



REQUEST FOR QUOTATION

1124161

Quotations will be received until 2 p.m., AKST, April 25, 2024.

PURCHASING OFFICE

Department of Fish and Game
Division of Administrative Services
PO Box 115526 Juneau, AK 99811-5526
On behalf of the Division of Commercial Fisheries

Page 1 of 11 Date 4.18.2024

VENDOR NOTICE (This is NOT a Purchase Order)

This is an informal quotation that will not be read at public opening. The information may be publicly reviewed after award. The terms and conditions should be reviewed and understood before preparing a quotation. The quotation shall be the best net price, FOB destination, to include all delivery charges, but exclude applicable taxes. Delivery schedule and discount for early payment shall be indicated in the spaces provided below. Return the quotation by the above time and date to the above address. Please reference the Buyer's name and the RFQ number on the outside of the return envelope.

DELIVERY LOCATION: PO Box 667 Petersburg, AK 99833-0667

BUYER: Eric Verrelli – Procurement Manager
eric.verrelli@alaska.gov 907-465-6178

VENDOR QUOTATION

Item	Description of Supply or Service	Qty	Unit	Unit Price	Extended Price
1	One (1) Consilium CFD 50/500 Alarm Panel is located in wheelhouse. Panel must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant.	1	each	\$	\$
2	Eight (8) Heat Sensors. Must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant.	8	each	\$	\$
3	Sixteen (16) Smoke Detectors. Must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant.	16	each	\$	\$
4	Eight (8) Sounders/Notification Devices (noise maker). Must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant. Each Sounder/Notification Devices shall be installed in each stateroom (living quarters) of the vessel. The Kestrel has a total of eight (8) staterooms.	8	each	\$	\$
5	Delivery and Installation of all devices.	1	all	\$	\$
				Total:	\$

THIS SECTION MUST BE COMPLETED BY VENDOR

Delivery shall be made _____ calendar days after receipt of order.

Payment Terms: _____

Company Name	Address	City	State	ZIP Code	Phone Number
Alaska Business License No.	Vendor Tax I.D. No.	Do you qualify for the Alaska Bidders' Preference? [] Yes [] No			
		Do you qualify for the Alaska Veteran Preference? [] Yes [] No			
Signature _____		Typed Name and Title _____			
Date _____					

**INSTRUCTIONS TO BIDDERS
TERMS AND CONDITIONS**

1. REQUEST FOR QUOTATION (RFQ) REVIEW: Offerors shall carefully review this RFQ for defects and questionable or objectionable material. Offerors' comments concerning defects and questionable or objectionable material in the RFQ must be made in writing and received by the purchasing authority before the date and time set for receipt of quotes. This will allow time for an amendment to be issued if one is required. It will also help prevent the opening of a defective quote, upon which award cannot be made, and the resultant exposure of offerors' prices. Offerors' original comments should be sent to the purchasing authority listed on the front of this RFQ.

2. QUOTATION FORMS: Offerors shall use this and attached forms in submitting quotes. A photocopied quote may be submitted.

3. SUBMISSION: Quotations shall be signed where applicable and received at the designated Purchasing Office no later than as indicated.

4. QUOTE REJECTION: The State reserves the right to reject any or all quotes, combinations of items, or lot(s), and to waive defects or minor informalities.

5. EXTENSION OF PRICES: In case of error in the extension of prices in the quote, the unit prices will govern; in a lot bid, the lot prices will govern. Negligence by the vendor in preparing the quotation confers no right for the withdrawal of the quotation after it has been opened.

6. ALASKA PROCUREMENT CODE: The Procurement Code (AS.36.30) and its Regulations (2 AAC Ch. 12), are made a part of this document as if fully set forth herein. Note: AS.36.30 and 2 AAC Ch. 12 are available at most public libraries and legislative information offices; and both are available for review at Alaska State Purchasing Offices.

7. PRICES: The offeror shall state prices in the units of issue on this RFQ. Prices quoted for commodities must be in U.S. funds and include applicable federal duty, brokerage fees, packaging, and transportation cost to the FOB point so that upon transfer of title the commodity can be utilized without further cost. Prices quoted for services must be quoted in U.S. funds and include applicable federal duty, brokerage fee, packaging, and transportation cost so that the services can be provided without further cost. Prices quoted must be exclusive of federal, state, and local taxes. If the offeror believes that certain taxes are payable by the State, the offeror may list such taxes separately, directly below the bid price for the affected item. The State is exempt from Federal Excise Tax except the following:

- Coal - Internal Revenue Code of 1986 (IRC), Section 4121 - on the purchase of coal;
- "Gas Guzzler" - IRC, Section 4064 - on the purchase of low m.p.g. automobiles, except that police and other emergency type vehicles are not subject to the tax;
- Air Cargo - IRC, Section 4271 - on the purchase of property transportation services by air;
- Air Passenger - IRC, Section 4261 - on the purchase of passenger transportation services by air carriers;
- Leaking Underground Storage Tank Trust Fund Tax (LUST) - IRC, Section 4081 - on the purchase of Aviation gasoline, Diesel Fuel, Gasoline, and Kerosene.

8. PAYMENT FOR STATE PURCHASES: Payment for agreements under \$500,000 for the undisputed purchase of goods or services provided to a State agency, will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement which establishes a lower interest rate or precludes the charging of interest.

9. PAYMENT DISCOUNT: Discounts for prompt payment will not be considered in evaluating the price you quote. However, the State shall be entitled to take advantage of any payment discount(s) offered by the vendor provided payment is made within the discount period. Payment discount periods will be computed from the date of receipt of the commodities or services and/or a correct invoice, whichever is later. Unless freight and other charges are itemized, any discount provided will be taken on full amount of invoice.

10. VENDOR TAX ID NUMBER: If goods or services procured through this RFQ are of a type that is required to be included on a Miscellaneous Tax Statement, as described in the Internal Revenue Code, a valid tax identification number must be provided to the State of Alaska before payment will be made.

11. INDEMNIFICATION: The Contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the Contractor under this agreement. The Contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the Contractor and the independent negligence of the Contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "Contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the Contracting agency's selection, administration, monitoring, or controlling of the Contractor and in approving or accepting the Contractor's work.

12. SEVERABILITY: If any provision of this contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected; and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular provision held to be invalid.

13. TITLE: Title passes to the State for each item at FOB destination.

14. FILING A PROTEST: An offeror shall attempt to informally resolve a dispute with the procurement officer regarding a small procurement. If the attempt is unsuccessful, the vendor may protest the solicitation or the award of a small procurement contract under AS 36.30.320. The protest must be filed in writing with the commissioner of the purchasing agency or the commissioner's designee and include the following

INSTRUCTIONS TO BIDDERS TERMS AND CONDITIONS

information: (1) the name, address, and telephone number of the protester; (2) the signature of the protester or the protester's representative; (3) identification of the contracting agency and the solicitation or contract at issue; (4) a detailed statement of the legal and factual grounds of the protest, including copies of relevant documents; and (5) the form of relief requested. The protester must file a copy of the protest with the procurement officer for the purchasing agency. Protests will be treated in accordance with AS 36.30.550 and 2 AAC 12.695.

15. COMPLIANCE: In the performance of a contract that results from this RFQ, the contractor must comply with all applicable federal, state, and borough regulations, codes, and laws; and be liable for all required insurance, licenses, permits and bonds; and pay all applicable federal, state, and borough taxes.

16. SUITABLE MATERIALS, ETC.: Unless otherwise specified, all materials, supplies or equipment offered by an offeror shall be new, unused, and of the latest edition, version, model or crop and of recent manufacture.

17. SPECIFICATIONS: Unless otherwise specified in the RFQ, product brand names or model numbers are examples of the type and quality of product required, and are not statements of preference. If the specifications describing an item conflict with a brand name or model number describing the item, the specifications govern. Reference to brand name or number does not preclude an offer of a comparable or better product, if full specifications and descriptive literature are provided for the product. Failure to provide such specifications and descriptive literature may be cause for rejection of the offer.

18. FIRM OFFER: For the purpose of award, offers made in accordance with this RFQ must be good and firm for a period of ninety (90) days from the date of quote opening.

19. QUOTE PREPARATION COSTS: The State is not liable for any costs incurred by the offeror in quote preparation.

20. CONSOLIDATION OF AWARDS: Due to high administrative costs associated with processing of purchase orders, a single low quote of \$50 or less may, at the discretion of the State, be awarded to the next low offeror receiving other awards for consolidation purposes. This paragraph is not subject to the protest terms enumerated in "FILING A PROTEST" above.

21. CONTRACT FUNDING: Offerors are advised that funds are available for the initial purchase and/or the first term of the contract. Payment and performance obligations for succeeding purchases and/or additional terms of the contract are subject to the availability and appropriation of funds.

22. CONFLICT OF INTEREST: An officer or employee of the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if (1) the officer or employee is an employee of the administrative unit that supervises the award of this contract; or (2) the officer or employee has the power to take or withhold official action so as to affect the award or execution of the contract.

23. ASSIGNMENT(S): Assignment of rights, duties, or payments under a contract resulting from this RFQ is not permitted unless authorized in writing by the procurement officer of the contracting agency. Quotes that are conditioned upon the State's approval of an assignment will be rejected as nonresponsive.

24. SUBCONTRACTOR(S): Within five (5) working days of notice from the state, the apparent low bidder must submit a list of the subcontractors that will be used in the performance of the contract. The list must include the name of each subcontractor and the location of the place of business for each subcontractor and evidence of each subcontractor's valid Alaska business license.

25. FORCE MAJEURE (Impossibility to perform): The parties to a contract resulting from this RFQ are not liable for the consequences of any failure to perform, or default in performing, any of its obligations under the contract, if that failure or default is caused by any unforeseeable Force Majeure, beyond the control of, and without the fault or negligence of, the respective party. For the purposes of this Agreement, Force Majeure will mean war (whether declared or not); revolution; invasion; insurrection; riot; civil commotion; sabotage; military or usurped power; lightning; explosion; fire; storm; drought; flood; earthquake; epidemic; quarantine; strikes; acts or restraints of governmental authorities affecting the project or directly or indirectly prohibiting or restricting the furnishing or use of materials or labor required; inability to secure materials, machinery, equipment or labor because of priority, allocation or other regulations of any governmental authorities.

26. LATE QUOTES: Late quotes are quotes received after the time and date set for receipt of the quotes. Late quotes will not be accepted.

27. CONTRACT EXTENSION: Unless otherwise provided in this RFQ, the State and the successful offeror/contractor agree: (1) that any holding over of the contract excluding any exercised renewal options, will be considered as a month-to-month extension, and all other terms and conditions shall remain in full force and effect and (2) to provide written notice to the other party of the intent to cancel such month-to-month extension at least thirty (30) days before the desired date of cancellation.

28. DEFAULT: In case of default by the contractor, for any reason whatsoever, the State of Alaska may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law or equity.

29. DISPUTES: If a contractor has a claim arising in connection with a contract resulting from this RFQ that it cannot resolve with the State by mutual agreement, it shall pursue a claim, if at all, in accordance with the provisions of AS 36.30.620 – 632.

30. GOVERNING LAW; FORUM SELECTION: A contract resulting from this RFQ is governed by the laws of the State of Alaska. To the extent not otherwise governed by section 29 of these Standard Terms and Conditions, any claim concerning the contract shall be brought only in the Superior Court of the State of Alaska and not elsewhere.

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31. CONSUMER ELECTRICAL PRODUCT: AS 45.45.910 requires that "...a person may not sell, offer to sell, or otherwise transfer in the course of the person's business a consumer electrical product that is manufactured after August 14, 1990, unless the product is clearly marked as being listed by an approved third party certification program." Electrical consumer products manufactured before August 14, 1990, must either be clearly marked as being third party certified or be marked with a warning label that complies with AS 45.45.910(e). Even exempted electrical products must be marked with the warning label. By signature on this quote the offeror certifies that the product offered is in compliance with the law. A list of approved third party certifiers, warning labels and additional information is available from: Department of Labor, Labor Standards & Safety Division, Mechanical Inspection Section, P.O. Box 107020, Anchorage, Alaska 99510-7020, (907)269-4925.

32. CONTINUING OBLIGATION OF CONTRACTOR: Notwithstanding the expiration date of a contract resulting from this RFQ, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance and parts availability requirements have completely expired.

33. ORDER DOCUMENTS: Except as specifically allowed under this RFQ, an ordering agency will not sign any vendor contract. The State is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the State under this RFQ. The State of Alaska Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this RFQ.

34. BILLING INSTRUCTIONS: Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order. The ordering agency will make payment after it receives the merchandise or service and the invoice. Questions concerning payment must be addressed to the ordering agency.

35. OFFERORS WITH DISABILITIES: The State of Alaska complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications to participate in this procurement should contact the procurement officer named on the cover page of this RFQ as soon as possible, but no later than the date and time quotations are due to make any necessary arrangements.

36. COMPLIANCE WITH ADA: By signature of their quote the bidder certifies that they comply with the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the federal government. Services or activities furnished to the general public on behalf of the State must be fully accessible. This is intended to ensure that agencies are in accordance with 28 CFR Part 35 Section 35.130 and that services, programs or activities furnished to the public through a contract do not subject qualified individuals with a disability to discrimination based on the disability.

37. ALASKA BIDDER PREFERENCE: The award of a contract based on a Request for Quotation (RFQ) will be made to the lowest responsive and responsible bidder after an Alaska bidder preference of five percent (5%) has been applied. An "Alaska bidder" is a person who: (1) holds a current Alaska business license; (2) submits a bid for goods, services, or construction under the name as appearing on the person's current Alaska business license; (3) has maintained a place of business within the state staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the bid; (4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship and the proprietor is a resident of the state, is a limited liability company organized under AS 10.50 and all members are residents of the state, or is a partnership under AS 32.06 or AS 32.11 and all partners are residents of the state; and, (5) if a joint venture, is composed entirely of ventures that qualify under (1) - (4) of this subsection. AS 36.30.170, AS 36.30.321(a) and AS 36.30.990(2)

38. ALASKA VETERAN PREFERENCE: If a bidder qualifies for the Alaska bidder preference under AS 36.30.321(a) and AS 36.30.990(2) and is a qualifying entity as defined in AS 36.30.321(f), they will be awarded an Alaska veteran preference of five percent (5%). The preference will be given to a (1) sole proprietorship owned by an Alaska veteran; (2) partnership under AS 32.06 or AS 32.11 if a majority of the partners are Alaska veterans; (3) limited liability company organized under AS 10.50 if a majority of the members are Alaska veterans; or (4) corporation that is wholly owned by individuals and a majority of the individuals are Alaska veterans, and may not exceed \$5,000. The bidder must also add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, the bidder must have sold supplies of the general nature solicited to other state agencies, other governments, or the general public. AS 36.30.321(i)

39. USE OF LOCAL FOREST PRODUCTS: In a project financed by state money in which the use of timber, lumber and manufactured lumber is required, only timber, lumber and manufactured lumber products originating in this state shall be used unless the use of those products has been determined to be impractical, in accordance with AS 36.15.010 and AS 36.30.322.

40. LOCAL AGRICULTURAL AND FISHERIES PRODUCTS PREFERENCE: When agricultural, dairy, timber, lumber, or fisheries products are purchased using state money, a seven percent (7%) preference shall be applied to the price of the products harvested in Alaska, or in the case of fisheries products, the products harvested or processed within the jurisdiction of Alaska, in accordance with AS 36.15.050.

41. ALASKA PRODUCT PREFERENCE: A bidder that designates the use of an Alaska Product which meets the requirements of the RFQ specification and is designated as a Class I, Class II or Class III Alaska Product by the Department of Commerce & Economic Development shall receive a preference in the bid evaluation in accordance with AS 36.30.332 and 3 AAC 92.010.

42. EMPLOYMENT PROGRAM PREFERENCE: If a bidder qualifies for the Alaska bidder preference, under AS 36.30.321(a) and AS 36.30.990(2), and is offering goods or services through an employment program as defined under 36.30.990(12), they will be awarded an Employment Program Preference of fifteen percent (15%) in accordance with AS 36.30.321(b).

43. ALASKANS WITH DISABILITIES PREFERENCE: If a bidder qualifies for the Alaskan bidder's preference under AS 36.30.321(a) and AS 36.30.990(2), and is a qualifying entity as defined AS 36.30.321(d), they will be awarded an Alaskans with Disabilities Preference of ten percent

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(10%) in accordance with AS 36.30.321(d). A bidder may not receive both an Employment Program Preference and an Alaskans with Disabilities Preference.

44. PREFERENCE QUALIFICATION LETTER: Regarding preferences 42 and 43 above, the Division of Vocational Rehabilitation in the Department of Labor and Workforce Development maintains lists of Alaskan: [1] employment programs that qualify for preference and [2] individuals who qualify for preference as Alaskan's with disabilities. In accordance with AS 36.30.321(i), in order to qualify for one of these preferences, a bidder must add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, a bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.

As evidence of an individual's or a business' qualification for a certain preference, the Division of Vocational Rehabilitation will issue a certification letter. To take advantage of the preferences 42 or 43 above, an individual or business must be on the appropriate Division of Vocational Rehabilitation list at the time the quote is opened, and must attach a copy of their certification letter to their quote. The bidder's failure to provide this certification letter with their quote will cause the State to disallow the preference.

Scope of Work

Alaska Department of Fish and Game

R/V Kestrel

R/V Kestrel Vessel Description / Particulars

The Research Vessel (R/V) Kestrel is all welded steel construction, with two diesel engine / two Hundested gear units turning shafts and variable pitch propellers on each end. The vessel is owned and operated by The State of Alaska and is intended to be engaged in the support of scientific research within Southeast Alaska. It is versatile and adaptable to accommodate a wide variety of deck equipment and machinery in the various configurations required to support the research.

Official Number: 811822

Vessel Name: R/V Kestrel

Dimensions:

Length Overall	32.3m 105.7'
Length Waterline	29.7m – 97.5'
Breadth Moulded	8m - 26'3"
Depth Moulded	3.5m – 11'6"
Design Draft Mean	2.3m - 7'6"
Displacement @ 2.3m Draft	326.57 Tonnes – 321.31 Long Tons
Registered Tonnage	76.24

Main Engines	2 @ 322 HP – 644 HP total
Generator Capacity	2 @ 95KW – 190KW Total
Speed	11.5 Knot

Builder	Allied Shipbuilders
Year Built	1990
Area of Operation	Southeast Alaska

Scope of Work

Work Scope

Work shall be completed inside, outside, and confined compartments of the vessel, located at North Harbor in Petersburg, Alaska. Vessel will be plugged into 480V, 100amp, 3 phase shore power. The base work of the project generally consists of the provision of all materials, equipment, labor, and other items necessary needed to safely remove existing Simplex Fire Control 4007 ES Fire Alarm Panel, sixteen (16) smoke detectors, and eight (8) heat sensors.

The contractor shall install a new alarm panel, eight (8) heat sensors, sixteen (16) smoke detectors, eight sounders/notification devices (noise makers). All parts shall be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant.

References

- Fire and Safety Plan Drawing No. 039-004
- Fire Alarm Panel Block Diagram Drawing No. 039-508
- Fire Detector & Alarm System Drawing No. 039-590-107
- Halon Schematic Drawing No. 039-207

SPECIFICATIONS: New Fire Alarm Panel, smoke detectors, sounders, and heat sensors shall consist of a minimum of:

1. One (1) Consilium CFD 50/500 Alarm Panel is located in wheelhouse. Panel must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant.
2. Eight (8) Heat Sensors. Must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant.
3. Sixteen (16) Smoke Detectors. Must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant.
4. Eight (8) Sounders/Notification Devices (noise maker). Must be United States Coast Guard Approved, Design Approved by America Bureau of Shipping, and Solas Compliant. Each Sounder/Notification Devices shall be installed in each stateroom (living quarters) of the vessel. The Kestrel has a total of eight (8) staterooms.

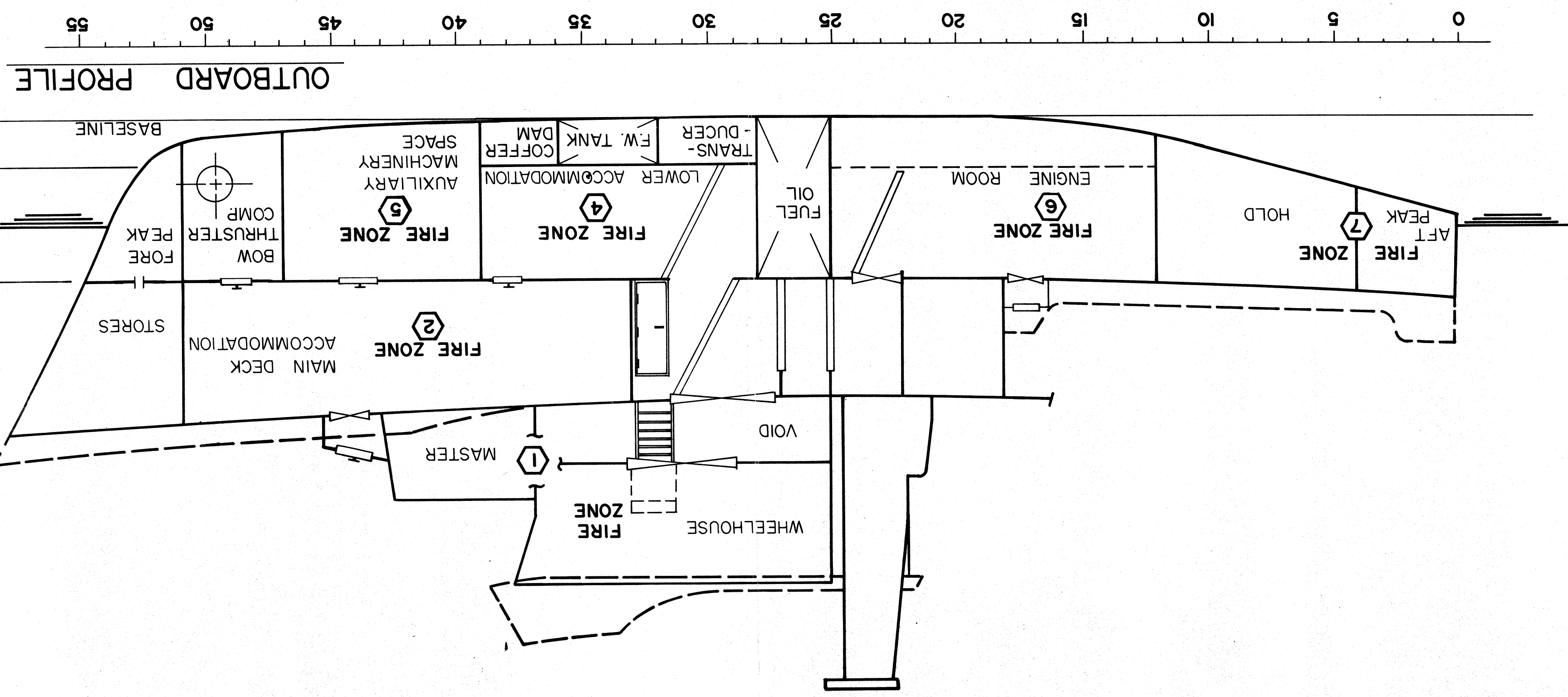
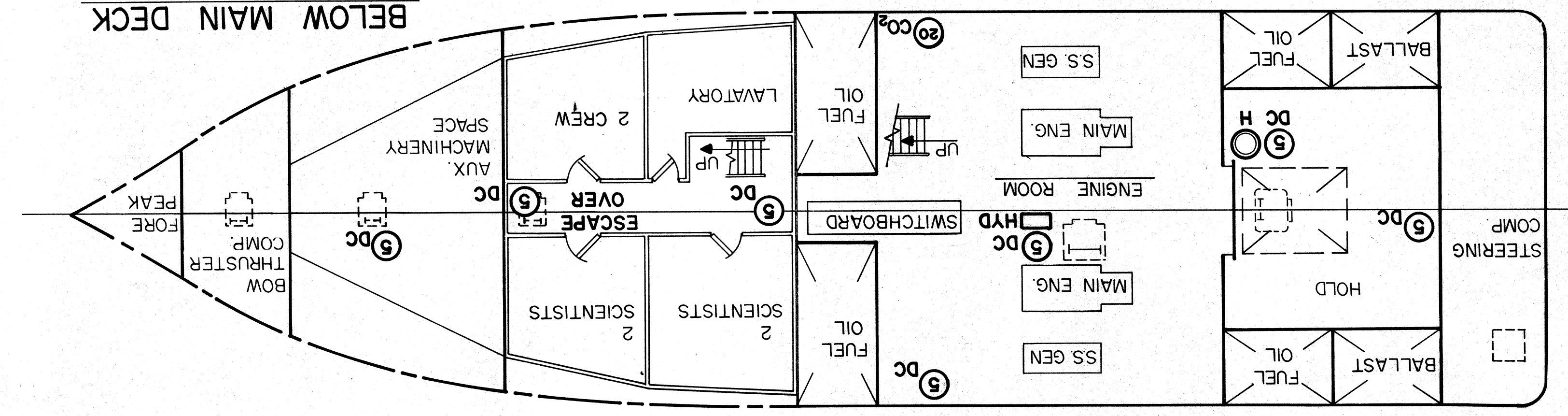
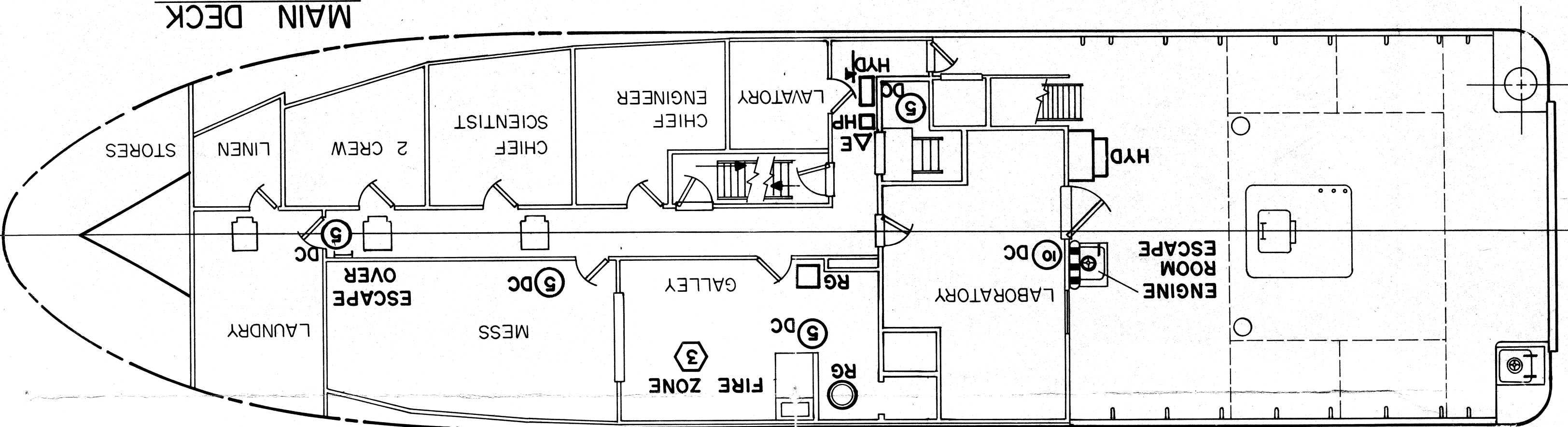
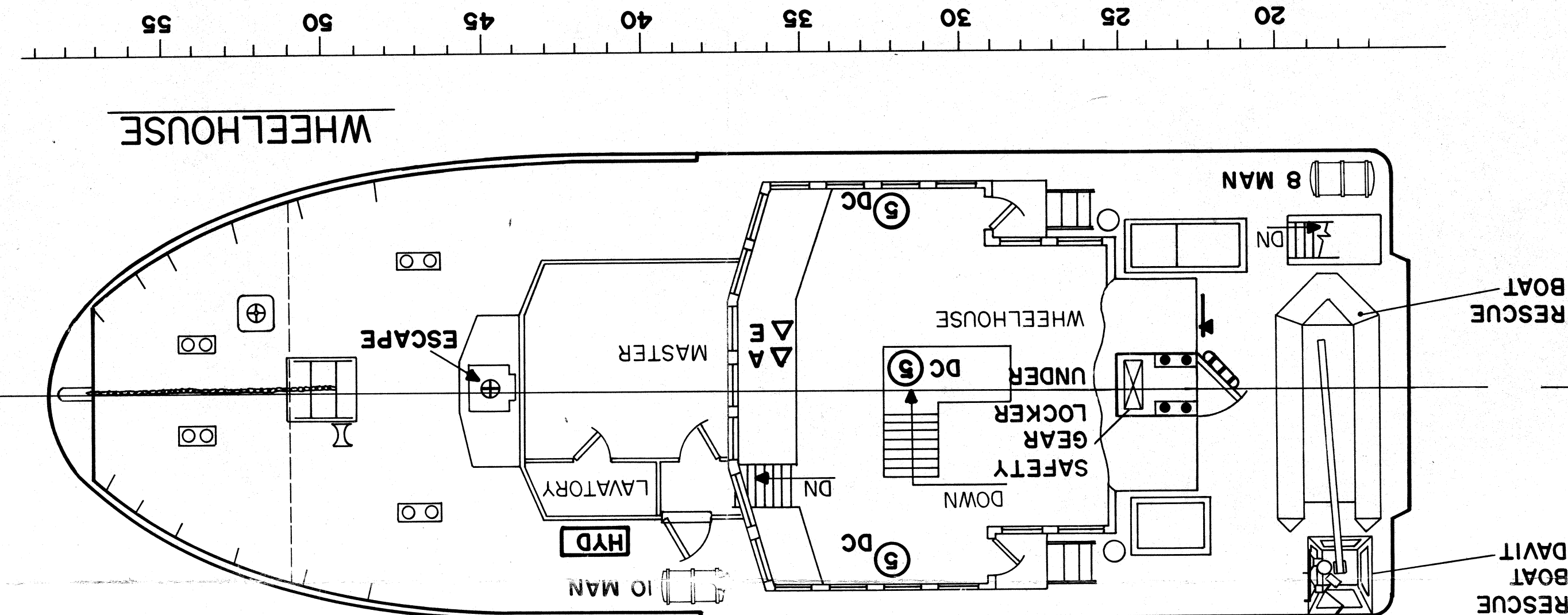
The contractor shall conduct tests on fire suppression system to prove and verify that the systems are working correctly. Vessel shall not undock, or operate, under its own power until dockside trials are complete. Trials shall occur under the supervision of the vessel's Master and the Fire Suppression technical representative and must meet [eCFR :: 46 CFR Part 76 Subpart 76.05 -- Fire Detecting and Extinguishing Equipment, Where Required](#).

PSD55-04-90

DRAWN	A. DAWSON	DATE	NOV. 23, 1989	SCALE	NTS	DES. NO.	921	DWG. NO.	039-004
FIRE AND SAFETY PLAN									
"R.B. YOUNG"									
DEPARTMENT OF FISHERIES AND OCEANS									
OTTAWA, CANADA									
ALLIED SHIPBUILDERS LTD.									
NORTH VANCOUVER, B.C.									
ALLIED SHIPBUILDERS LTD.									

ISSUED
MAY 15 1990
ALLIED SHIPBUILDERS LTD.

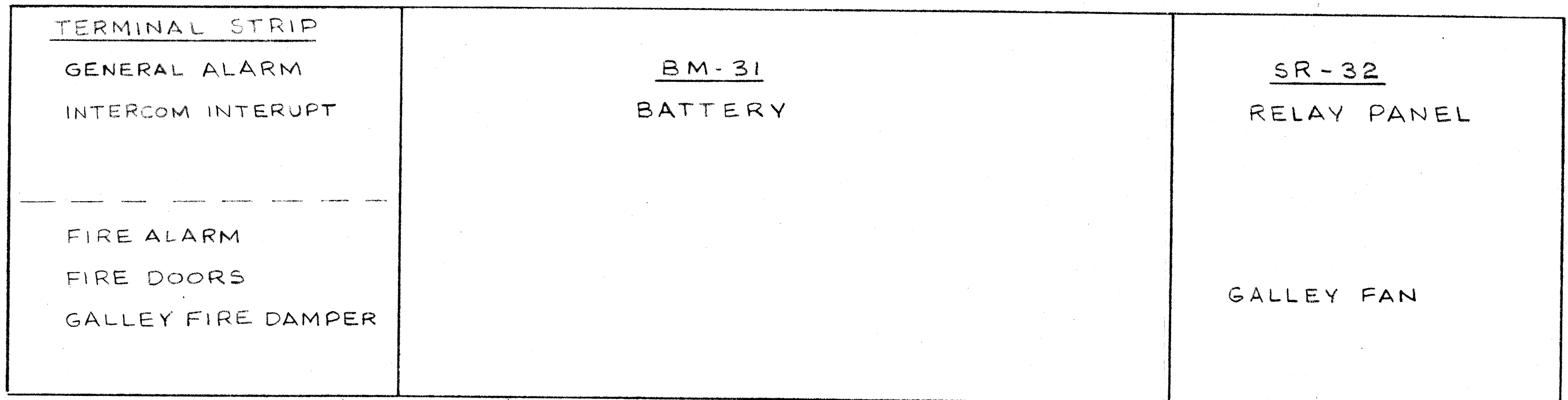
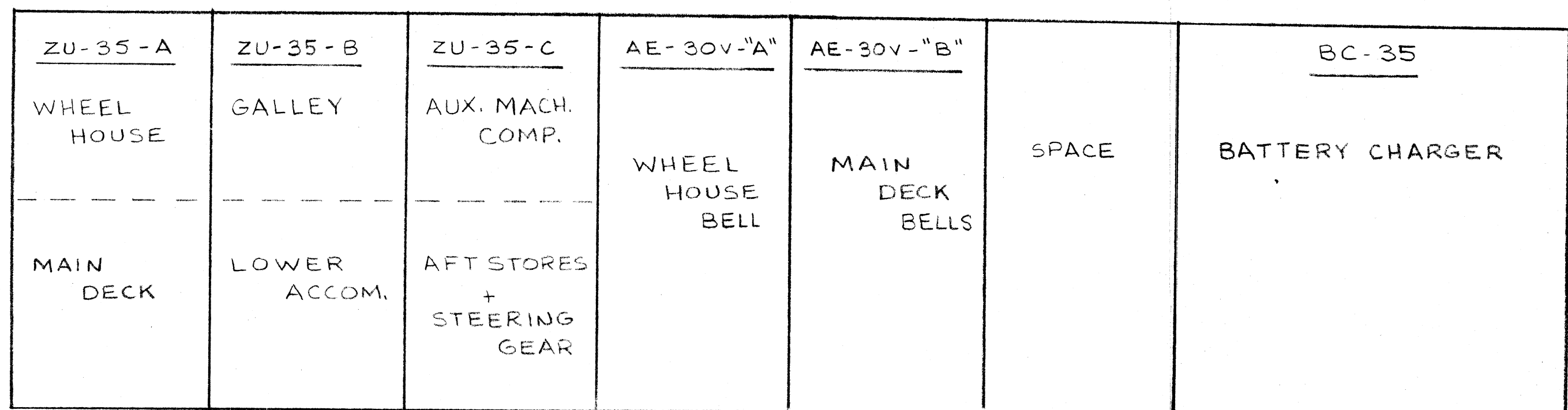
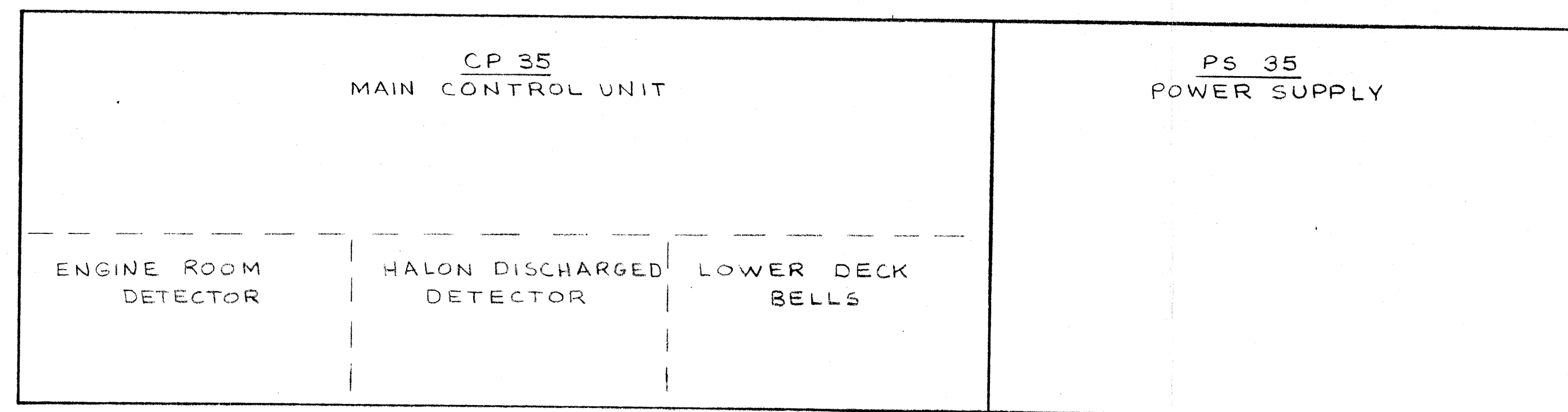
PRINCIPAL PARTICULARS
LENGTH OVERALL 32.3 m
BREADTH, MLD 8.0 m
DEPTH, MLD 3.5 m
GROSS TONNAGE 299.96 m
CLASS OF VOYAGES HOME TRADE II



- LEGEND
- 5 DC 5 LB DRY CHEMICAL EXTINGUISHER
 - 20 CO2 20 LB CO2 EXTINGUISHER
 - HYD FIRE HYDRANT STATION WITH HOSE
 - RG GALLEY RANGE HOOD EXTINGUISHING FLUID
 - RG GALLEY RANGE HOOD ACTUATOR PULL
 - H HALON GAS CYLINDER
 - HP HALON GAS PULL SYSTEM
 - E ENGINE ROOM VENTILATION AND FUEL OIL TRANSFER PUMP SHUT-DOWN
 - A ACCOMMODATION VENTILATION SHUT-DOWN
 - F FUEL OIL TANK SHUT-OFF
 - AX FIRE AXE
 - EH ESCAPE HATCH
 - HA FIRE ALARM ZONE
 - FB FIRE BUCKETS
 - IS IMMERSION SUITS
 - LR LIFE RAFTS

LOCATION OF COMPONENTS IN FIRE DETECTION PANEL

PYROTRONICS SYSTEM 3

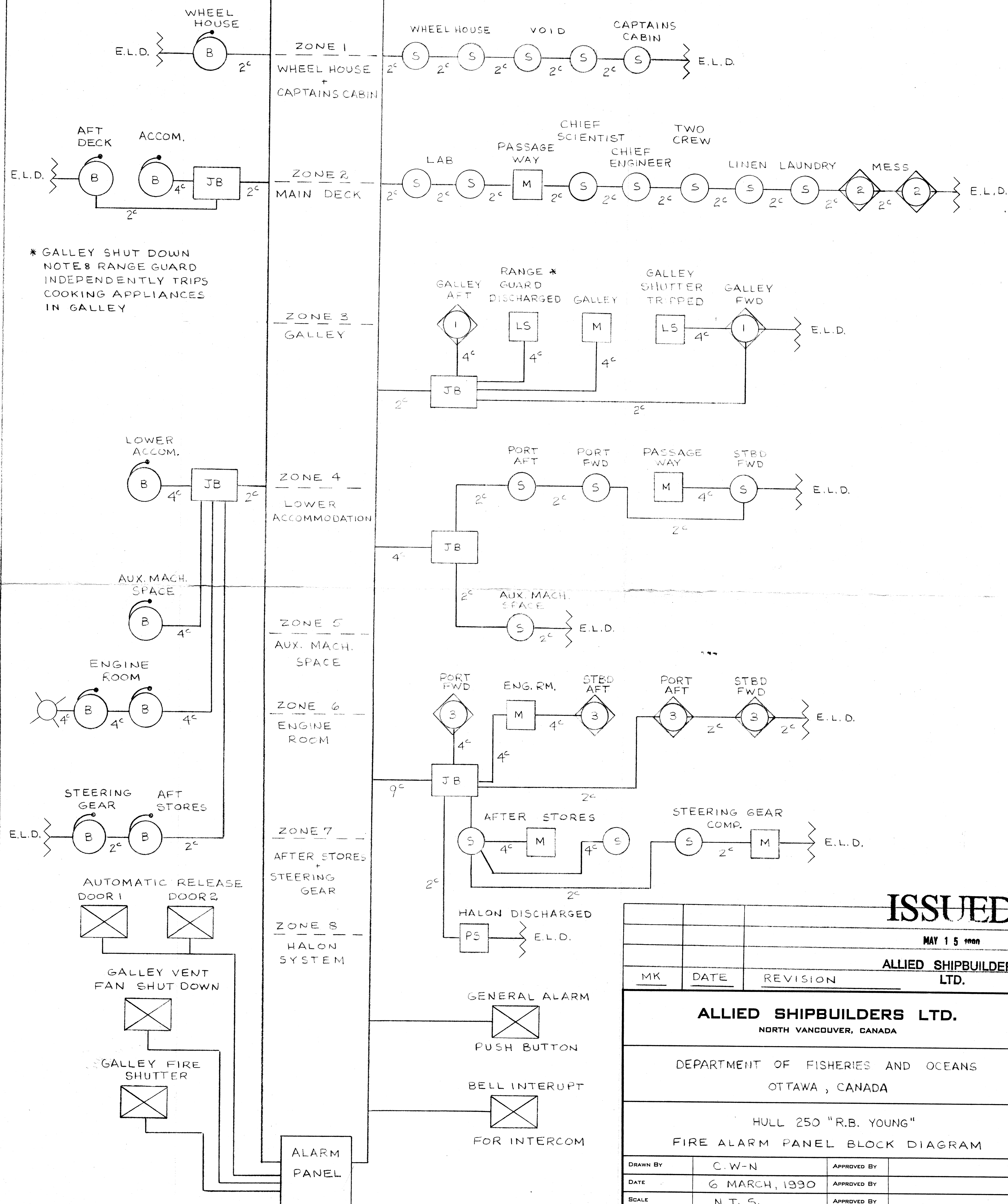


KEY

- PS - PRESSURE SWITCH (HALON SYSTEM)
- M - FIRE ALARM MANUAL STATION
- J.B. - JUNCTION BOX
- ⊗ - ALARM LIGHT
- B - ALARM BELL

KEY

- E.L.D. - END of LINE DEVICE
- S - IONIZATION DETECTOR
- 1 - 135° FIXED THERMAL DETECTOR
- 2 - 135° FIXED AND RATE OF RISE THERMAL DETECTOR
- 3 - 200° FIXED THERMAL DETECTOR



ISSUED

MAY 15 1990

ALLIED SHIPBUILDERS LTD.

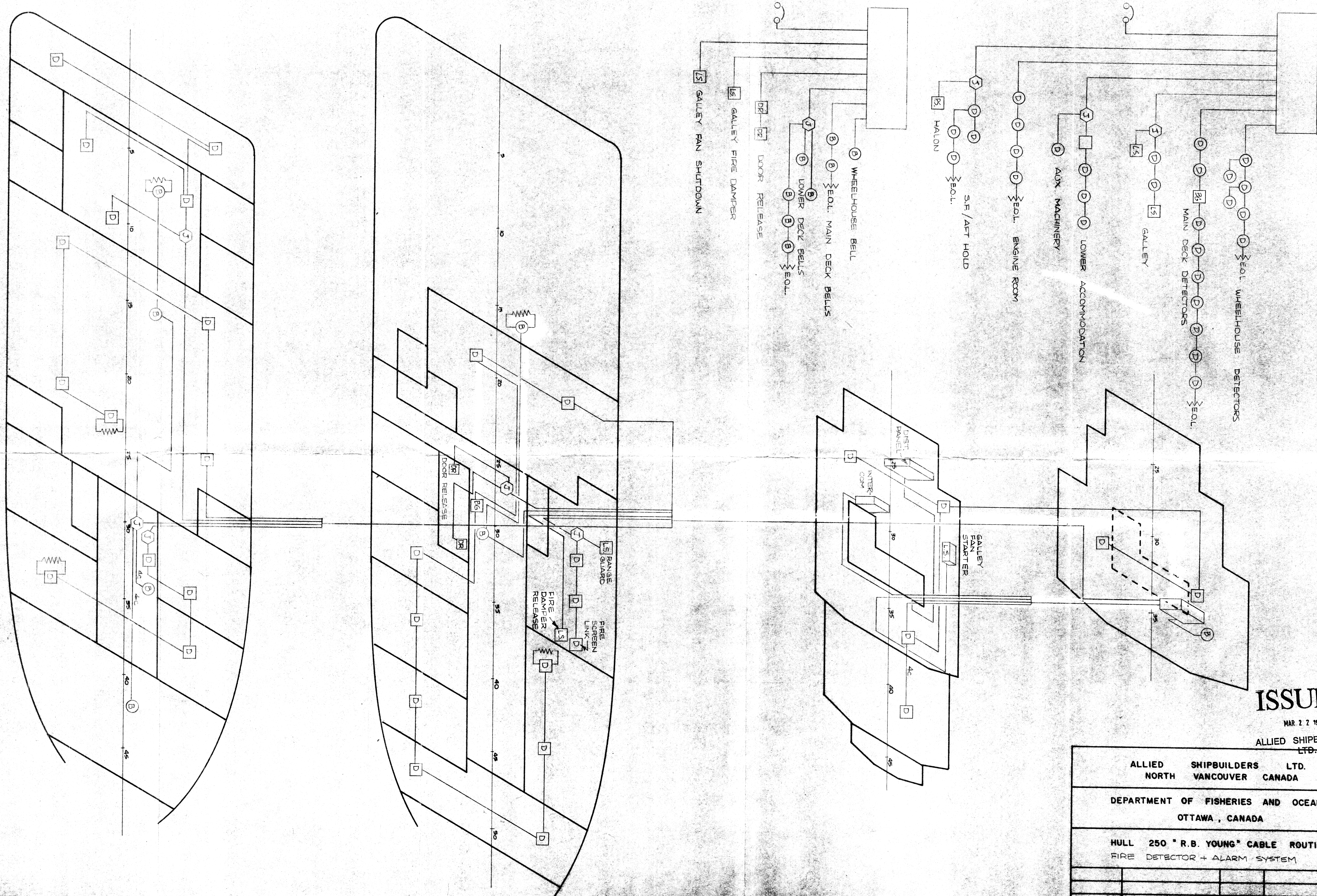
ALLIED SHIPBUILDERS LTD.
NORTH VANCOUVER, CANADA

DEPARTMENT OF FISHERIES AND OCEANS
OTTAWA, CANADA

HULL 250 "R.B. YOUNG"
FIRE ALARM PANEL BLOCK DIAGRAM

DRAWN BY	C.W-N	APPROVED BY	
DATE	6 MARCH, 1990	APPROVED BY	
SCALE	N.T.S.	APPROVED BY	
DESIGN NO.	921	DRG. NO.	039-508

PS055-50-90



ISSUED

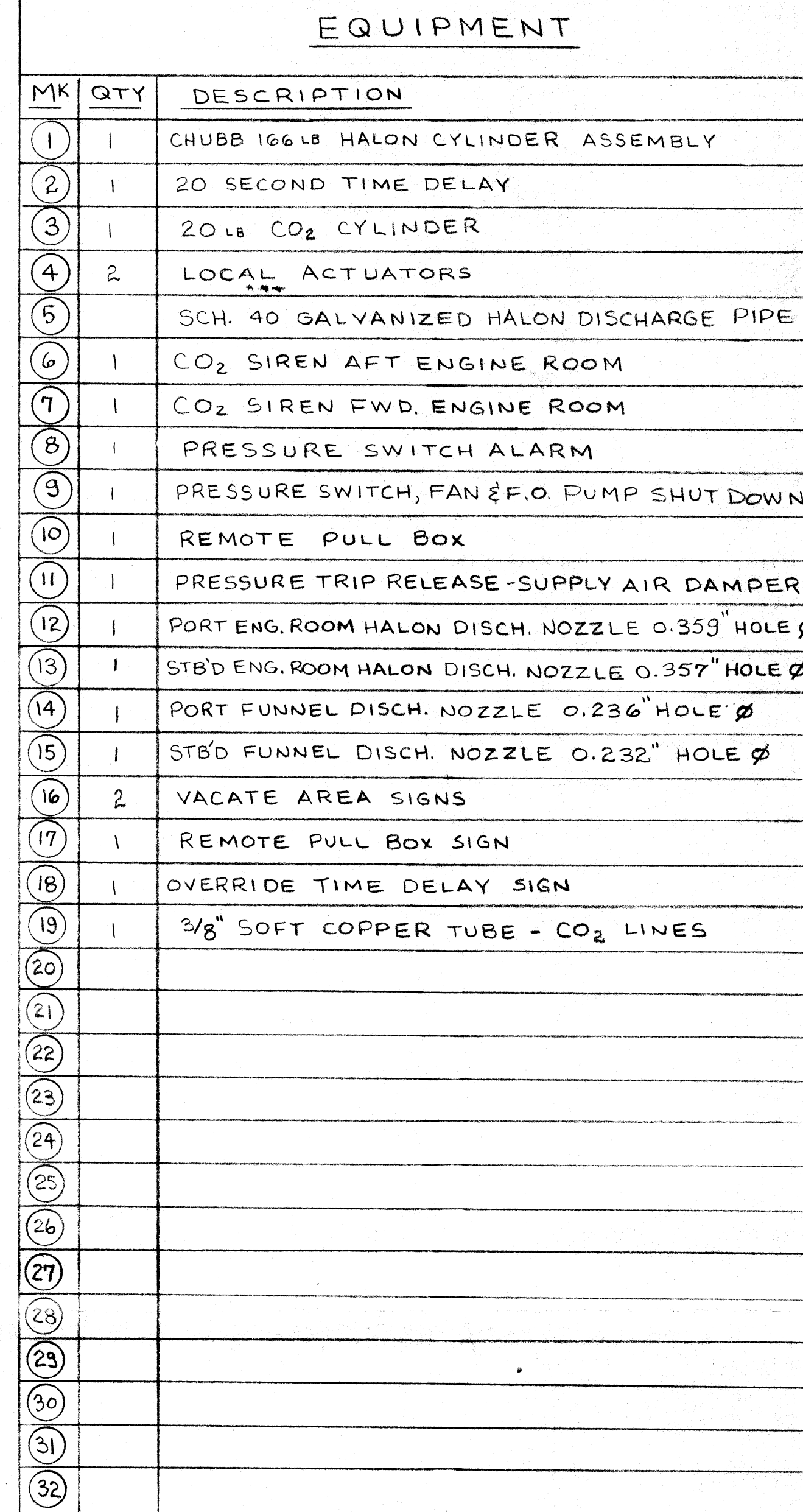
MAR 22 1990

ALLIED SHIPBUILDERS LTD.

ALLIED SHIPBUILDERS LTD.
NORTH VANCOUVER CANADA

DEPARTMENT OF FISHERIES AND OCEANS
OTTAWA, CANADA

HULL 250 "R.B. YOUNG" CABLE ROUTING
FIRE DETECTOR + ALARM SYSTEM



AS FITTED

NOTE 3

- 1 - ALL TEES MUST HAVE ALL 3 CONNECTIONS ON A HORIZONTAL PLANE
- 2 - ALL HALON DISCHARGE PIPING TO BE SCH. 40 SCREWED GALVANIZED PIPE AND FITTINGS
- 3 - ALL CO₂ SIGNAL LINES TO BE 3/8" SOFT COPPER TUBE WITH BRASS FLARE FITTINGS
- 4 - ENGINE ROOM NOZZLES TO BE MOUNTED VERTICALLY DOWN
- 5 - FUNNEL NOZZLES TO BE MOUNTED HORIZONTALLY POINTING DOWN

NOZZLE (15) UP STB'D
FUNNEL CASE AT 600MM
ABOVE FOCSLE DECK

ISSUED

~~MAY 15 1987~~

~~ALLIED SHIPBUILDERS~~
LTD.

ALLIED SHIPBUILDERS LTD.
NORTH VANCOUVER, CANADA

DEPARTMENT OF FISHERIES AND OCEANS
OTTAWA, CANADA

HULL 250 - "R. B. YOUNG"
HALON SCHEMATIC

DRAWN BY	C. W-N	APPROVED BY	C.C.G.
DATE	12 JAN 1990	APPROVED BY	D.F.O.
SCALE	N.T.S.	APPROVED BY	D.S.S.
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