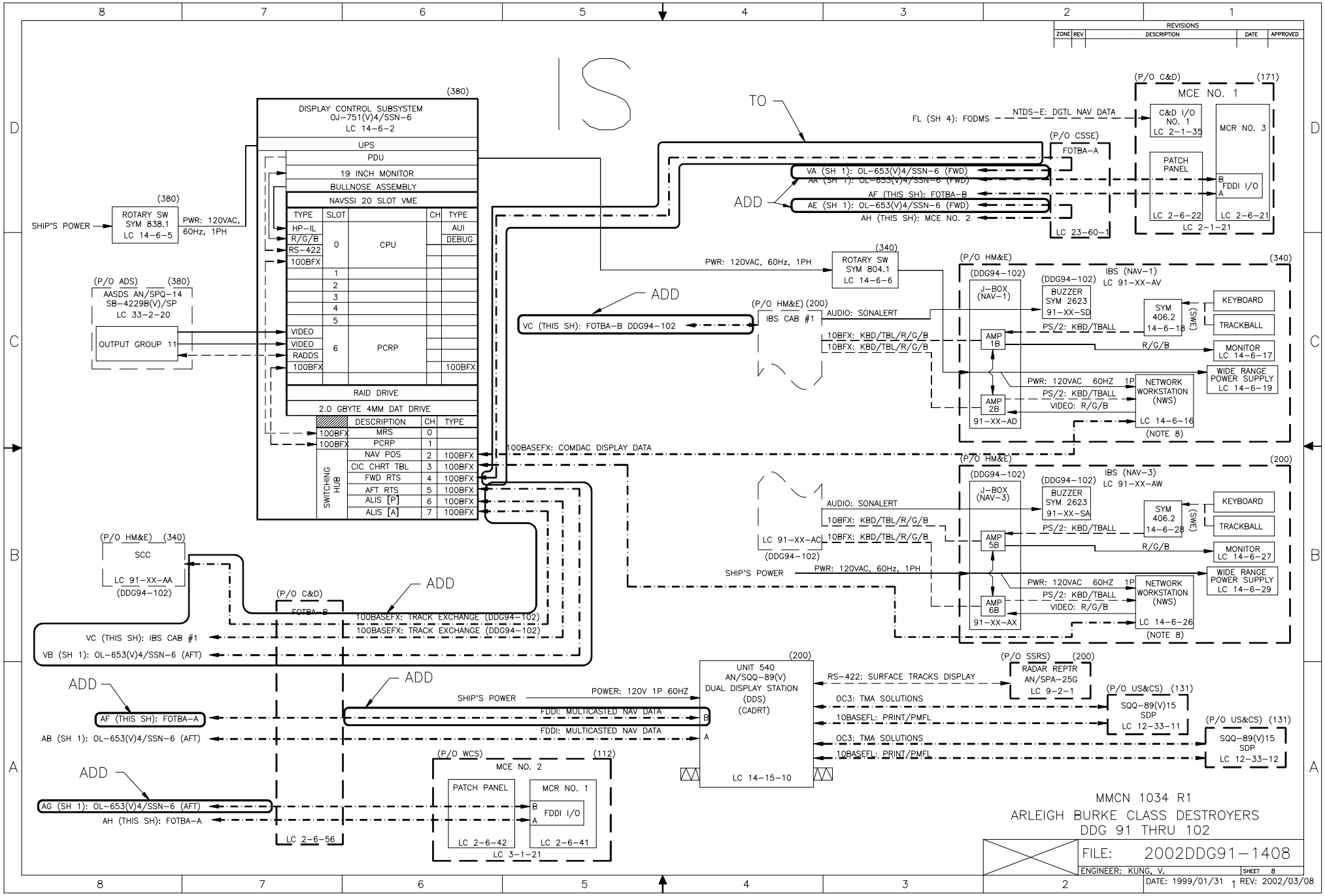

Figure 3.14-2 Navigation System Interface Diagram (Sheet 9 of 10)

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