

8 7 6 5 4 3 2 1

NOTE: THIS DRAWING AND THE INFORMATION CONTAINED HEREON CONSTITUTES EXPORT CONTROLLED INFORMATION SUBJECT TO THE INTERNATIONAL TRAFFIC IN ARMS REGULATIONS (ITAR) AND A TECHNICAL ASSISTANCE AGREEMENT ("TAA") BETWEEN GUIDO PERLA & ASSOCIATES, INC. ("GPA") AND APPLICABLE SUBCONTRACTORS. THIS DRAWING AND THE INFORMATION CONTAINED HEREIN MAY NOT BE DISCLOSED OR TRANSFERRED TO ANY PERSON, WHO IS NOT A U.S. PERSON AS DEFINED IN 22 CFR 120.15 WITHOUT THE EXPRESS PRIOR WRITTEN CONSENT OF GPA AND THE OFFICE OF TRADE CONTROLS LICENSING OF THE U.S. DEPARTMENT OF STATE, AND COMPLIANCE WITH APPLICABLE PROVISIONS OF ITAR AND THE TAA. ANY VIOLATION OF THESE RESTRICTIONS MAY SUBJECT THE VIOLATOR TO CRIMINAL PROSECUTION.

P R E L I M I N A R Y
 DRAWINGS SUBMITTED UPON THE OCCASION OF DESIGN REVIEW 1.
 GPA RESERVES THE RIGHT TO MAKE ANY CHANGES TO THIS DRAWING IN UPCOMING REVISIONS.
 FINAL REVIEW AND APPROVAL BY GPA IS PENDING.

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE

EQUIPMENT LIST					
NO.	NAME	MANUFACTURER	MODEL NO.	SWL	NOTES
1	MAIN CRANE	ALLIED	TK70-70	22,000 LBS AT 70 FT (STATIC)	REF 4
2	PORTABLE CRANE	ALLIED	TK4-30	2,000 LBS AT 30 FT (DYNAMIC)	REF 5
3	RESCUE BOAT DAVIT	SCHAT HARDING	SA135	TBD	REF 9
4	STERN FRAME	ALLIED	A-30	30,000 LBS AT ALL POSITIONS	REF 6
5	HYDROGRAPHIC WINCH	MARKEY	CAST6-125	24,000 LBS	REF 11
6	TRACTION WINCH	MARKEY	DETW-9-11	26,500 LBS (0 TO 205 FT/MIN)	REF 12
7	CTD HANDLING SYSTEM	ALLIED	CTD LARS	11,100 LBS AT 23 FT (DYNAMIC)	REF 7
8	STARBOARD SIDE HANDLING DEVICE	ALLIED	STBD SIDE HANDLER	11,100 LBS AT 23 FT (DYNAMIC)	REF 8

TRACTION/TRAWL WINCH	SHEAVES		
	LOCATION	DIAMETER	TYPE
	01 DK FR 92 CL	48 INCH	FLAGGING, INSTRUMENTED
	A-FRAME	48 INCH	HANGING (GFE)
HYDROGRAPHIC WINCH	FOCSLE DK FR 74 (S)	16 INCH	PEDESTAL 1- 2 FIXED, 1 FLAGGING
	FOCSLE DK FR 83 (S)	16 INCH	PEDESTAL 2- 2 FIXED

GENERAL NOTES

1. ALL WORKMANSHIP, WELDING AND MATERIALS SHALL BE IN ACCORDANCE WITH THE ABS RULES FOR VESSELS UNDER 90 METERS, SUB-CHAPTER "U" OF TITLE 46 OF THE CFR AND SOLAS.
2. ALL STRUCTURAL STEEL SHALL BE ABS GRADE A OR EQUIVALENT UNLESS NOTED OTHERWISE. WELDING SHALL BE IN ACCORDANCE WITH ABS RULES AND SHALL BE TO THE SATISFACTION OF THE ATTENDING ABS SURVEYOR.
3. ROUGH OR RAGGED EDGES WHERE LIKELY TO INJURE PERSONNEL OR DAMAGE EQUIPMENT SHALL BE DRESSED OR MADE SMOOTH.
4. PEDESTAL HEIGHT TO BE CONFIRMED BASED ON RESCUE BOAT, CRADLE AND DECK CLEARANCE AT LAUNCH. TRIPPING BRACKETS TO BE SHIPYARD SUPPLIED.
5. THE WEATHER DECK BECOMES SUBMERGED AT 15.4'. THIS IS THE MAXIMUM UNFAVORABLE TRIM AND, PER SUB-CHAPTER "W" 199.130 (4) (iii), THE FUNCTIONAL LIMIT FOR THE LIFESAVING APPLIANCES TO LAUNCH AND RECOVER.

. OVERBOARDS IN WAY OF LIFESAVING EQUIPMENT SHALL HAVE DEFLECTORS.

12. MARKEY 43282 11. MARKEY E52030 10. 9. SCHAT HARDING 8. ALLIED 63677 7. ALLIED 63297 6. ALLIED 63567 5. ALLIED 63439 4. ALLIED 63267 3. 54308-832-01 2. 54308-573-02 1. 54308-801-01	TRACTION WINCH HYDROGRAPHIC WINCH LOAD HANDLING STRUCTURAL CALCULATIONS NSK 1888 RESCUE BOAT DAVIT ALLIED STBD SIDE HANDLER ALLIED CTD-LARS ALLIED A-30 STERN FRAME GENERAL ARRANGMENTS ALLIED PORTABLE CRANE TK4-30 ALLIED CRANE TK70-70 GENERAL ARRANGEMENT CONTRACTOR'S SYSTEM SPECIFICATION SCIENTIFIC SYSTEMS DEPLOYMENT GENERAL ARRANGEMENTS
--	---

DWG	TITLE
REFERENCES	
APPROVALS	
USCG	
ABS	
OWNER	
HULL NO. 58	DESIGNER GUIDO PERLA & ASSOCIATES, Inc. 701 FIFTH AVENUE, SUITE 1200 SEATTLE, WA 98104 U.S.A. Tel: (206) 768-1515 Fax: (206) 768-9700 Email: gpa@gpai.com
CAGE CODE OW7U3	SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc. 820 FOURTH STREET, P.O. BOX 218 ANACORTES, WA 98221 Tel: (360) 293-9575 Fax: (360) 293-6453
NAVSEA DWG. No. 8565924	PROJECT OCEAN CLASS AGOR
ESWBS 573-01	TITLE SHIP CONSTRUCTION HANDLING SYS. ARRANGEMENT
DWN MSH DATE 02/10/11	DWG No. 65411-573-01
CKD CC DATE 02/10/11	REV. -
APVD - DATE -	SCALE NONE
APVD - DATE -	SHEET: 1 OF 9

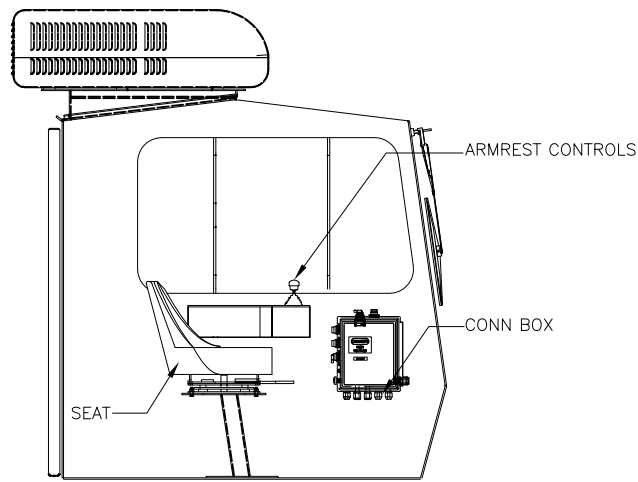
DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

**HALF SIZE
PRINT**

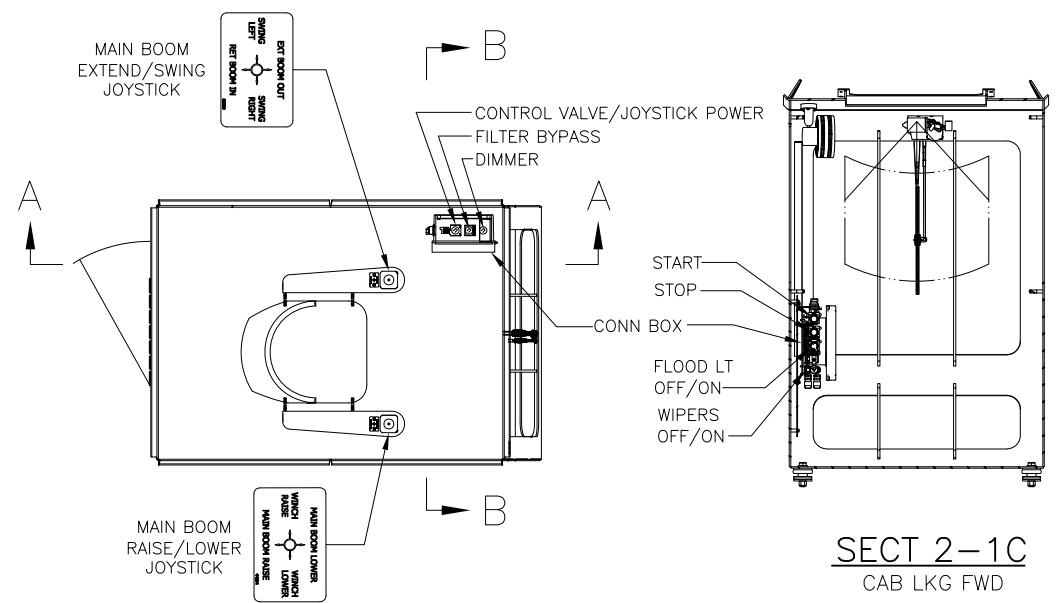
Thursday December 01 2011 10:24:15 pm
 PLOT DIR: C:\XMIT\11201\NAVSEA DR1 DRAWINGS\DCI 027-19 F57301 REV-19 HANDLING SYSTEMS ARRANGEMENTS\
 PLOT FILE: DCI 027-19 F573-01 REV-19.DWG
 FILE NAME:

8 7 6 5 4 3 2 1

PLOT DATE: December 01 2011
 PLOT TIME: 10:26:36 pm
 PLOT DIR: \\XMIT\111201_NAVSEA_DR1_DRAWINGS\DCI 027-19 F57301 REV- HANDLING SYSTEMS ARRANGEMENTS\
 FILE NAME: DCI 027-19 F573-01 REV-.DWG

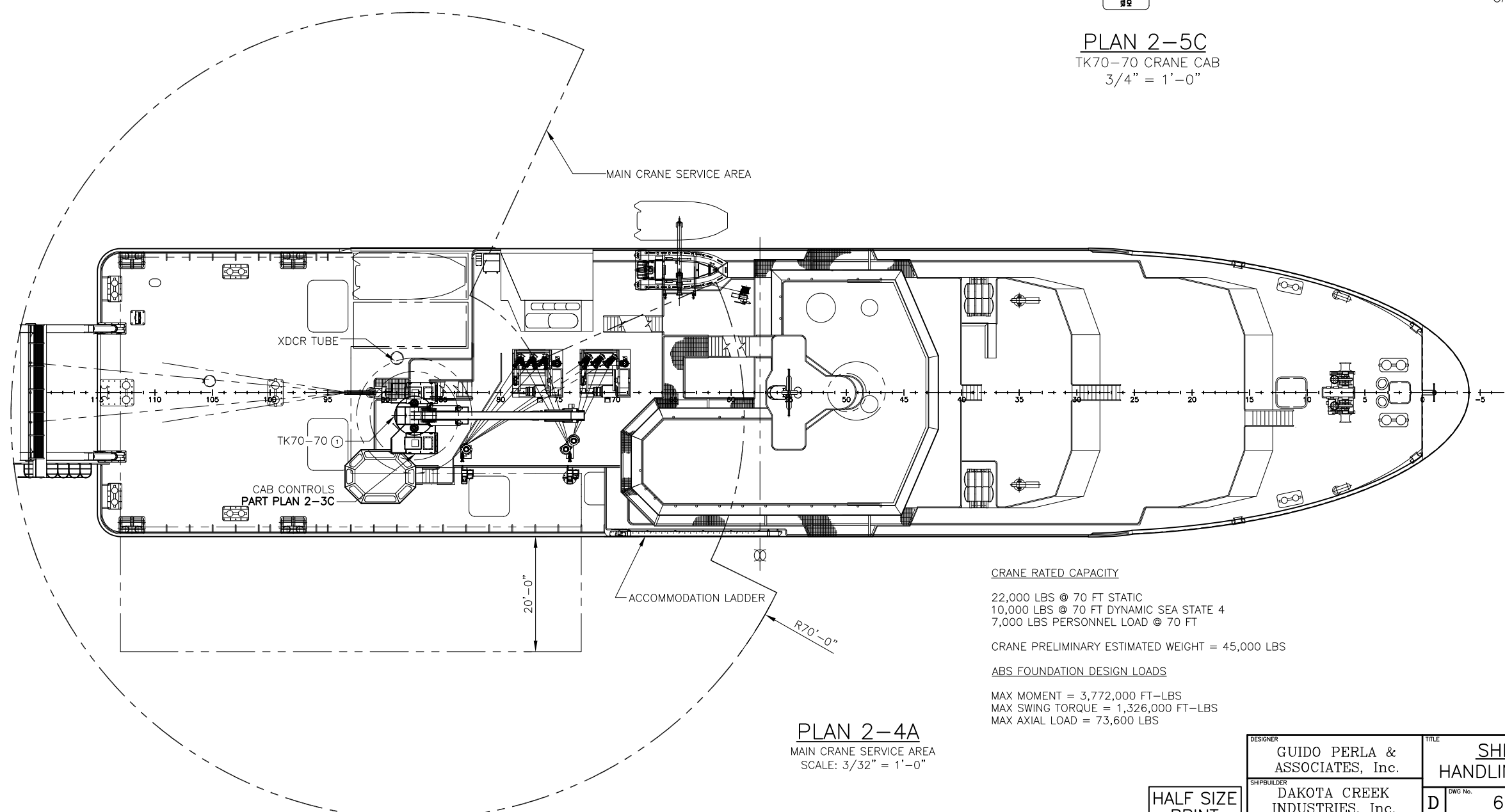


ELEV 2-5A
CAB LKG FWD



PLAN 2-5C
TK70-70 CRANE CAB
3/4" = 1'-0"

SECT 2-1C
CAB LKG FWD



PLAN 2-4A
MAIN CRANE SERVICE AREA
SCALE: 3/32" = 1'-0"

CRANE RATED CAPACITY
 22,000 LBS @ 70 FT STATIC
 10,000 LBS @ 70 FT DYNAMIC SEA STATE 4
 7,000 LBS PERSONNEL LOAD @ 70 FT

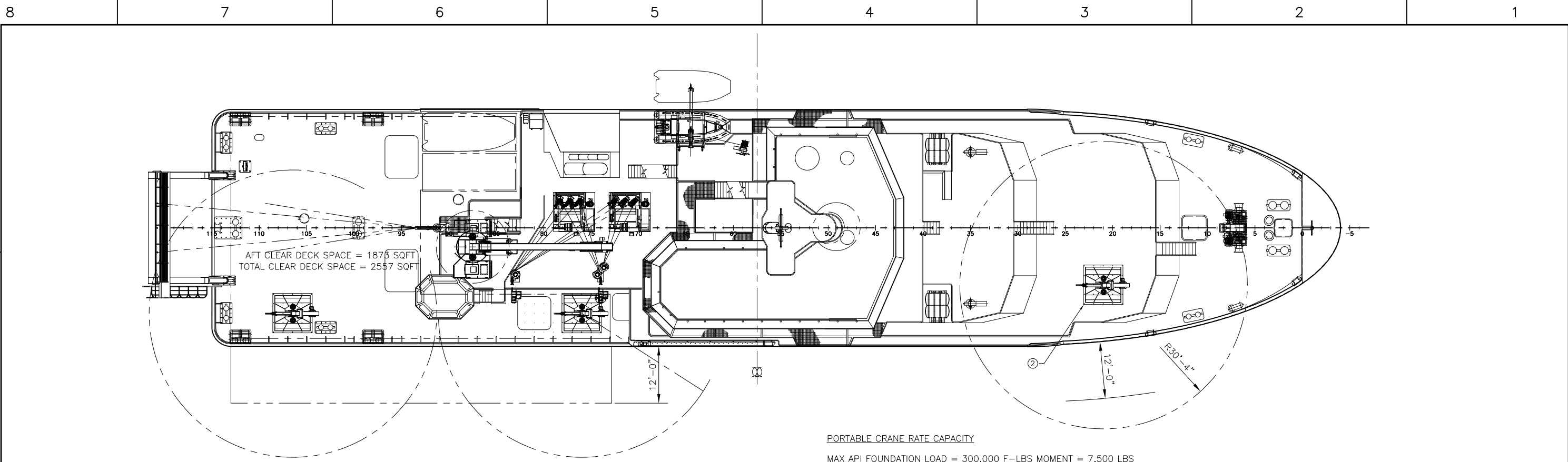
CRANE PRELIMINARY ESTIMATED WEIGHT = 45,000 LBS

ABS FOUNDATION DESIGN LOADS
 MAX MOMENT = 3,772,000 FT-LBS
 MAX SWING TORQUE = 1,326,000 FT-LBS
 MAX AXIAL LOAD = 73,600 LBS

HALF SIZE PRINT

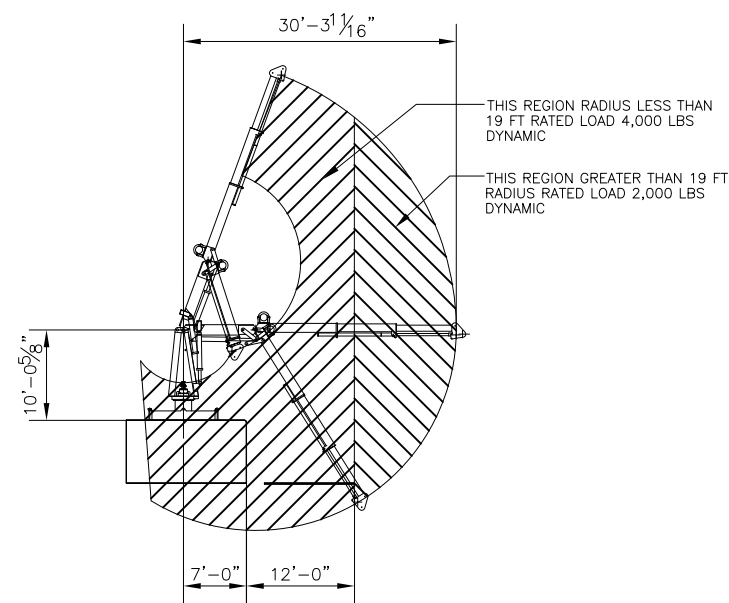
DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE AS NOTED
SHEET: 2 OF 9	

PLOT DATE: Thursday, December 01, 2011
 PLOT TIME: 10:26:58 pm
 PLOT ID: 65411-573-01
 PLOT DIR: D:\11201\NAVSEA DR1 DRAWINGS\DCI 027-19 F57301 REV- HANDLING SYSTEMS ARRANGEMENTS\
 FILE NAME: DCI 027-19 F573-01 REV-.DWG

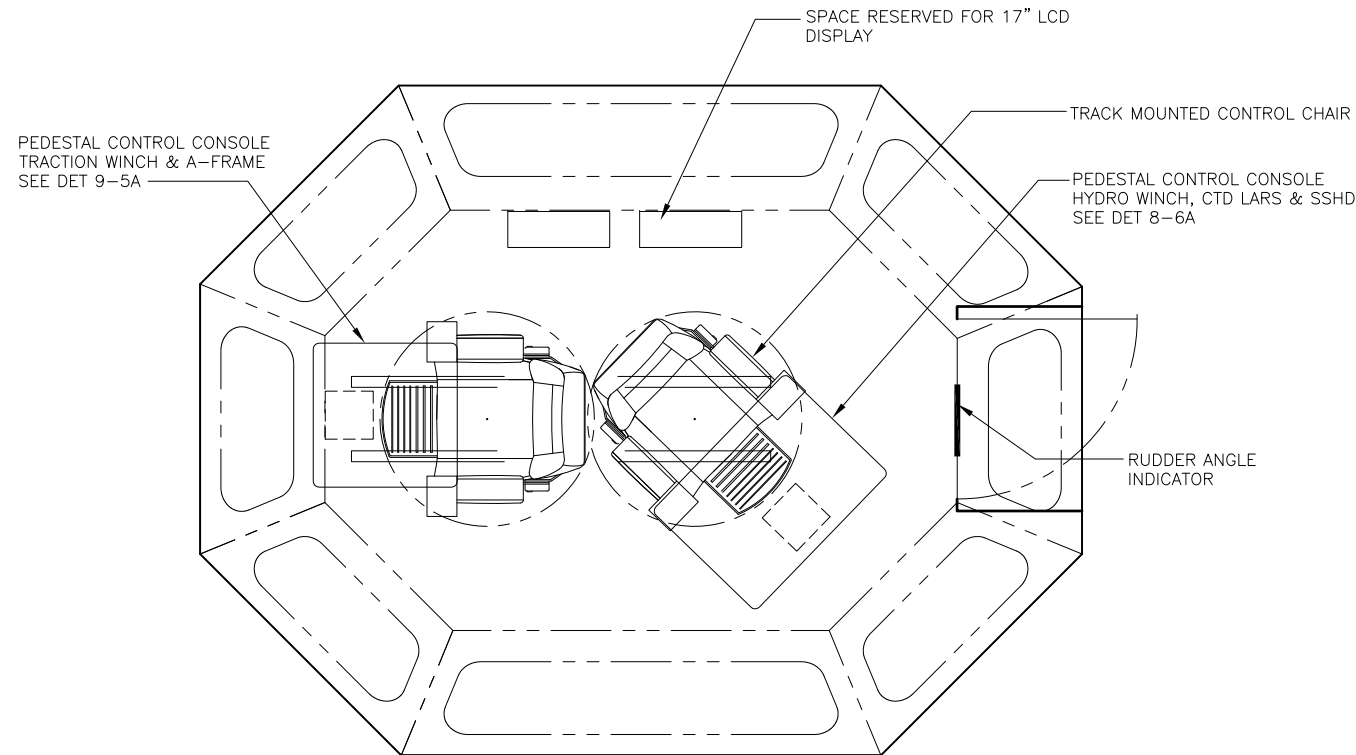


PLAN 3-5C
 PORTABLE CRANE LOCATIONS & SERVICE AREAS
 SCALE: 3/32" = 1'-0"

PORTABLE CRANE RATE CAPACITY
 MAX API FOUNDATION LOAD = 300,000 F-LBS
 MAX SOCKET LOAD = 7,500 LBS
 MAX AXIAL LOAD = 22,000 LBS
 SWING TORQUE = 30,000 FT-LBS
 FOUNDATION MATCHES 2 FT DECK SOCKET PATTERN
 ESTIMATED CRANE WITH HPU AND BASE = 10,000 LBS



ELEV 3-7A
 PORTABLE CRANE
 SCALE: 3/32" = 1'-0"



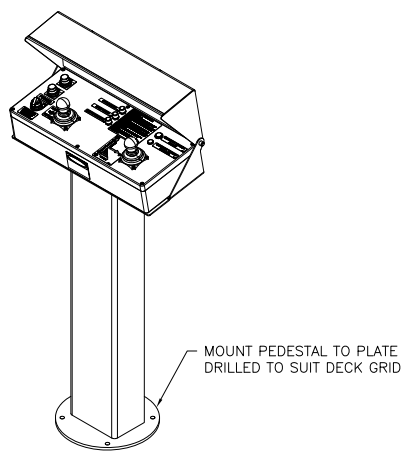
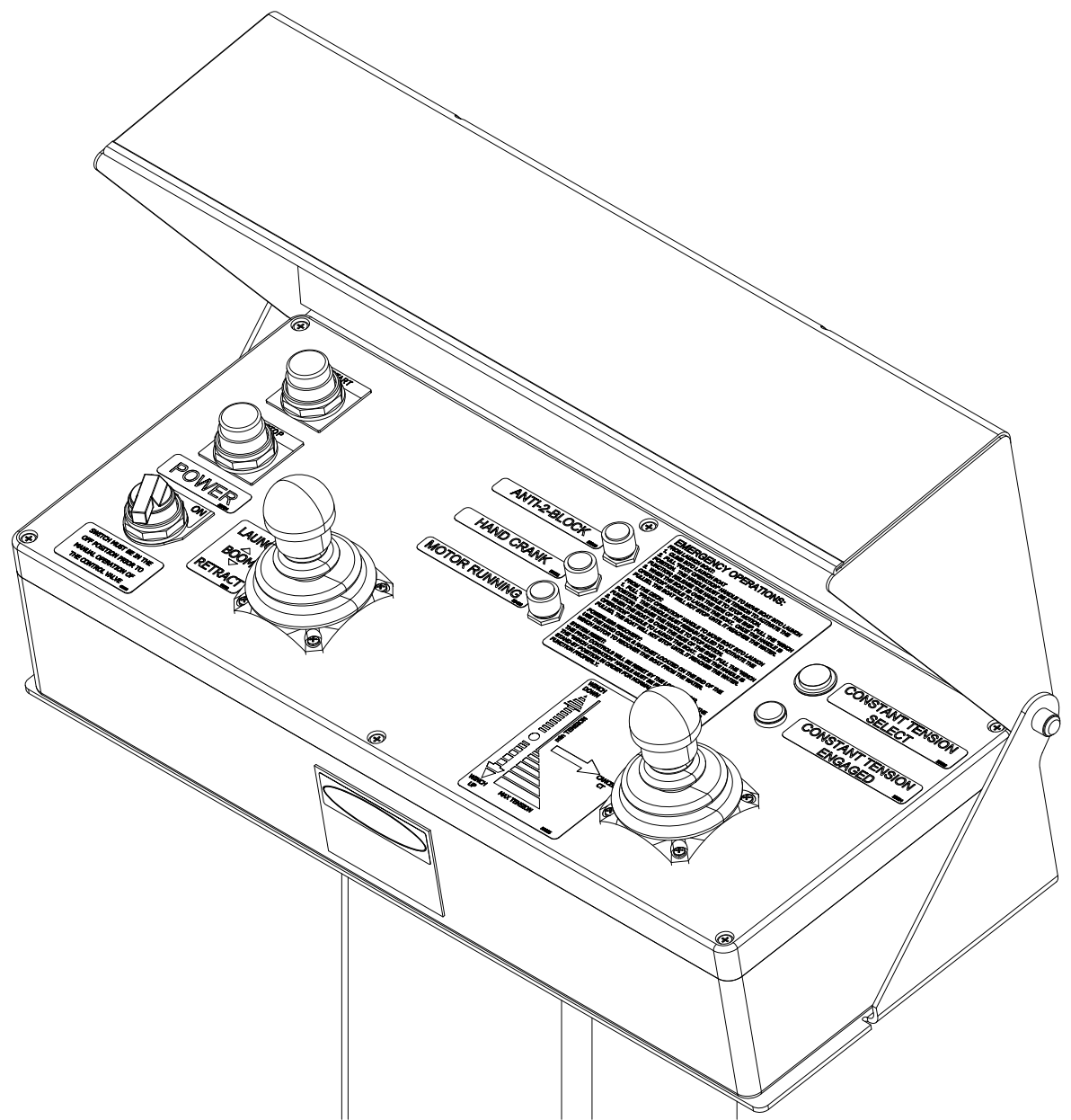
PART PLAN 3-2A
 AFR CONTROL STATION
 3/4" = 1'-0"

HALF SIZE
 PRINT

DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE AS NOTED
	SHEET 3 OF 9

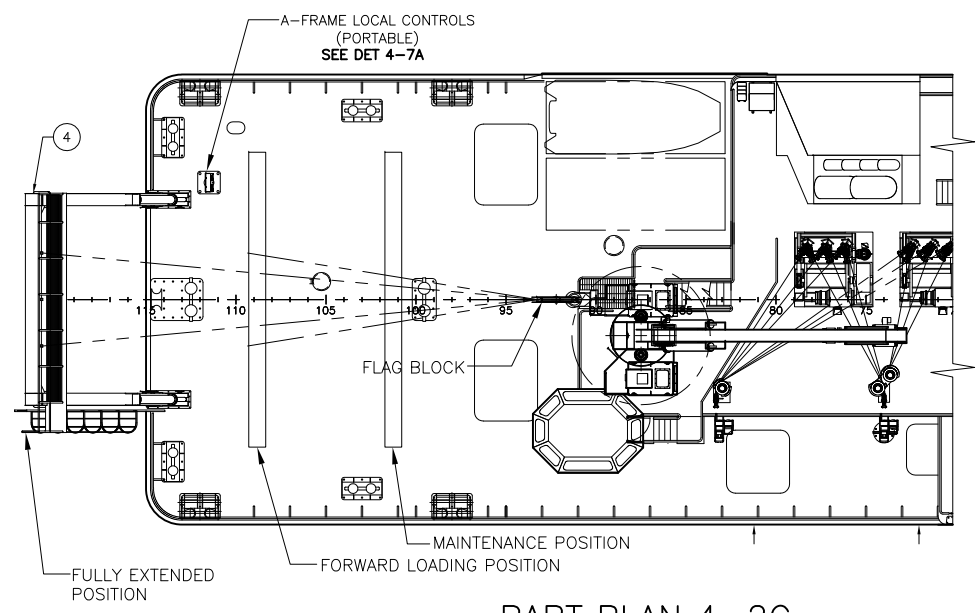
8 7 6 5 4 3 2 1

D
C
B
A

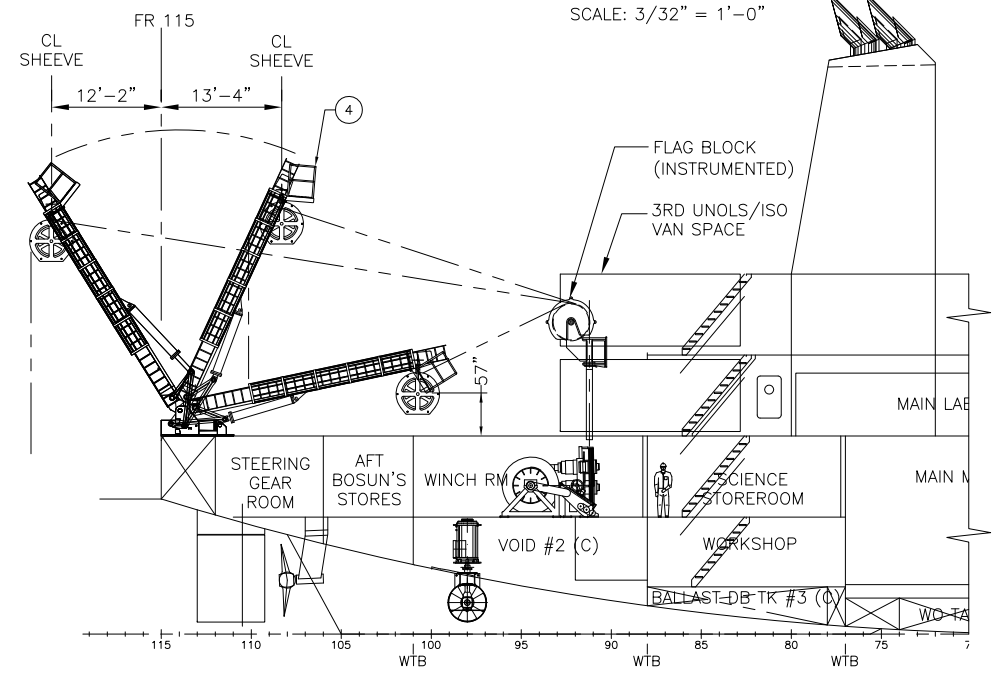


DET 4-7A
A-FRAME LOCAL CONTROLS
NTS

1) F-LBS MOMENT = 7,500 LBS
KET PATTERN
= 10,000 LBS



PART PLAN 4-2C
STERN FRAME SERVICE AREAS
SCALE: 3/32" = 1'-0"



ELEV 4-2A
STERN FRAME SERVICE AREAS
SCALE: 3/32" = 1'-0"

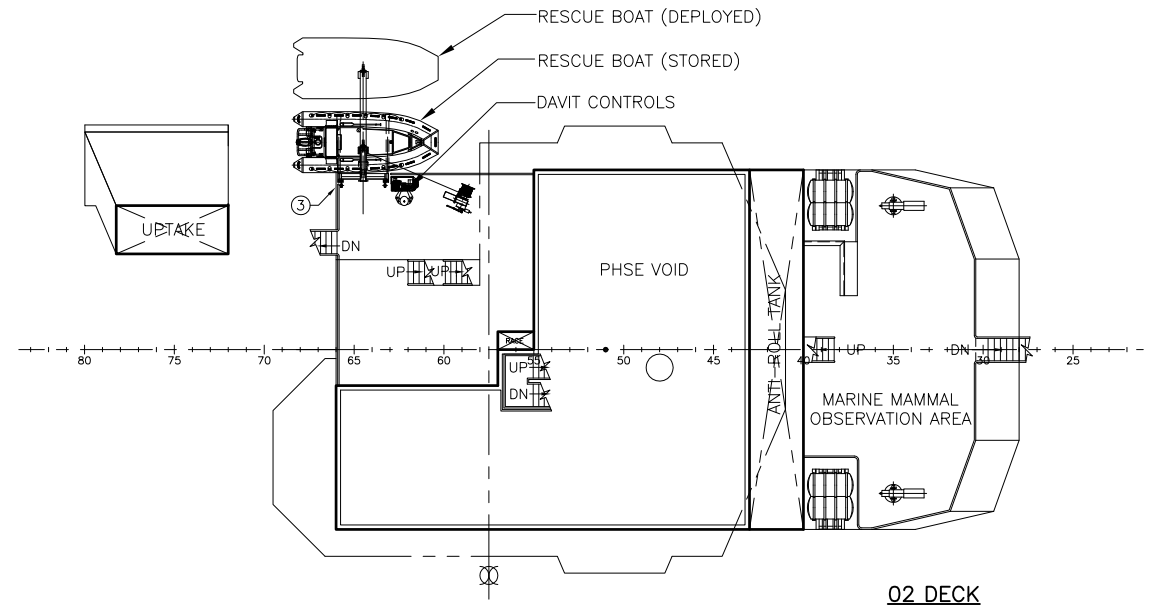
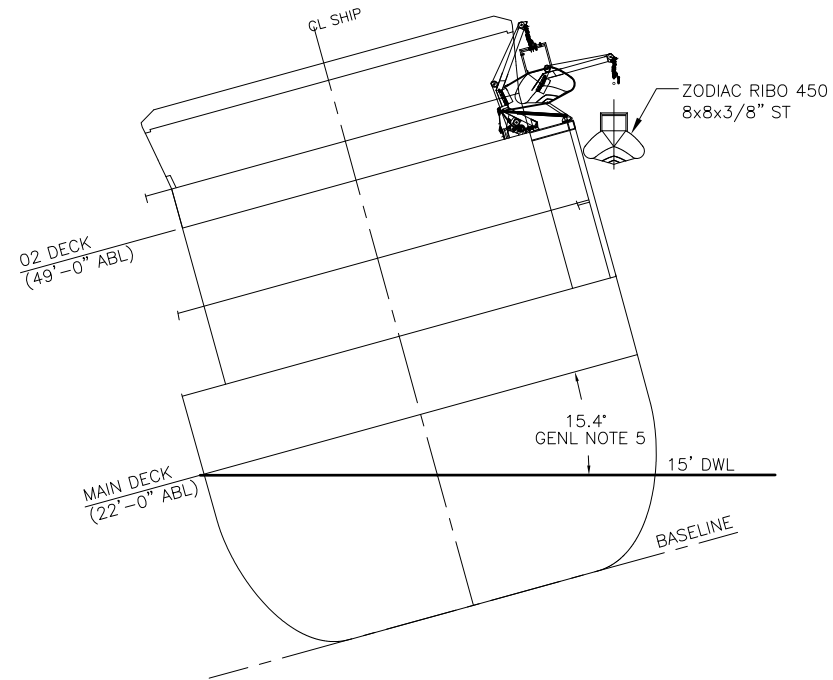
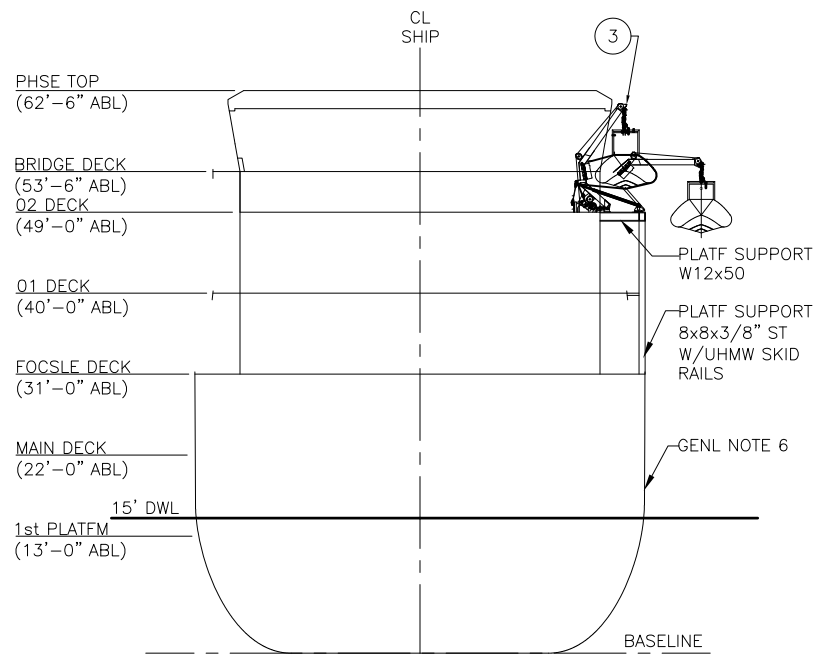
PLOT DATE: Thursday, December 01, 2011
PLOT TIME: 10:27:17 pm
PLOT DIR: C:\XMIT\11201_NAVSEA DR1 DRAWINGS\DCI 027-19 F57301 REV- HANDLING SYSTEMS ARRANGEMENTS\
FILE NAME: DCI 027-19 F573-01 REV-DWG

HALF SIZE
PRINT

DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE AS NOTED
SHEET: 4 OF 9	

8 7 6 5 4 3 2 1

PLOT DATE: Thursday, December 01, 2011
 PLOT TIME: 10:27:34 pm
 PLOT ID: 65411-573-01
 FILE NAME: D:\027-19\F573-01\REV-DWG

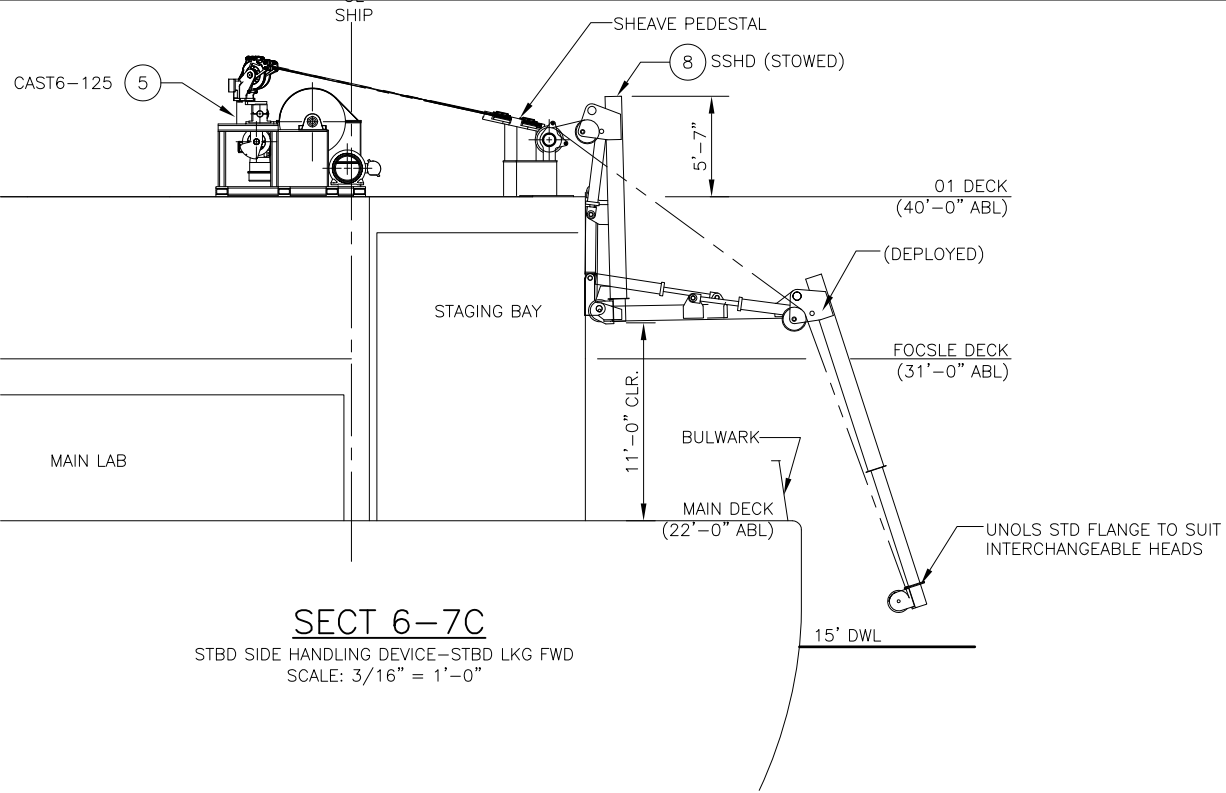


SECT 5-6A
 RESCUE BOAT LAUNCHING
 SCALE: 3/32" = 1'-0"

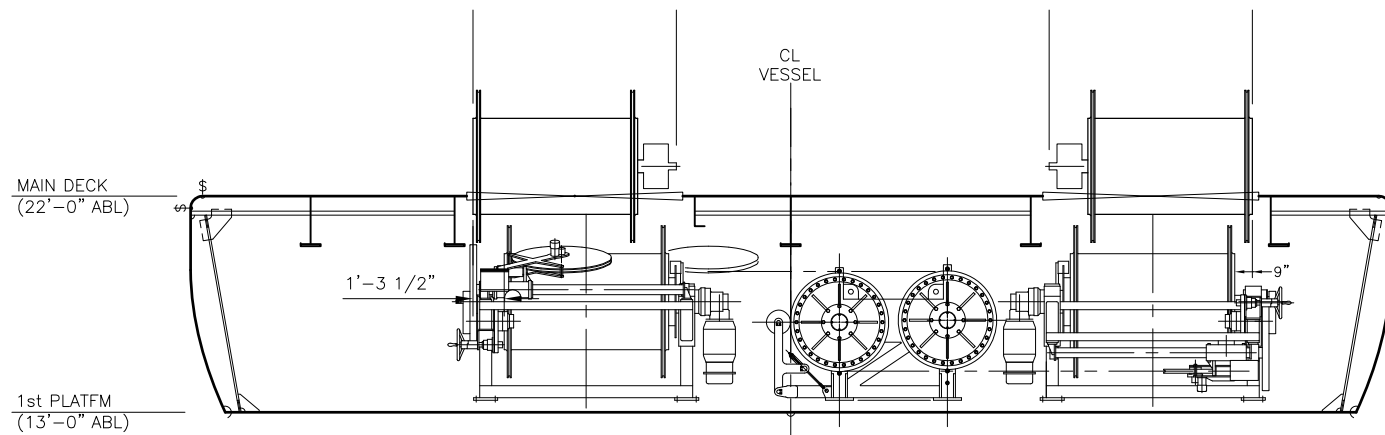
PLAN 5-2A
 RESCUE BOAT & DAVIT LOCATION
 SCALE: 3/32" = 1'-0"

HALF SIZE PRINT

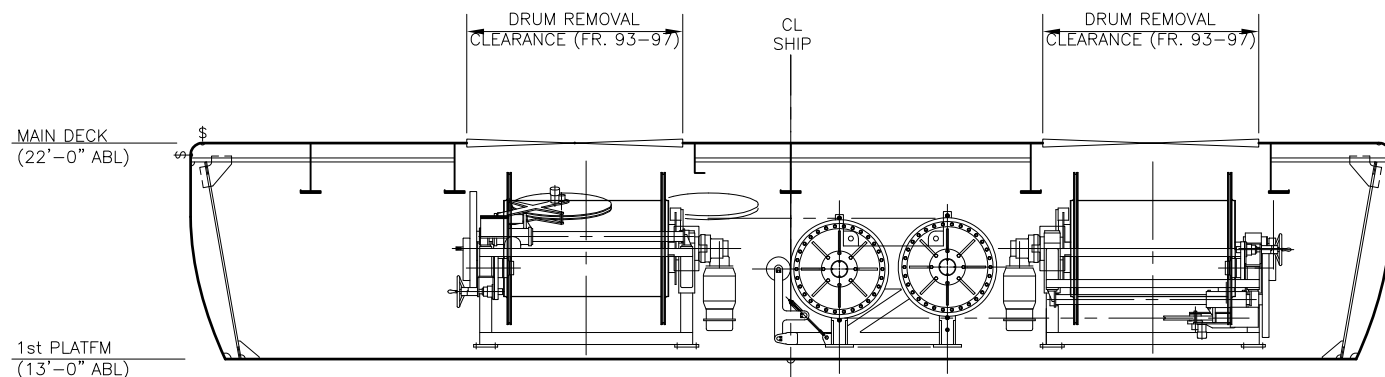
DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE 3/32" = 1'-0"
SHEET: 5 OF 9	



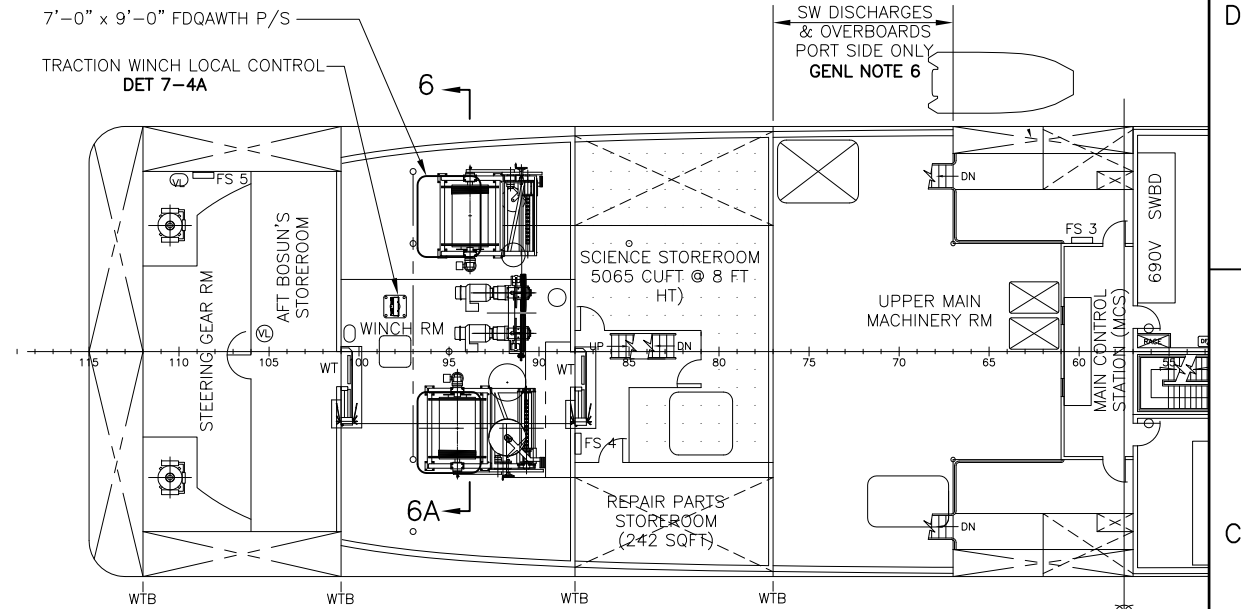
SECT 6-7C
STBD SIDE HANDLING DEVICE-STBD LKG FWD
SCALE: 3/16" = 1'-0"



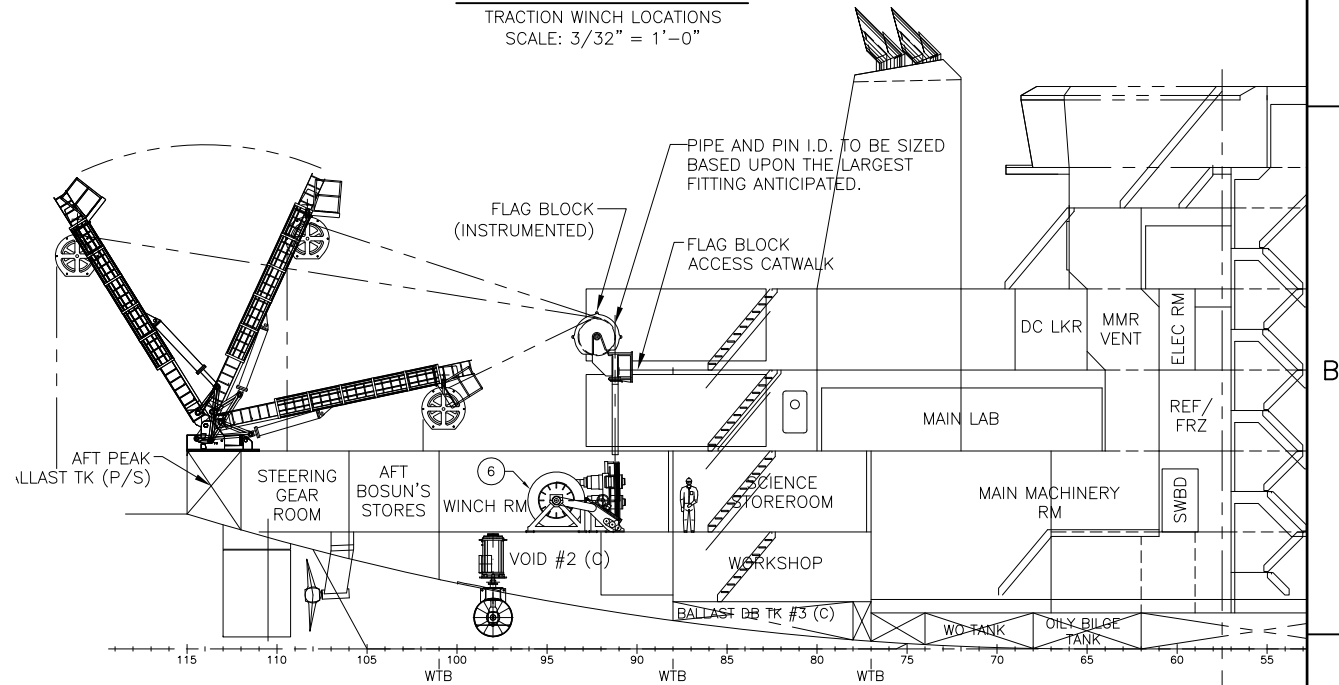
SECT 6-6B
FR 94 LKG AFT
WITH DRUMS TRANSLATED OUTBD FOR LIFTING
SCALE: 1/4" = 1'-0"



SECT 6-6A
FR 94 LKG AFT
WITH DRUMS INSTALLED
SCALE: 1/4" = 1'-0"



PART PLAN 6-2C
TRACTION WINCH LOCATIONS
SCALE: 3/32" = 1'-0"



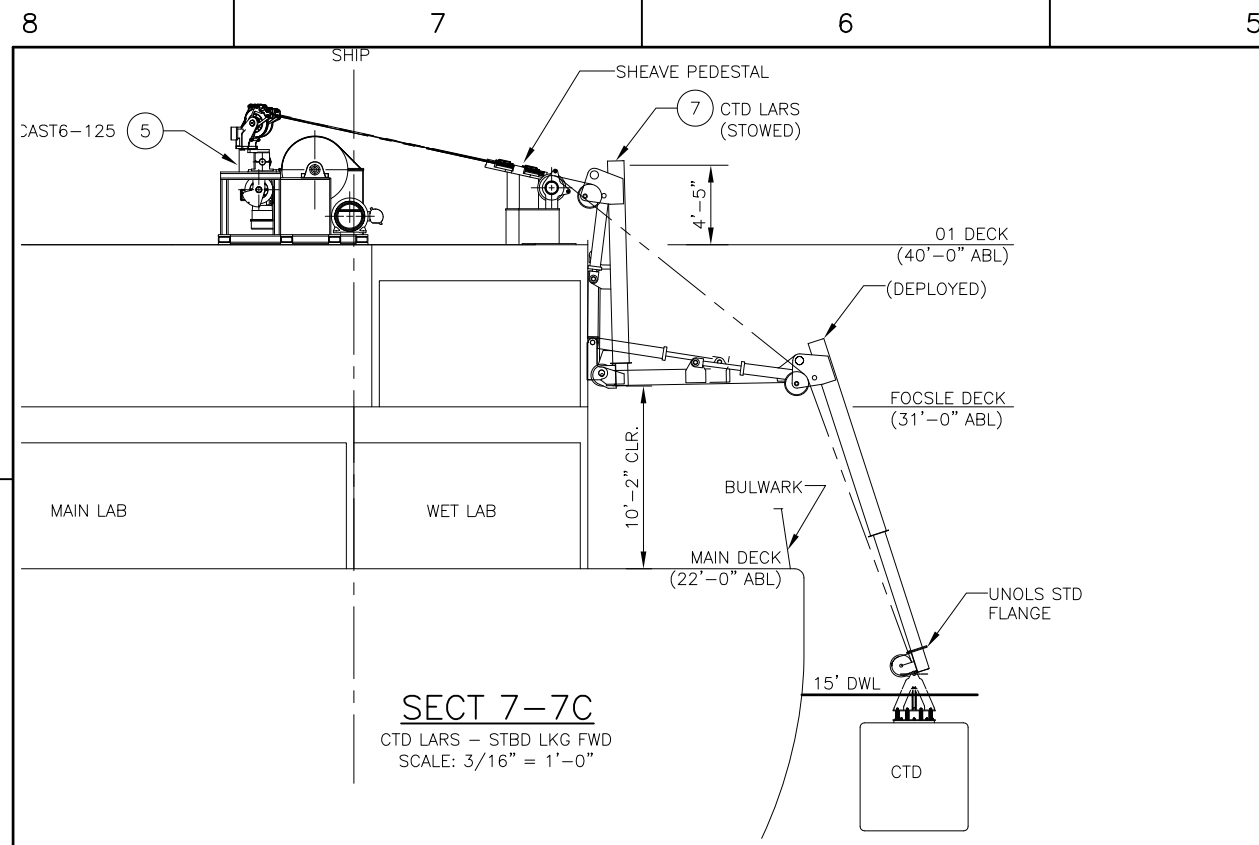
ELEV 6-2A
TRACTION WINCH LOCATIONS
SCALE: 3/32" = 1'-0"

PLOT DATE: Thursday, December 01, 2011
 PLOT TIME: 10:27:50 pm
 PLOT ID: 65411-573-01
 PLOT DIR: C:\11201\NAVSEA DR1 DRAWINGS\DCI 027-19 F57301 REV- HANDLING SYSTEMS ARRANGEMENTS\
 FILE NAME: DCI 027-19 F573-01 REV-DWG

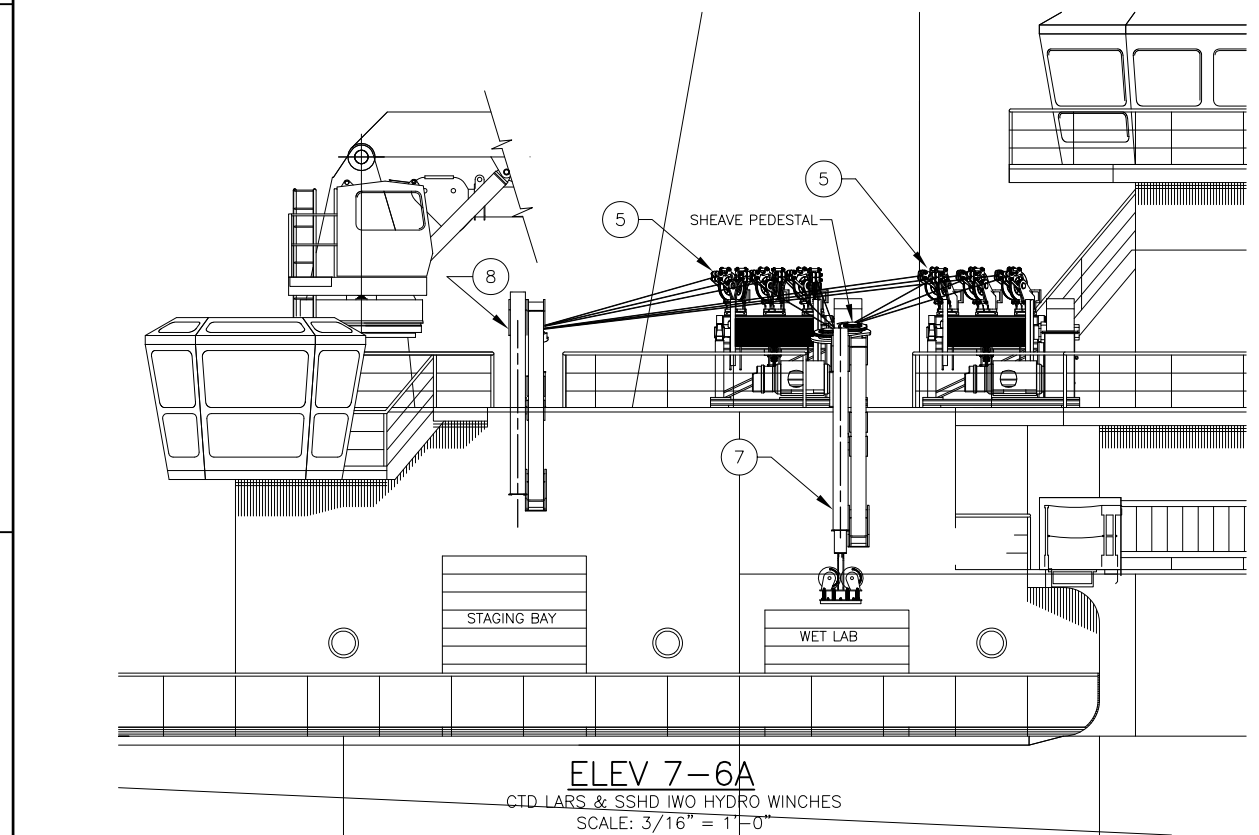
HALF SIZE
PRINT

DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE AS NOTED
	SHEET 6 OF 9

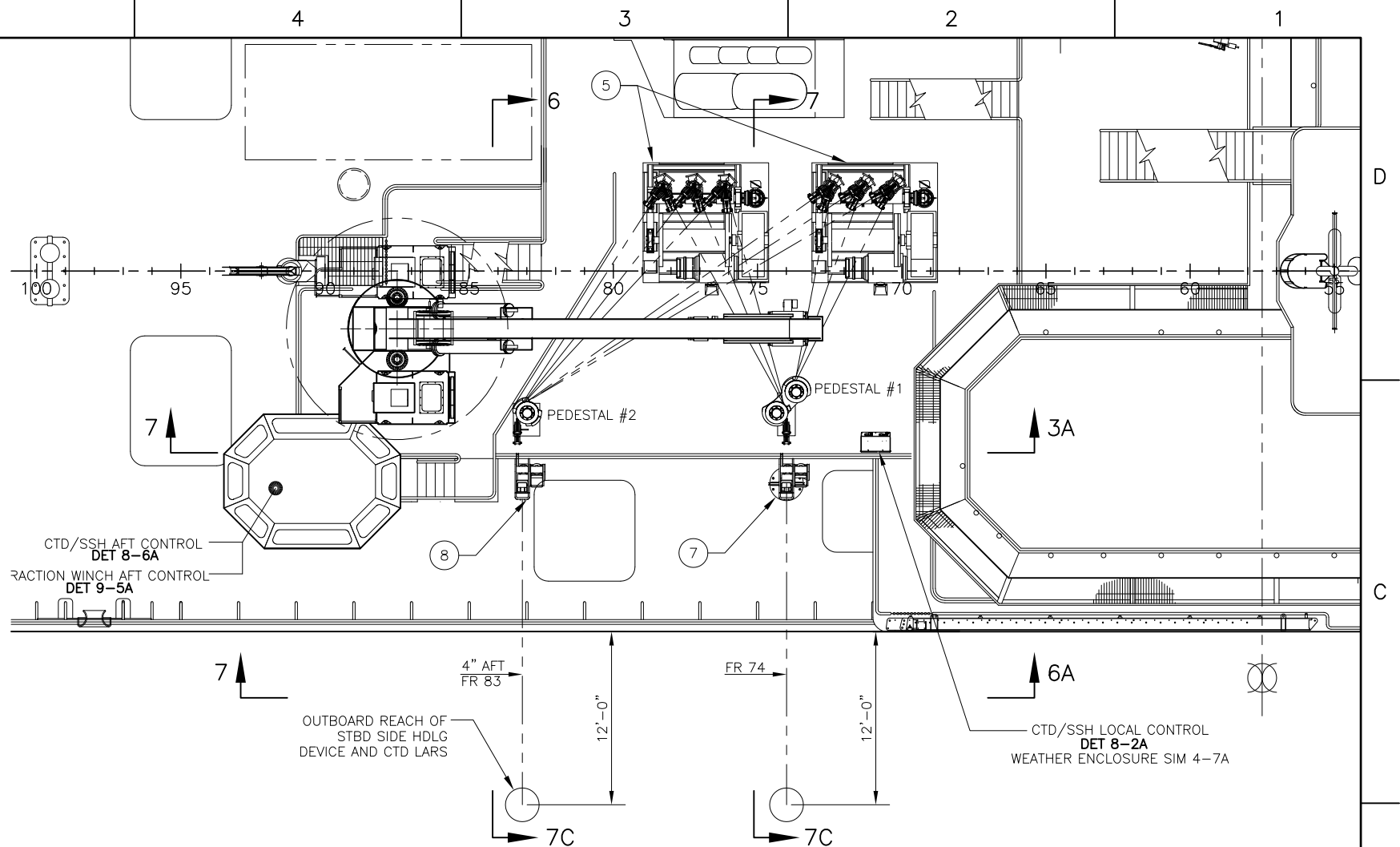
PLOT DATE: Thursday, December 01, 2011
 PLOT TIME: 10:28:11 pm
 PLOT DIR: C:\Users\j\Documents\65411\11201_NAVSEA DR1 DRAWINGS\DCI 027-19 F57301 REV- HANDLING SYSTEMS ARRANGEMENTS\
 FILE NAME: DCI 027-19 F573-01 REV-01.DWG



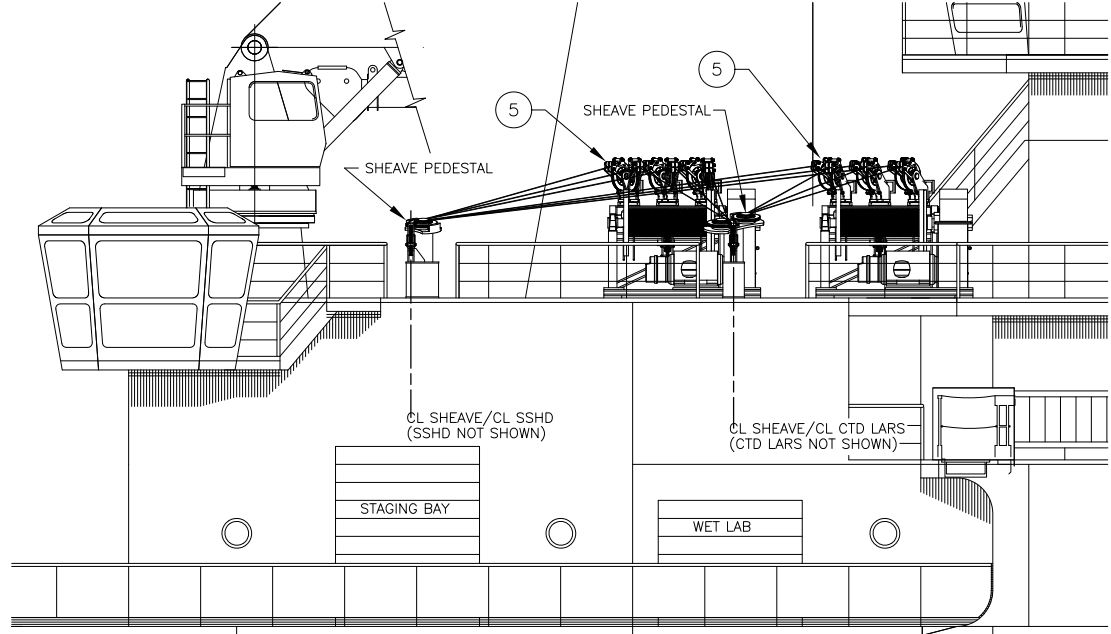
SECT 7-7C
 CTD LARS - STBD LKG FWD
 SCALE: 3/16" = 1'-0"



ELEV 7-6A
 CTD LARS & SSHD IWO HYDRO WINCHES
 SCALE: 3/16" = 1'-0"



PART PLAN 7-3B
 HYDROGRAPHIC WINCH, CTD LARS AND SSHD
 SCALE: 3/32" = 1'-0"

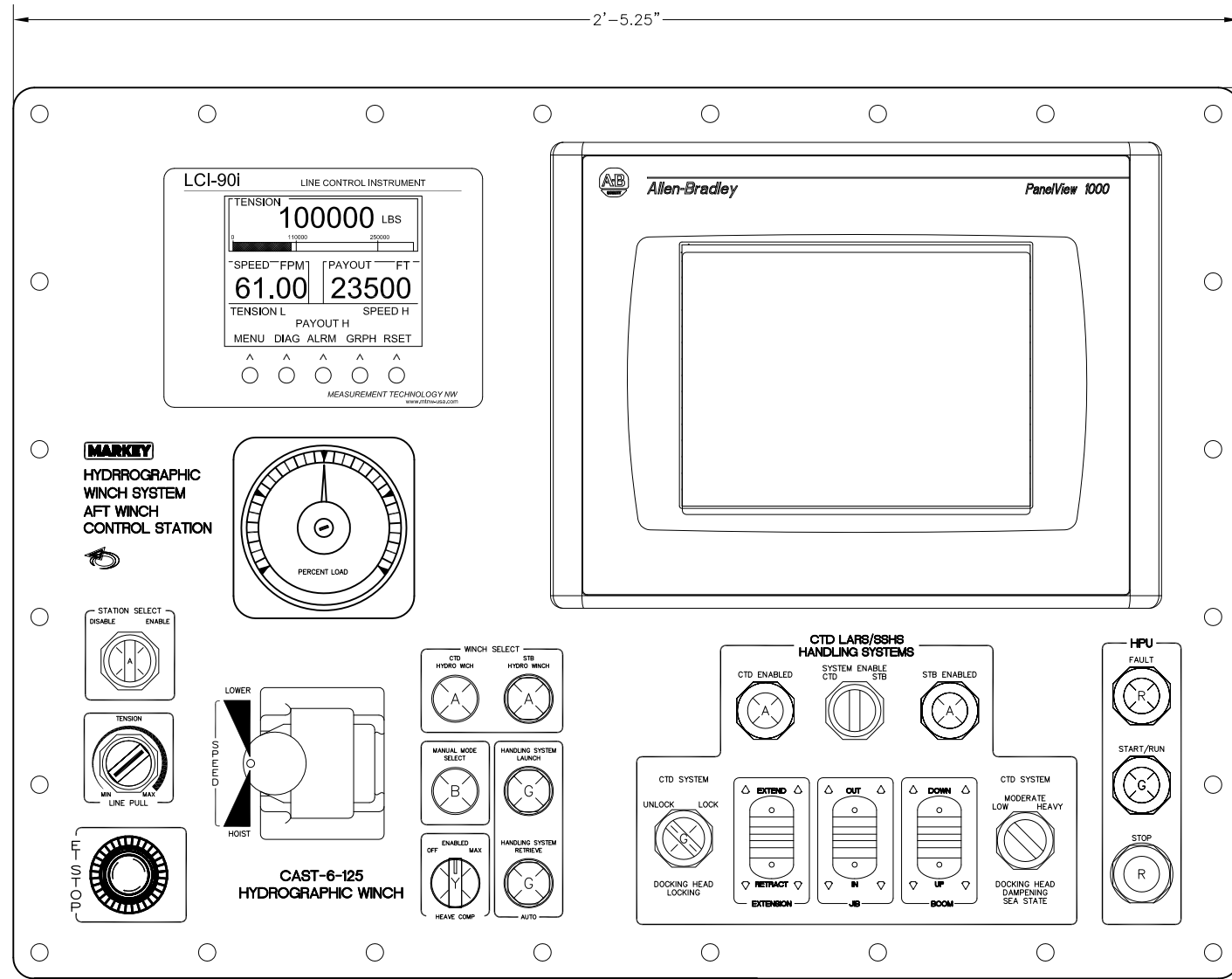


ELEV 7-3A
 HYDROGRAPHIC WINCHES AND SHEAVE PEDESTALS
 SCALE: 3/16" = 1'-0"

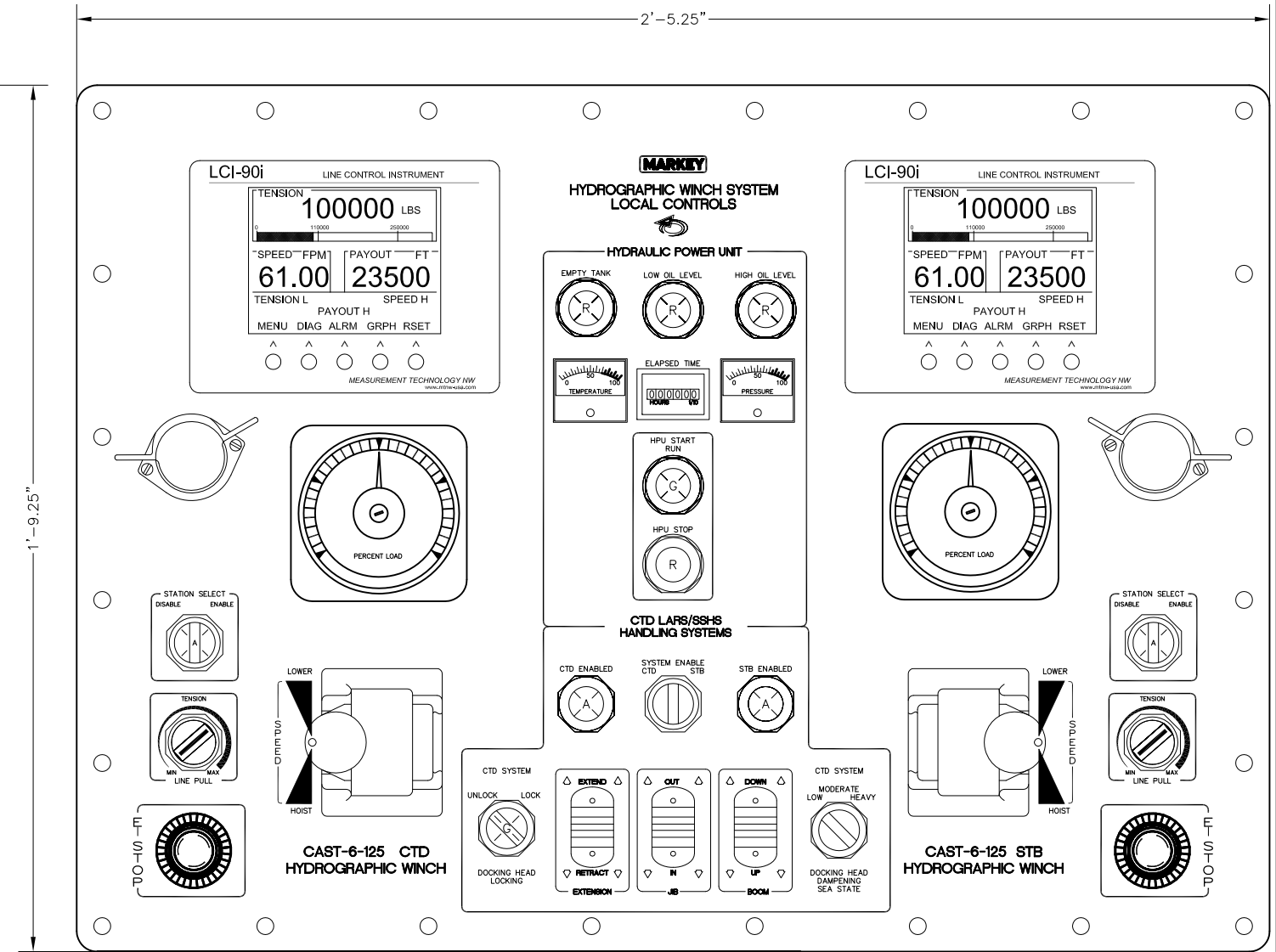
HALF SIZE PRINT

DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE AS NOTED
	SHEET 7 OF 9

PLOT DATE: Thursday, December 01, 2011
 PLOT TIME: 10:28:30 pm
 PLOT ID: XMIT_111201_NAVSEA_DR1_DRAWINGS\DCI 027-19_F57301_REV--HANDLING SYSTEMS ARRANGEMENTS\
 FILE NAME: DCI 027-19_F573-01_REV--DWG



DET 8-6A
 CTD/SSH AFT CONTROL PANEL
 SCALE: 6" = 1'-0"

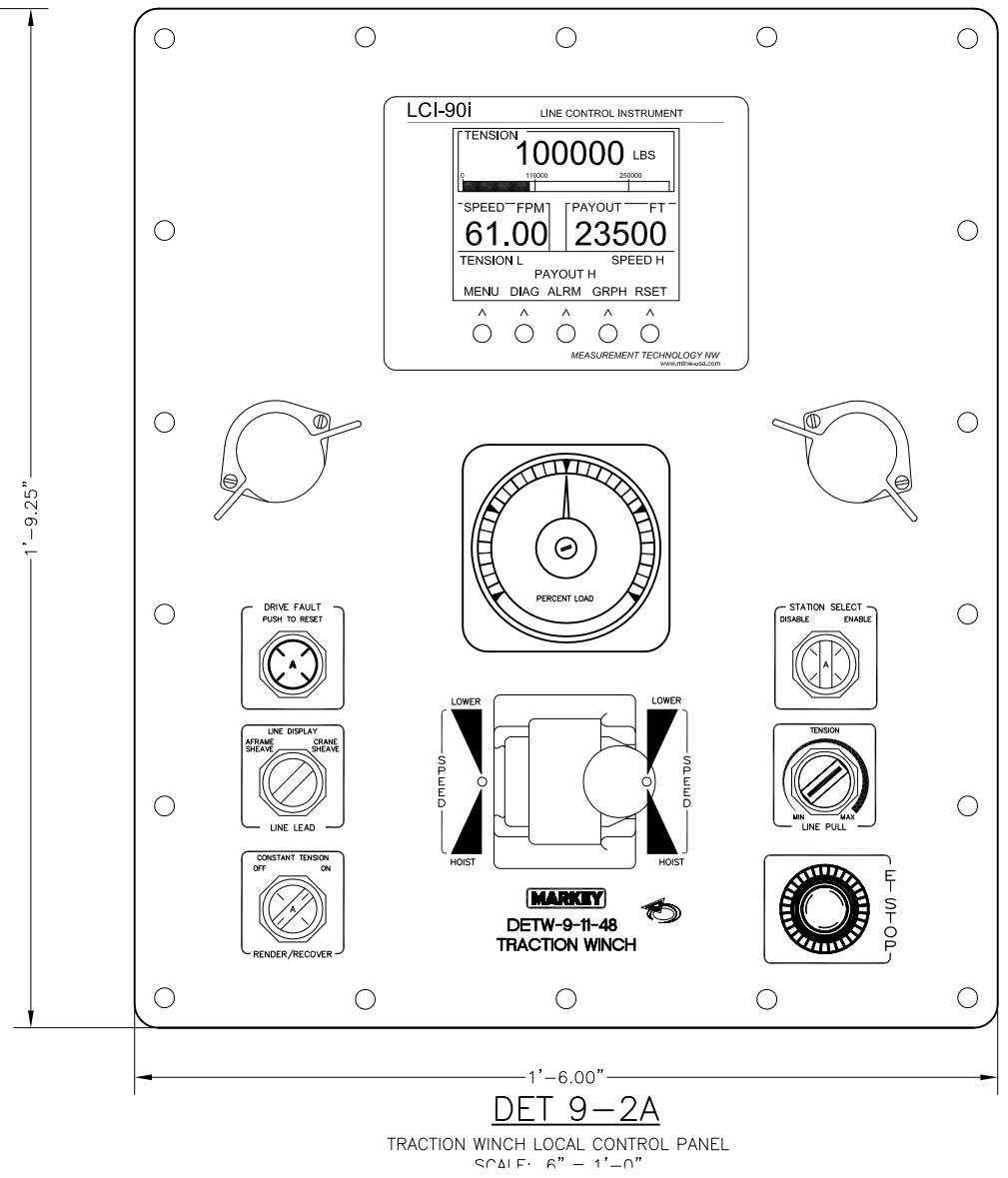
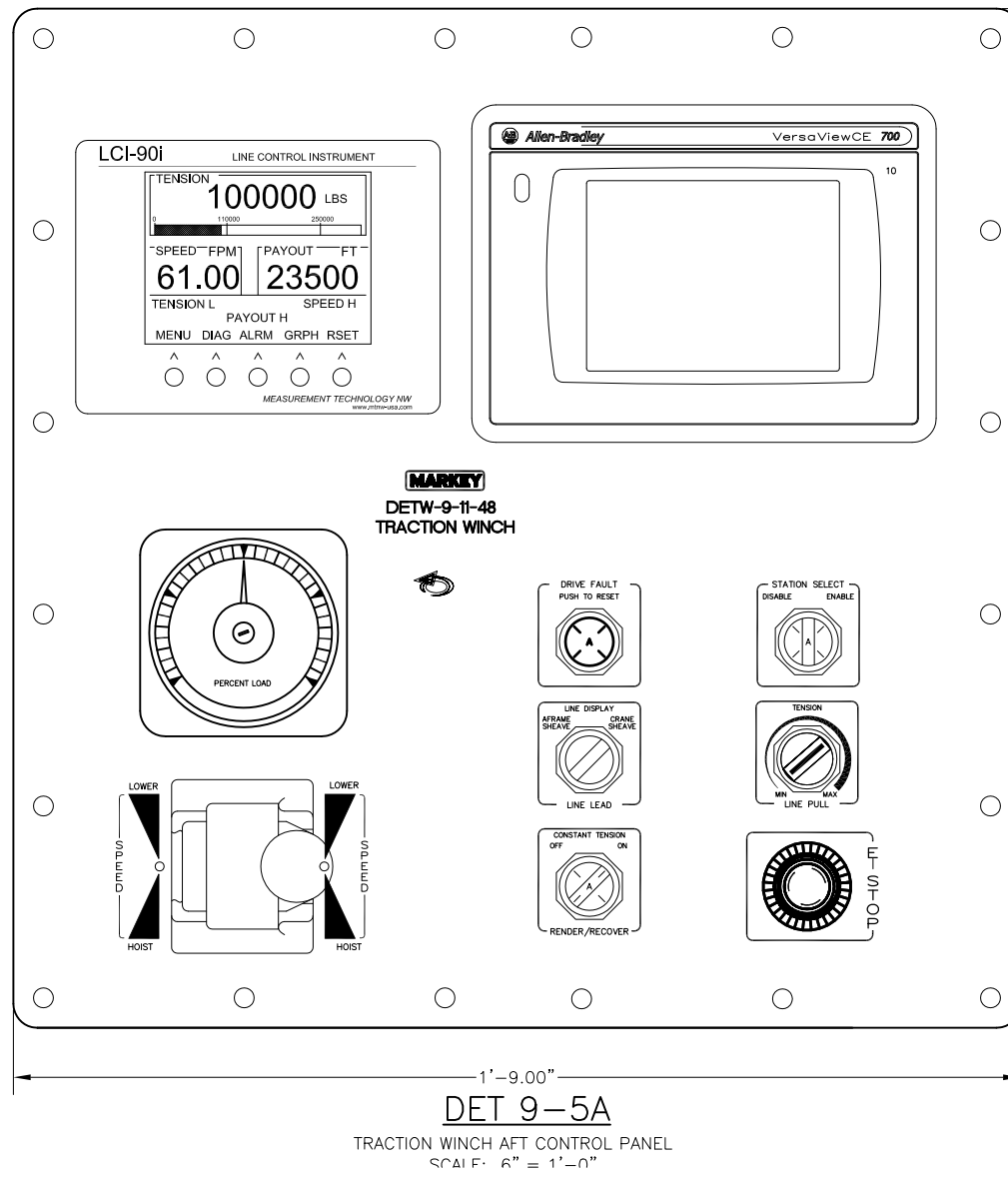


DET 8-2A
 CTD/SSH LOCAL CONTROL PANEL
 SCALE: 6" = 1'-0"

HALF SIZE PRINT

DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE AS NOTED
SHEET: 8 OF 9	

PLOT DATE: Thursday, December 01, 2011
 PLOT TIME: 10:28:48 pm
 PLOT DIR: \\XMIT\11201\NAVSEA DR1 DRAWINGS\DCI 027-19 F57301 REV- HANDLING SYSTEMS ARRANGEMENTS\
 FILE NAME: DCI 027-19 F573-01 REV-DWG



HALF SIZE PRINT

DESIGNER GUIDO PERLA & ASSOCIATES, Inc.	TITLE SHIP CONSTRUCTION HANDLING SYSTEMS ARRGMT.
SHIPBUILDER DAKOTA CREEK INDUSTRIES, Inc.	DWG No. 65411-573-01
NAVSEA DWG No. 8565924	SCALE 6" = 1'-0"
	SHEET: 9 OF 9