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Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

Bid Fax: (819) 997-9776

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise  
indicated, all other terms and conditions of the Solicitation  
remain the same.

Ce document est par la présente révisé; sauf indication contraire,  
les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

Ship Refits and Conversions / Radoubss et  
modifications de navires and / et

11 Laurier St. / 11, rue Laurier

6C2, Place du Portage

Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> Shock Mitigation Seats Sièges de barre atténuant de chocs	
<b>Solicitation No. - N° de l'invitation</b> F7049-210159/A	<b>Amendment No. - N° modif.</b> 002
<b>Client Reference No. - N° de référence du client</b> F7049-210159	<b>Date</b> 2022-05-27
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$MD-039-28674	
<b>File No. - N° de dossier</b> 039md.F7049-210159	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> Eastern Daylight Saving Time EDT <b>on - le 2022-06-21</b> Heure Avancée de l'Est HAE	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Blackburn, Jessica	<b>Buyer Id - Id de l'acheteur</b> 039md
<b>Telephone No. - N° de téléphone</b> (819) 230-2672 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> Raison sociale et adresse du fournisseur/de l'entrepreneur	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> (type or print) <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

N° de l'invitation - Solicitation No.  
**F7049-210159/A**  
N° de réf. du client - Client Ref. No.  
**F7049-210159**

N° de la modif - Amd. No.  
**002**  
File No. - N° du dossier  
**039md.F7049-210159**

Id de l'acheteur - Buyer ID  
**039md**  
N° CCC / CCC No. / N° VME - FMS

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Solicitation amendment 002 is raised to:

1. Revise typo in Bid Solicitation (English version only);
  2. Revise Statement of Work;
  3. Provide Drawings/Document;
  4. Extend Solicitation Closing Date.
- 

## **1. Revise typo in Bid Solicitation**

At 6.2 – Requirement:

**Delete:**

The CCG Vessel Life Extension (VLE) program requires the supply of four (4) shock mitigating helm chairs for each of the thirty-six (36) 47 foot Motor Life Boat (MLB) vessels as part of the MLB VLE. Total number of shock seats to be delivered is 148 with the option of 20 more.

**Insert:**

The CCG Vessel Life Extension (VLE) program requires the supply of four (4) shock mitigating helm chairs for each of the thirty-six (36) 47 foot Motor Life Boat (MLB) vessels as part of the MLB VLE. Total number of shock seats to be delivered is 148 with the option of 16 more.

## **2. Revise Statement of Work**

At Annex A - Statement of Work – Article 3.24

**Delete:** Seats must be equipped with swivel capability.

## **3. Provide Drawings/Document**

Provide Following Drawings:

HM1973 – Joystick Assembly Spring Iss4

110-630-01

110-630-02

600-010-05

600-010-06

Technical Standards Document – Flammability of Interior Materials

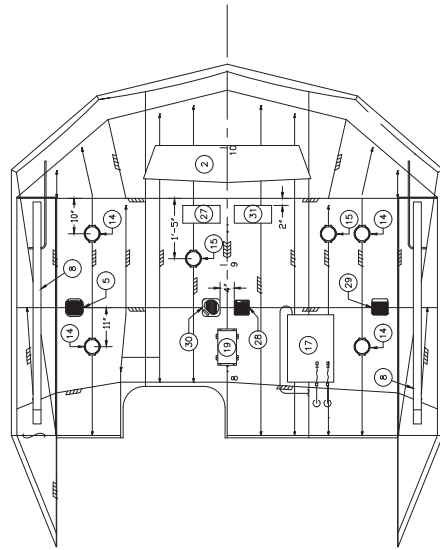
## **4. Extend Solicitation Closing Date.**

At Request for Proposal - Cover Page – Solicitation Closes :

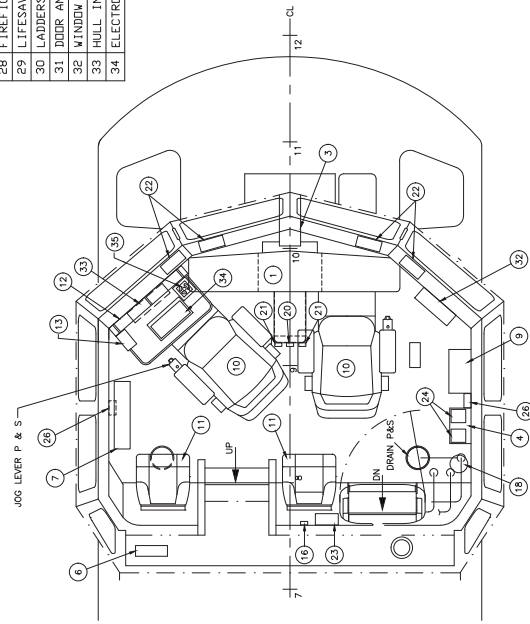
**Delete:** 2022-06-07

**Insert:** 2022-06-21

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED



PLAN AT DECKHEAD



PLAN AT DECK

REFERENCE DRAWINGS		
NO	TITLE	DRAWING NO
1	DECKHOUSE SIDE, STD	47B MLB 150-010
2	DECKHOUSE SIDE, PORT	47B MLB 150-020
3	LOWER BULKHEAD FR 8	47B MLB 150-040
4	FORWARD DECK LOCKER	47B MLB 150-060
5	CONSOLE STRUCTURE	47B MLB 150-070
6	ENCLOSED BRIDGE TOP	47B MLB 150-080
7	UPPER BULKHEAD FR 8	47B MLB 150-100
8	PROPULSION CONTROL SYSTEM	47B MLB 252-010
9	ELECTRICAL ONE LINE DIAGRAM	47B MLB 300-020
10	WINDOW HEATERS, BLOWERS & WIPERS	47B MLB 320-030
11	LIGHTS & SWITCHES	47B MLB 331-010
12	CONTROL AND ALARM SYSTEMS (DIESEL INDICATING SYSTEM)	47B MLB 436-011
13	CONTROL AND ALARM SYSTEMS (COR. SYSTEM)	47B MLB 436-012
14	CONTROL AND ALARM SYSTEMS (STEERING SYSTEM)	47B MLB 436-013
15	CONTROL AND ALARM SYSTEMS (FIRE ALARM SYSTEM)	47B MLB 436-014
16	CONTROL AND ALARM SYSTEMS (BILGE ALARM SYSTEM)	47B MLB 436-015
17	CONTROL AND ALARM SYSTEMS (STEERING ALARM SYSTEM)	47B MLB 436-016
18	CONSOLE ARRANGEMENT	47B MLB 438-010
19	HF/SSB TRANSCEIVER SYSTEM	47B MLB 440-010
20	VHF/FM RADIO TELEPHONE	47B MLB 440-011
21	VHF/FM RADIO TELEPHONE	47B MLB 440-012
22	VHF/FM VIDEABAND TRANSCEIVER No. 1	47B MLB 440-013
23	VHF/FM VIDEABAND TRANSCEIVER No. 2	47B MLB 440-014
24	VHF/FM PORTABLE RECEIVERS	47B MLB 440-015
25	PIPING ARRANGEMENT - BILGE SYSTEM	47B MLB 505-023
26	HVAC DETAILS	47B MLB 512-010
27	DUFFIT AND FURNISHINGS LIST	47B MLB 600-010
28	FIRE LIFTING	47B MLB 610-010
29	LIFESAVING	47B MLB 610-020
30	LADDERS	47B MLB 623-010
31	DOOR AND HARDWARE LIST	47B MLB 624-010
32	WINDOW LIST	47B MLB 625-010
33	HULL INSULATION	47B MLB 635-010
34	ELECTRONIC CHART COMPUTER	47B MLB 436-011

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ITEM NO	NO OF	DESCRIPTION	
1	1	CONSOLE	SEE REFERENCE No 5 & 18, SECURING BY SHIPWARD
2	1	OVERHEAD CONSOLE	SEE REFERENCE No 5 & 18, SECURING BY SHIPWARD
3	1	MILLION BOX	SEE REFERENCE No 5 & 18, SECURING BY SHIPWARD
4	1	CAPSIZE CONTROL BOX	SEE REFERENCE No 9 & DETAIL 3-4A
5	1	SPEAKER (VHF/PM WIDEBAND X'OUR No 1)	SEE REFERENCE No 22, SECURING BY SHIPWARD
6	1	RED LIGHTS & BLUE LIGHT RELAY PANEL	SEE REFERENCE No 11, SECURING BY SHIPWARD
7	1	NAVIGATION LIGHT PANEL	SEE REFERENCE No 11, & DETAIL 3-BE
8	2	WINDOW BLUNDER C/W TUBULAR DIFFUSER	SEE REFERENCE No 10 & 26, SECURING BY SHIPWARD
9	1	BILGE ALARM PANEL/SWITCHES	SEE REFERENCE No 25, & DETAIL 3-4A
10	2	OPERATOR'S SEAT	SEE REFERENCE No 27
11	1	ROLLSTER CHAIR	SEE REFERENCE No 27
12	1	CHART TABLE	SEE REFERENCE No 27
13	1	MAP LIGHT, RED/WHITE	SEE REFERENCE No 11, SECURING BY SHIPWARD
14	4	LIGHT, WHITE	SEE REFERENCE No 11, SECURING BY SHIPWARD
15	2	LIGHT, RED, C/W ANTI-GLARE SHIELDS	SEE REFERENCE No 11, SECURING BY SHIPWARD
16	1	THERMOSTAT CONTROL	SEE REFERENCE No 9
17	1	HVAC UNIT	SEE REFERENCE No 26
18	1	FIRE EXTINGUISHER, TYPE B-1, PWP	SEE REFERENCE No 28
19	1	LIGHT SWITCH WITH DIMMER	SEE REFERENCE No 11
20	2	COS PULL STATION, MAIN RESERVE	SECURING BY SHIPWARD
21	1	ENGINE SHUTDOWN PULL STATION	SECURING BY SHIPWARD
22	4	WINDOW WIPER MOTOR	SEE REFERENCE No 10 & 3E
23	1	EMERGENCY LIGHT	SEE REFERENCE No 11
24	2	CHARGING SETS	SEE REFERENCE No 24
25	3	NOT USED	
26	1	RECEPTACLE	SEE REFERENCE No 9
27	2	AUXILIARY CONTROL SWITCH	SEE REFERENCE No 8
28	1	SPEAKER (VHF/PM TRANSCEIVER)	SEE REFERENCE No 20
29	1	SPEAKER (VHF/PM TRANSCEIVER	SEE REFERENCE No 21
30	1	SPEAKER/W-SSB MARINE RADIO TELEPHONE	SEE REFERENCE No 19
31	1	INTERCOM CONTROL ENCLOSURE	
32	1	MID-CW DIGITAL W-SSB MARINE RADIO TELEPHONE	SEE REFERENCE No 34
33	1	ELECTRONIC CHART COMPUTER	SEE REFERENCE No 34
34	1	KEYPAD	SEE REFERENCE No 34
35	1	MUSE	SEE REFERENCE No 34

## LIST OF CONTENTS

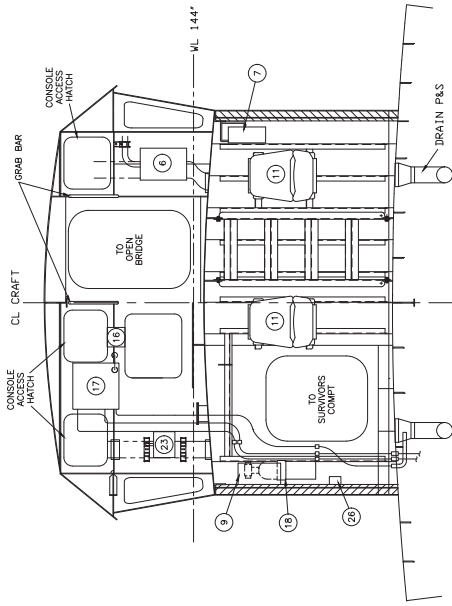
GENERAL NOTES:

1. THIS DRAWING SHOWS MAIN EQUIPMENT WITHIN THE ENCLOSED BRIDGE. ALL ELECTRICAL AND FUNCTION BOXES WILL BE FOUND ON THE RELEVANT SYSTEM DRAWINGS.
2. THE RECKHEAD OF THE ENCLOSED BRIDGE IS TO BE PAINTED BLACK TO REDUCE THE EFFECT OF GLARE.
3. ALL SPEAKER LOCATIONS ARE TO BE AGREED BY THE TECHNICAL AUTHORITY, PRIOR TO INSTALLATION.
4. THE STOWAGES FOR THE HAND HELD ANEMOMETER, THE EDC WORK COUNTER, AND LASS, ARE TO BE LOCATED AT THE DISCRETION OF THE SHIPS STAFF.

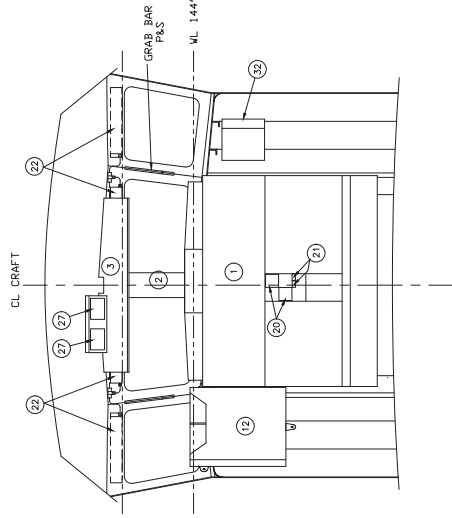
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GENERAL NOTES:

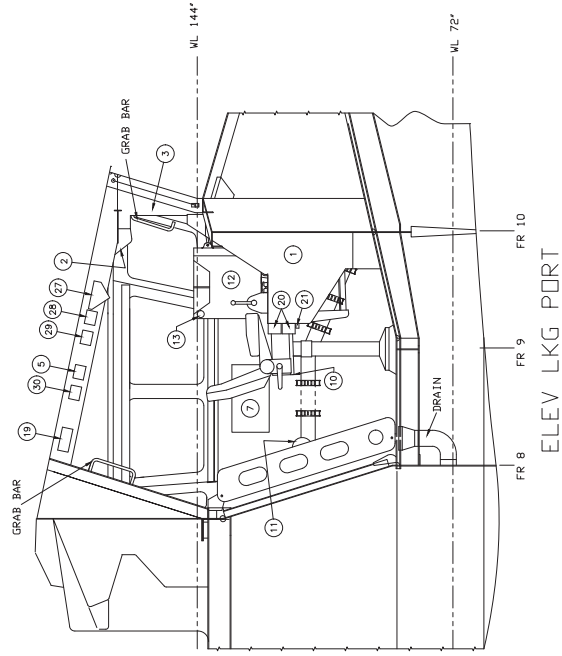
- THIS DRAWING SHOWS MAIN EQUIPMENT WITHIN THE ENCLOSED BRIDGE. SMALLER EQUIPMENT ITEMS, FOR EXAMPLE, JUNCTION BOXES WILL BE FOUND ON THE RELEVANT SYSTEM DRAWINGS.



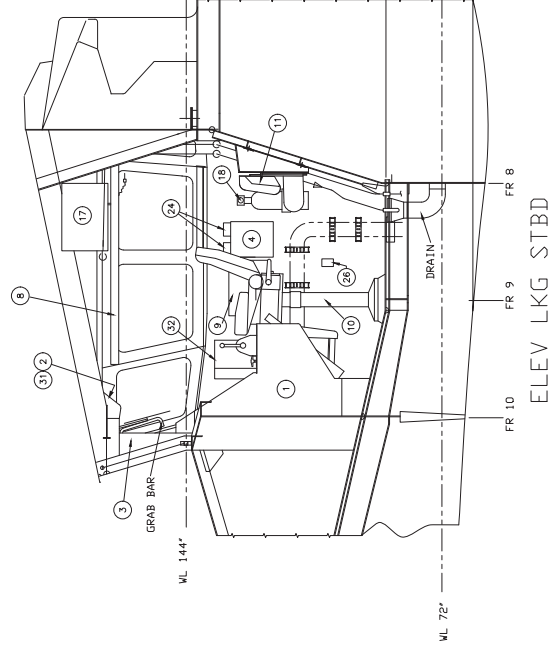
SECTION LKG AFT



SECTION LKG FWD



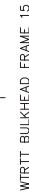
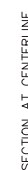
ELEV LKG PORT

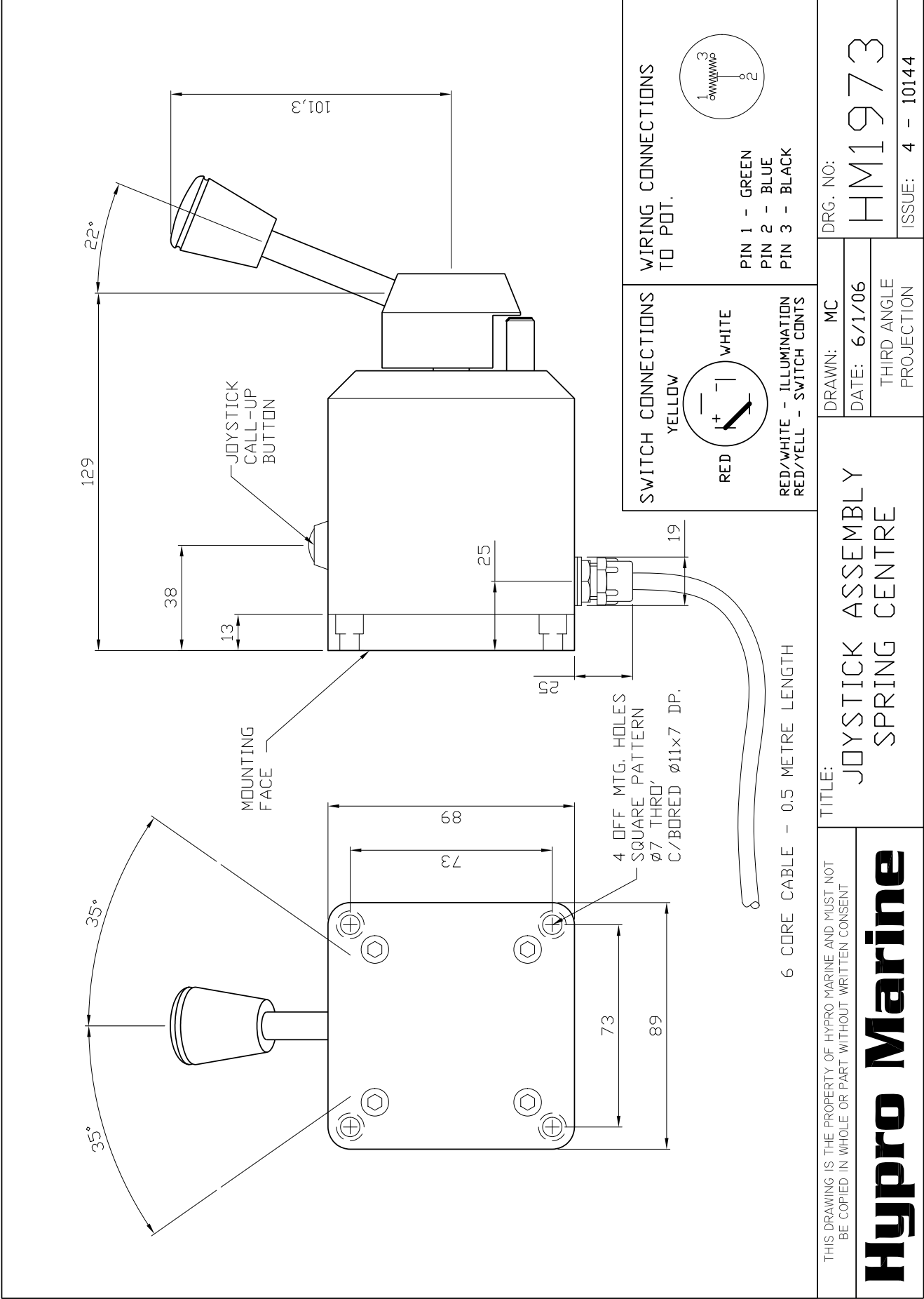


ELEV LKG STBD

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Transport  
Canada  
Motor Vehicle  
Safety

Transports  
Canada  
Sécurité des  
véhicules  
automobiles

## TECHNICAL STANDARDS DOCUMENT No. 302, Revision 0R

### Flammability of Interior Materials

The text of this document is based on Federal Motor Vehicle Safety Standard No. 302, *Flammability of Interior Materials*, as published in the U.S. *Code of Federal Regulations*, Title 49, Part 571, revised as of October 1, 2006.

**Publication Date:**

**August 22, 2007**

**Effective Date:**

**August 22, 2007**

**Mandatory Compliance Date:**

**February 22, 2008**

*(Ce document est aussi disponible en français)*



## Introduction

As defined by section 12 of the *Motor Vehicle Safety Act*, a Technical Standards Document (TSD) is a document that reproduces an enactment of a foreign government (e.g. a Federal Motor Vehicle Safety Standard issued by the U.S. National Highway Traffic Safety Administration). According to the Act, the [\*Motor Vehicle Safety Regulations\*](#) may alter or override some provisions contained in a TSD or specify additional requirements; consequently, it is advisable to read a TSD in conjunction with the Act and its counterpart Regulation. As a guide, where the corresponding Regulation contains additional requirements, footnotes indicate the amending subsection number.

TSDs are revised from time to time in order to incorporate amendments made to the reference document, at which time a Notice of Revision is published in the *Canada Gazette*, Part I. All TSDs are assigned a revision number, with “Revision 0” designating the original version.

## Identification of Changes

In order to facilitate the incorporation of a TSD, certain non-technical changes may be made to the foreign enactment. These may include the deletion of words, phrases, figures, or sections that do not apply under the Act or Regulations, the conversion of imperial to metric units, the deletion of superseded dates, and minor changes of an editorial nature. Additions are underlined, and provisions that do not apply are ~~stroked through~~. Where an entire section has been deleted, it is replaced by: “[CONTENT DELETED]”. Changes are also made where there is a reporting requirement or reference in the foreign enactment that does not apply in Canada. For example, the name and address of the U.S. Department of Transportation are replaced by those of the Department of Transport.

## Effective Date and Mandatory Compliance Date

Compliance with the requirements of a TSD that is being introduced for the first time is not mandatory until six months after publication in the *Canada Gazette*, Part II, of the Regulations that incorporate the TSD. In the case of a revision, compliance becomes mandatory six months after publication of the Notice of revision in the *Canada Gazette*, Part I, as long as the requirements of the previous version continue to be met. Voluntary compliance is permitted as of the Effective Date of the TSD.

## **Official Version of Technical Standards Documents**

The PDF version is a replica of the TSD as published by the Department and is to be used for the purposes of legal interpretation and application.

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## S1. Scope

This Technical Standards Document (TSD) standard specifies burn resistance requirements for materials used in the occupant compartments of motor vehicles.

## S2. Purpose

The purpose of this TSD standard is to reduce the deaths and injuries to motor vehicle occupants caused by vehicle fires, especially those originating in the interior of the vehicle from sources such as matches or cigarettes.

## S3. Application

[CONTENT DELETED] For applicability, see Schedule III and subsection 302(1) of Schedule IV to the [\*Motor Vehicle Safety Regulations\*](#).

### S3A. Definition

**Occupant compartment air space** means the space within the occupant compartment that normally contains refreshable air. (*Espace d'air de l'habitacle*)

## S4. Requirements

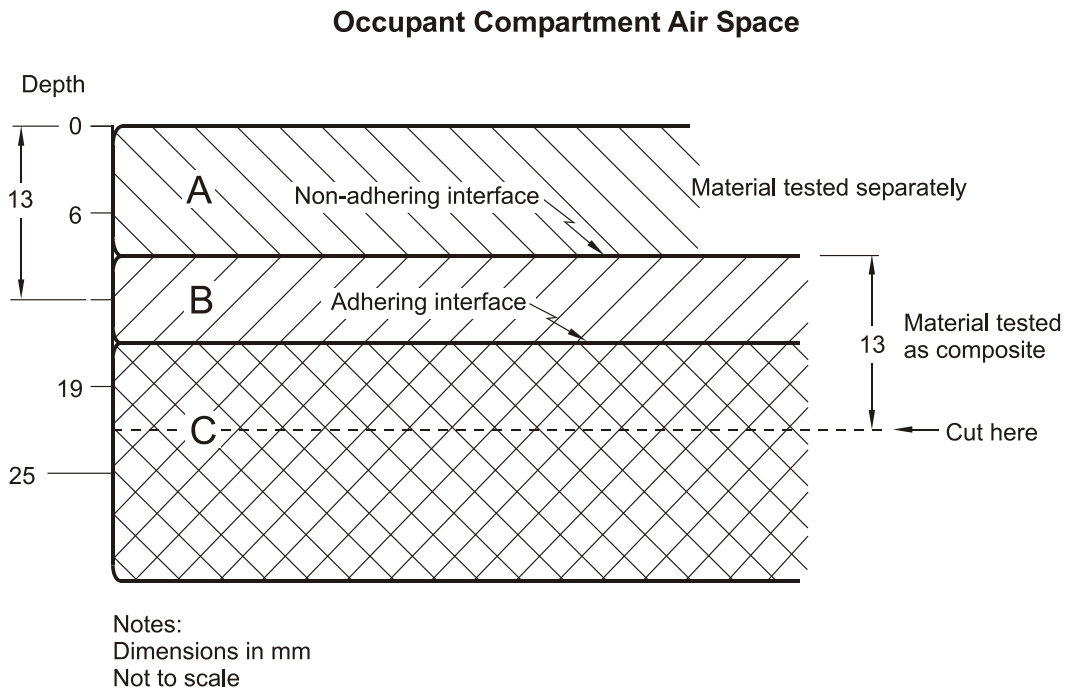
**S4.1** The portions described in S4.2 of the following components of vehicle occupant compartments shall meet the requirements of S4.3: Seat cushions, seat backs, seat belts, headlining, convertible tops, arm rests, all trim panels including door, front, rear, and side panels, compartment shelves, head restraints, floor coverings, sun visors, curtains, shades, wheel-housing covers, engine compartment covers, mattress covers, and any other interior materials, including padding and crash-deployed elements, that are designed to absorb energy on contact by occupants in the event of a crash.

**S4.1.1** [Reserved]

**S4.2** Any portion of a single or composite material which is within 13 mm of the occupant compartment air space shall meet the requirements of S4.3.

**S4.2.1** Any material that does not adhere to other material(s) at every point of contact shall meet the requirements of S4.3 when tested separately.

**S4.2.2** Any material that adheres to other materials at every point of contact shall meet the requirements of S4.3 when tested as a composite with the other material(s).



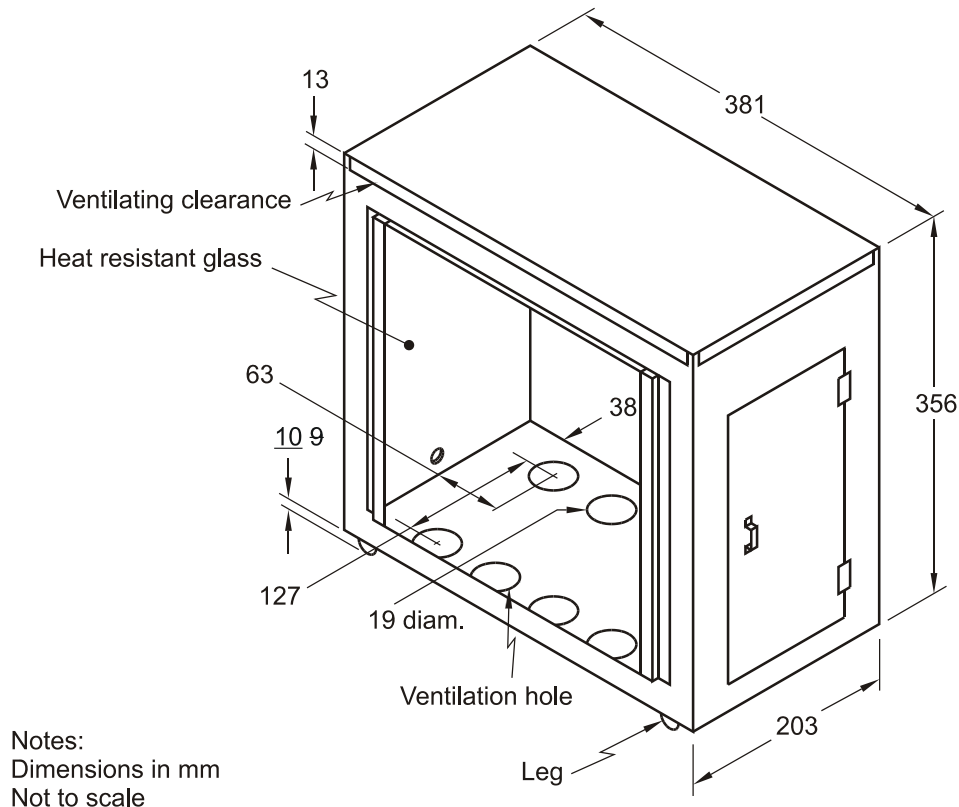
Material A has a non-adhering interface with material B and is tested separately. Part of material B is within 13 mm of the occupant compartment air space, and materials B and C adhere at every point of contact; therefore, B and C are tested as a composite. The cut is in material C as shown, to make a specimen 13 mm thick.

### S4.3

- (a) When tested in accordance with S5, material described in S4.1 and S4.2 shall not burn, nor transmit a flame front across its surface, at a rate of more than 102 mm per minute. The requirement concerning transmission of a flame front shall not apply to a surface created by cutting a test specimen for purposes of testing pursuant to S5.
- (b) If a material stops burning before it has burned for 60 seconds from the start of timing, and has not burned more than 51 mm from the point where the timing was started, it shall be considered to meet the burn-rate requirement of S4.3(a).

## S5.1 Conditions

**S5.1.1** The test is conducted in a metal cabinet for protecting the test specimens from drafts. The interior of the cabinet is 381 mm long, 203 mm deep, and 356 mm high. It has a glass observation window in the front, a closable opening to permit insertion of the specimen holder, and a hole to accommodate tubing for a gas burner. For ventilation, it has a 13-mm clearance space around the top of the cabinet, ten holes in the base of the cabinet, each hole 19 mm in diameter, and legs to elevate the bottom of the cabinet by 10 mm, all located as shown in Figure 1.



### Figure 1

**S5.1.2** Prior to testing, each specimen is conditioned for 24 hours at a temperature of 21°C and a relative humidity of 50 percent, and the test is conducted under those ambient conditions.

**S5.1.3** The test specimen is inserted between two matching U-shaped frames of metal stock 25 mm wide and 10 mm high. The interior dimensions of the U-shaped frames are 51 mm wide by 330 mm long. A specimen that softens and bends at the flaming end so as to cause erratic burning is kept horizontal by supports consisting of thin, heat-resistant wires spanning the width of the U-shaped frame under the specimen at 25-mm intervals. A device that may be used for supporting this type of material is an additional U-shaped frame, wider than the U-shaped frame containing the specimen, spanned by 0.254-mm (10-mil) wires of heat-resistant composition at 25-mm intervals, inserted over the bottom U-shaped frame.

**S5.1.4** A bunsen burner with a tube of 10-mm inside diameter is used. The gas adjusting valve is set to provide a flame, with the tube vertical, of 38 mm in height. The air inlet to the burner is closed.

**S5.1.5** The gas supplied to the burner has a flame temperature equivalent to that of natural gas.

## **S5.2 Preparation of Specimens**

**S5.2.1** Each specimen of material to be tested shall be a rectangle 102 mm wide by 356 mm long, wherever possible. The thickness of the specimen is that of the single or composite material used in the vehicle, except that if the material's thickness exceeds 13 mm, the specimen is cut down to that thickness measured from the surface of the specimen closest to the occupant compartment air space. Where it is not possible to obtain a flat specimen because of surface curvature, the specimen is cut to not more than 13 mm in thickness at any point. The maximum available length or width of a specimen is used where either dimension is less than 356 mm or 102 mm, respectively, unless surrogate testing is required under S4.1.1.

**S5.2.2** The specimen is produced by cutting the material in the direction that provides the most adverse test results. The specimen is oriented so that the surface closest to the occupant compartment air space faces downward on the test frame.

**S5.2.3** Material with a napped or tufted surface is placed on a flat surface and combed twice against the nap with a comb having seven to eight smooth, rounded teeth per 25 mm.

## **S5.3 Procedure**

- (a) Mount the specimen so that both sides and one end are held by the U-shaped frame, and one end is even with the open end of the frame. Where the maximum available width of a specimen is not more than 51 mm, so that the sides of the specimen cannot be held in the U-shaped frame, place the specimen in position on wire supports as described in S5.1.3, with one end held by the closed end of the U-shaped frame.
- (b) Place the mounted specimen in a horizontal position in the center of the cabinet.
- (c) With the flame adjusted according to S5.1.4, position the bunsen burner and specimen so that the center of the burner tip is 19 mm below the center of the bottom edge of the open end of the specimen.

- (d) Expose the specimen to the flame for 15 seconds.
- (e) Begin timing (without reference to the period of application of the burner flame) when the flame from the burning specimen reaches a point 38 mm from the open end of the specimen.
- (f) Measure the time that it takes the flame to progress to a point 38 mm from the clamped end of the specimen. If the flame does not reach the specified end point, time its progress to the point where flaming stops.
- (g) Calculate the burn rate from the formula:

$$B = 60 \times \frac{D}{T}$$

where:

B = Burn rate in millimeters per minute

D = Length the flame travels in millimeters, and

T = Time in seconds for the flame to travel D millimeters.