

8

7

6

5

4

3

DWG NO360B-WMSM-551-001SH1REV B

1

SHEET REVISION STATUS AND TITLE INDEX

SH	REV	TITLE
1	B	TITLE SHEET, SYMBOL LIST, ABBREVIATIONS, AND NOTES
1A	B	MATERIAL SCHEDULE AND MATERIAL TABLE
2	B	EQUIPMENT AND FITTING LIST
3	B	STARTING AIR BELOW 1ST PLATFORM, 68-142
4	B	CONTROL AIR BELOW 1ST PLATFORM, FR 68-142
5	B	SERVICE AIR BELOW MAIN DECK, FR 115-155
6	B	SERVICE AIR BELOW MAIN DECK, FR 88-115
7	B	SERVICE AIR BELOW MAIN DECK, FR 68-88
8	B	SERVICE AIR BELOW 1ST PLATFORM, FR 42-68
9	B	SERVICE AIR BELOW MAIN DECK, FR 7-42
10	B	SERVICE AIR ABOVE 1ST PLATFORM, FR 142-204
11	B	SERVICE AIR MAIN DECK TO 01 DECK, FR 88-194
12	B	SERVICE AIR MAIN DECK TO 01 DECK, FR 7-68
13	B	SERVICE AIR 01 DECK TO 02 DECK, 115-155
14	B	SERVICE AIR 01 DECK TO 02 DECK, FR 34-88
15	B	SERVICE AIR 02 DECK TO 04 DECK, FR 54-88
16	B	DECK PLAN SERVICE AIR 03 LEVEL FR 46-88
17	B	DECK PLAN SERVICE AIR 02 LEVEL FR 38-88
18	B	DECK PLAN SERVICE AIR 01 LEVEL FR 88-149
19	B	DECK PLAN SERVICE AIR 01 LEVEL FR 31-88
20	B	DECK PLAN SERVICE AIR MAIN DECK FR 142-195
21	B	DECK PLAN SERVICE AIR MAIN DECK FR 69-120
22	B	DECK PLAN SERVICE AIR MAIN DECK FR 13-69
23	B	DECK PLAN SERVICE AIR FIRST PLATFORM FR 140-199
24	B	DECK PLAN SERVICE AIR FIRST PLATFORM FR 68-120
25	B	DECK PLAN START AIR FIRST PLATFORM FR 86-142
26	B	DECK PLAN START AND CONTROL AIR INNER BOTTOM FR 88-141
27	B	DECK PLAN CONTROL AIR INNER BOTTOM FR 53-88
28	B	DECK PLAN SERVICE AIR INNER BOTTOM FR 88-157
29	B	DECK PLAN SERVICE AIR INNER BOTTOM FR 14-88

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	GLOBE VALVE		PRESSURE REDUCING VALVE
	GLOBE VALVE - LOCKED CLOSED		AUTOMATIC DRAIN VALVE
	GLOBE VALVE - LOCKED OPEN		ELECTROMAGNETIC AND MANUAL STARTING VALVE
	STOP CHECK GLOBE VALVE		TWO WAY SOLENOID VALVE - POSITION INDICATION
	STOP CHECK GLOBE VALVE - LOCKED CLOSED		BALL VALVE
	STOP CHECK GLOBE VALVE - LOCKED OPEN		DRYER WITH MOISTURE SEPARATOR
	LIFT CHECK VALVE		MOISTURE SEPARATOR
	BALL VALVE - LOCKED CLOSED		TWO WAY SOLENOID VALVE
	NEEDLE VALVE		FLEXIBLE HOSE
	NEEDLE VALVE WITH STEM TEST CONNECTION		QUICK DISCONNECT HOSE CONNECTION
	NEEDLE VALVE WITH STEM TEST CONNECTION- LOCKED OPEN		HOSE CONNECTION C/W CAP AND KEEP CHAIN
	PRIORITY VALVE - SEE NOTE 9		FLANGE
	PRESSURE REDUCING DIAPHRAM VALVE		AIR COMPRESSOR
	PRESSURE RELIEF VALVE		FILTER, COALESCING
	ALARM, LOW PRESSURE		MECHANICAL DIFFERENTIAL PRESS. INDICATOR, INC. TELLTALE
	GAUGE, PRESSURE, LOCAL READING		LUBRICATOR
	THERMOMETER, LOCAL READING, W/THERMOWELL-SEE NOTE 15		REDUCER
	PRESSURE OPERATED SWITCH		MOISTURE SEPARATOR WITH FILTER
	DEW POINT MONITOR		AUTOMATIC DRAIN

GENERAL NOTES (CONTINUED)

TESTING:

6.1 THE STARTING AIR SYSTEM IS TO BE HYDROSTATICALLY TESTED TO 135% OF MAXIMUM WORKING PRESSURE OR 765 PSI (CLASS II).

6.2 THE SERVICE AIR AND CONTROL AIR SYSTEMS ARE TO BE HYDROSTATICALLY TESTED TO 135% OF THE MAXIMUM WORKING PRESSURE OR 190 PSI.

6.3 FOLLOWING THE HYDROSTATIC PRESSURE TEST, THE SYSTEMS SHALL BE DRAINED AND THOROUGHLY DRIED BY BLOWING OUT WITH CLEAN DRY AIR. THE SYSTEMS ARE THEN TO BE TIGHTNESS TESTED WITH DRY AIR (550 PSI FOR STARTING AIR, 125 PSI FOR SERVICE AND CONTROL AIR.

INSTALLATION

7.1 PER ABS NVR 5-2-10/2.3, THE COMPRESSOR INTAKE AIR TERMINAL SHALL BE LOCATED BETWEEN 6" & 18" FROM A VENTILATION AIR TERMINAL.

7.2 PIPE ROUTING IS INDICATIVE ONLY AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF NVR SECTIONS 5-1-1A/5.3 AND 5-1-1B/5.3 (ELECTRICAL EQUIPMENT PROTECTION). PER ABS NVR 5-2-10 3.1, PIPING SHALL BE ARRANGED TO ELIMINATE POCKETS WHERE MOISTURE MAY COLLECT. WHERE POCKETS OR LOW POINTS IN AIR PIPING ARE UNAVOIDABLE, DRAINS WILL BE INSTALLED AT LOW POINTS.

7.3 DEAD END PIPING SHALL BE KEPT TO A MINIMUM.

7.4 DRAIN LINE TERMINALS ON MOISTURE SEPARATORS AND RECEIVERS SHALL BE LOCATED SO THAT THE DISCHARGE IS CLEARLY VISIBLE TO THE OPERATOR OF THE DRAINAGE VALVE.

7.5 DISTANCE FROM FINAL STARTING AIR REDUCING STATIONS TO THE ENGINES THEY SERVE IS TO BE KEPT TO A MINIMUM BUT TO BE AT LEAST 5M.

7.6 PER ABS NVR 5-2-10 3.8, DISCHARGE PIPING FROM RELIEF VALVES WILL BE DIRECTED SO AS TO NOT DAMAGE MACHINERY OR EQUIPMENT OR TO ENDANGER PERSONNEL.

7.7 ISOLATION GASKETS TO BE PROVIDED AT MATERIAL TRANSITIONS.

7.8 PNEUMATIC AIR OUTLETS LOCATED IN THE WEATHER SHALL BE PROTECTED BY WEATHERPROOF ENCLOSURES

7.9 AN EXPANDED METAL CAGE SHALL BE INSTALLED AROUND BOTH THE MOISTURE SEPARATOR/FILTER AND COALESCING FILTER ON THE SHORE SUPPLY LINE.

INSTRUMENTATION:

8. STARTING AIR SYSTEM SHALL BE IN ACCORDANCE WITH NVR 5-2-10/15 AS MODIFIED FOR THIS PROJECT:

8.1 FOR SSDGS THE AUTOMATIC STARTING AIR VALVES SHALL BE ACTUATED BY ONE OR MORE SOLENOID VALVES, AS NECESSARY. THE SOLENOID VALVES SHALL BE ARRANGED TO OPEN THE AUTOMATIC AIR STARTING VALVE TO ALIGN WITH THE REQUIREMENTS OF THE POWER MANAGEMENT SYSTEM, REFER TO REFERENCES 7 AND 8 FOR DETAILS.

8.2 FOR SSDGS, TO INDICATE THAT ALL MANUALLY-OPERATED VALVES ARE SET UP FOR AUTOMATIC OPERATION, ALL CUTOUT VALVES, EXCEPT THE BYPASS VALVE AROUND THE REDUCING VALVE, SHALL BE INSTALLED WITH A SWITCH CONNECTED TO GREEN INDICATOR LIGHTS, INSTALLED ON BOTH THE SWITCHBOARD ASSOCIATED WITH THE DIESEL GENERATOR AND ON THE ELECTRIC PLANT SECTION OF THE MAIN CONTROL CONSOLE, INDICATING THAT THE VALVES ARE IN THE OPEN POSITION.

9. COMPRESSOR OPERATION SHALL BE FULLY AUTOMATIC. THE COMPRESSOR'S CONTROLLER SHALL PROVIDE LOCAL DISPLAY OF KEY PARAMETERS AND SEND REMOTE DISPLAY OF THE SAME KEY PARAMETERS TO THE MPCMS. AIR RECEIVER LOW PRESSURE ALARMS SHALL BE PROVIDED AUDIBLY AND VISUALLY LOCALLY AND REMOTELY AT THE PROPULSION CONTROL CONSOLE.

10. IN ACCORDANCE WITH NVR 5-2-10 10.4 A TWO-STEP MANUAL RETURN SWITCH, UTILIZING A "PULL-OUT TO THROW" SAFETY INTERLOCK FEATURE, SHALL BE USED FOR CONTROL OF ALL SOLENOID VALVES IN AIR SYSTEMS.

11. ALL ELECTRICALLY ACTUATED VALVES SHALL BE PROVIDED WITH MEANS FOR OVERRIDING THE ACTUATOR OF THE VALVES MANUALLY. CONTROL VALVE SHALL BE INSTALLED IN THE COMPRESSED AIR STARTING SYSTEM TO PRECLUDE THE INITIATION OF THE AUTOMATIC STARTING SEQUENCE WHEN THE GENERATOR ENGINE IS RUNNING. THE CONTROL VALVE MAY BE ACTIVATED BY ENGINE FUEL, LUBRICATING OIL, OR COOLING WATER PRESSURE. (NVR 5-2-10/15.1.5) THE AUTOMATIC STARTING AIR VALVE FOR THE GENERATORS SHALL BE PROVIDED BY THE ENGINE VENDOR, AND SHALL BE ARRANGED WITH MANUAL STARTING OVERRIDE TO MEET INTENT OF NVR 5-2-10/15.1.2.

GENERAL NOTES

SYSTEM REQUIREMENTS

1. THE COMPRESSED AIR SYSTEM CONSISTS OF:

1.1 STARTING AIR SYSTEM - THE STARTING AIR SYSTEM IS A MEDIUM PRESSURE SYSTEM. IT OPERATES AT 550 PSI AND IS USED FOR STARTING THE 2 MAIN PROPULSION DIESEL ENGINES AND THE 4 SHIP SERVICE DIESEL GENERATOR ENGINES.

1.2 SERVICE AIR SYSTEM - THIS SYSTEM IS A LOW PRESSURE SYSTEM OPERATES AT 125 PSI. IT IS DIVIDED INTO A "VITAL" SYSTEM AND A "NON-VITAL SYSTEM". IT PROVIDES ALL THE SERVICE AIR REQUIRED THROUGHOUT THE VESSEL, INCLUDING AIR NEEDED FOR EQUIPMENT, FOR OPERATING HAND TOOLS, FOR SEA CHEST BLOW OUTS.

1.3 CONTROL AIR SYSTEM - THIS SYSTEM FEED OF THE SERVICE AIR SYSTEM. IT IS A 125 PSI SYSTEM ALSO. THE AIR IS DRIED TO A DEW POINT OF -40 DEGREE F. THIS AIR IS USED FOR INSTRUMENTS AND CONTROLS THAT REQUIRE SMALL FLOW DRY AIR.

1.4 VALVES WITH THIS NOTE REQUIRE PERMANENT ACCESS AT DECK LEVEL OR BY PERMANENT STANDING ELEVATED SURFACE. IF SUCH IS NOT PRACTICAL, ACCESS BY STAIR IS ACCEPTABLE.

TECHNICAL INFORMATION

2. THE STARTING AIR SYSTEM:

2.1 THE STARTING AIR SYSTEM CONSISTS OF 2 STARTING AIR COMPRESSORS AND 3 STARTING AIR RECEIVERS. 1 AIR COMPRESSOR AND 1 AIR RECEIVER ARE IN THE AFT ENGINE ROOM, 1 AIR COMPRESSOR AND 1 AIR RECEIVER ARE IN THE SSDG ROOM. THE THIRD AIR RECEIVER IS LOCATED IN THE FWD ENGINE ROOM.

2.2 EACH AIR RECEIVER IF SUPPLIED BY A 1" STARTING AIR MAIN THAT RUNS FROM THE AFT ENGINE ROOM THRU TO THE FWD SSDG ROOM.

2.3 THE STARTING AIR SYSTEM IS OPERATING AT 550 PSI. THE RELIEF VALVES ON THE AIR RECEIVERS ARE SET AT 565 PSI. MPDES AND THE SSDGS REQUIRE PRESSURE REDUCING STATIONS BEFORE THE AIR ENTERS THE AIR STARTER.

3. THE SERVICE AIR SYSTEM:

3.1 AIR DEHYDRATORS SHALL BE PROVIDED FOR THE SHIP SERVICE AIR COMPRESSORS. THEY MUST PROVIDE AIR AT A DEW POINT OF 55 DEG F AT 125 LB./IN².

4. THE CONTROL AIR SYSTEM:

4.1 FOR CONTROL AIR: DEHYDRATORS SHALL MEET THE REQUIREMENTS OF 5-2-10/13.2.2 (DRY AIR), ALTHOUGH DESICCANT TYPE DEHYDRATORS MAY BE USED IN LIEU OF MEMBRANE TYPE. WHERE NECESSARY, ADDITIONAL DEHYDRATORS AND OTHER FILTRATION/SEPARATION EQUIPMENT SHALL BE PROVIDED TO MEET THE REQUIREMENTS OF THE CONTROL AIR CONSUMERS THEY SERVE. IN PARTICULAR, THE REQUIREMENTS OF THE CONTROL AIR FOR THE MPDES SHALL BE MET. THE DEHYDRATORS SHALL BE ACTIVELY MONITORED, THEY SHALL PRODUCE A GENERAL ALARM UPON FAULT TO MPCMS AND LOCAL GENERAL

5.1 PER ABS NVR 5-2-10/13.3.6, INSTALL LABEL PLATES NEAR SEA CHEST BLOWING NEEDLE VALVES INSCRIBED WITH THE WORDS " CAUTION - DO NOT PERMIT PRESSURE TO EXCEED 2.40 BAR, (2.46KG/CM2, 35PSI) WHEN BLOWING-OUT SEA CHEST. PER ABS NVR 5-2-10 13.3.6, OUTLETS FOR BLOWING OUT SEA CHESTS ARE TO BE LOCATED CENTRALLY SO THAT EACH OUTLET CAN SERVE AS MANY SEA CHESTS AS PRACTICABLE. FOR DETAILS OF CONNECTIONS TO SEA CHEST BLOW OUT REFER TO REFERENCE 9.

5.4 ABS NVR 5-2-10/13.3.3, EACH BLOW GUN HOSE CONNECTION SHALL BE PROVIDED WITH A HOSE AND BLOW GUN. THE BLOW GUN SHALL BE FITTED WITH AN ORIFICE DESIGNED TO LIMIT DISCHARGE PRESSURE TO 25 PSI.

ALL PNEUMATIC TOOL AIR OUTLETS SHALL BE EQUIPPED WITH METAL BOWL GUARDS AND UNION END FITTINGS IN ACCORDANCE WITH MIL-F-1183.

5.5 PER ABS NVR 5-2-10 13.1.3, PRIORITY VALVES WILL BE SIZED FOR THE CONNECTED LOAD OF THE VALVE PLUS 25 PERCENT.

5.6 IN ACCORDANCE WITH 5-2-10/3.2 COMPRESSED AIR LINES SERVING WATER MIST PROTECTED SPACES SHALL BE PROVIDED WITH CUTOUT VALVES OUTSIDE THE SPACE SERVED.

5.7 PIPING CONNECTIONS TO RESILIENTLY MOUNTED EQUIPMENT SHALL CONTAIN FLEXIBLE HOSE CONNECTIONS IN ACCORDANCE WITH TECHNICAL DIRECTIVE S6430-AE-TED-010.

5.8 IN ACCORDANCE WITH 5-2-10/3.4 AIR SYSTEMS SHALL BE PROVIDED WITH MEANS FOR BLEEDING DOWN FOR REPAIR PURPOSES. TO ACCOMPLISH THIS, GAUGE ISOLATION AND TEST VALVES SHALL BE IN ACCORDANCE WITH MIL-V-24578, FITTED WITH A UNION TYPE CONNECTION BETWEEN THE VALVE BODY AND BONNET AND WITH THE STEM ASSEMBLED FROM THE BOTTOM OF THE BONNET.

5.9 IN ACCORDANCE WITH 5-2-10/8 AIR RECEIVERS SHALL BE IN ACCORDANCE WITH ASME PRESSURE VESSEL TEST CODE REQUIREMENTS OR PREVIOUSLY APPROVED NAVAL TECHNICAL AUTHORITY DESIGN. AIR RECEIVERS MAY COMPLY WITH 46 CFR 54, OR ASME BOILER AND PRESSURE VESSEL CODE AS APPLICABLE

5.10 FILTERS FOR REDUCING STATIONS SHALL MEET THE FILTRATION REQUIREMENTS SPECIFIED IN MIL-V-24272 OR ISO 8573.1, CLASS 5 PARTICULATE. PRESSURE INSTRUMENT PROTECTIVE DEVICES (SNUBBERS) IN ACCORDANCE WITH MIL-S-2940 SHALL BE INSTALLED IN ALL INSTRUMENT PIPING SYSTEMS IN WHICH PRESSURE SPIKES OR CONTINUOUS PRESSURE PULSATIONS ARE EXPECTED. SNUBBERS SHALL BE INSTALLED BETWEEN THE INSTRUMENT ISOLATION VALVE AND THE INDIVIDUAL PRESSURE INSTRUMENT AS CLOSE TO THE PRESSURE INSTRUMENT AS POSSIBLE.

5.11 IN ACCORDANCE WITH 5-2-10/3.4 AIR SYSTEMS SHALL BE PROVIDED WITH MEANS FOR BLEEDING DOWN FOR REPAIR PURPOSES. TO ACCOMPLISH THIS, GAUGE ISOLATION AND TEST VALVES SHALL BE IN ACCORDANCE WITH MIL-V-24578, FITTED WITH A UNION TYPE CONNECTION BETWEEN THE VALVE BODY AND BONNET AND WITH THE STEM ASSEMBLED FROM THE BOTTOM OF THE BONNET.

5.12 A HOSE SHALL BE PROVIDED SO THAT IT CAN REACH ANY POINT ON A HELICOPTER FOR WHICH THE CUTTER IS CLASS 1 CERTIFIED; SPOTTED AT THE AIRCRAFT'S FARTHEST AFT PERMISSIBLE FLIGHT DECK SPOTTING POSITION.

5.13 MPDE STARTING AIR PROVIDED WITH FILTERS WITH 5.0 MICRON ELEMENTS TO MEET AT LEAST THE QUALITY REQUIREMENT OF ISO 8573-1:2010 [6:7:X]:

5.13.1 SOLID PARTICLES PARTICLE SIZE > 40 MICRONS

5.13.2 MAX. CONCENTRATION < 5 MG/M3

5.13.3 RESIDUAL WATER CONTENT < 0.5 G/M3

5.13.4 ADDITIONAL REQUIREMENTS ARE:

5.13.5 THE AIR MUST NOT CONTAIN ORGANIC OR INORGANIC SILICON COMPOUNDS.

5.13.6 THE LAYOUT OF THE STARTING AIR SYSTEM MUST ENSURE THAT NO CORROSION MAY OCCUR.

5.13.7 THE STARTING AIR SYSTEM AND THE RECEIVER MUST BE EQUIPPED WITH CONDENSATE DRAIN DEVICES.

5.13.8 BY MEANS OF DEVICES PROVIDED IN THE STARTING AIR SYSTEM AND VIA MAINTENANCE OF THE SYSTEM COMPONENTS, IT MUST BE ENSURED THAT ANY HAZARDOUS FORMATION OF AN EXPLOSIVE COMPRESSED AIR/LUBE OIL MIXTURE IS PREVENTED IN A SAFE MANNER.

5.14 MPDE CONTROL AIR PROVIDED WITH FILTERS WITH 0.5 MICRONS ELEMENTS TO MEET AT LEAST THE QUALITY REQUIREMENT OF ISO 8573-1:2010 [5:4:3].

5.15 WHERE NON-UNION SW GLOBE VALVES ARE UTILIZED, TAKE DOWN JOINTS ARE TO BE PROVIDED TO REMOVE THE VALVES FOR MAINTENANCE. TAKE DOWN JOINTS NEED NOT BE ON AN INDIVIDUAL VALVE BASIS, BUT MAY BE FOR A GROUP OF VALVES. (FOR EXAMPLE, THE HP REDUCING STATION OR SEACHEST BLOW DOWN ASSEMBLIES). THE VALVES WITHIN THE ASSEMBLY SHOULD BE GENERALLY ARRANGED IN THE SAME DIRECTION, AND IN A DIRECTION SUCH THAT WHEN THE ASSEMBLY IS PLACED ON A WORK BENCH, THE VALVE SEAT IS POSITIONED TO ALLOW IT TO BE LAPPED.

5.16 MPDE LOCAL INSTRUMENT PANEL HAS A STARTING AIR PRESSURE READOUT FROM PT1710 WHICH SENDS A 4-20MA SIGNAL THAT CONVERTS INTO A PRESSURE READOUT.

5.17 A SCBA SYSTEM IS A VENDOR PROVIDED SYSTEM AND IS CAPTURED ON OPC-640-01-5015 DAMAGE CONTROL STATIONS ARRANGEMENT.

5.18 A PROTECTIVE COVERING OF METAL LAGGING WILL BE APPLIED OVER UNINSULATED HOT SURFACES TO PROTECT PERSONNEL OR REDUCE RISK OF FIRE.

5.19 THE MPDE LOCAL INSTRUMENT PANEL (OR SACOS) DOES HAVE A STARTING AIR PRESSURE READOUT. THE PRESSURE TRANSMITTER (PT7170) SENDS A 4-20MA ANALOG SIGNAL, WHICH CONVERTS TO INTO A PRESSURE READING.

REVISIONS

REV	SH	ZONE	ITEM	DESCRIPTION	DATE	APPVL SIG & ORG
-				-DELETED 1 STARTING AIR COMPRESSOR. -DELETED 2 STARTING AIR RECEIVERS AND MADE 2 STARTING AIR RECEIVERS LARGER. -DELETED 2 STARTING AIR AFTERCOOLERS.	05/26/23	TIM GENTRY /s/
A	1	3-A	1	ADD GENERAL NOTE 5.16 USCG COMPLIANCE COMMENT 2	10/08/23	TIM GENTRY /s/
	1	1-C 66-B	2	RESERVATION 1 MODIFIED FINAL PIPE HOOKUP DEPENDENT ON VENDOR DATA USCG COMPLIANCE COMMENT 4		
	1	3-C	3	REVISE GENERAL NOTE 3.1 USCG DESIGN CONCERNS COMMENT 1		
	3 4,5,7, 8	23-B VAR	4	PRESSURE REDUCING VALVES REORIENTED TOWARDS CONSUMERS USCG DESIGN CONCERNS COMMENT 4		
	4 VAR	31-C VAR	5	LUBRICATORS REMOVED USCG DESIGN CONCERNS COMMENT 5		
	3 VAR	20-D VAR	6	VALVES MOVED CLOSER TO BOTH SIDES OF ALL WT BHDS OR ADDED USCG DESIGN CONCERNS COMMENT 6 USCG COMPLIANCE COMMENT 1		
	4	31-C	7	SPELLING CORRECTION ADMINISTRATIVE NOTES 2		
	1A	1-A	8	FIX ZONE NUMBERS LETTERS USCG COMPLIANCE COMMENT 2		

CONTINUED ON SHEET 1A-2

REFERENCE PLANS

NO.	TITLE	DRAWING NO.
8	ROLLS ROYCE DRAWING - CONTROL VALVE ASSEMBLY	314-315
7	GENERAL ARRANGEMENT DRAWING	360B-WMSM-070-001
6	POTABLE WATER SYSTEM DIAGRAM	360B-WMSM-532-001
5	FUEL OIL SYSTEM DIAGRAM	360B-WMSM-541-001
4	BILGE AND BALLAST SYSTEM DIAGRAM	360B-WMSM-529-001
3	CHILLED WATER SYSTEM DIAGRAM	360B-WMSM-532-003
2	MACHINERY SEA WATER COOLING SYSTEM	360B-WMSM-256-001
1	SEWAGE SYSTEM DIAGRAM	360B-WMSM-593-003

STINFO DESIGNATION

DISTRIBUTION STATEMENT F- FURTHER DISSEMINATION ONLY AS DIRECTED BY COMMANDANT (CG-9322) (28AUG2012) OR HIGHER COAST GUARD AUTHORITY.

WARNING-THIS DOCUMENT CONTAINS TECHNICAL DATA WHOSE EXPORT IS RESTRICTED BY THE ARMS EXPORT-CONTROL ACT (TITLE 22, U.S.C. SEC 2751, ET. SEQ.) OR THE EXPORT ADMINISTRATION ACT OF 1979, AS AMENDED, TITLE 50, U.S.C. APP 2401 ET. SEQ. VIOLATIONS OF THESE EXPORT LAWS ARE SUBJECT TO SEVERE CRIMINAL PENALTIES. DISSEMINATE IN ACCORDANCE WITH PROVISIONS OF DOD DIRECTIVE 5230.25. DESTRUCTION NOTICE-FOR UNCLASSIFIED, LIMITED DOCUMENTS, DESTROY BY ANY METHOD THAT WILL PREVENT DISCLOSURE OF CONTENTS OR RECONSTRUCTION OF THE DOCUMENT. DATA RIGHTS-UNLIMITED RIGHTS.

AUSTAL
100 AUSTAL WAY
MOBILE, AL 36602
PHONE: (251)445-8000
CONTRACT/PO NO.
70Z02322C93220001

UNITED STATES COAST GUARD
WASHINGTON, D.C. 20593
OFFICE OF NAVAL ENGINEERING
3600 FEET
WMSM
COMPRESSED AIR SYSTEM
DIAGRAM
TITLE SHEET

DESIGNED: G RICE 05/26/23
DRAWN: H LINDEMANN 05/26/23
CHECKED: T GENTRY 05/26/23
APPROVED: BRAD VICKERS 05/26/23

USCG APPROVAL MM/DD/YY
APPVL SIG /s/ APPVL AUTH

SIZE D 81340
SCALE: AS NOTED

USCG DRAWING NO.
360B-WMSM-551-001
REV B

SHEET: 1 OF 29

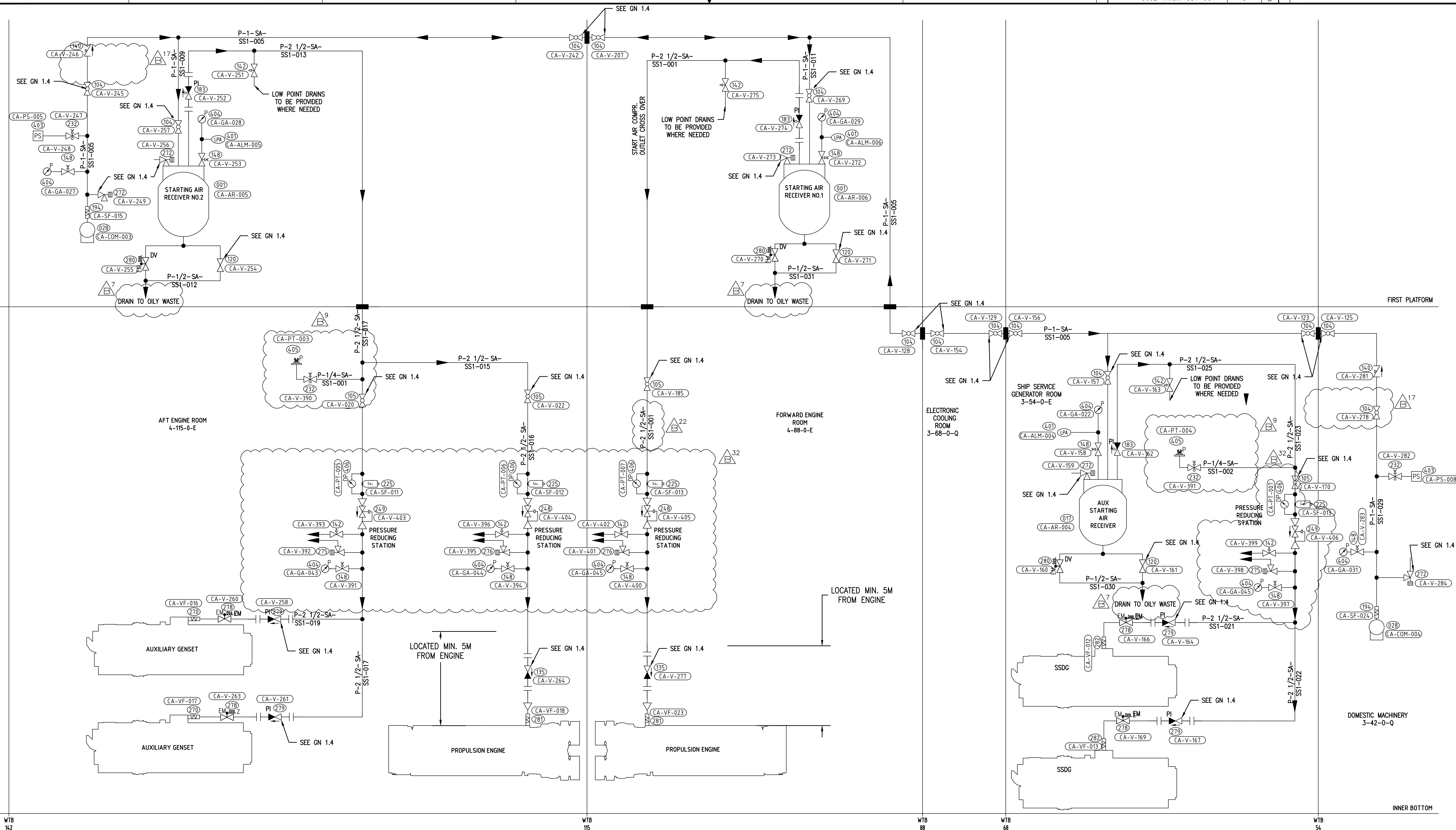
360B WMSM
PLAN SET

919 AF
HULLS

AUSTAL DRAWING NO.
OPC-551-01-5001

APPLICABILITY

16		15		14		13		12		11		DWG NO 360B-WMSM-551-001		SH 2		REV B		9	
MATERIALS LIST																		D	
ITEM NO	Count	IFS	TYPE	TYPE DESCRIPTION	SIZE (NPS)	MATERIAL	END CONNECTION	STANDARD	PRESSURE RATING	TEMPERATURE RATING	MANUFACTURER	MODEL	ADDITIONAL						
001	2	TBD	RECEIVER	STARTING AIR	200 US GAL	STEEL	300 LB FLANGED	COMMERCIAL	565 PSI	200 °F	TBD	TBD	START AIR RECIEVER						
002	2	TBD	AIR DEHYDRATOR	CONTROL AIR	2.4 SCFM @ 125 PSI	VARIOUS	NPT	COMMERCIAL	140 PSI	200 °F	TBD	TBD	CONTROL AIR LOW PRESSURE OUTLET AIR @ -40F DEWPOINT						
010	2	TBD	COMPRESSOR	LP AIR	51 SCFM @ 125 PSI	VARIOUS	150LB FLANGED	COMMERCIAL	140 PSI	200 °F	TBD	TBD							
015	2	TBD	AIR DEHYDRATOR	SERVICE AIR LOW PRESSURE OUTLET AIR @ 55F DEWPOINT	62 SCFM @ 125 PSI	MANUFACTURERS STD.	150LB FLANGED	COMMERCIAL	140 PSI	200 °F	TBD	TBD	SERVICE AIR LOW PRESSURE OUTLET AIR @ 55F DEWPOINT						
016	2	TBD	RECEIVER	LP AIR	95 US GAL	STEEL	150 LB FLANGED	COMMERCIAL	140 PSI	200 °F	TBD	TBD	SERVICE AIR RECEIVER						
017	1	TBD	RECEIVER	STARTING AIR	100 US GAL	STEEL	300 LB FLANGED	COMMERCIAL	565 PSI	200 °F	TBD	TBD	AUX. STARTING AIR RECEIVER						
018	1	TBD	RECEIVER	LP AIR	30 US GAL	STEEL	150 LB FLANGED	COMMERCIAL	140 PSI	200 °F	TBD	TBD	STERN TUBE AIR RECEIVER						
028	2	TBD	COMPRESSOR	STARTING AIR	22.2 SCFM @ 550 PSI	VARIOUS	300LB FLANGED	COMMERCIAL	565 PSI	200 °F	TBD	TBD							
100	90	192584	VALVE	BALL	1/4	CRES 316	SOCKET WELD	MSS SP-110	150 PSI	250 °F	Triac	F83-SW-0025-XXX							
101	6	193671	VALVE	BALL	3/8	CRES 316	SOCKET WELD	MSS SP-110	150 PSI	250 °F	Triac	F83-SW-0038-XXX							
102	34	192597	VALVE	BALL	1/2	CRES 316	SOCKET WELD	MSS SP-110	150 PSI	250 °F	Triac	F83-SW-0050-XXX							
103	30	192587	VALVE	BALL	3/4	CRES 316	SOCKET WELD	MSS SP-110	150 PSI	250 °F	Triac	F83-SW-0075-XXX							
104	63	192589	VALVE	BALL	1	CRES 316	SOCKET WELD	MSS SP-110	150 PSI	250 °F	Triac	F83-SW-0100-XXX							
105	4	193672	VALVE	BALL	2 1/2	CRES 316	SOCKET WELD	MSS SP-110	150 PSI	250 °F	Triac	F88-SW-0250-XXX							
116	5	192616	VALVE	BALL LOCKED CLOSED	1	NI-AL-BRZ	WAFER	MSS SP-68	225 PSI	250 °F	BRAY	"400400-11001A80/A006, 010250-21141007"							
120	6	TBD	VALVE	GLOBE	1/2	316LSS BODY AND TRIM	150 LB FLANGED	API 602	150 PSI (MIN.)	250 °F	TBD	TBD	GLOBE						
127	2	TBD	VALVE	GLOBE LOCKED CLOSED	3/4	316LSS BODY AND TRIM	150 LB FLANGED	API 602	800 PSI	250 °F	TBD	TBD	GLOBE LOCKED CLOSED						
130	4	TBD	VALVE	GLOBE STOP-CHECK	1/4	316LSS BODY AND TRIM	UNION SW ENDS	COMMERCIAL	150 PSI (MIN.)	250 °F	TBD	TBD	GLOBE STOP-CHECK						
132	2	TBD	VALVE	GLOBE STOP-CHECK	1/2	316LSS BODY AND TRIM	UNION SW ENDS	COMMERCIAL	150 PSI (MIN.)	250 °F	TBD	TBD	GLOBE STOP-CHECK						
134	1	TBD	VALVE	GLOBE STOP-CHECK	1	316LSS BODY AND TRIM	UNION SW ENDS	COMMERCIAL	150 PSI (MIN.)	250 °F	TBD	TBD	GLOBE STOP-CHECK						
135	2	TBD	VALVE	GLOBE STOP-CHECK	2 1/2	316LSS BODY AND TRIM	300 LB FLANGED	COMMERCIAL	550 PSI (MIN.)	250 °F	TBD	TBD	GLOBE STOP-CHECK						
140	9	192610	VALVE	LIFT-CHECK SPRING LOADED	1	BRONZE	SOCKET WELD	MSS SP-110	50 PSI	250 °F	PBM	SPN1E5U-G--L04							
142	35	192800	VALVE	NEEDLE	1/4	CRES 316	SOCKET WELD	COMMERCIAL	600 PSI	250 °F	DERBYSHIRE	M1156-1197							
148	40	TBD	VALVE	NEEDLE STEM CONNECTION	1/4	316LSS BODY AND TRIM	UNION SW ENDS	MIL-V-24578	6000 PSI	250 °F	TBD	TBD	NEEDLE STEM CONNECTION						
160	1	TBD	VALVE	PRESSURE REDUCING DIAPHRAM 125 PSI INLET 87 PSI OUTLET	1	BRONZE BODY 316LSS TRIM	UNION ENDS	MIL-V-24834	150 PSI	250 °F	FISCHER		PRESSURE REDUCING DIAPHRAM 125 PSI INLET 87 PSI OUTLET						
168	4	TBD	VALVE	SELF-ACTUATED PRESSURE RELIEF ANGLED SET @ 40 PSI	1	316LSS BODY AND TRIM	150# UNION SW	COMMERCIAL	150 PSI	120 °F	TBD	TBD	SET @ 40 PSI						
183	3	TBD	VALVE	STOP-CHECK GLOBE LOCKED OPEN POSITION INDICATOR	2 1/2	316LSS BODY AND TRIM	300 LB FLANGED	API 600	300 PSI	250 °F	TBD	TBD	STOP-CHECK GLOBE LOCKED OPEN POSITION INDICATOR						
190	4	TBD	HOSE	FLEXIBLE HOSE VENDOR FURNISHED	1/4	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	FLEXIBLE HOSE VENDOR FURNISHED						
191	1	TBD	HOSE	FLEXIBLE HOSE VENDOR FURNISHED	3/8	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	FLEXIBLE HOSE VENDOR FURNISHED						
194	2	TBD	HOSE	FLEXIBLE HOSE VENDOR FURNISHED	1	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	FLEXIBLE HOSE VENDOR FURNISHED						
224	4	TBD	FILTER	COALESCING FILTER	1	ALUMINUM BODY	THREADED	TBD	250 PSI	TBD	TBD	TBD	COALESCING FILTER						
225	4	194351	FILTER	FILTER W/ MOISTURE SEPARATOR	2 1/2	VARIOUS	TBD	TBD	TBD	TBD	PARKER HANNAFIN	MN85-8CVG							
226	3	TBD	LUBRICATOR	LUBRICATOR	TBD	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	LUBRICATOR						
232	8	192801	VALVE	NEEDLE STEM CONNECTION LOCKED OPEN	1/4	CRES 316	SOCKET WELD	COMMERCIAL	6000 PSI	250 °F	DERBY SHIRE	M1156-SPECIAL							
246	21	193709	REGULATOR	AIR PRESSURE FILTER (5 MICRON) - REGULATOR - LUBRICATOR	3/4	ALUMINUM BOWL	FPT	ASTM F1795	0-140 PSI	120 °F	INGERSOLL RAND	C38341-810	ADJUSTABLE - DRAIN INCLUDED						
247	7	193708	REGULATOR	AIR PRESSURE FILTER (5 MICRON) - REGULATOR	3/4	ALUMINUM BOWL	FPT	ASTM F1795	0-140 PSI	120 °F	INGERSOLL RAND	P39344-614	ADJUSTABLE - DRAIN INCLUDED						
248	2	193261	VALVE	MPDE PRESSURE REDUCING 2000 SCFM	1	SST BODY SST/NBR TRIM	300# FLANGED	MIL-V-24834	740 PSI	250 °F	FISHER	EZR 1270-8388905	SET @ 450 PSI						
249	2	193262	VALVE	MPDE PRESSURE REDUCING 1700 SCFM	1	SST BODY SST/NBR TRIM	300# FLANGED	MIL-V-24834	1050 PSI	120 °F	FISHER	EZR 1270-8388905	SET @ 125 PSI						
269	8	TBD	VALVE	PRIORITY UPSTREAM SHUTOFF	1 1/4	316LSS BODY AND TRIM	150# UNION SW	MIL-V-24384 TYP. III	150 PSI	120 °F	TBD	TBD	SET @ 85 PSI						
270	2	TBD	HOSE	VENDOR FURNISHED	TBD	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	VENDOR FURNISHED						
271	4	TBD	HOSE	VENDOR FURNISHED	TBD	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	VENDOR FURNISHED						
272	7	TBD	VALVE	SELF-ACTUATED PRESSURE RELIEF ANGLED SET AT 580 PSI	1	316LSS BODY AND TRIM	300# FLANGED	COMMERCIAL	600 PSI	120 °F	TBD	TBD	SET AT 580 PSI						
274	7	TBD	VALVE	SELF-ACTUATED PRESSURE RELIEF ANGLED SET AT 140 PSI	1	316LSS BODY AND TRIM	150# UNION SW	COMMERCIAL	150 PSI	120 °F	TBD	TBD	SET AT 140 PSI						
275	2	194350	VALVE	SELF-ACTUATED PRESSURE RELIEF ANGLED SET AT 150 PSI	1	316LSS BODY AND TRIM	150# UNION SW	COMMERCIAL	300 PSI	120 °F	KUNKLE	917BDEB06BKE0150	SET AT 150 PSI						
276	2	194349	VALVE	SELF-ACTUATED PRESSURE RELIEF ANGLED SET AT 470 PSI	1	316LSS BODY AND TRIM	300# FLANGED	COMMERCIAL	600 PSI	120 °F	KUNKLE	917BDEB06BKE0470	SET AT 470 PSI						
278	4	TBD	VALVE	TWO-WAY SOLENOID ELECTROMAGNETIC STARTING VF	1 1/2	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	MTU FURNISHED						
279	4	TBD	VALVE	GLOBE STOP-CHECK POSITION INDICATOR	2 1/2	316LSS BODY AND TRIM	300 LB FLANGED	COMMERCIAL	550 PSI (MIN.)	250 °F	TBD	TBD	GLOBE STOP-CHECK POSITION INDICATOR						
280	6	TBD	VALVE	TWO-WAY SOLENOID DRAIN VALVE	1/2	316LSS BODY AND TRIM	TBD	TBD	232 PSI	250 °F	TBD	TBD	TWO-WAY SOLENOID DRAIN VALVE						
281	2	TBD	HOSE	VENDOR FURNISHED (FMD)	TBD	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD							
282	2	TBD	HOSE	VENDOR FURNISHED (MTU)	TBD	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD							
400	2	TBD	MONITOR	DEW POINT MONITOR	TBD	VARIOUS	TBD	TBD	150 PSI	120 °F	TBD	TBD	DEW POINT MONITOR						
401	4	TBD	ALARM	LOW PRESSURE ALARM	1/4	VARIOUS	FPT	COMMERCIAL	150 PSI	120 °F	TBD	TBD	LOW PRESSURE ALARM						
403	4	TBD	SWITCH	PRESSURE SWITCH	1/4	VARIOUS	FPT	COMMERCIAL	150 PSI	120 °F	TBD	TBD	PRESSURE SWITCH						
404	40	TBD	GAUGE	PRESSURE LOCAL READING (0-150 PSI)	1/4	VARIOUS	MALE MPT	COMMERCIAL	150 PSI	140 °F	TBD	TBD	PRESSURE LOCAL READING (0-150 PSI)						
405	2	TBD	GAUGE	PRESSURE TRANSMITTER	1/2	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD	MTU FURNISHED						
406	4	TBD	GAUGE	DIFFERENTIAL PRESSURE	1/4	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD							
407	2	TBD	GAUGE	PRESSURE TRANSMITTER	1/2	VARIOUS	TBD	TBD	TBD	TBD	TBD	TBD							
A																		C	
B																			
C																			
D																			
EQUIPMENT AND FITTING LIST																		A	
360 WMSM																			
EQUIPMENT AND FITTING LIST																			
SIZE D		CAGE CODE 81340		USCG DRAWING NO. 360B-WMSM-551-001				REV B		SCALE: AS NOTED				SHEET: 2					
16		15		14		13		12		11		10		9					



360			WMSM		
COMPRESSED AIR SYSTEM					
DIAGRAM					
STARTING AIR BELOW 1ST PLATF FR 68-142					
SIZE	CAGE CODE	USCG DRAWING NO.			REV
D	81340	360B-WMSM-551-001			B
SCALE: AS NOTED				SHEET: 3	

FIRST PLATFORM

INNER BOTTOM

AFT ENGINE ROOM
4-115-0-EFORWARD ENGINE ROOM
4-88-0-EELECTRONIC COOLING ROOM
3-68-0-QSHIP SERVICE GENERATOR ROOM
3-54-0-E

SEACHEST NO.8 (P)

APM BRAKE CONTROL

BALLAST WATER TREATMENT

CONTROL (DRY) AIR MAIN

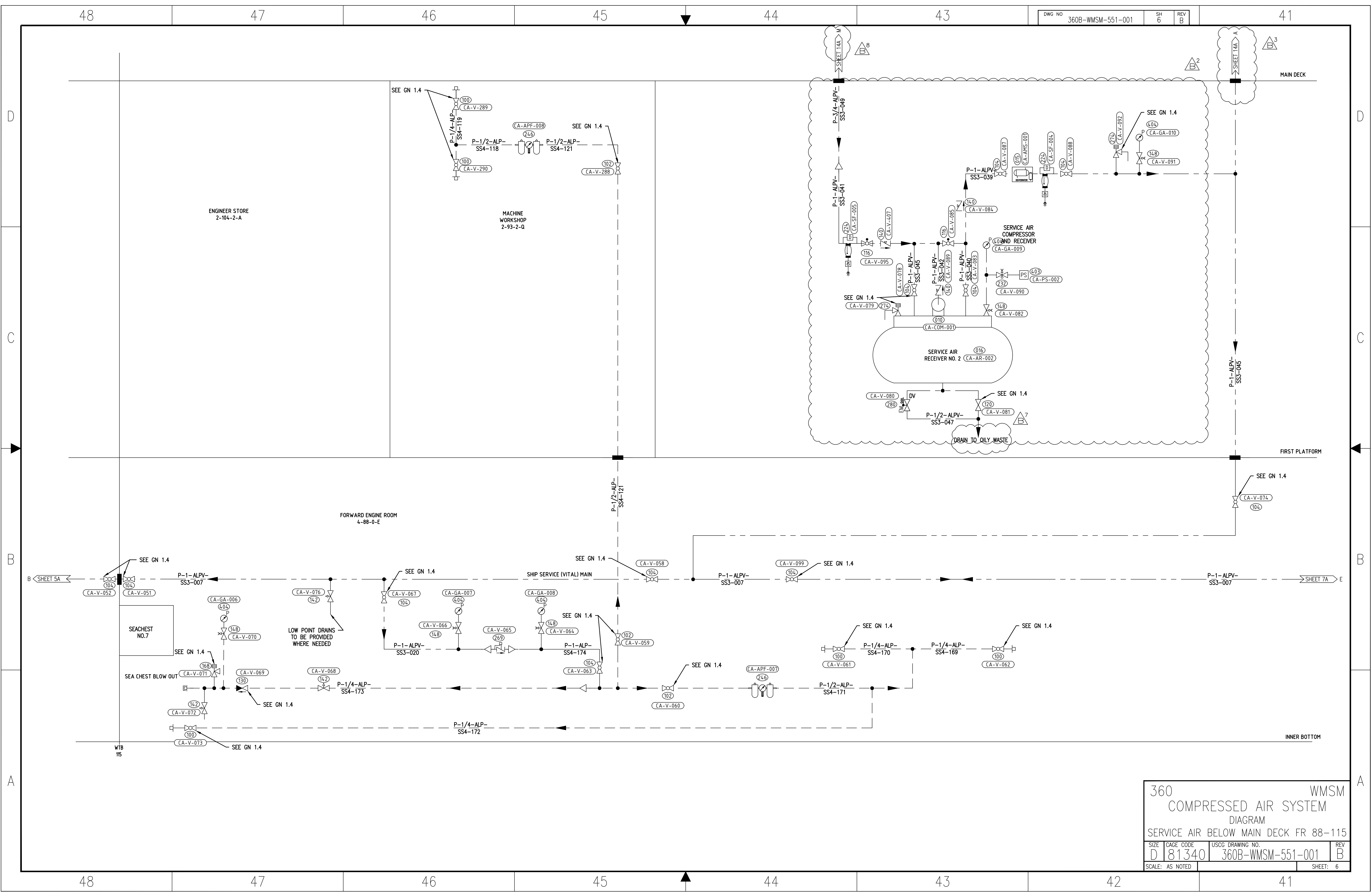
FUEL OIL PURIFIER

PROPULSION ENGINE

PROPULSION ENGINE

880 (DN6) APM
BRAKE CONTROLFROM SERVICE AIR SYSTEM
SHEET 8A < F

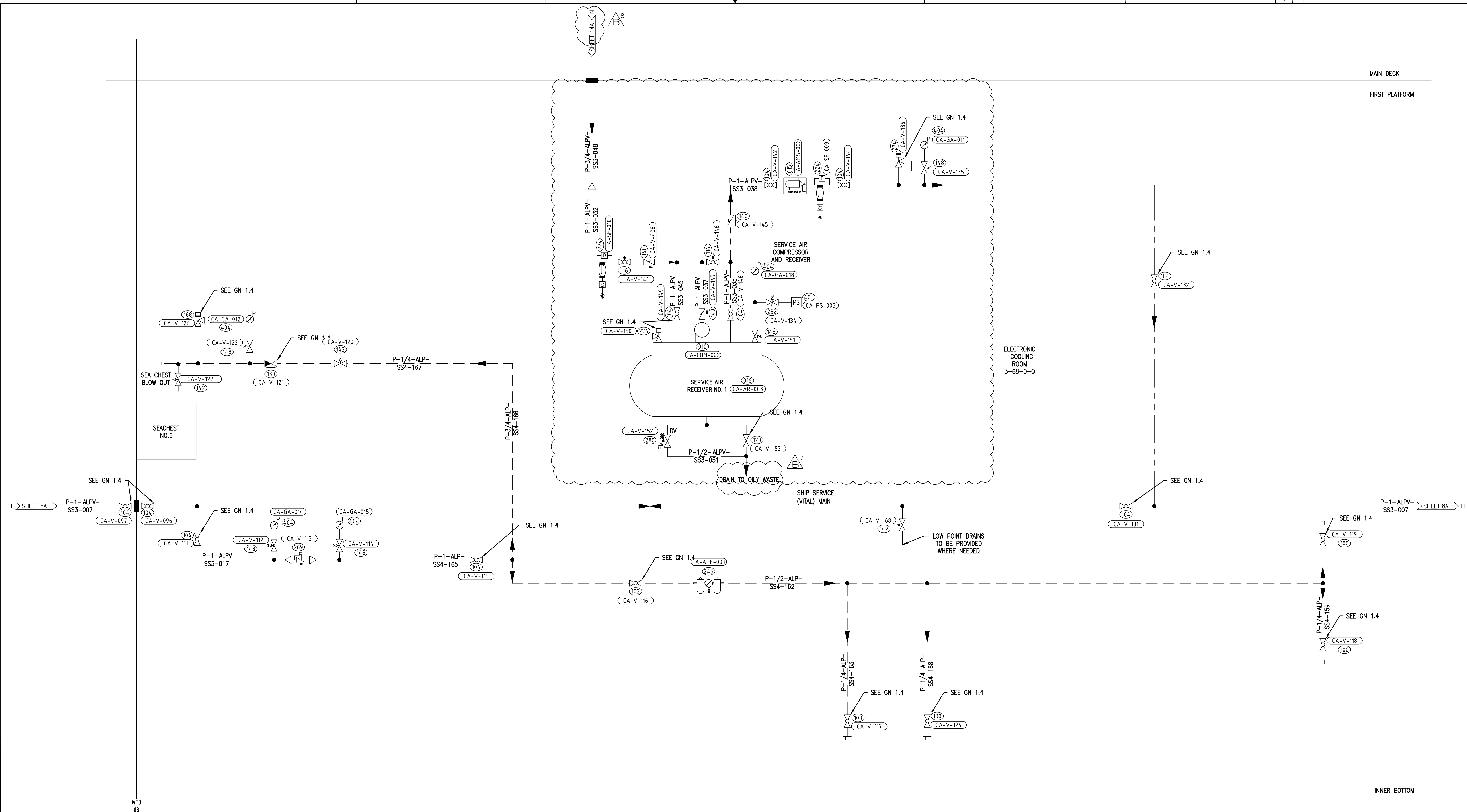
360			WMSM		
COMPRESSED AIR SYSTEM					
DIAGRAM					
CONTROL AIR BEL 1ST PLATF FR 68-142					
SIZE	CAGE CODE	USCG DRAWING NO.			REV
D	81340	360B-WMSM-551-001			B
SCALE: AS NOTED					SHEET: 4



MAIN DECK

FIRST PLATFORM

INNER BOTTOM



360			WMSM	
COMPRESSED AIR SYSTEM				
DIAGRAM				
SERVICE AIR BELOW MAIN DECK FR 68-88				
SIZE	CAGE CODE	USCG DRAWING NO.		REV
D	81340	360B-WMSM-551-001		B
SCALE: AS NOTED				SHEET: 7

FIRST PLATFORM

SEACHEST
NO.5
(P)

SHIP SERVICE
GENERATOR ROOM
3-54-0-E

TO CONTROL AIR
SYSTEM
F SHEET 4A

DOMESTIC MACHINERY
3-42-0-Q

EACHEST
NO.5
(S)

SEA CHEST BLOW OUT

LOW POINT DRAINS
TO BE PROVIDED
WHERE NEEDED

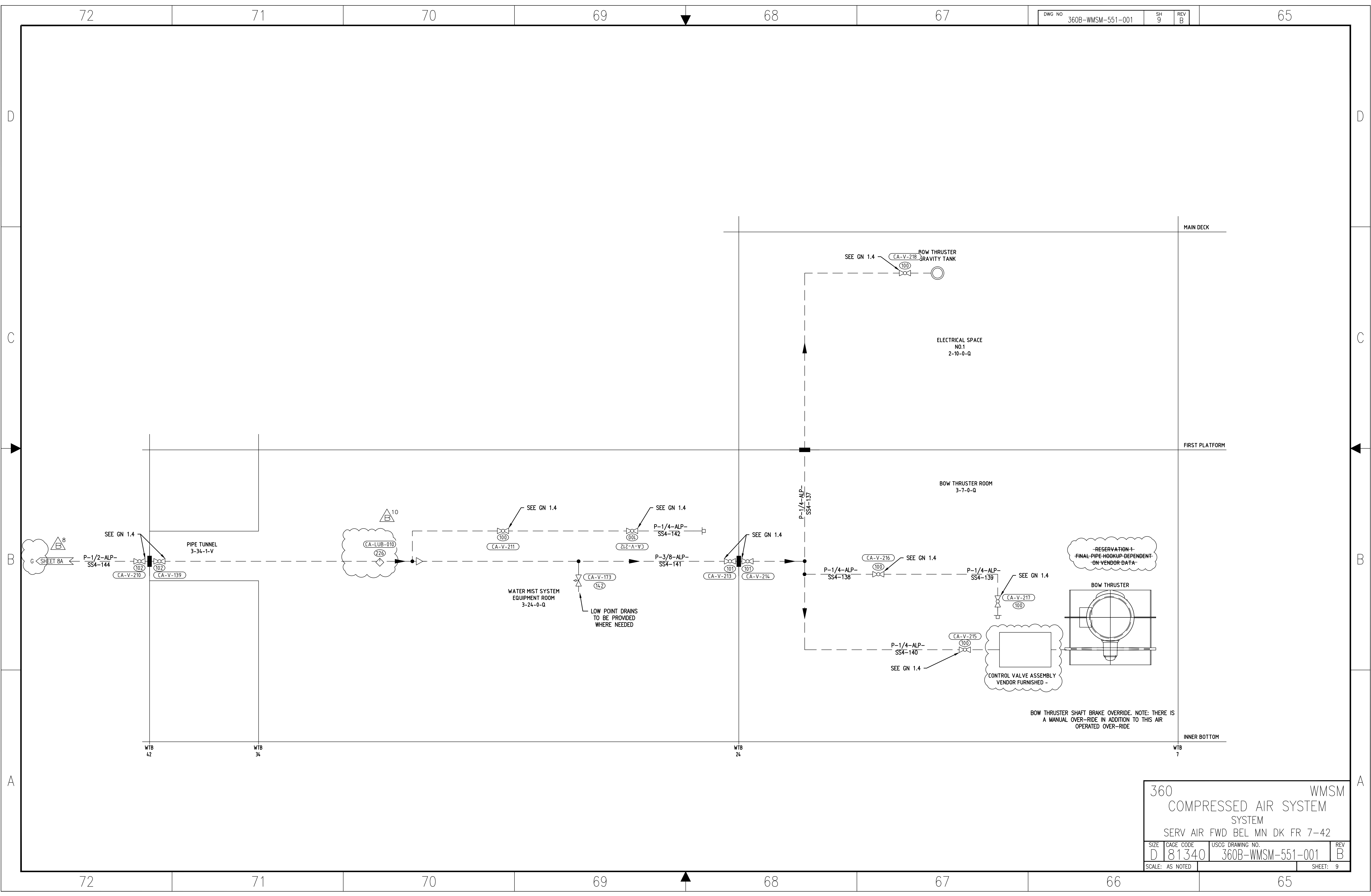
INNER BOTTOM

WTB
68

5

360 WMSM
COMPRESSED AIR SYSTEM
SYSTEM
SERV/START AIR BEL 1ST PLATF FR 42-68

SIZE D	CAGE CODE 81340	USCG DRAWING NO. 360B-WMSM-551-001	REV B
SCALE: AS NOTED		SHEET: 8	



02 LEVEL

01 LEVEL

WTB
155

WTB
142

WT
11

FLIGHT
DECK
01-145-0-X

HELICOPTER HANGER
01-115-0-Q

HELICOPTER SHOP AIR

SEE GN 1.4 .

 SEE GN 1.4

SEE GN 1.4

SEE GN 1.4

SEE GN 1.4

SEE GN 1.4 -

SEE GN 1.4

360	COMPRESSED AIR SYSTEM DIAGRAM	WMSM
SERV AIR 01 LVL TO 02 LVL FR 115-155		
SIZE: D	GAGE CODE: 81340	USCG DRAWING NO. 360B-WMSM-551-001
SCALE: AS NOTED		REV B SHEET: 13

104

103

102

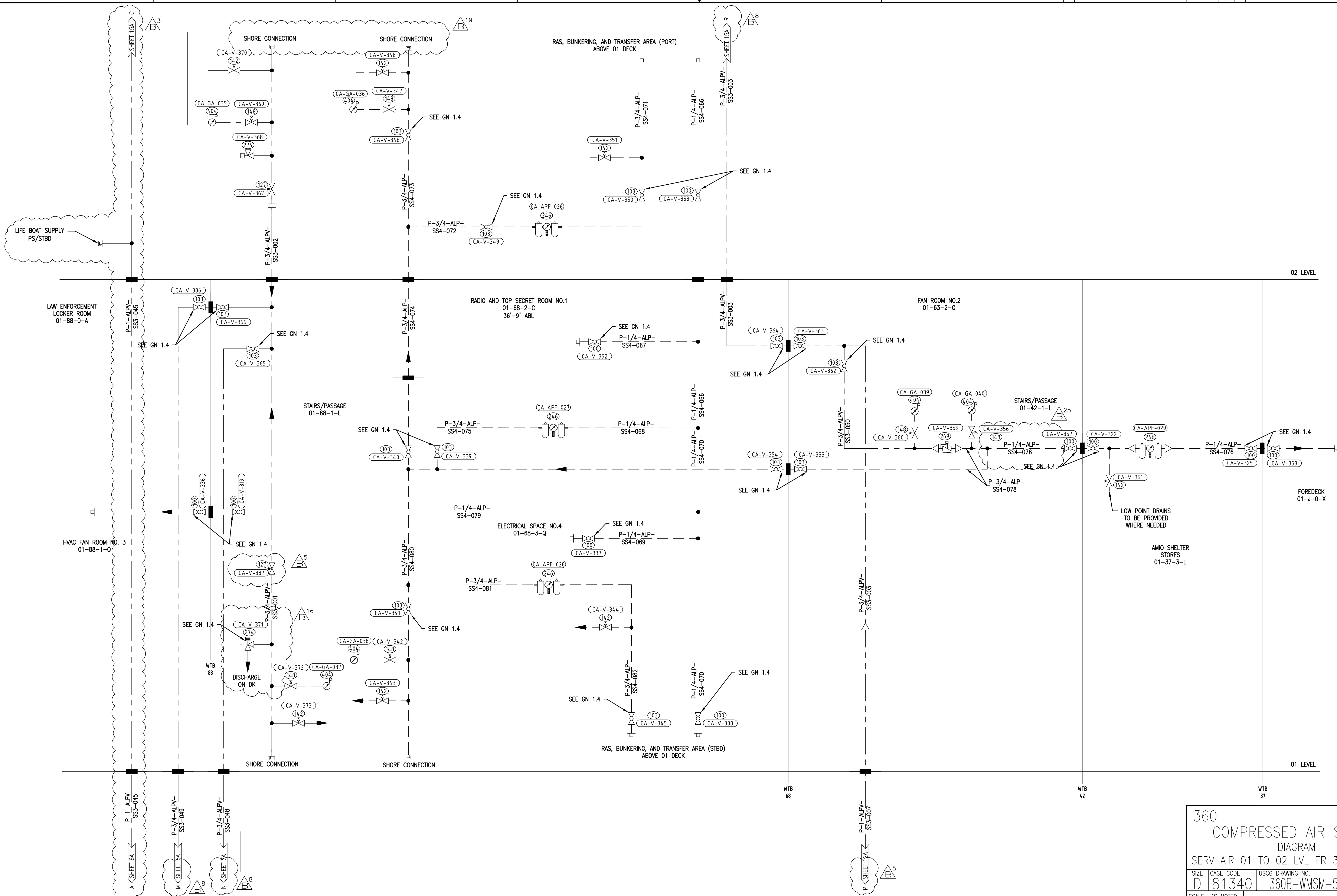
101

100

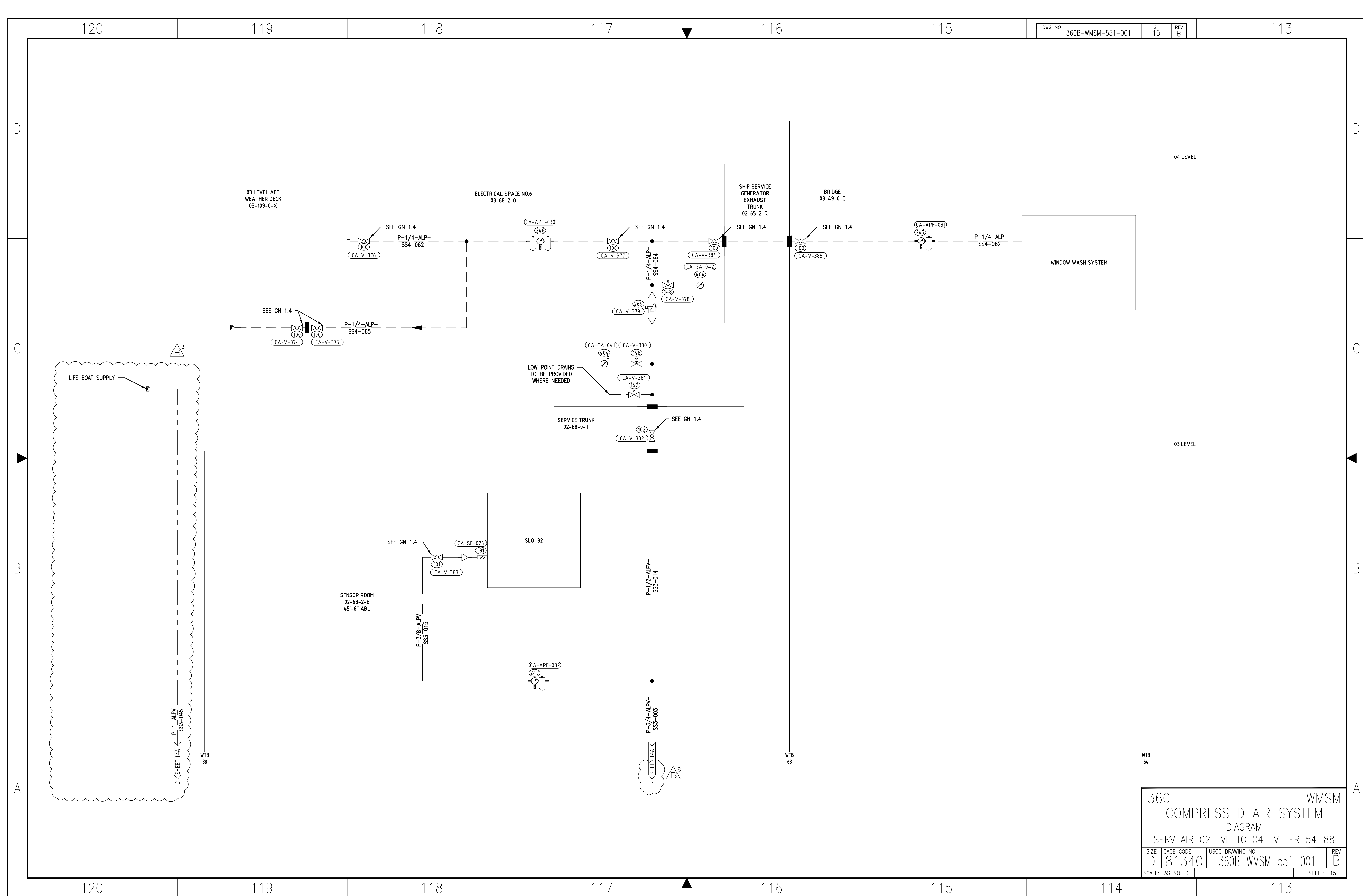
99

98

97



360			WMSM		
COMPRESSED AIR SYSTEM					
DIAGRAM					
SERV AIR 01 TO 02 LVL FR 34 AFT OF 88					
SIZE	CAGE CODE	USCG DRAWING NO.			REV
D	81340	360B-WMSM-551-001			B
SCALE: AS NOTED			SHEET: 14		



128

127

126

125

124

123

DWG NO 360B-WMSM-551-001

SH 16

REV B

121

D

C

B

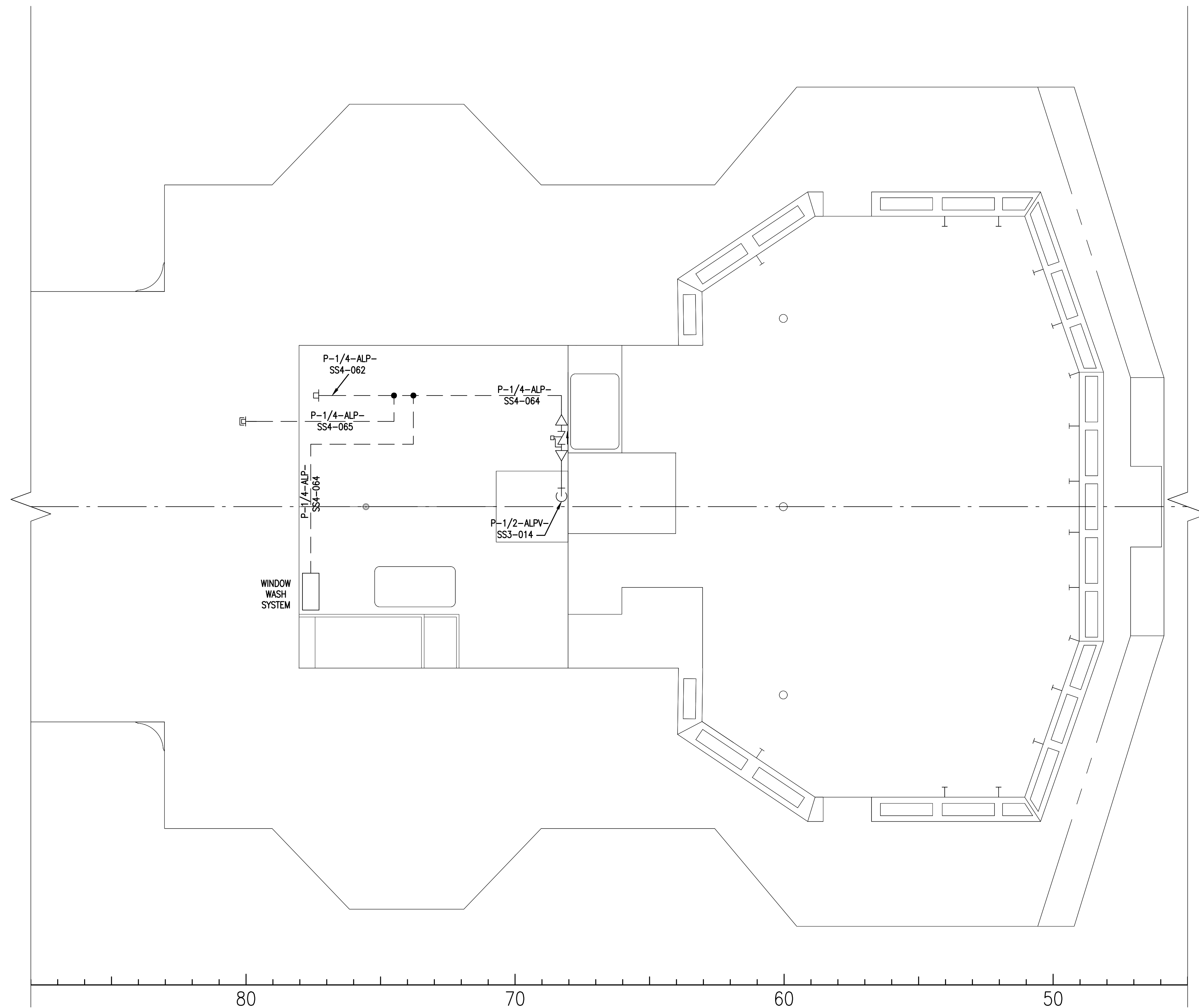
A

D

C

B

A



PLAN VIEW 124-A

SERVICE AIR
03 LEVEL
FRAMES 46-88
SCALE: 1/4" = 1'-0

COMPRESSED AIR DECK PLAN SERVICE AIR 03 LEVEL FR 46-88			
SIZE D	CAGE CODE 81340	USCG DRAWING NO. 360B-WMSM-551-001	REV B
SCALE: AS NOTED		SHEET: 16	

128

127

126

125

124

123

122

121

136

135

134

133

132

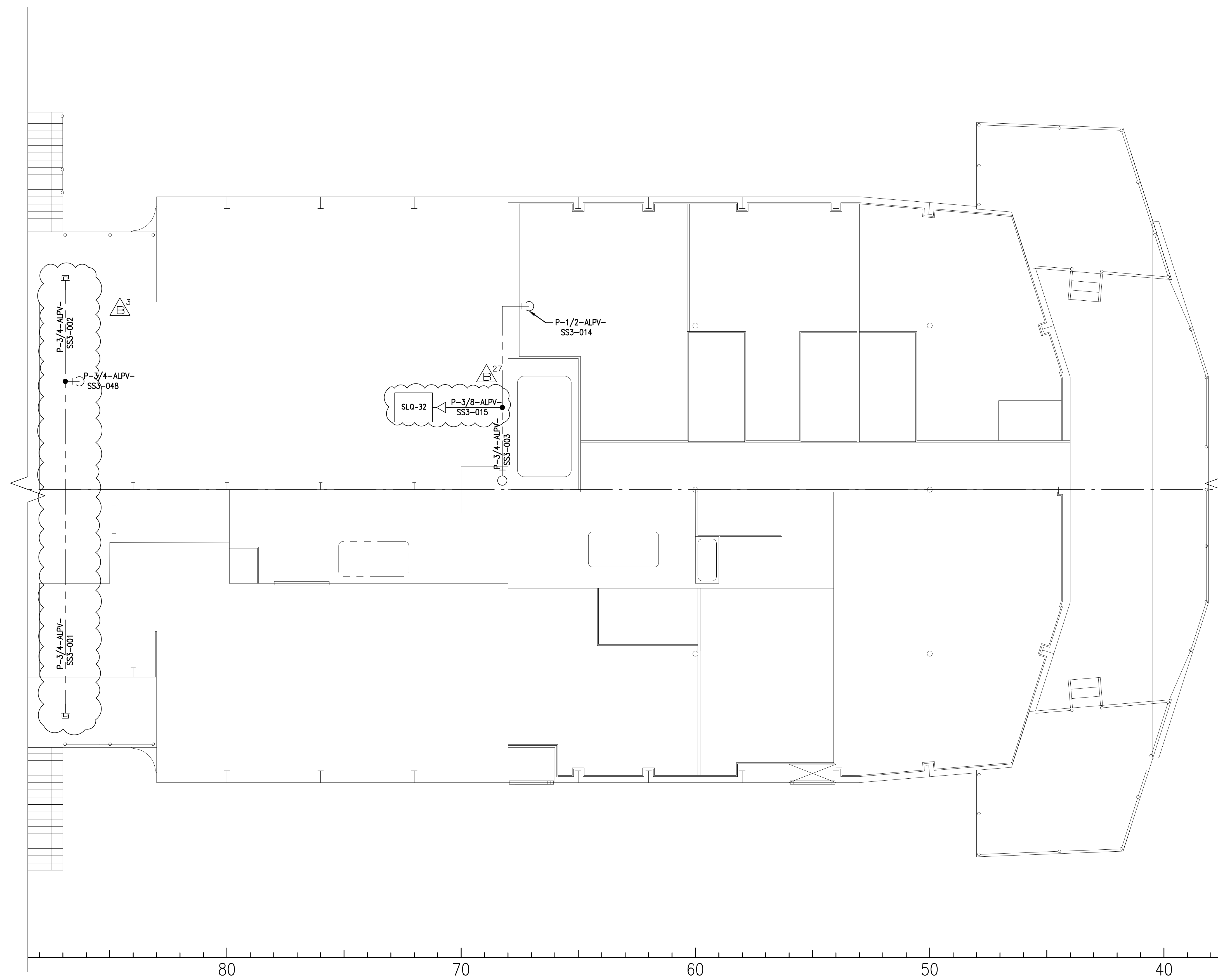
131

DWG NO
17

SH
17

REV
B

129



PLAN VIEW 132-A

SERVICE AIR
02 LEVEL
FRAMES 38-88
SCALE: 1/4" = 1'-0

COMPRESSED AIR DECK PLAN			
SERVICE AIR			
02 LEVEL			
FR 38-88			
SIZE D	CAGE CODE 81340	USCG DRAWING NO. 360B-WMSM-551-001	REV B
SCALE: AS NOTED		SHEET: 17	

136

135

134

133

132

131

130

129

144

143

142

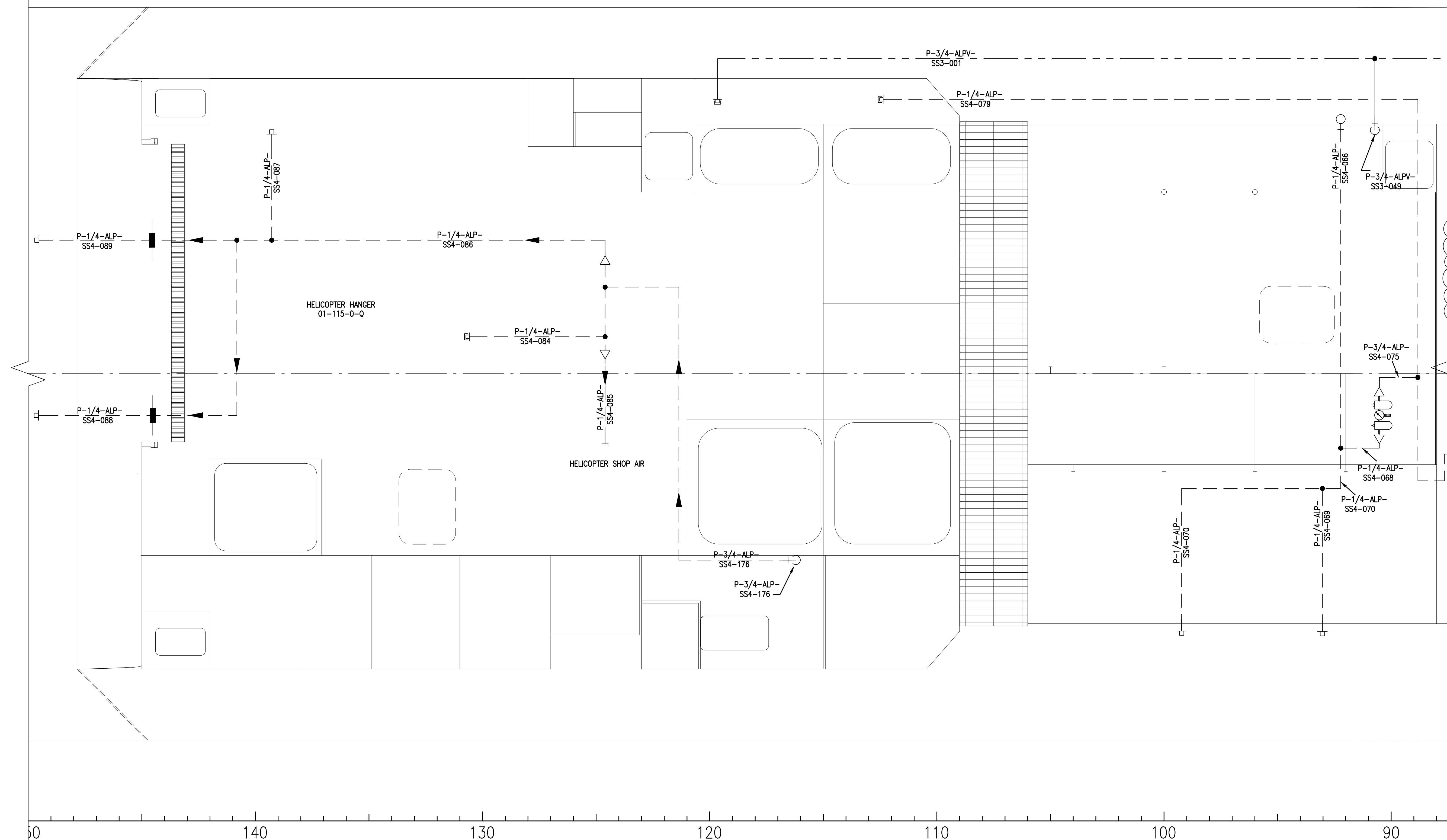
141

140

139

DWG NO
360B-WMSM-551-001SH
18REV
B

137



PLAN VIEW 140-A

SERVICE AIR
01 LEVEL
FRAMES 88-149
SCALE: 1/4" = 1'-0"

COMPRESSED AIR DECK PLAN
SERVICE AIR
01 LEVEL
FR 88-149

SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED		SHEET: 18	

144

143

142

141

140

139

138

137

152

151

150

149

148

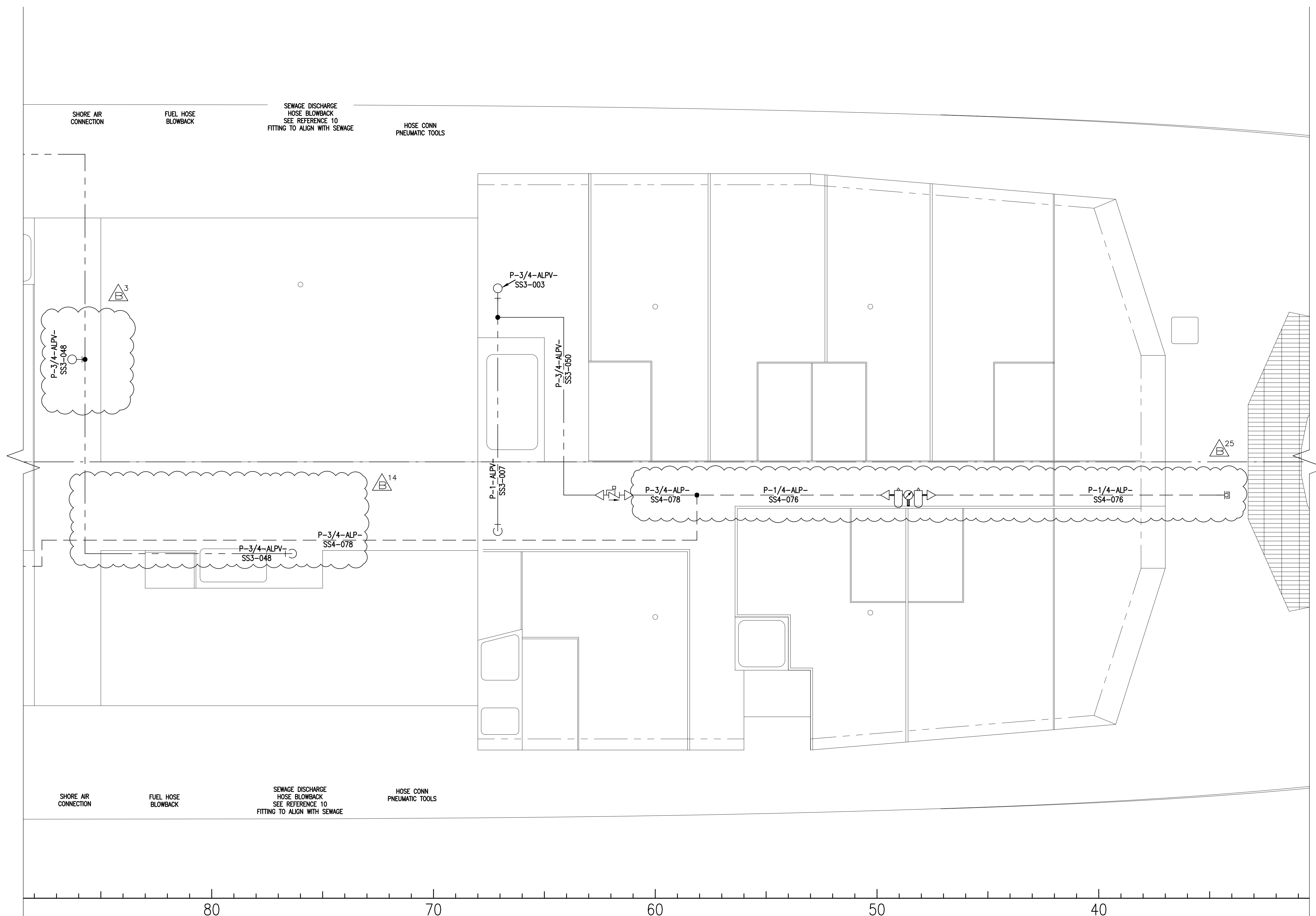
147

DWG NO 360B-WMSM-551-001

SH 19

REV B

145



PLAN VIEW 148-A

SERVICE AIR
01 LEVEL
FRAMES 31-88
SCALE: 1/4" = 1'-0

COMPRESSED AIR DECK PLAN			
SERVICE AIR			
01 LEVEL			
FR 31-88			
SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED		SHEET: 19	

152

151

150

149

148

147

146

145

160

159

158

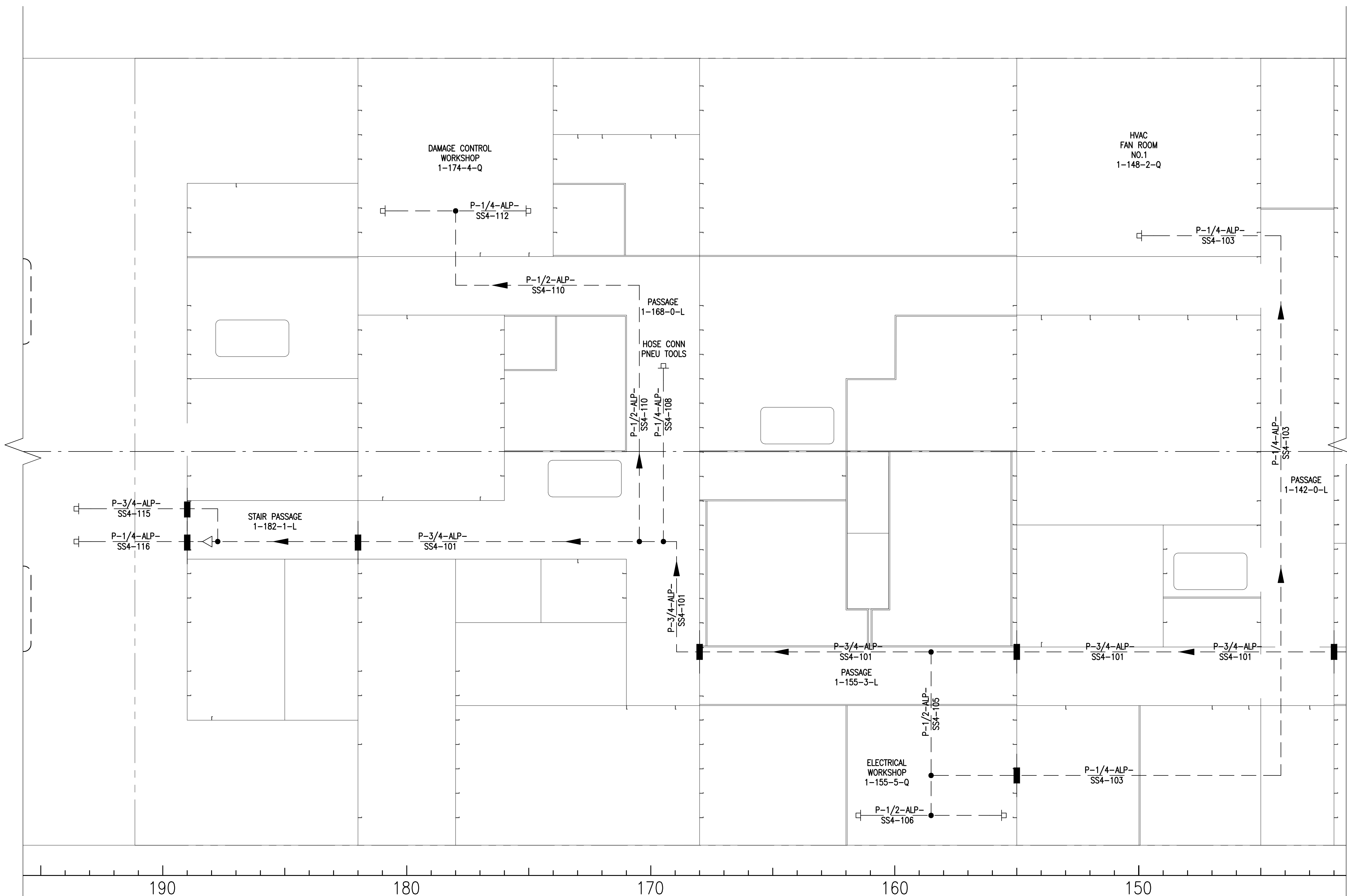
157

156

155

DWG NO
360B-WMSM-551-001SH
20REV
B

153



PLAN VIEW 156-A

SERVICE AIR
MAIN DECK
FRAMES 142-195
SCALE: 1/4" = 1'-0

COMPRESS AIR SYSTEM
SERVICE AIR
MAIN DECK
FR 142-195

SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED		SHEET: 20	

160

159

158

157

156

155

154

153

168

167

166

165

164

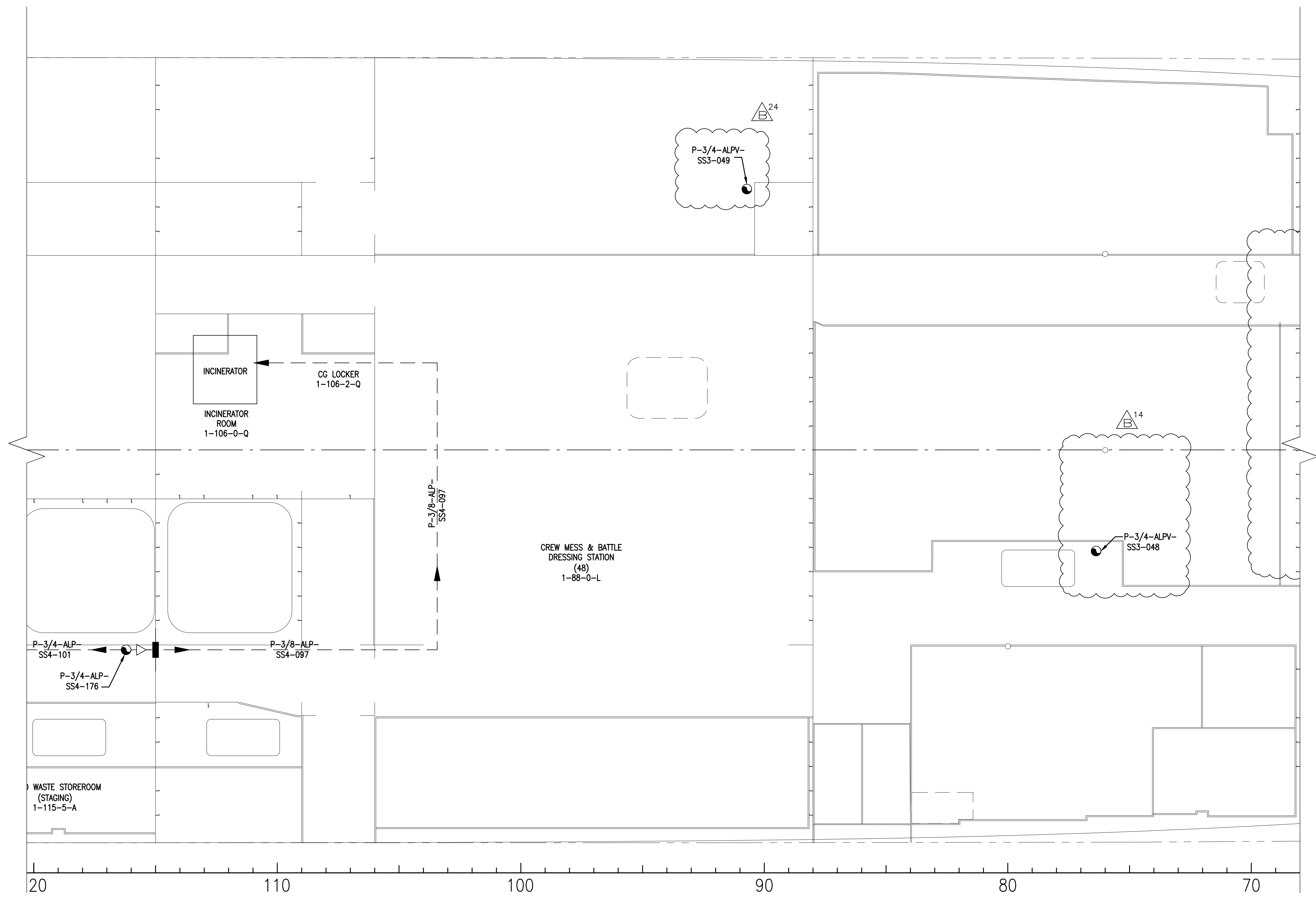
163

DWG NO 360B-WMSM-551-001

SH 21

REV B

161



PLAN VIEW 164-A

SERVICE AIR
MAIN DECK
FRAMES 69-120
SCALE: 1/4" = 1'-0

COMPRESSED AIR SYSTEM
SERVICE AIR
MAIN DECK
FR 69-120

SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED			SHEET: 21

176

175

174

173

172

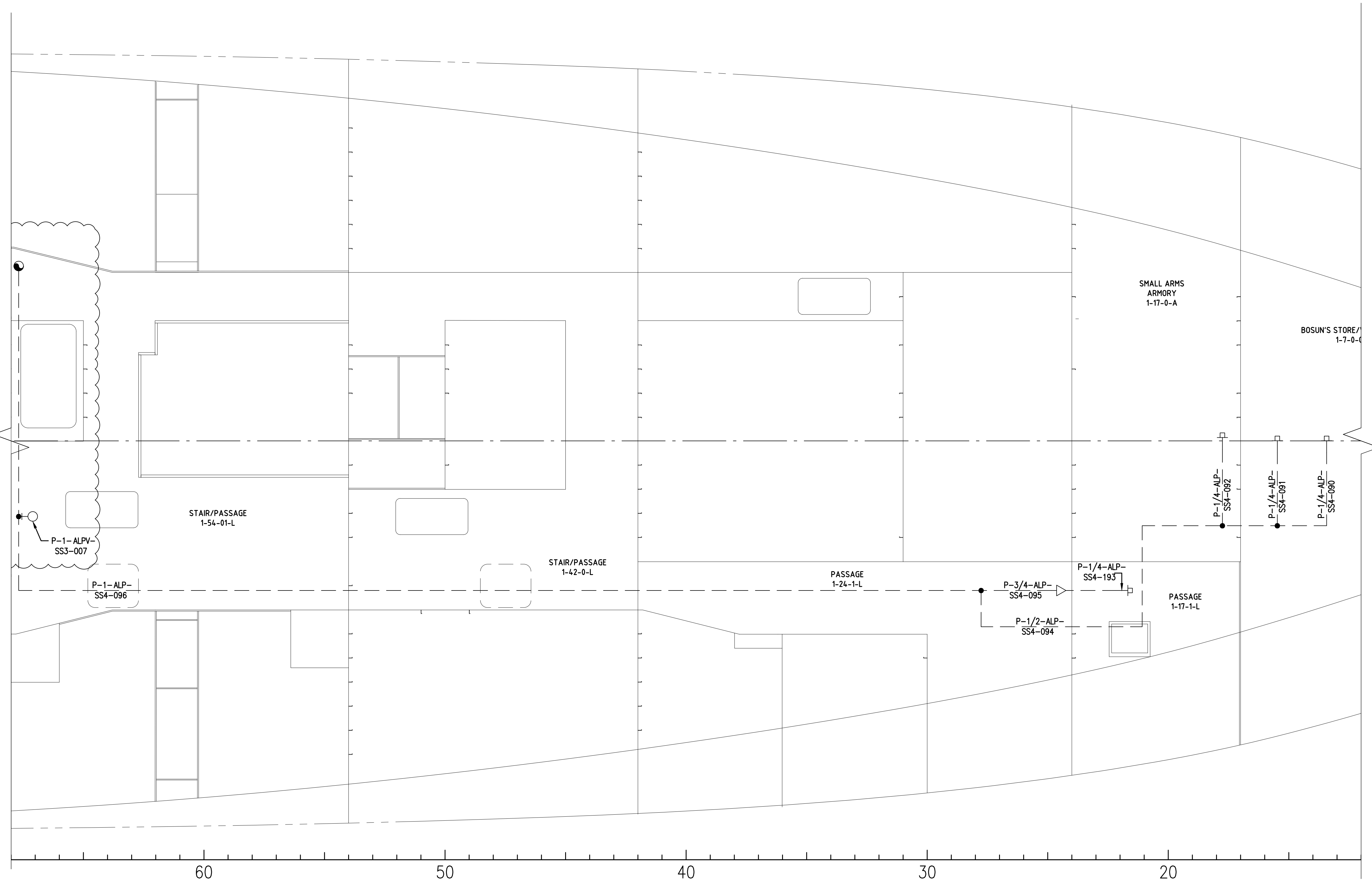
171

DWG NO 360B-WMSM-551-001

SH 22

REV B

169



PLAN VIEW 172-A

SERVICE AIR
MAIN DECK
FRAMES 13-69
SCALE: 1/4" = 1'-0

COMPRESSED AIR SYSTEM
SERVICE AIR
MAIN DECK
FR 13-69

SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED		SHEET: 22	

176

175

174

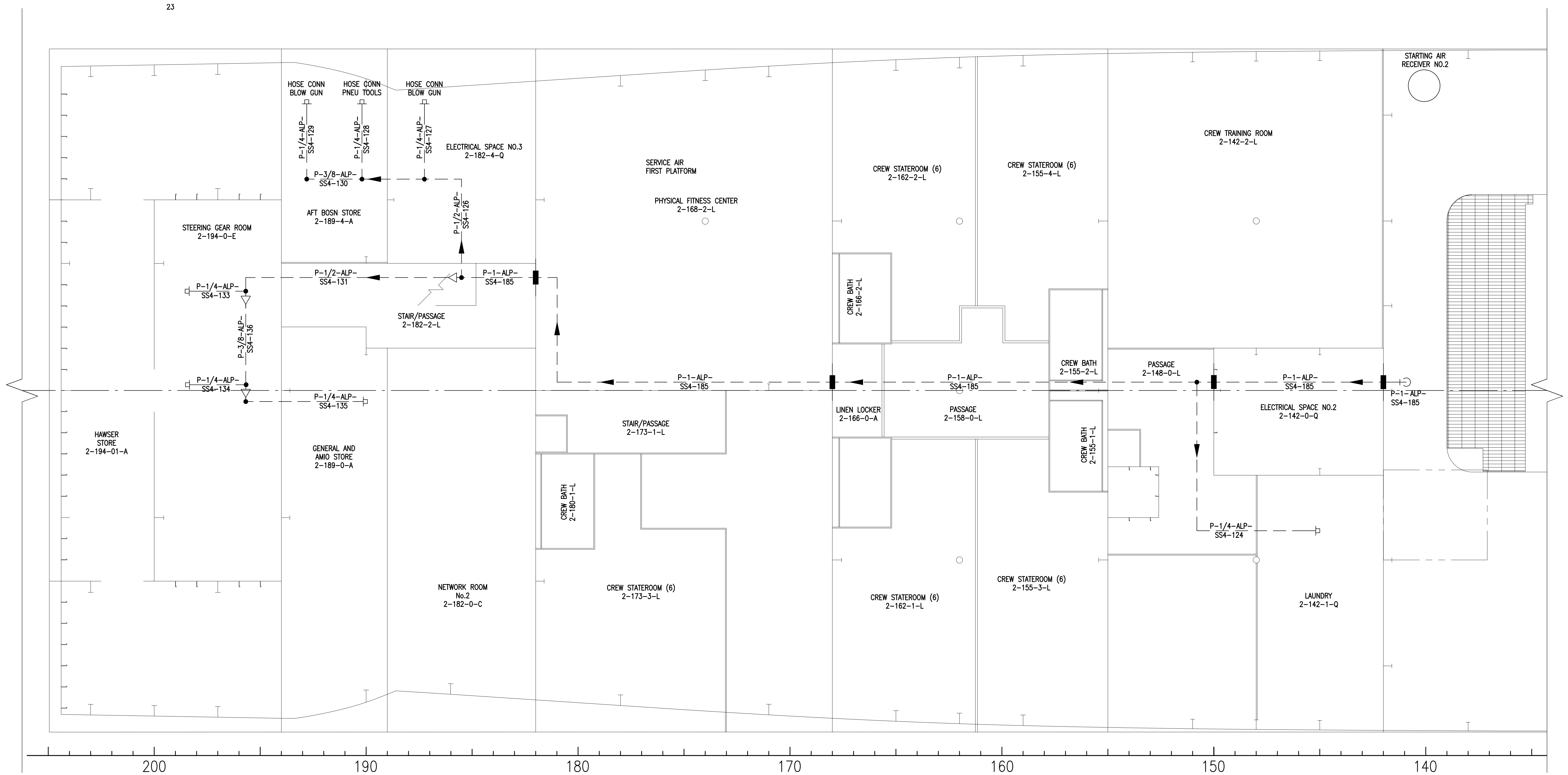
173

172

171

170

169



PLAN VIEW 180-A

SERVICE AIR
FIRST PLATFORM
FRAMES 140-199
SCALE: 1/4" = 1'-0"

COMPRESSED AIR SYSTEM
SERVICE AIR
FIRST PLATFORM
FR 140-199

SIZE D	CAGE CODE 81340	USCG DRAWING NO. 360B-WMSM-551-001	REV B
SCALE: AS NOTED		SHEET: 23	

192

191

190

189

188

187

DWG NO
360B-WMSM-551-001SH
24REV
B

185

ENGINEER STORE
2-104-2-AP-1/2-ALP-
SS4-118P-1/4-ALP-
SS4-119MACHINE
WORKSHOP
2-93-2-QTEST LAB
P-3/4-ALP-
SS3-045 (BP)
P-1-ALPV-
SS3-041 (DOWN)SERVICE AIR
RECEIVER NO.2P-1-ALPV-
SS3-040P-1-ALPV-
SS3-045P-2 1/2-SA-
SS1-001STARTING AIR
RECEIVER NO.1P-1-ALPV-
SS3-039CREW STATEROOM (6)
2-68-2-LSHIP SERVICE GENERATOR
ROOM
2-54-0-EP-1-ALPV-
SS3-007CREW STATEROOM (6)
2-72-2-LCREW STATEROOM (6)
2-71-2-LPASSAGE
2-68-0-LAFT ENGINE ROOM
4-115-0-ESERVICE AIR
FIRST PLATFORMFORWARD ENGINE ROOM
4-88-0-ECREW STATEROOM (4)
2-71-0-LSTAIR/PASSAGE
2-75-1-LP-3/4-ALPV-
SS3-048CREW STATEROOM (6)
2-72-1-LNETWORK ROOM No.1
2-54-01-CCREW STATEROOM (6)
2-68-3-LP-3/4-ALP-
SS4-176

SERVICE AIR AFTERCOOLER

SERVICE AIR AFTERCOOLER

CREW BATH
2-66-1-LCREW BATH
2-86-3-LCREW BATH
2-86-5-LCREW BATH
2-86-6-LCREW BATH
2-66-4-LCREW BATH
2-86-2-L

14

PLAN VIEW 188-A

SERVICE AIR
FIRST PLATFORM
FRAMES 68-120
SCALE: 1/4" = 1'-0"

13

COMPRESSED AIR DECK PLAN
SERVICE AIR
FIRST PLATFORM
FR 68-120

SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED		SHEET: 24	

192

191

190

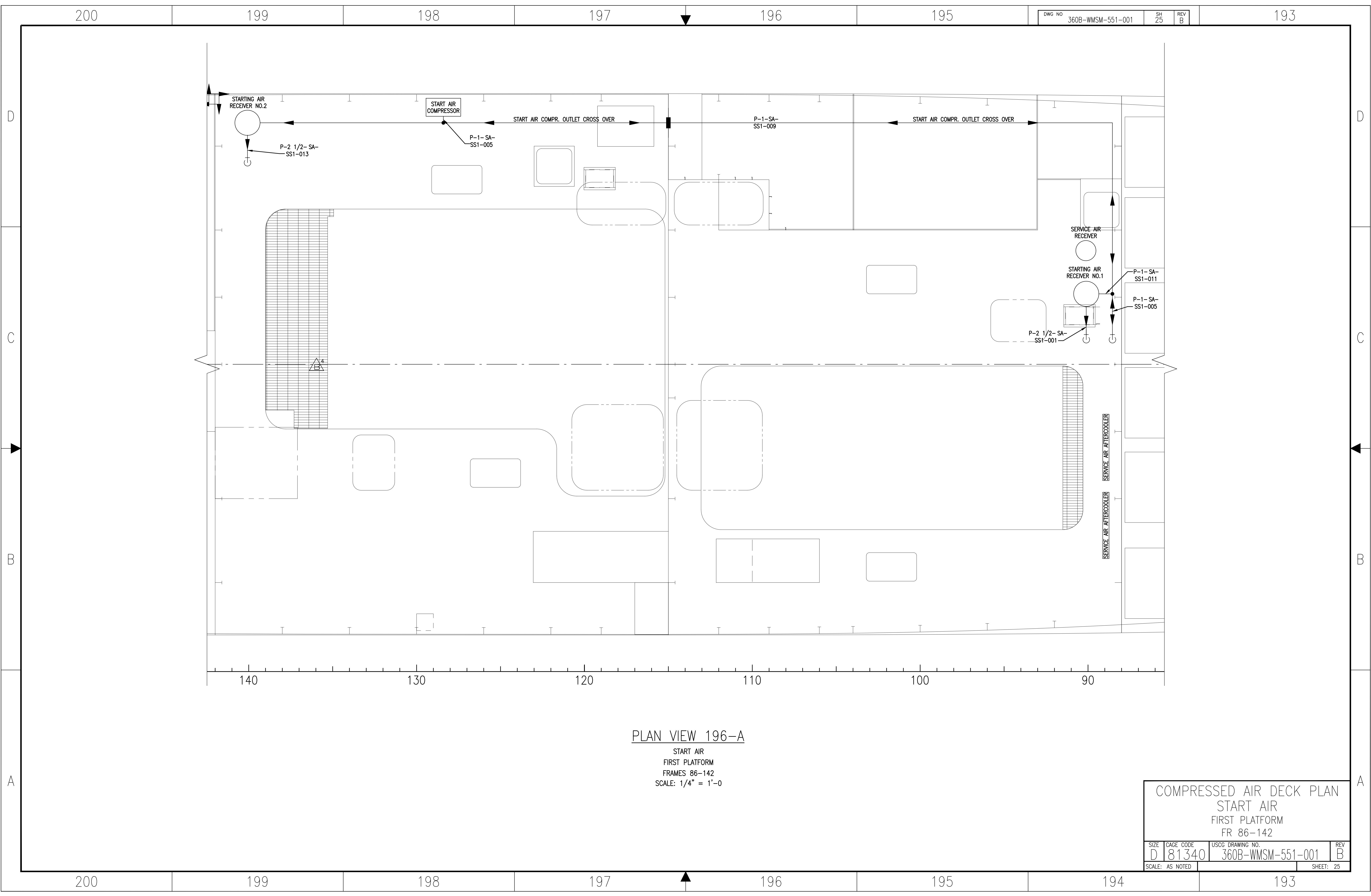
189

188

187

186

185

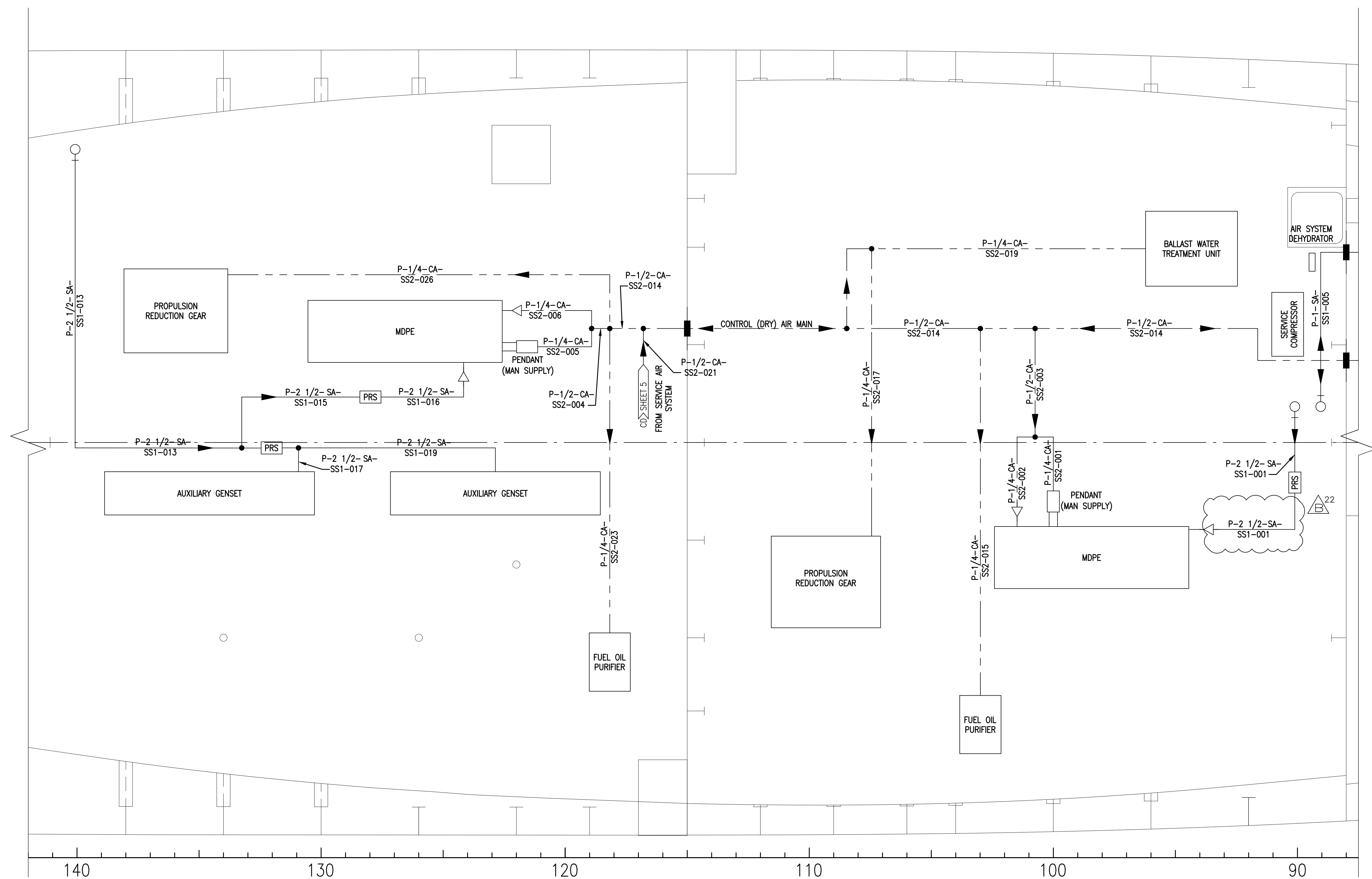


PLAN VIEW 196-A

START AIR
FIRST PLATFORM
FRAMES 86-142
SCALE: 1/4" = 1'-0

COMPRESSED AIR DECK PLAN
START AIR
FIRST PLATFORM
FR 86-142

SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED		SHEET: 25	



PLAN VIEW 204-A

START AND CONTROL AIR
INNER BOTTOM
FRAMES 88-141
SCALE: 1/4" = 1'-0"

COMPRESSED AIR DECK PLAN
START AND CONTROL AIR
INNER BOTTOM
FR 88-141

SIZE D	CAGE CODE 81340	USCG DRAWING NO. 360B-WMSM-551-001	REV B
SCALE: AS NOTED		SHEET: 26	

216

215

214

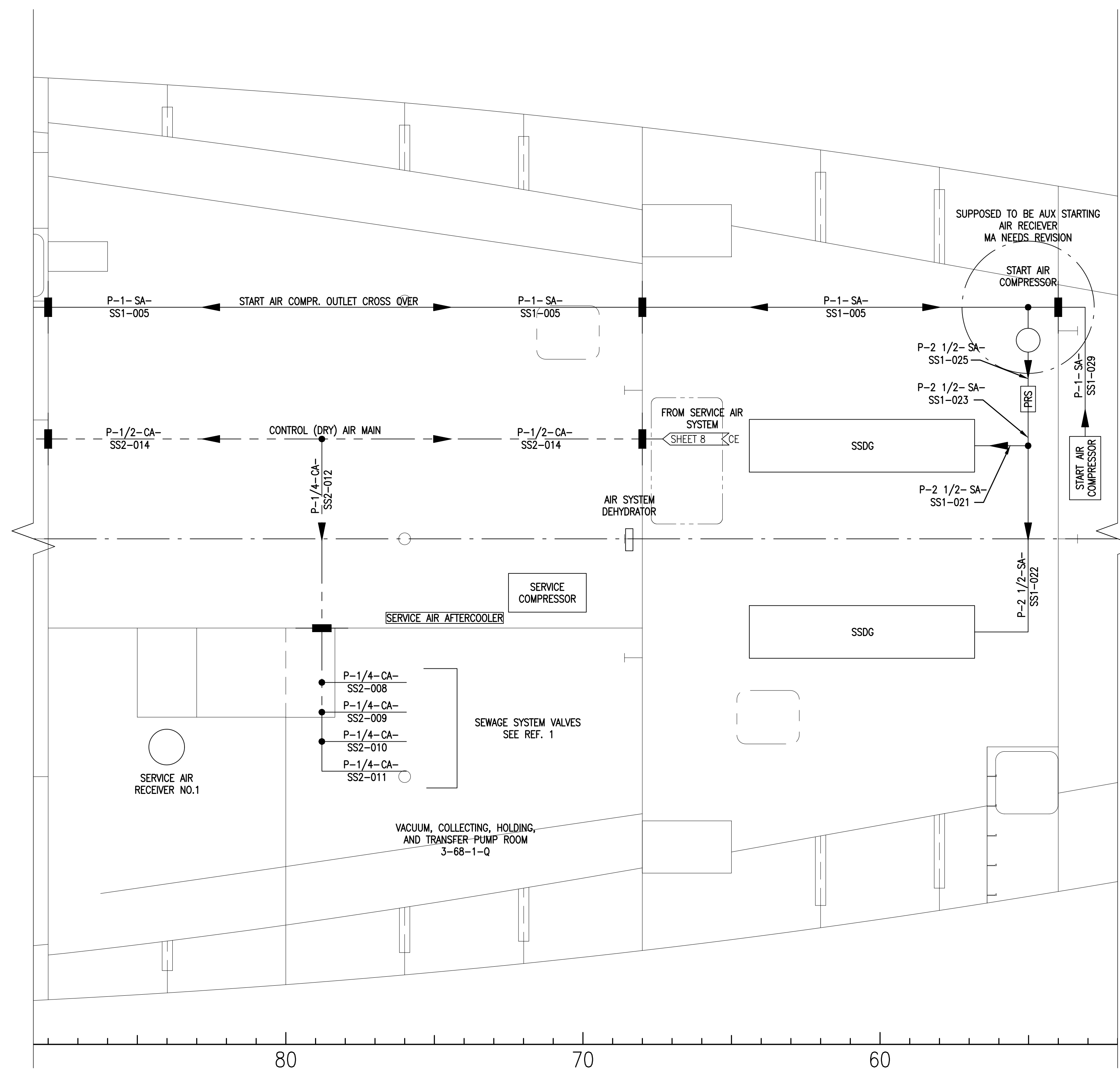
213

212

211

DWG NO
360B-WMSM-551-001SH
27REV
B

209

PLAN VIEW 212-A

CONTROL AIR
INNER BOTTOM
FRAMES 53-88
SCALE: 1/4" = 1'-0

COMPRESSED AIR DECK PLAN
CONTROL AIR
INNER BOTTOM
FR 53-88

SIZE	CAGE CODE	USCG DRAWING NO.	REV
D	81340	360B-WMSM-551-001	B
SCALE: AS NOTED		SHEET: 27	

216

215

214

213

212

211

210

209

