

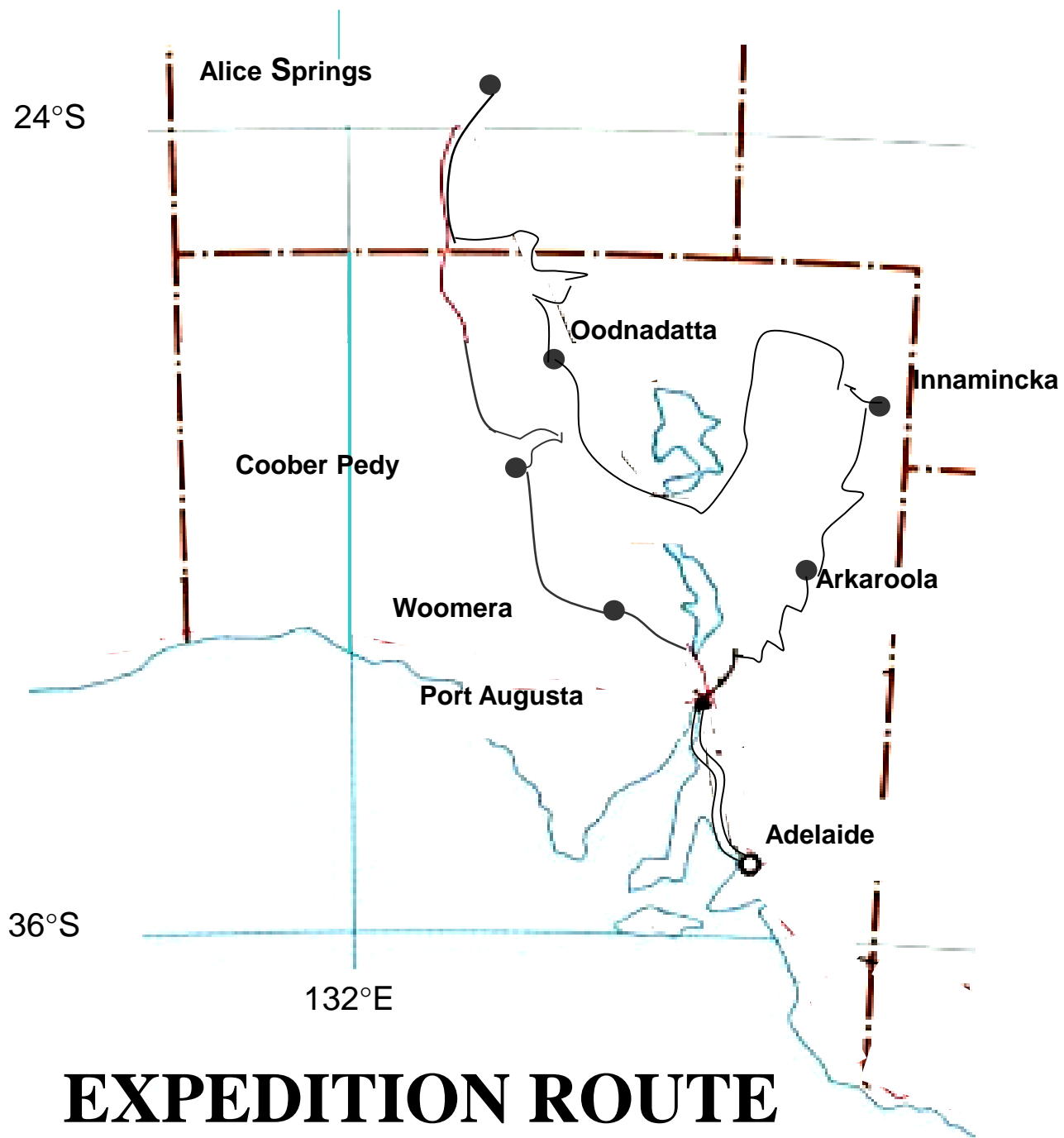




ARCTIC RESEARCH STATION

Discovery

BATTLER



# EXPEDITION ROUTE

# MARS-OZ ANALOGUES I

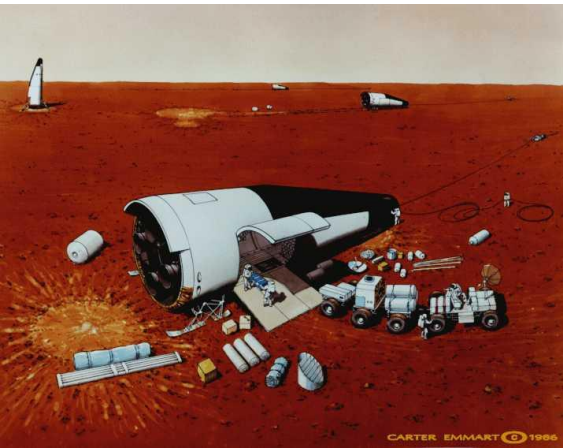
## 4 m diameter fuel tank



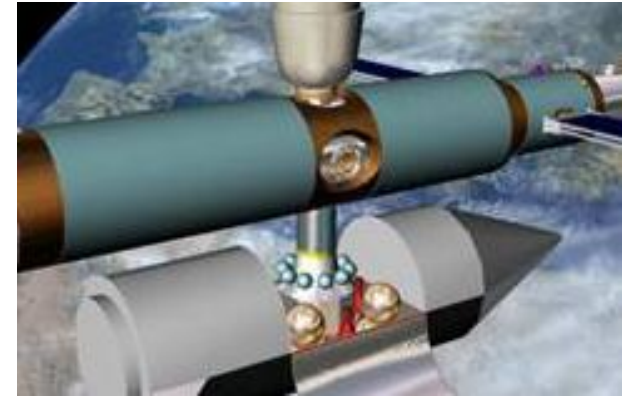
# **WHY MODEL A HORIZONTAL CONFIGURATION?**

- **Easier to transport than alternative configurations (little on-site assembly required)**
- **Horizontal landers a strong contender for any crewed mission**
- **Other Mars Analogue Research Stations are based on Mars Direct**
- **Or not based on any specific mission architectures**
- **Imperative to test alternative configurations**

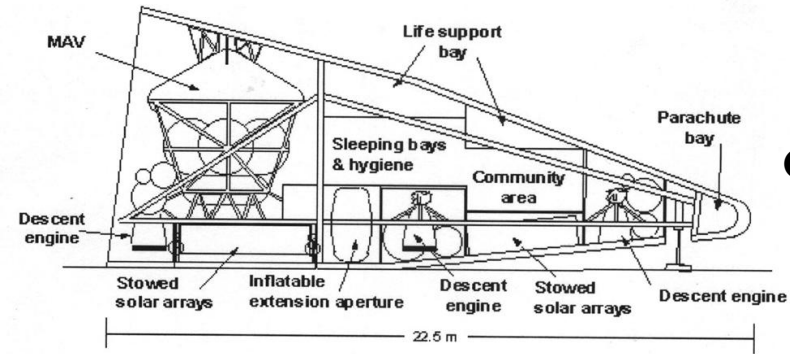
# Inspirational and parallel concepts



Case for Mars 1984

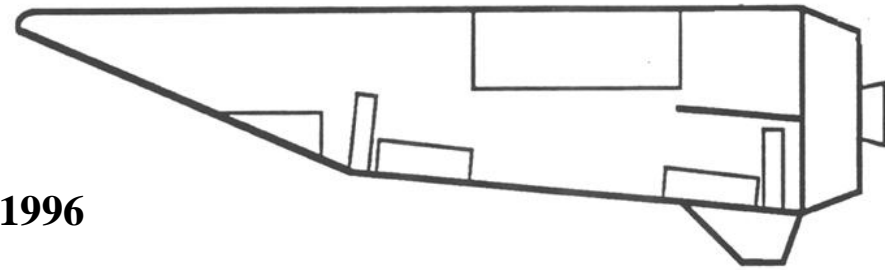


Energia 1989



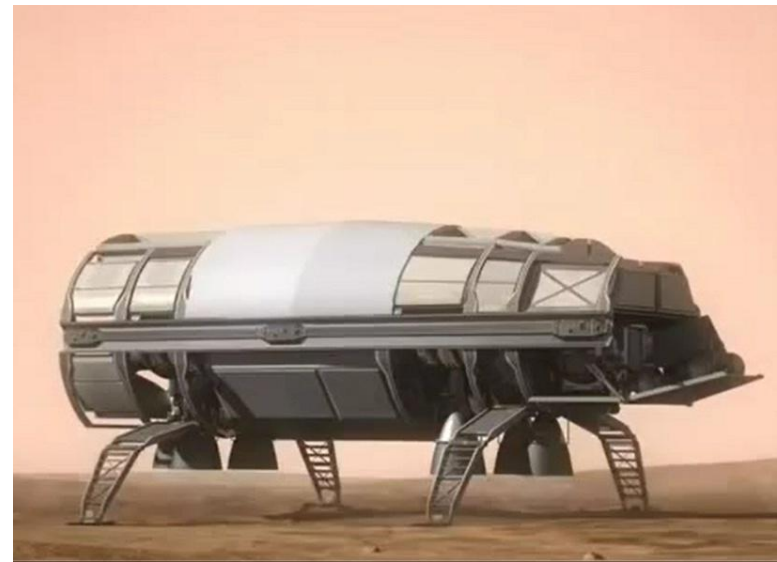
ISU 1991

Grover *et al.* 1996

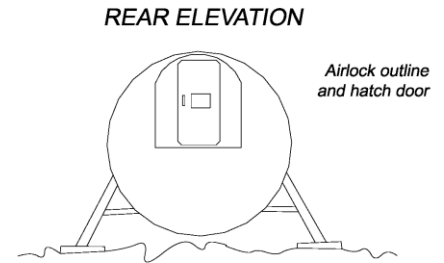
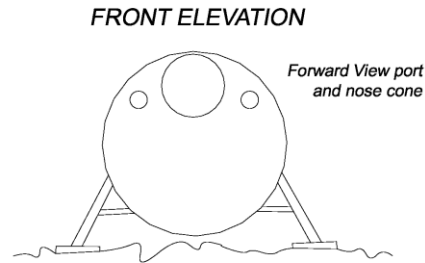
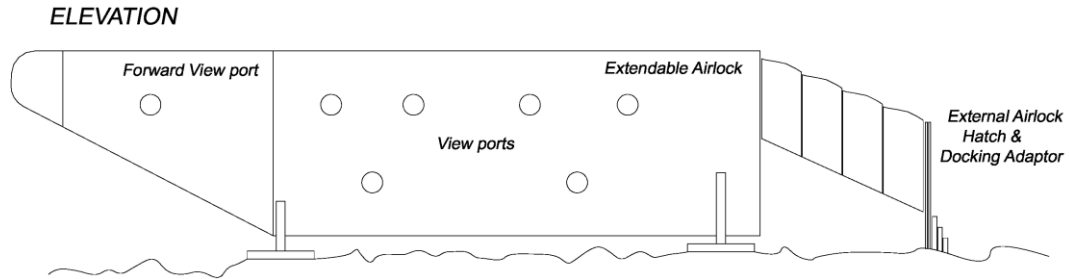
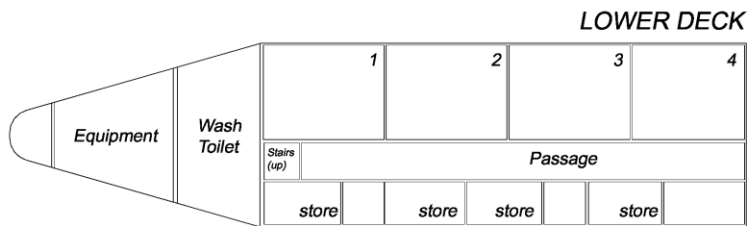
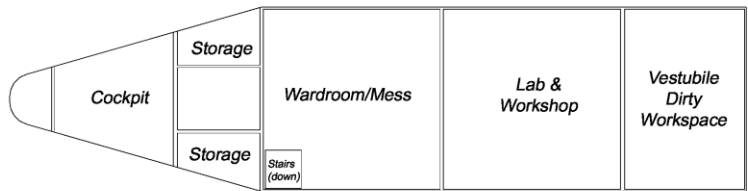
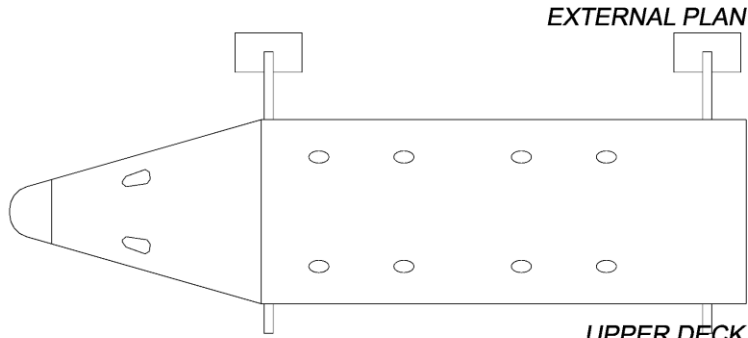


DRM 4.0 2001

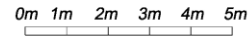
DRM 5.0 2001



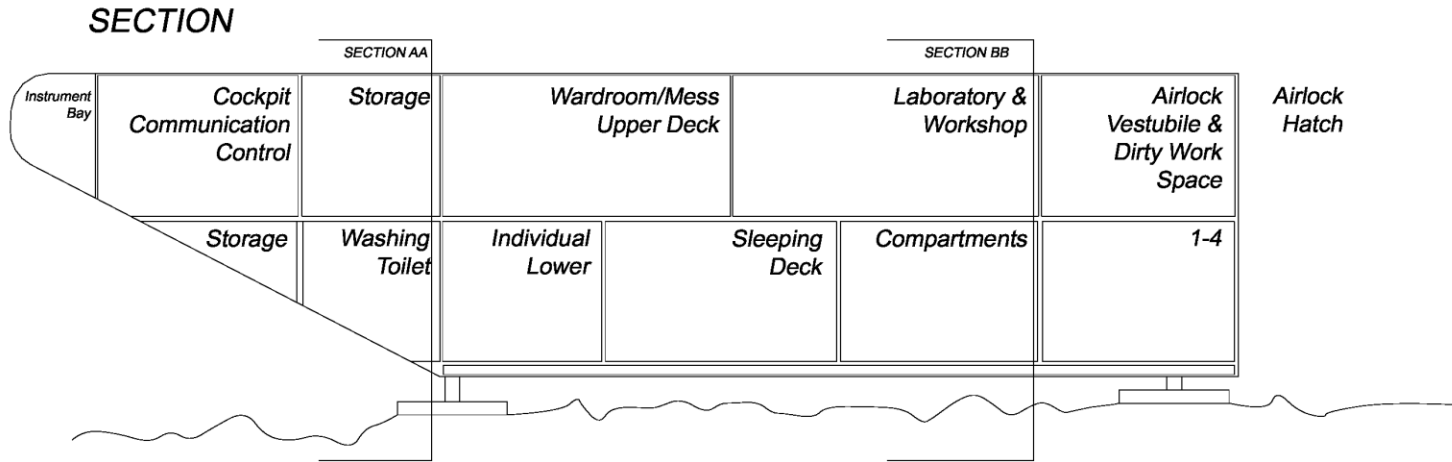
# HABITAT MODULE 2002



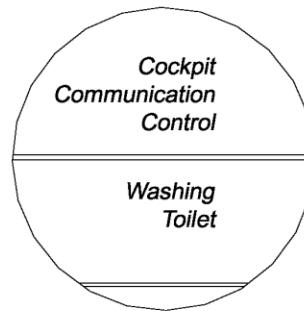
MARS-OZ  
HAB-B



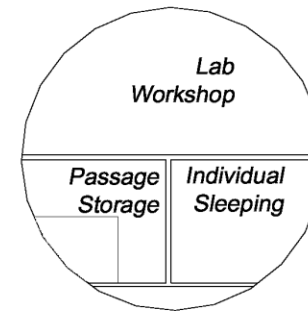
# HABITAT MODULE II



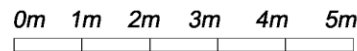
**SECTION AA**



**SECTION BB**

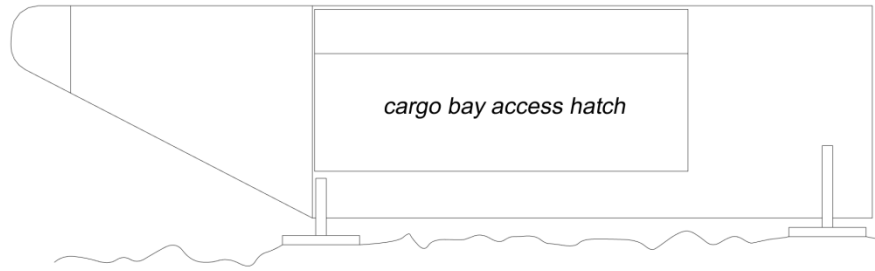


**MARS-OZ  
HAB-C**

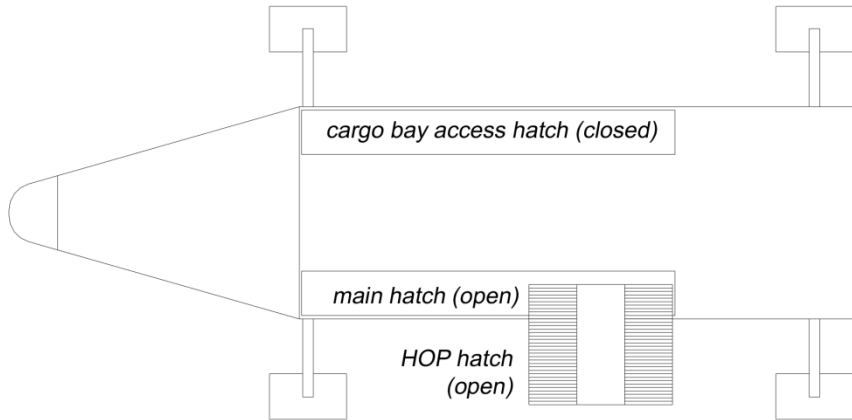




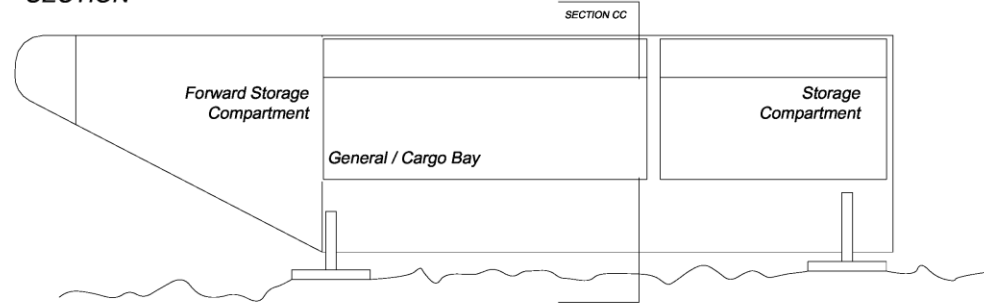
# CARGO MODULE 2002



landing legs



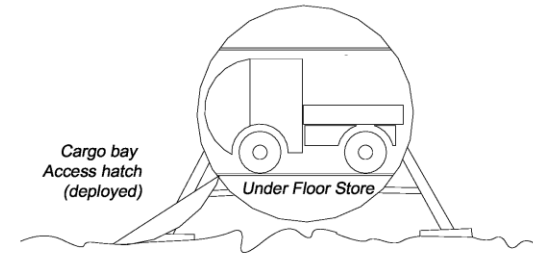
SECTION



SECTION CC

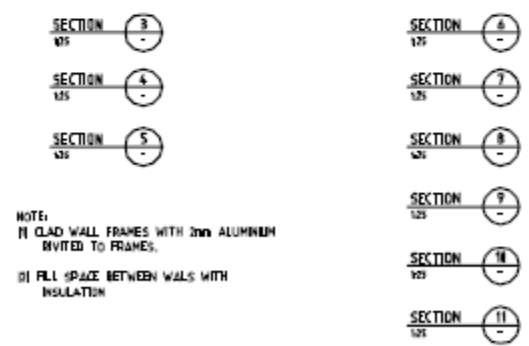
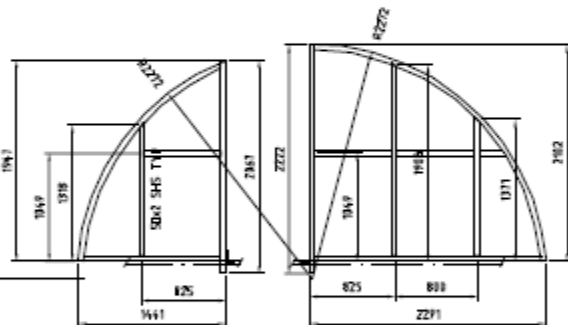
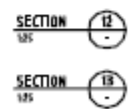
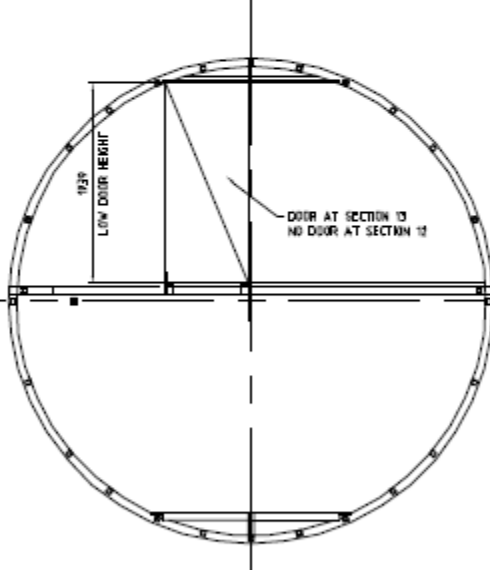
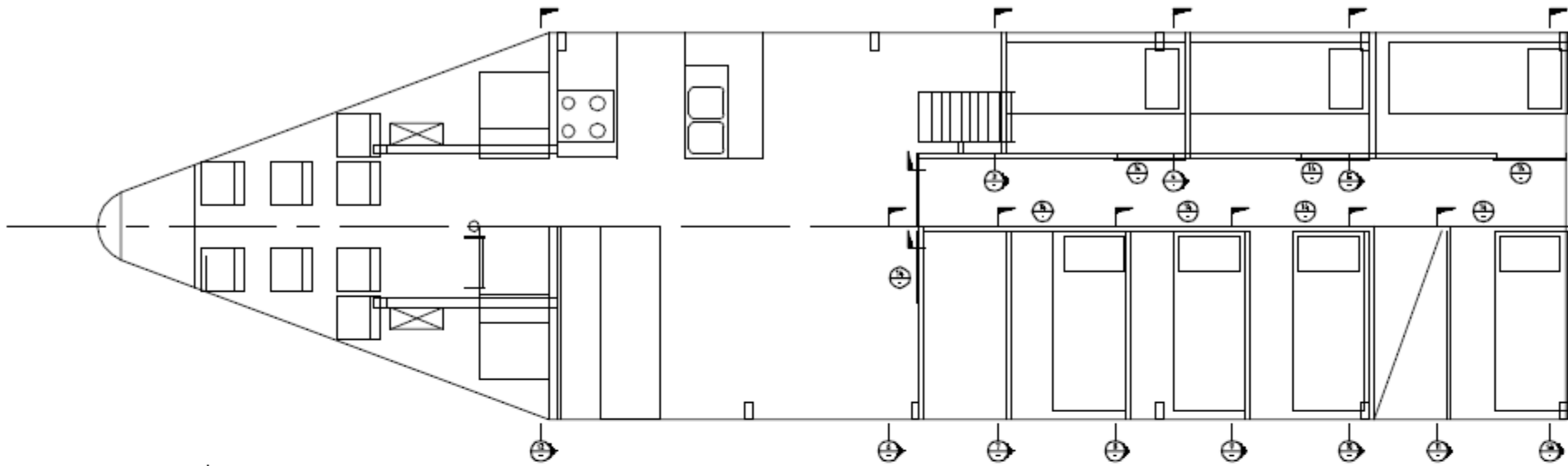
MARS-OZ  
CARGO  
LANDER-B

0m 1m 2m 3m 4m 5m

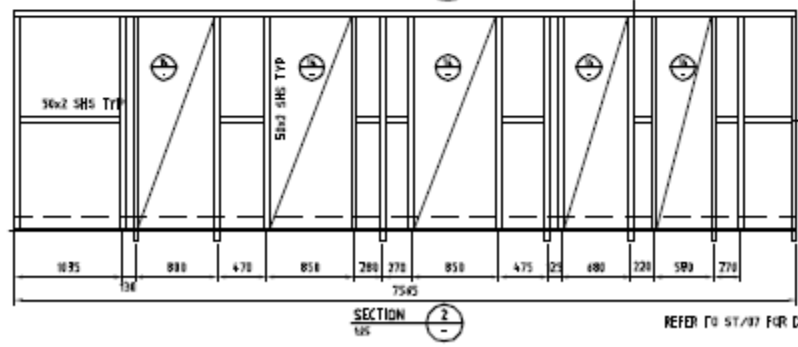
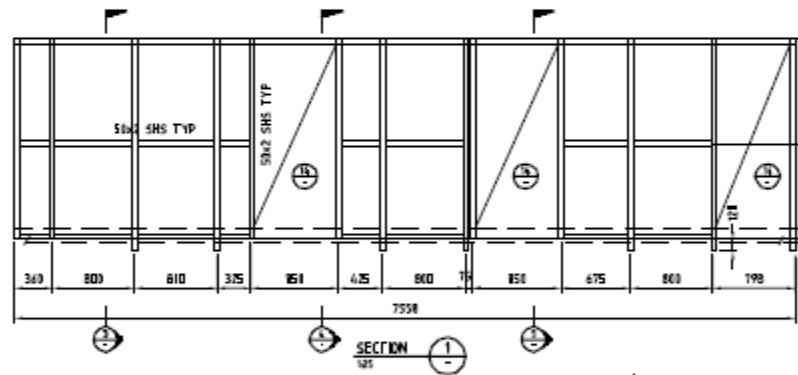


Cargo bay  
Access hatch  
(deployed)

Under Floor Store



NOTE:  
 (1) CLAD WALL FRAMES WITH 2mm ALUMINUM DIVIDED TO FRAMES.  
 (2) FILL SPACE BETWEEN WALLS WITH INSULATION

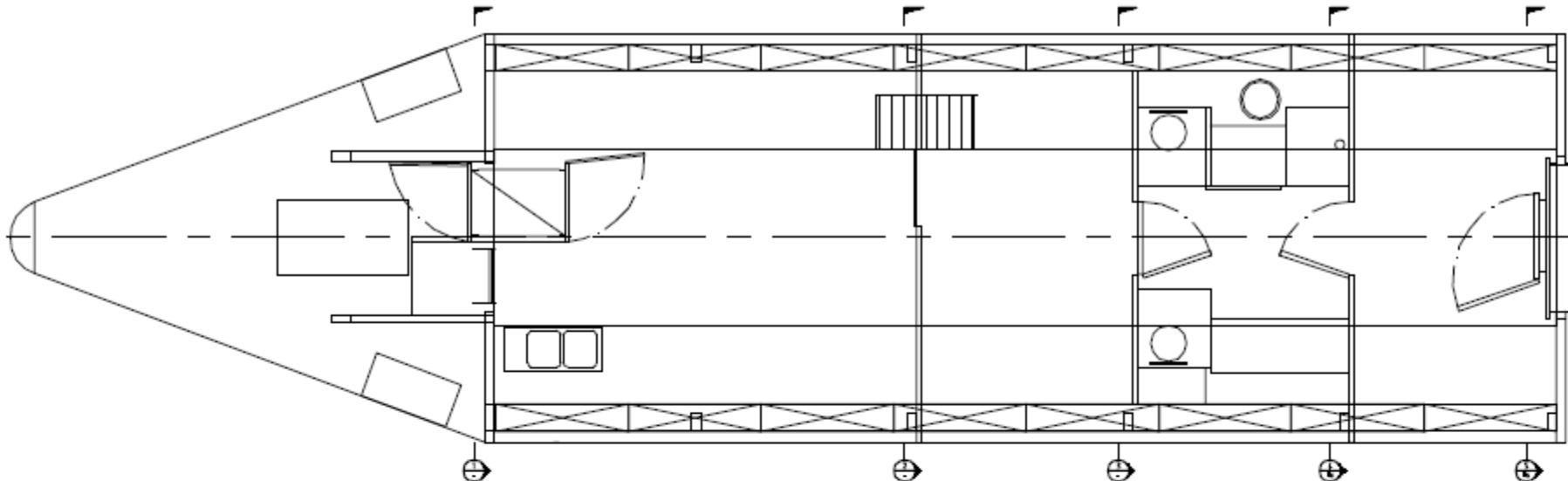


REFER TO S1/07 FOR DETAILS

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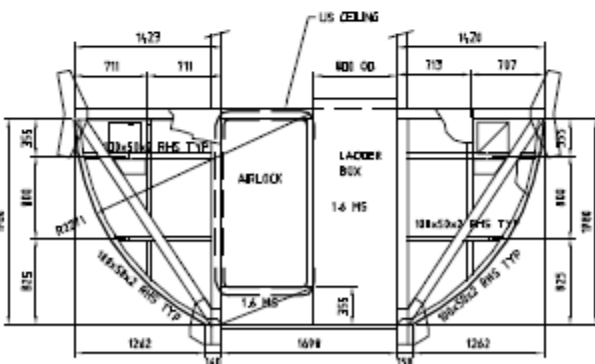
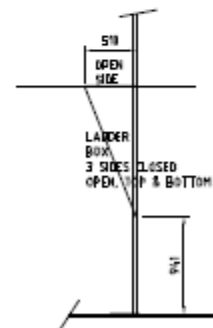
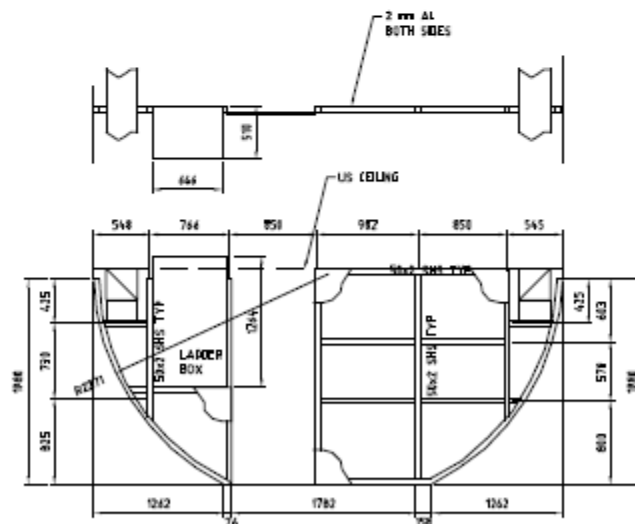
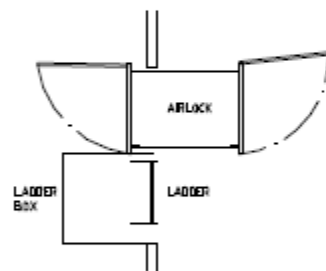
MARS SOCIETY AUSTRALIA

MARS-O2 ANALOGUE BASE	
MARS-O2 HAB	1/5
HAB INTERNAL WALLS	1/5



NOTE:  
 (1) CLAD WALL FRAMES WITH 2mm ALUMINUM 3004 RIVETED TO FRAMES.

(2) FILL SPACE BETWEEN WALLS WITH INSULATION



SECTION 1

SECTION 2

DRAWING CHECK		CO-ORDINATION CHECK	
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2	1/11/81	2	1/11/81
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MARS SOCIETY AUSTRALIA

MARS-O2 ANALOGUE BASE

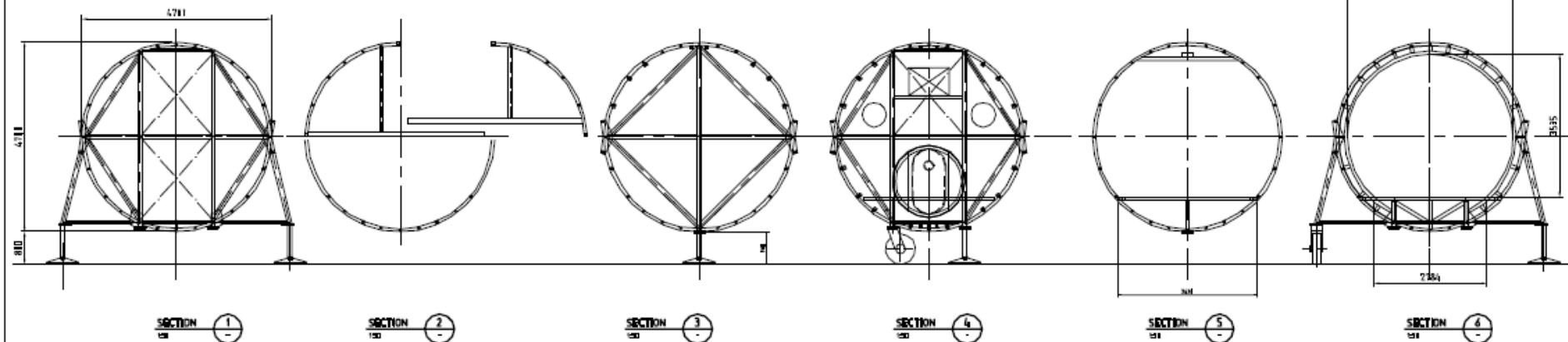
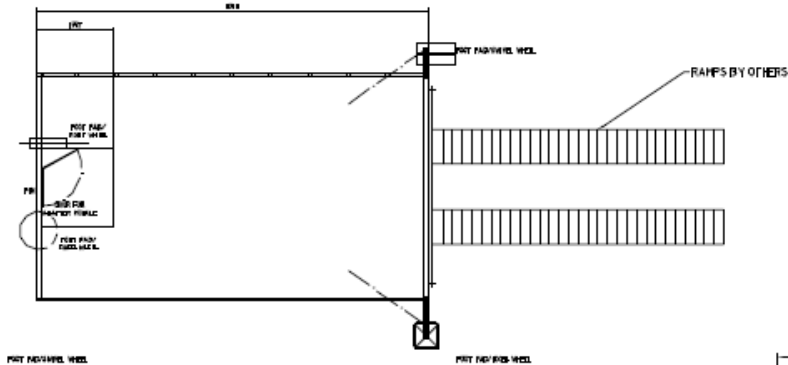
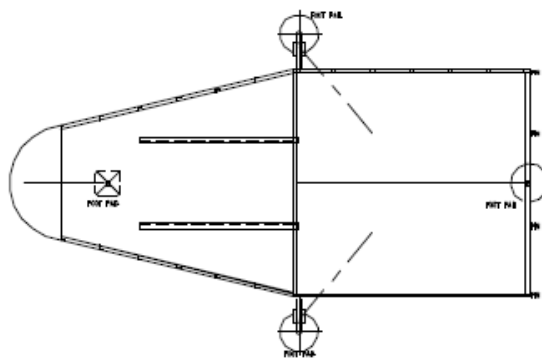
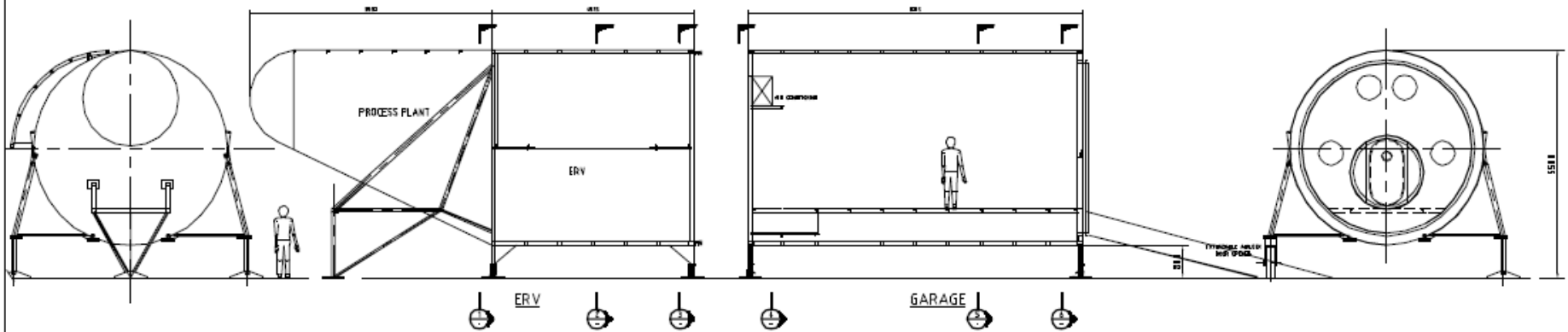
MARS-O2 HAB

HAB INTERNAL WALLS

NO.	DATE	NO.	DATE
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2	1/11/81	2	1/11/81
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4	1/11/81	4	1/11/81



REMOVABLE TRACK  
IN FRAME



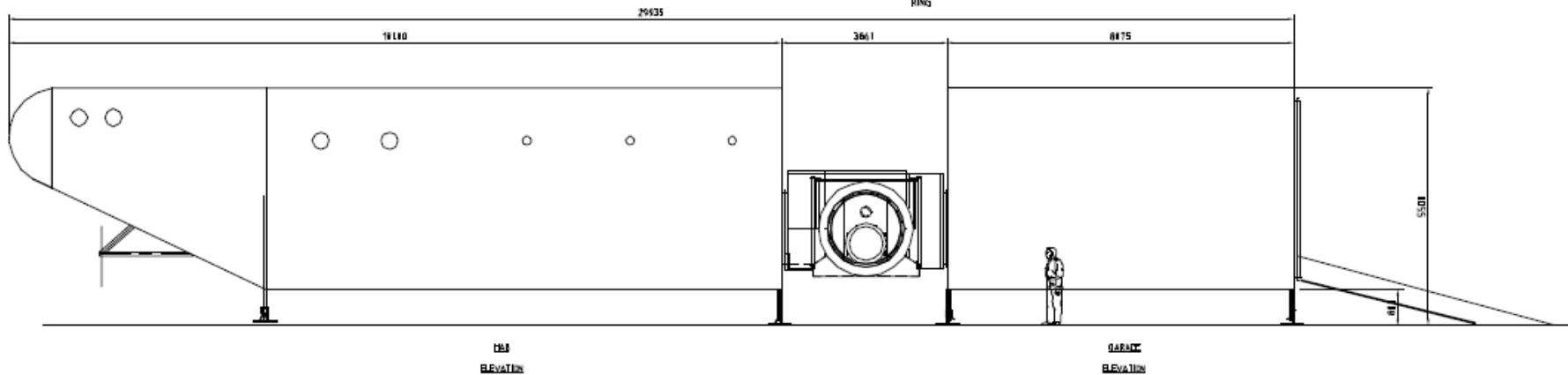
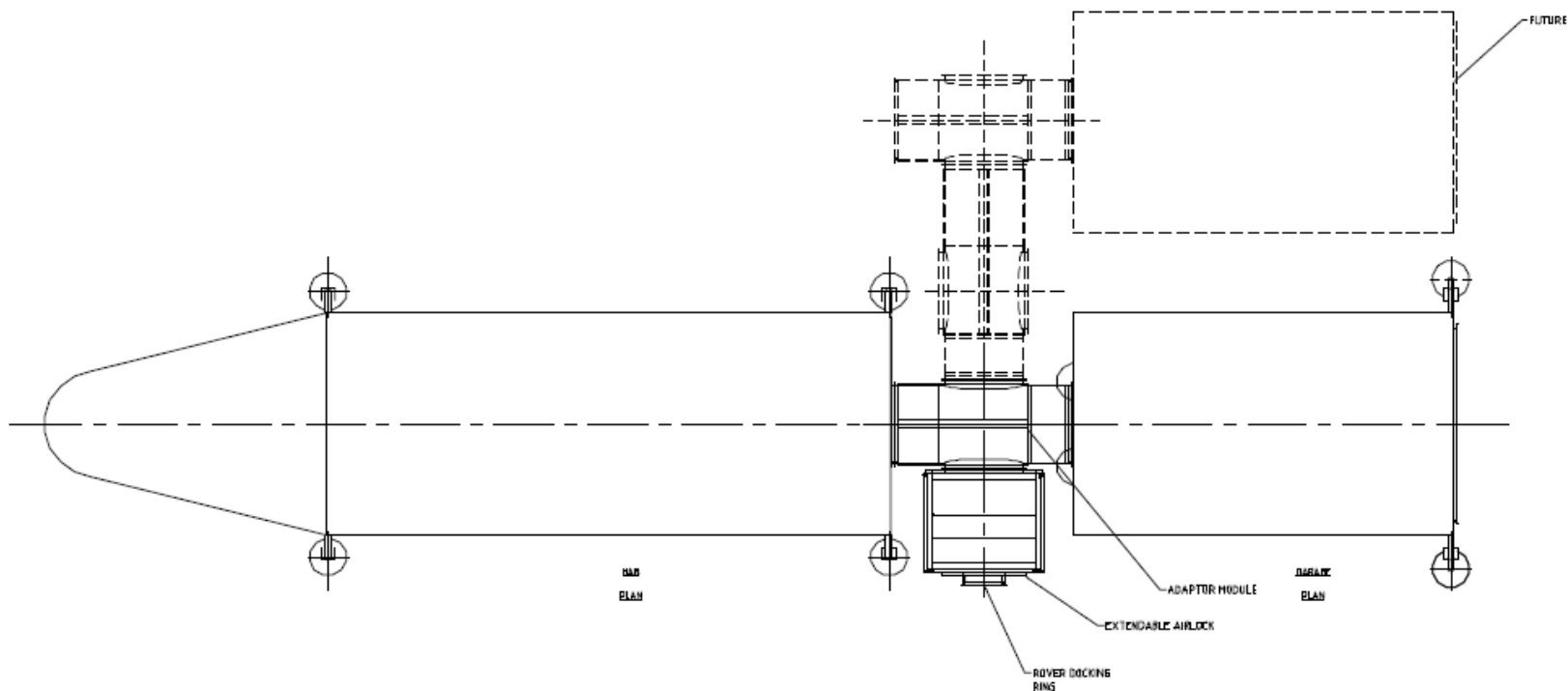
REV	NO.	DESCRIPTION

DRAWING CHECK		CO-ORDINATOR CHECK	
NO.	DATE	NO.	DATE

MARS SOCIETY AUSTRALIA

MARS-OZ ANALOGUE BASE  
GARAGE  
FLOOR PLANS

SCALE	1:50	DATE	1/18/22	PROJECT	MARS-OZ ANALOGUE BASE	NO.	104	REV.		
DRG. No.	GAR/FP									



REV	NO	DATE	DESCRIPTION
1	107	03/08/06	

DRAWING CHECK		CO-ORDINATION CHECK	
DATE	BY	DATE	BY
02/10/13	2m	02/10/13	FORNBERG, JAC
02/10/13	JAC/DM	02/10/13	FORNBERG, JAC
02/10/13	DM	02/10/13	FORNBERG, JAC
02/10/13	DM	02/10/13	FORNBERG, JAC
02/10/13	DM	02/10/13	FORNBERG, JAC

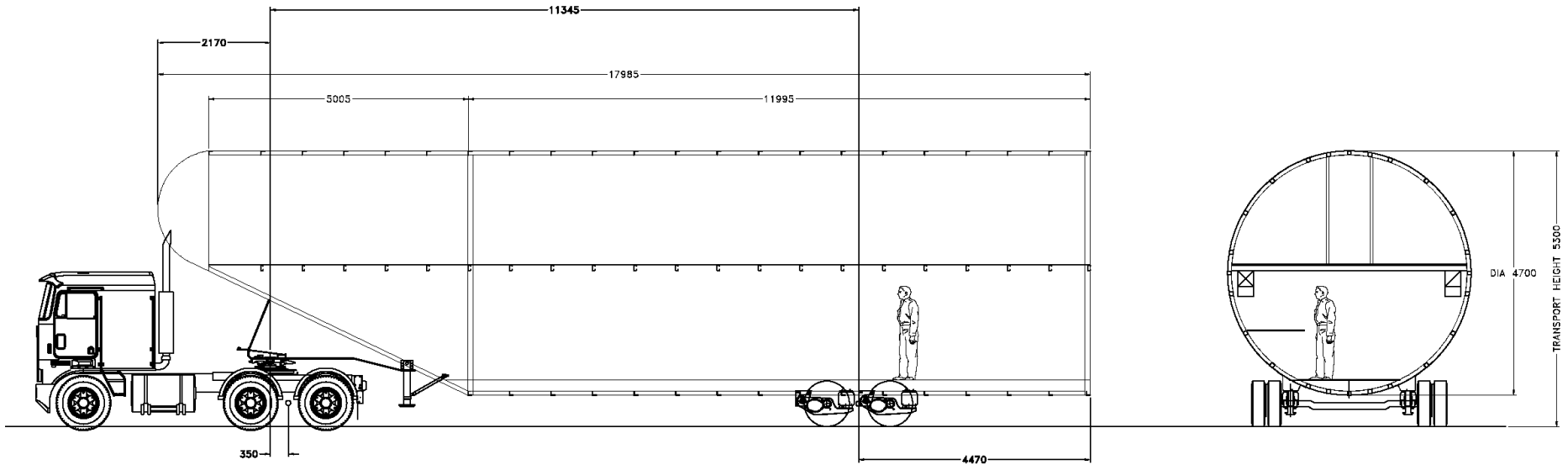
MARS SOCIETY AUSTRALIA

MARS-OZ ANALOGUE BASE
MARS-OZ BASE
HAB AND GARAGE ASSEMBLY

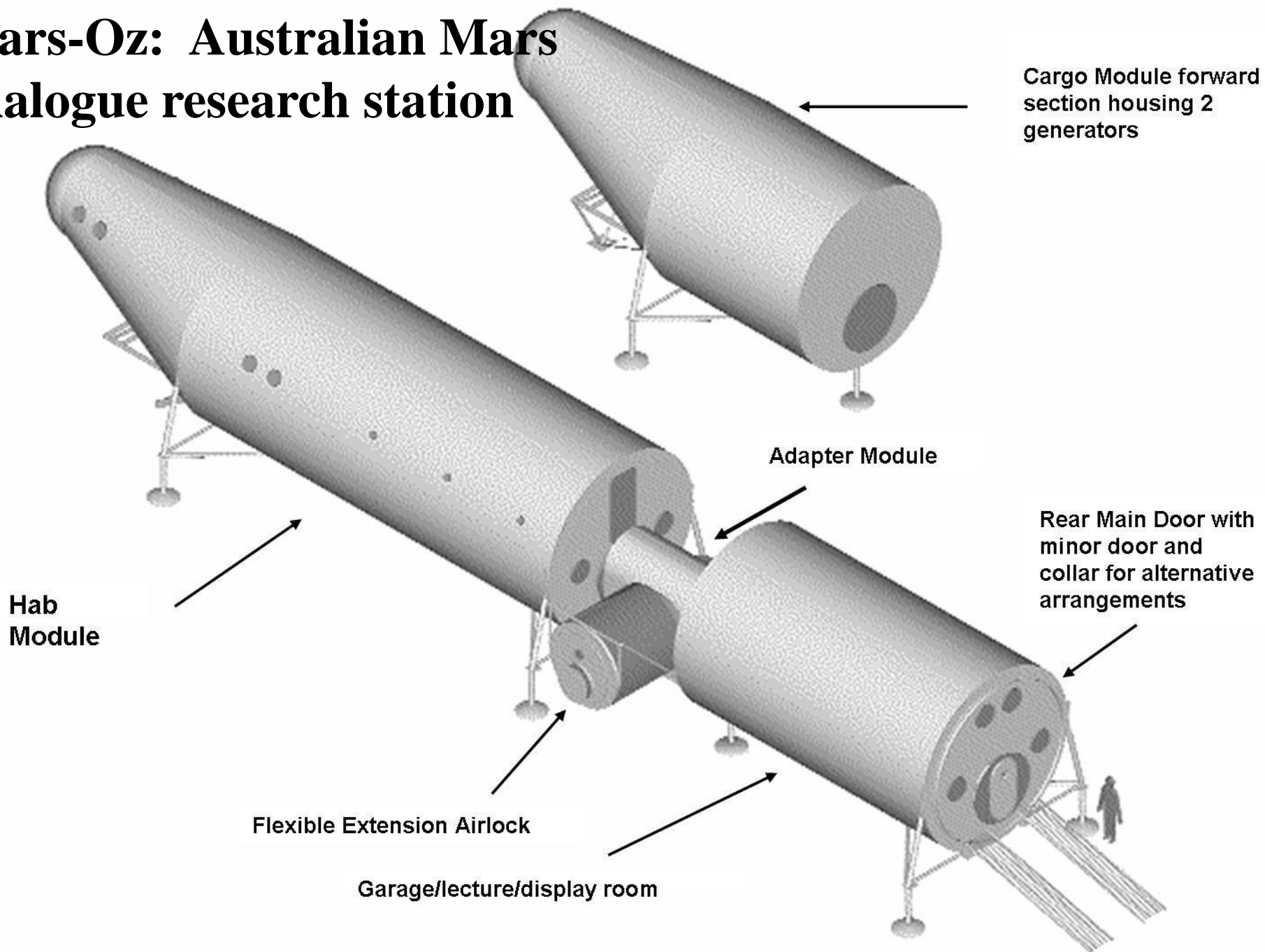
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DRAWN BY		CHECKED BY		DATE	
JAC/DM		DM		03/08/06	
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JAC/DM		DM		03/08/06	

DRG. No. **HAB/GAR/PL** A1

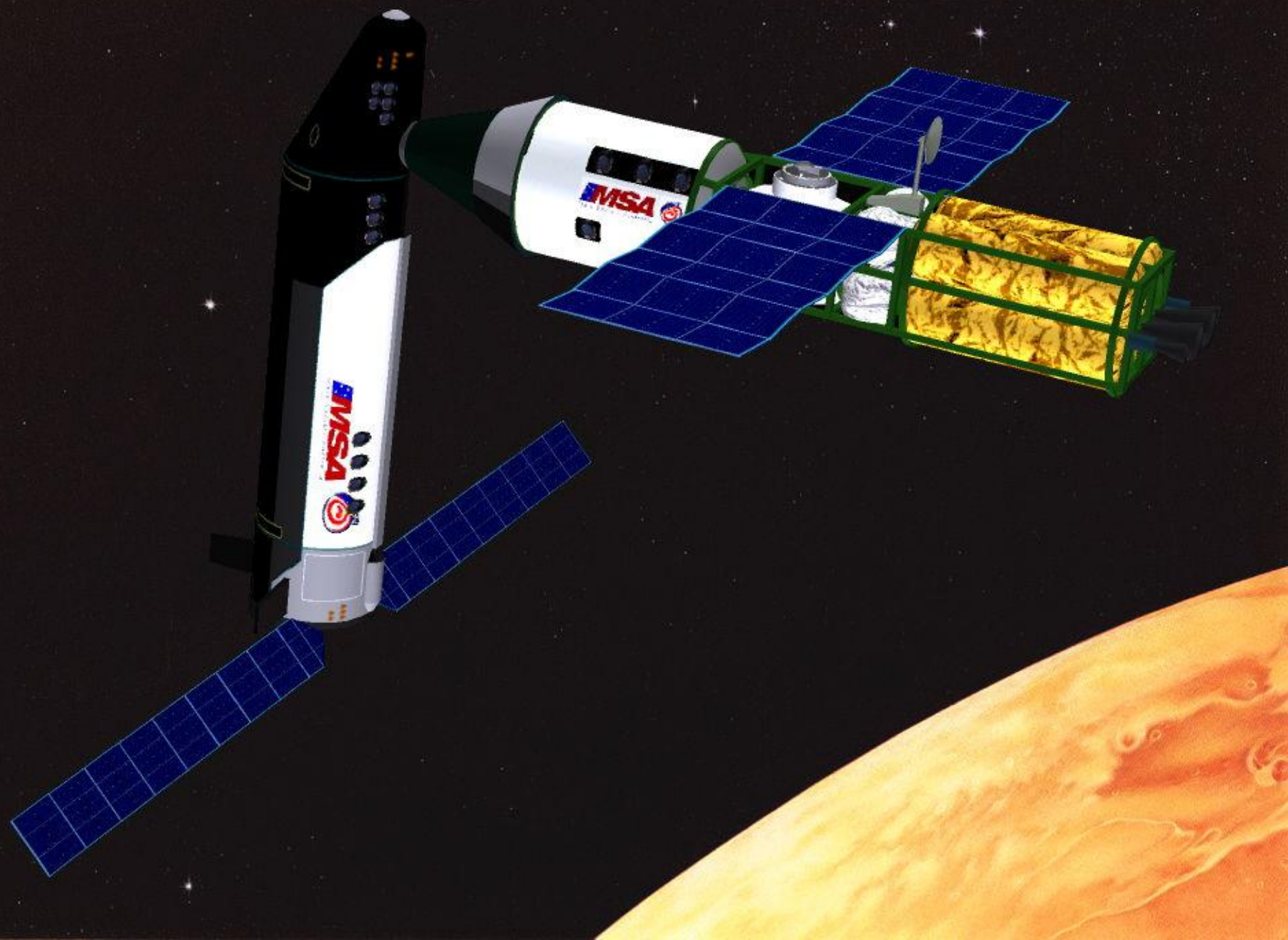
# MARS-OZ A TRAILER



# Mars-Oz: Australian Mars analogue research station











# DISCUSSION

