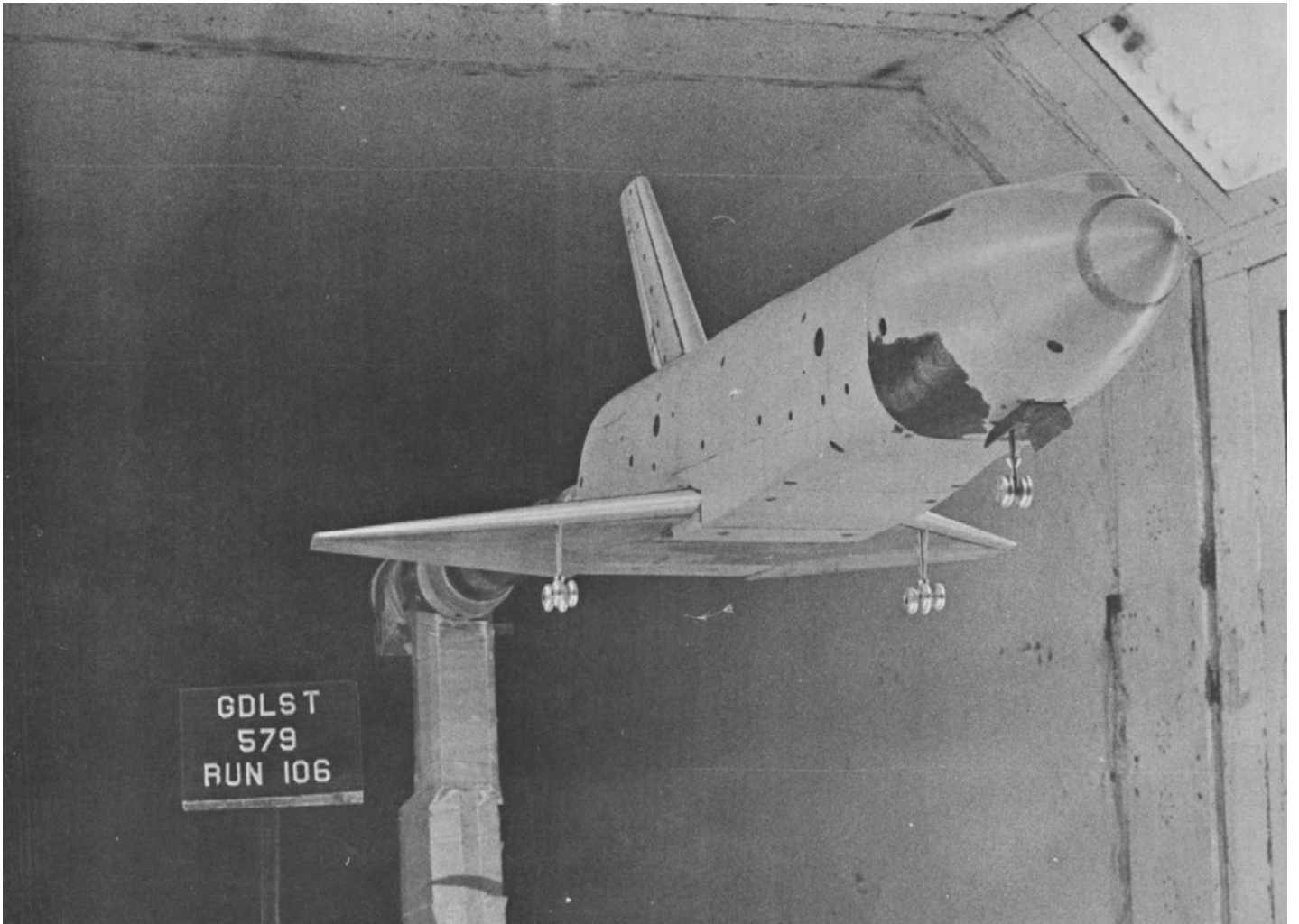


# Early Space Shuttle Wind Tunnel Models



Compiled by Scott Lowther

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*Aerospace Projects Review* Presents: Space Shuttle Wind Tunnel models

First Edition, 2011

This is a test. If you would like to see this compilation completed, contact: [scottlowther@ix.netcom.com](mailto:scottlowther@ix.netcom.com)

# STUDY TO DEVELOP A SOLUTION FOR CONFIGURATION INSTABILITY FOR THE 0.003366 SCALE S-IC/NR HCR ORBITER

DMS-DR-1091

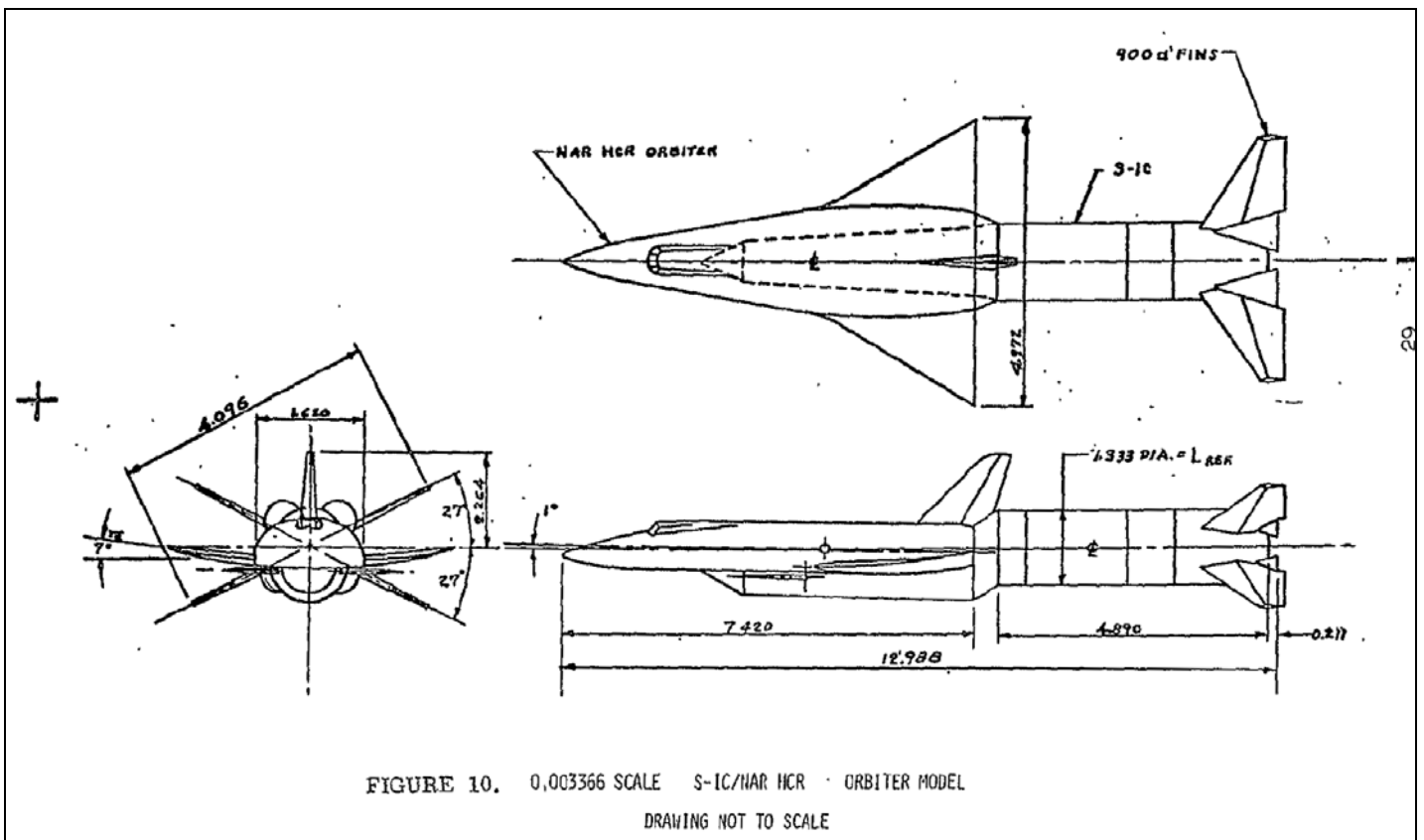
MAY 1971

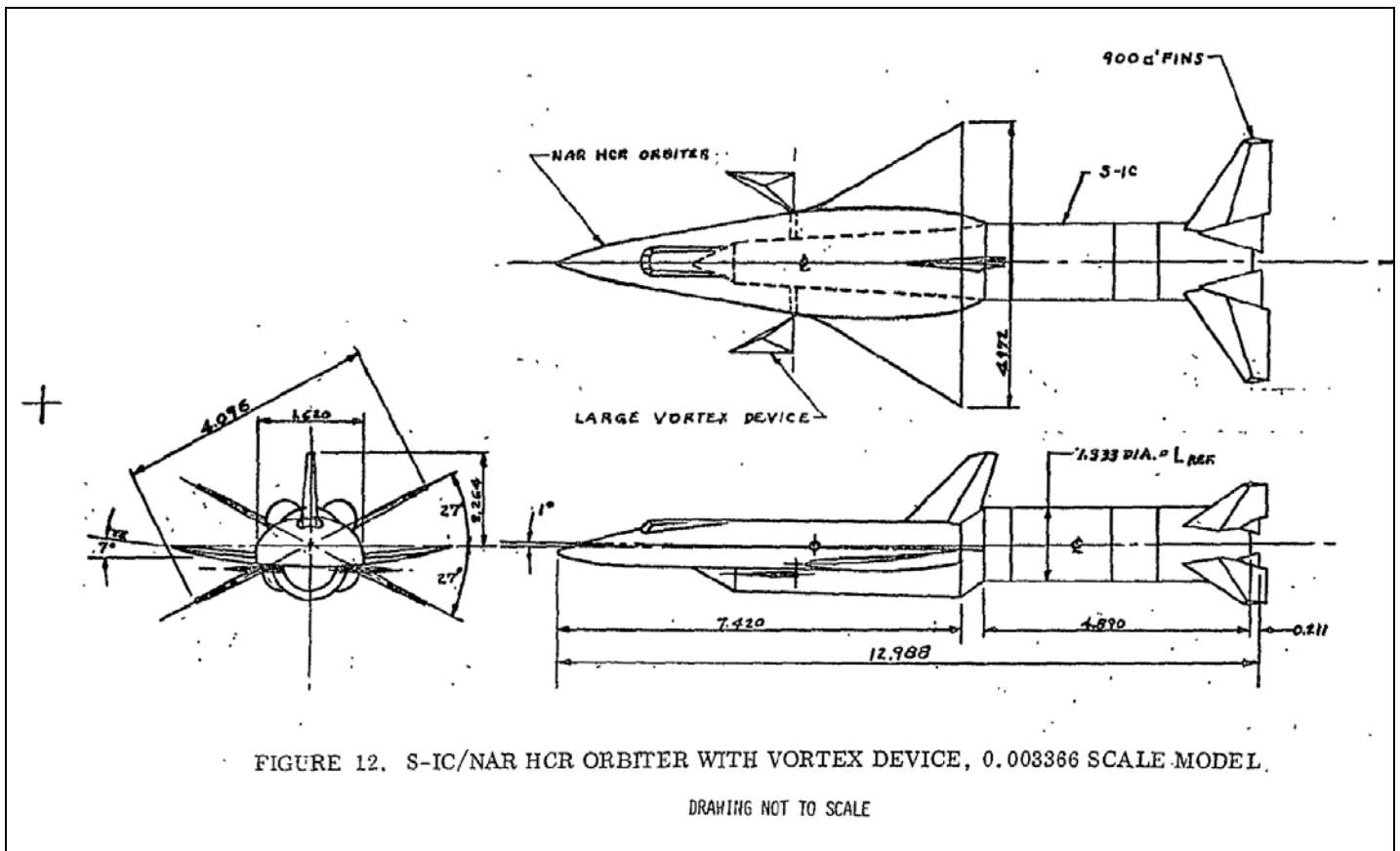
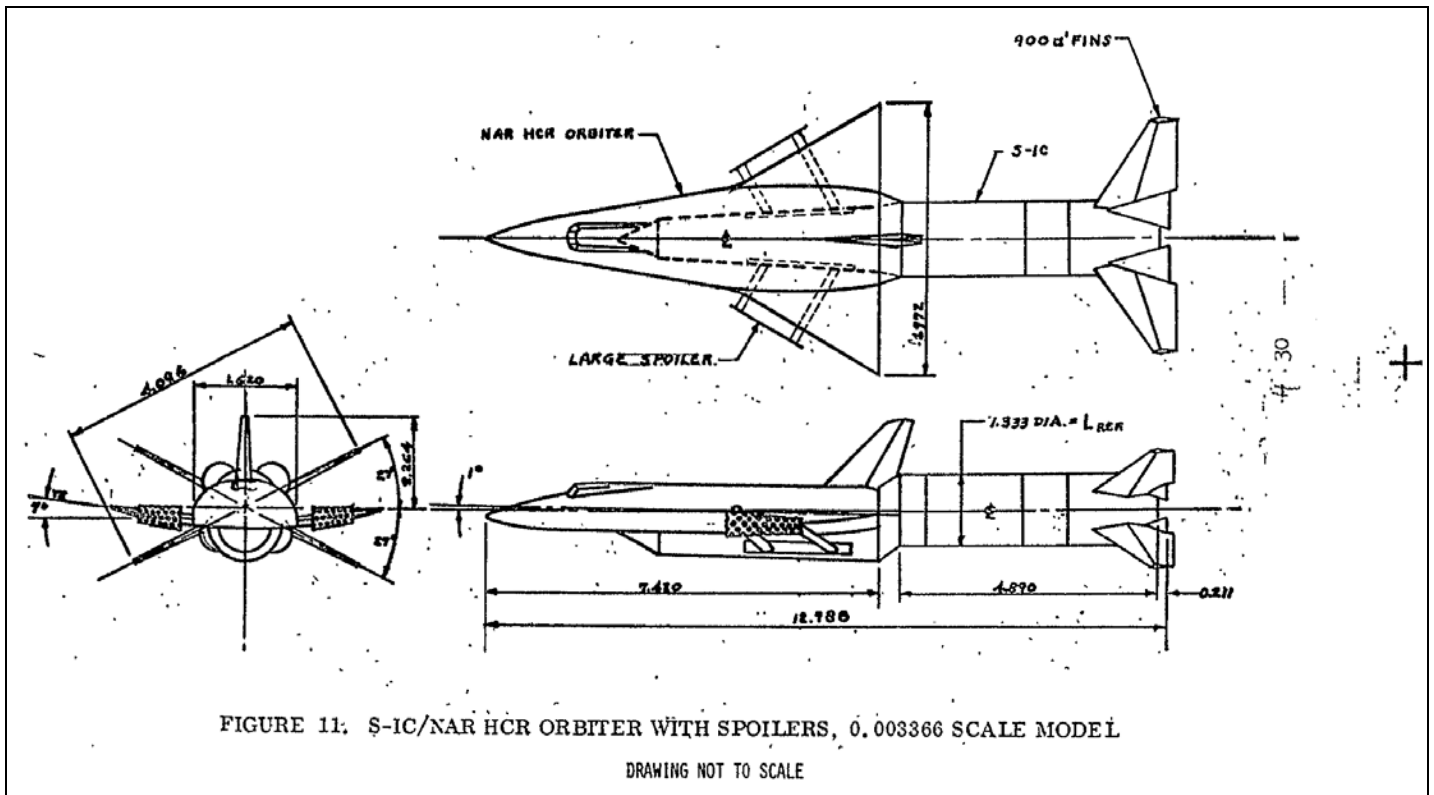
MSFC 14 INCH TRISONIC WIND TUNNEL

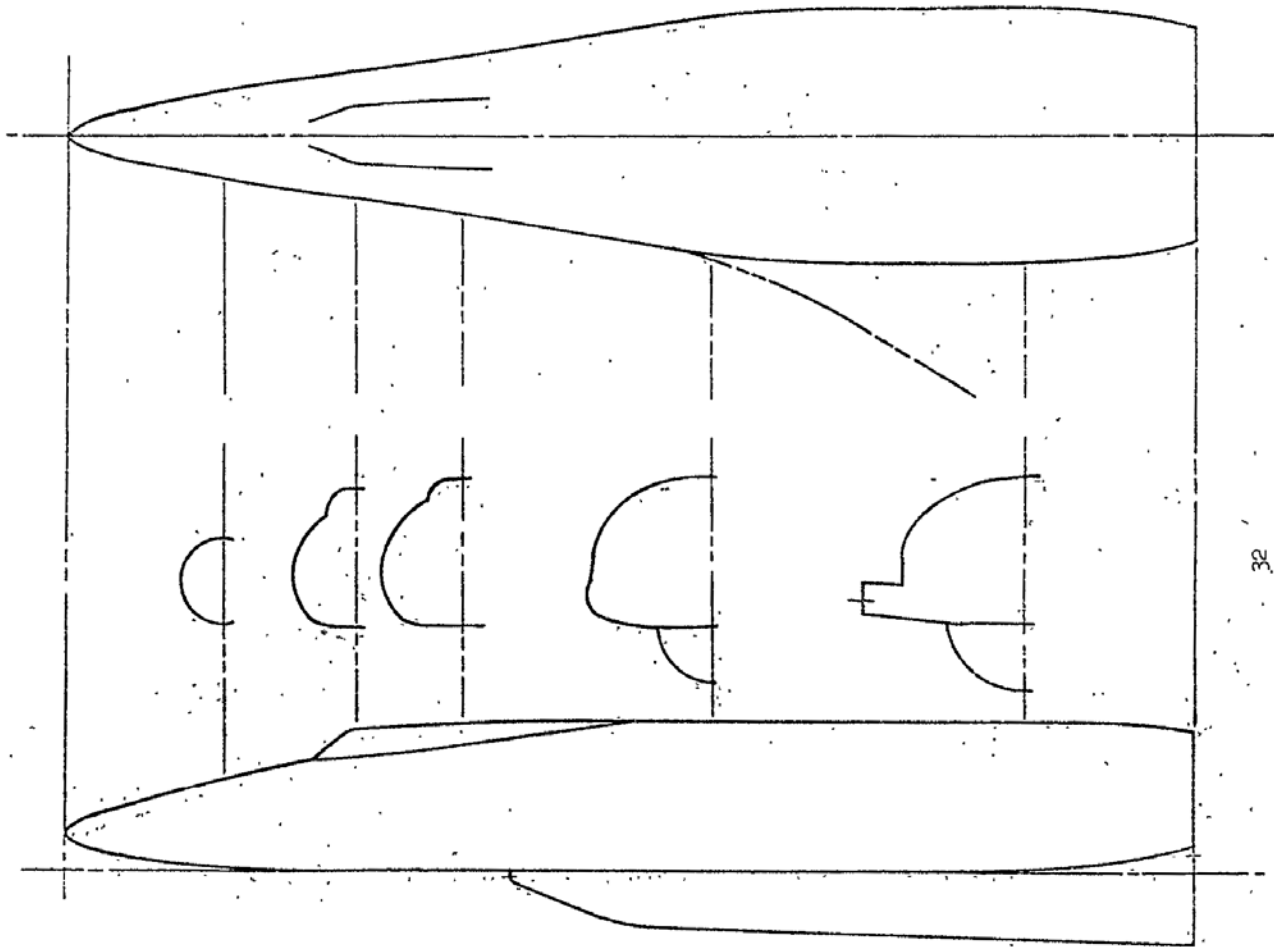
CONFIGURATION: S-IC/NAR HCR Orbiter: 0.003366 Scale

TESTING AGENCY: The Boeing Company

TEST NO. & DATE: MSFC TWT 485, March 18, 1971

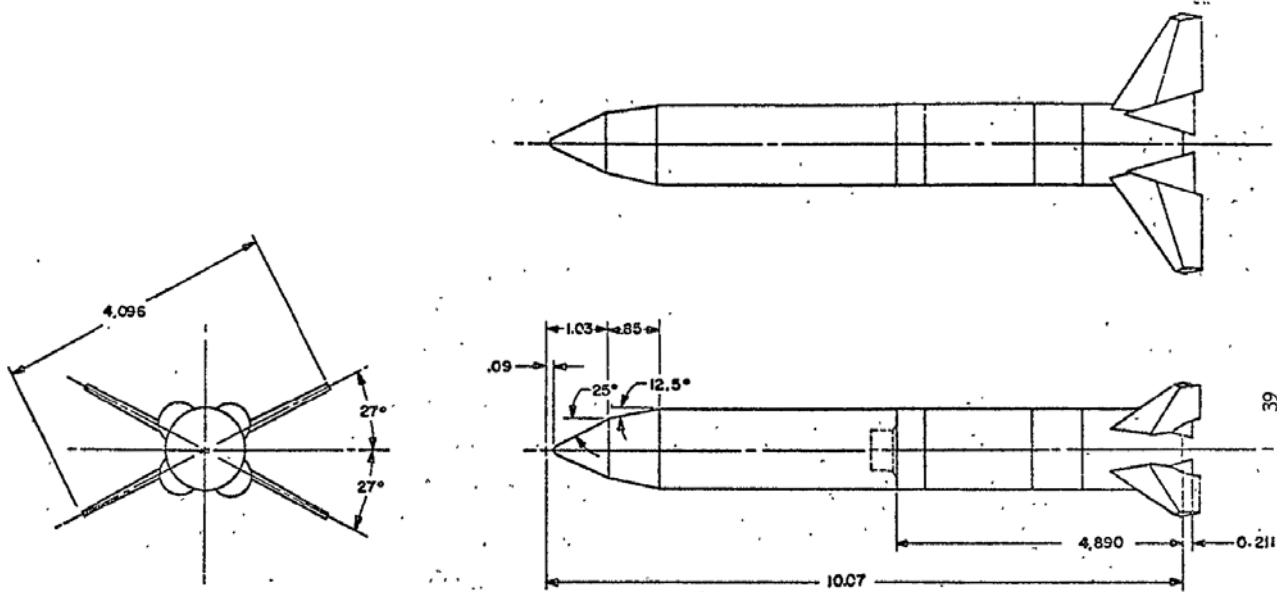






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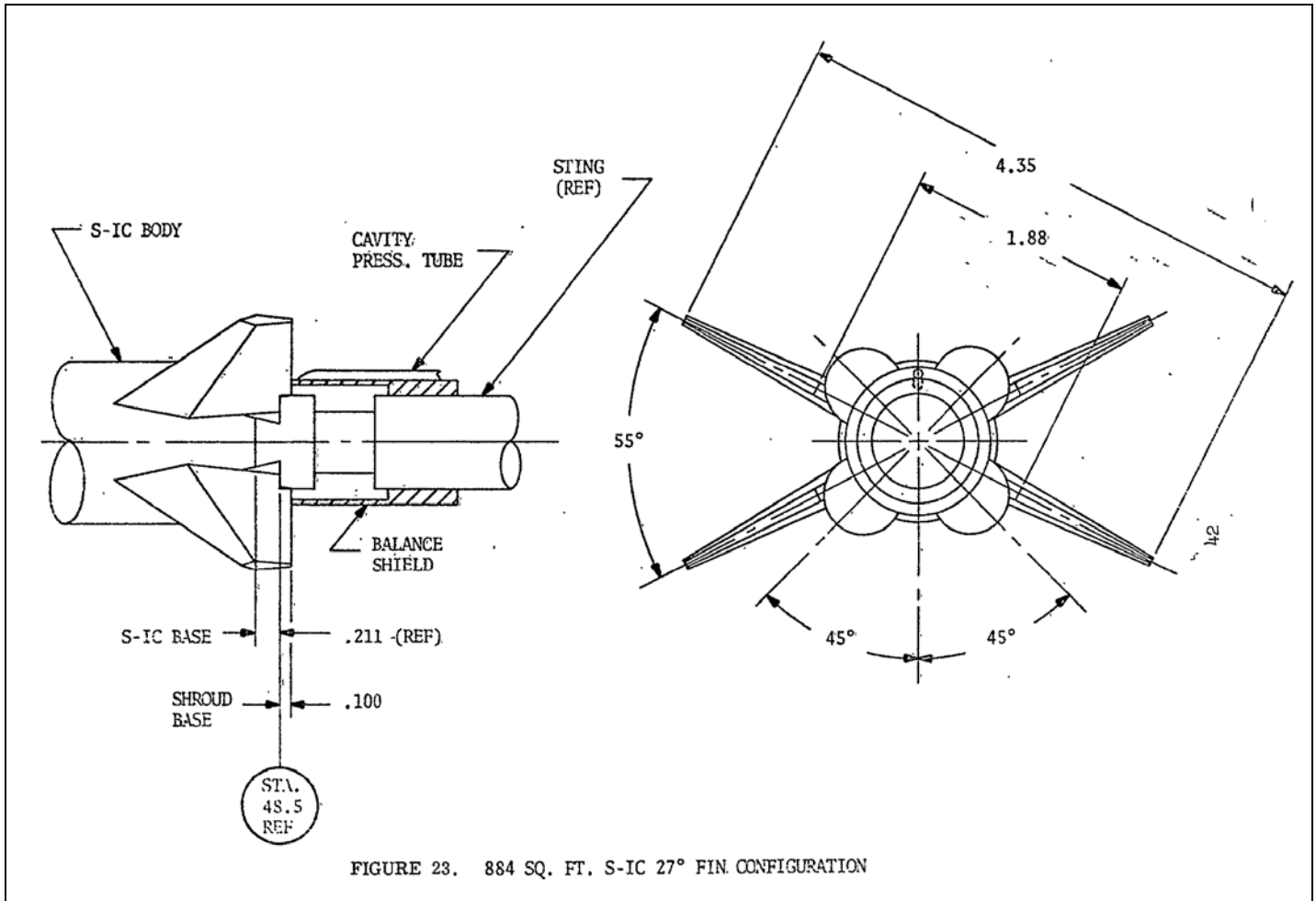
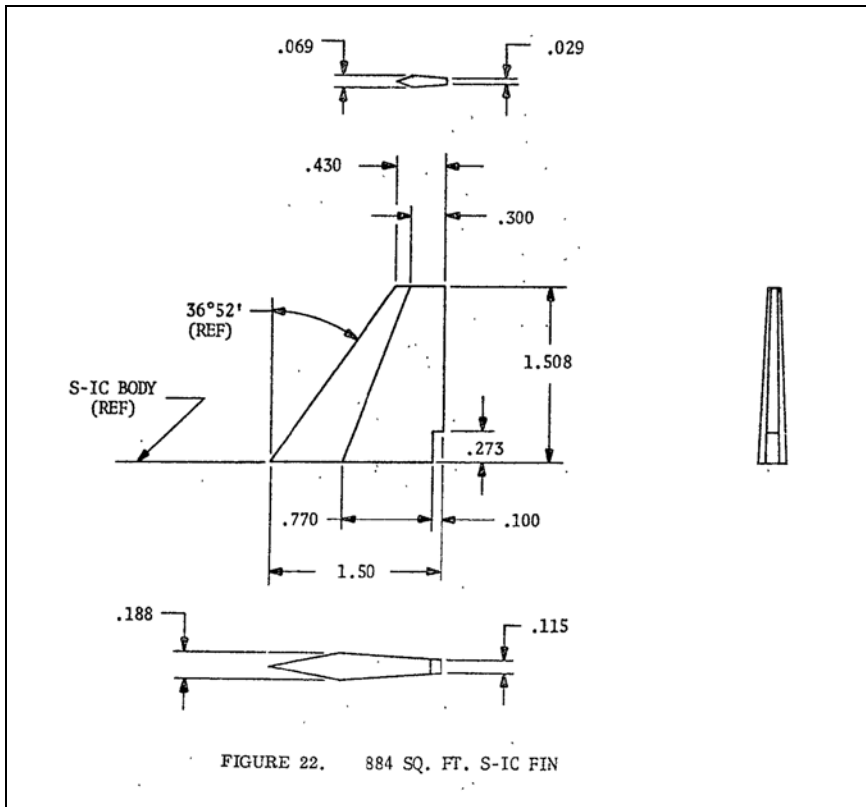
FIGURE 13. NAR HCR ORBITER BODY WITH CRADLE



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FIGURE 20.

0.003366 SCALE S-1C/MLV CONE FRUSTUM CYLINDER (G)



NOT REPRODUCIBLE



FIGURE 2.

S-1C/NAR HCR 0,005366 SCALE ORBITER MODEL  
3/4 PLAN

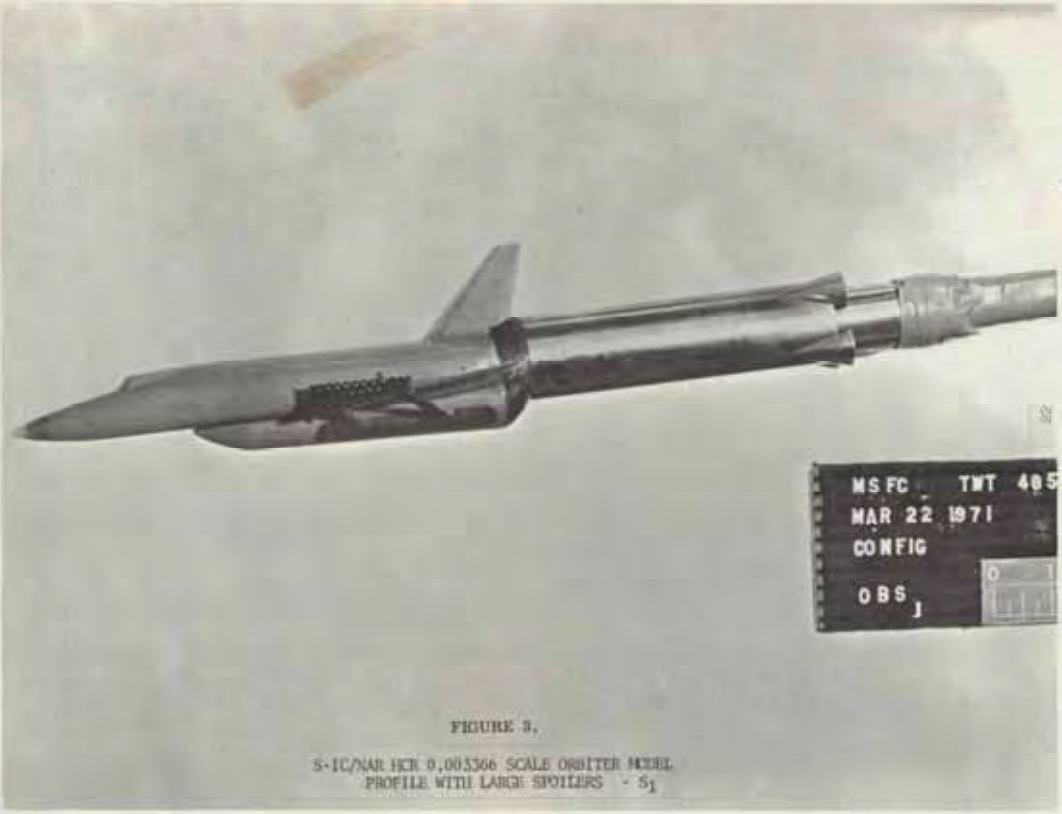


FIGURE 3.

S-1C/NAR HCR 0,005366 SCALE ORBITER MODEL  
PROFILE WITH LARGE SPOILERS - 5<sub>1</sub>

MSFC TWT 485  
MAR 22 1971  
CONFIG  
OBS 1



FIGURE 8.

SMALL VORTEX DEVICE- VD<sub>2</sub>  
3/4 FRONT VIEW

NOT REPRODUCIBLE

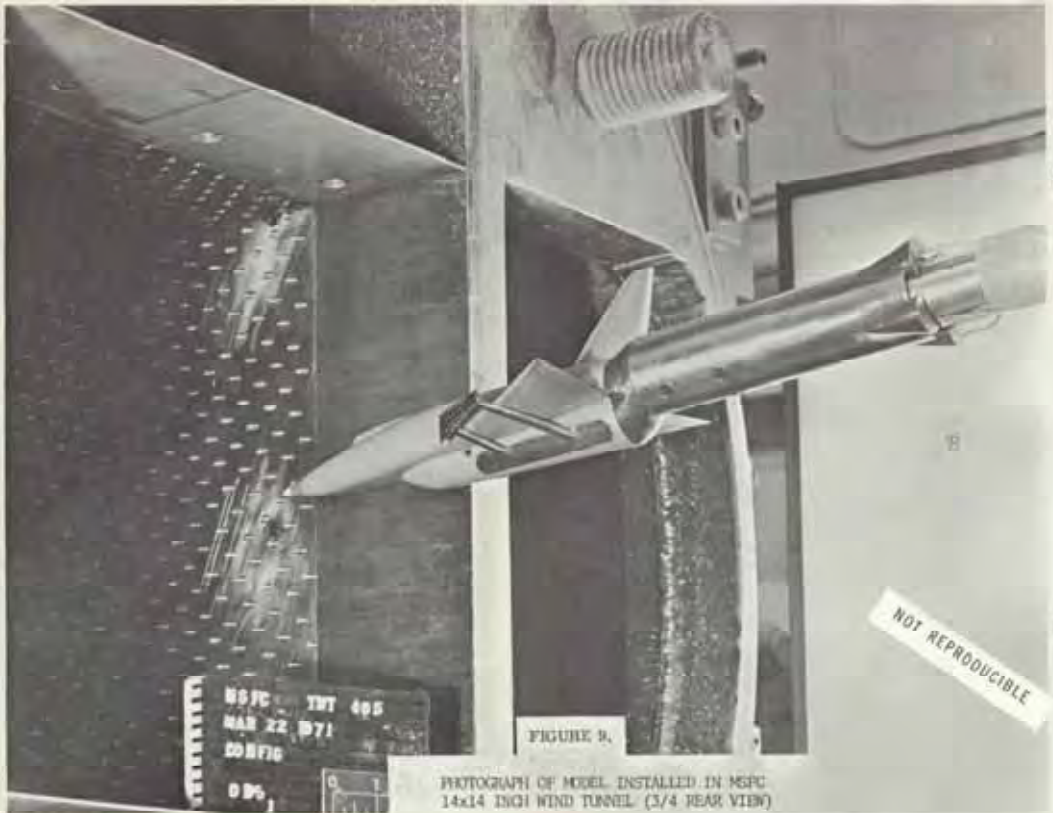


FIGURE 9.

PHOTOGRAPH OF MODEL INSTALLED IN NSFC  
14x14 INCH WIND TUNNEL (3/4 REAR VIEW)

NOT REPRODUCIBLE



# AERODYNAMIC HEATING TO THE GRUMMAN SPACE SHUTTLE ORBITERS (ROS-NB1 AND ROS-WB1) AT MACH NUMBER 8.0

DMS-DR-1154

JULY 1971

GAC HYPERSONIC WIND TUNNEL

CONFIGURATION: Grumman Delta-Wing Orbiters (ROS-NB1 and ROS-WB1) : 0.0067 Scale

TESTING AGENCY: Grumman Aerospace Company

TEST NO. & DATE: GFHT-017, February 20 -March 22, 1971

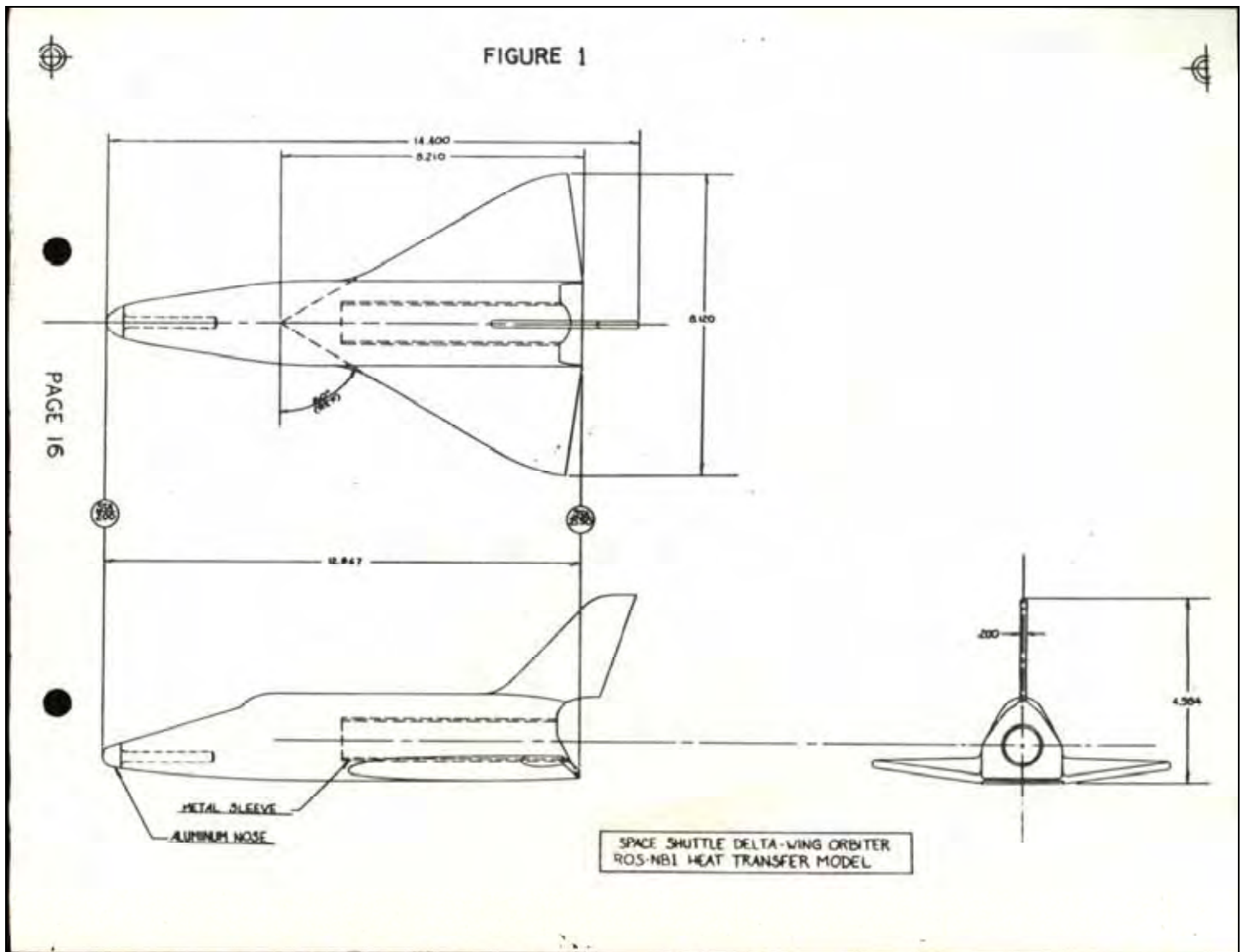
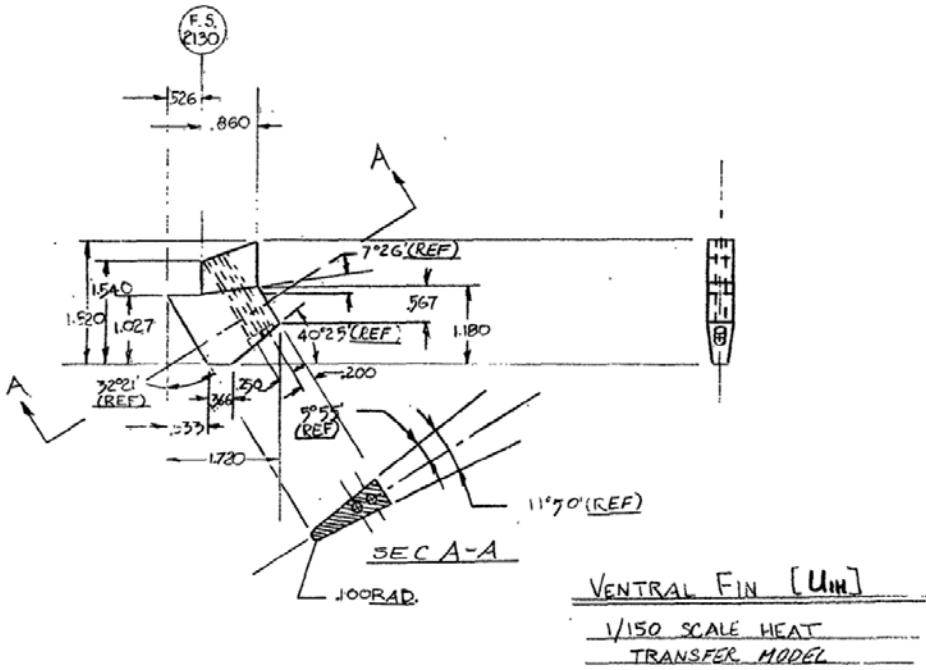
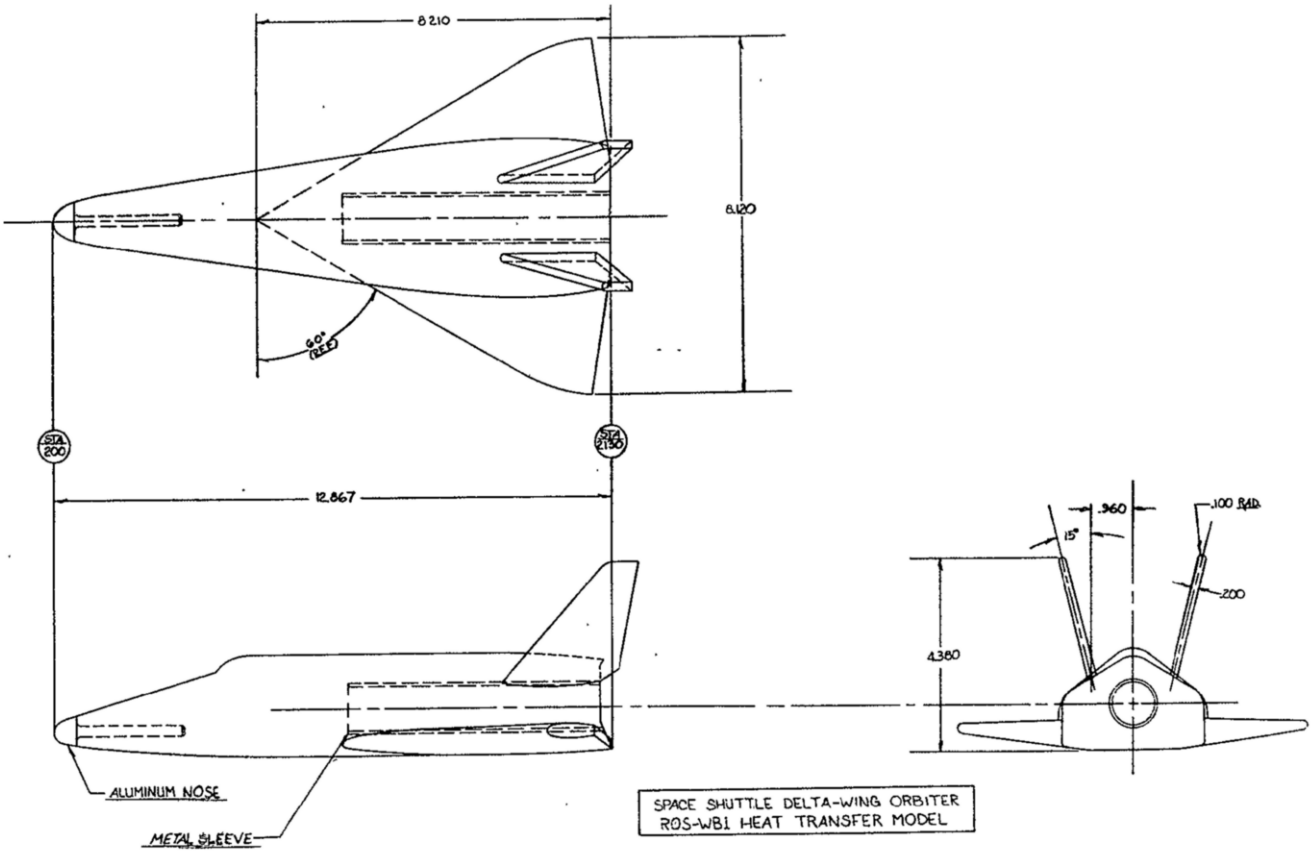


FIGURE 2



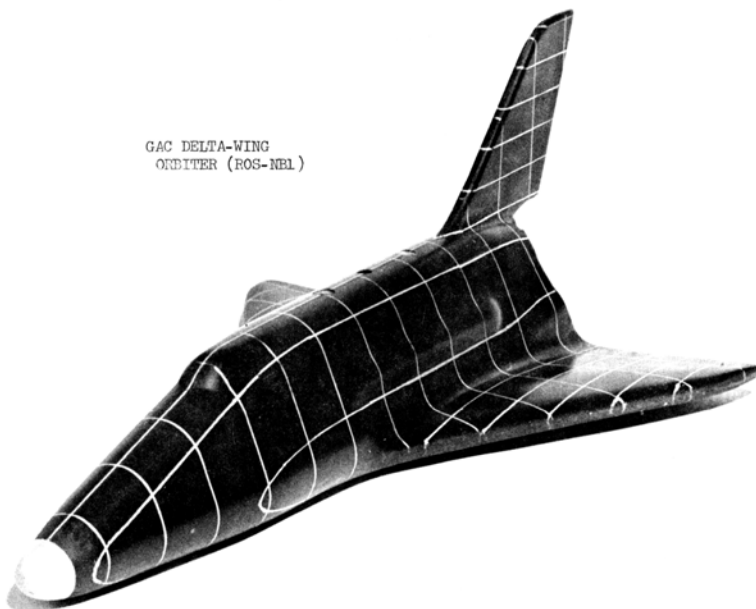
PAGE 17



PHOTOGRAPH 1

GAC DELTA-WING  
ORBITER (ROS-MBL)

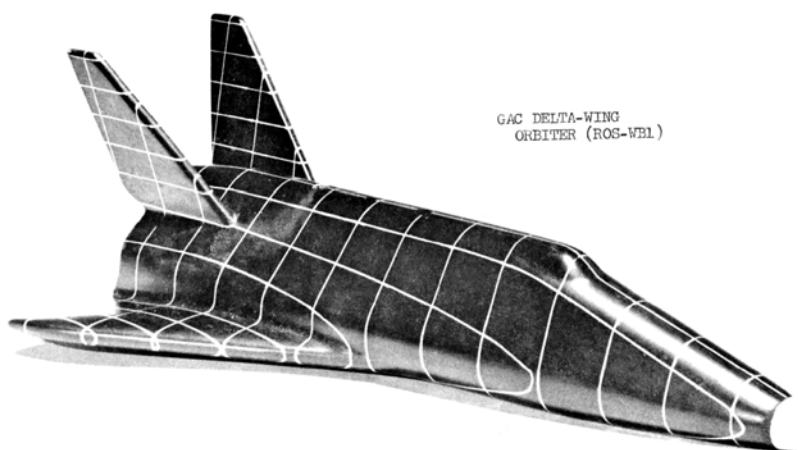
7/2/63



PHOTOGRAPH 2

GAC DELTA-WING  
ORBITER (ROS-WBL)

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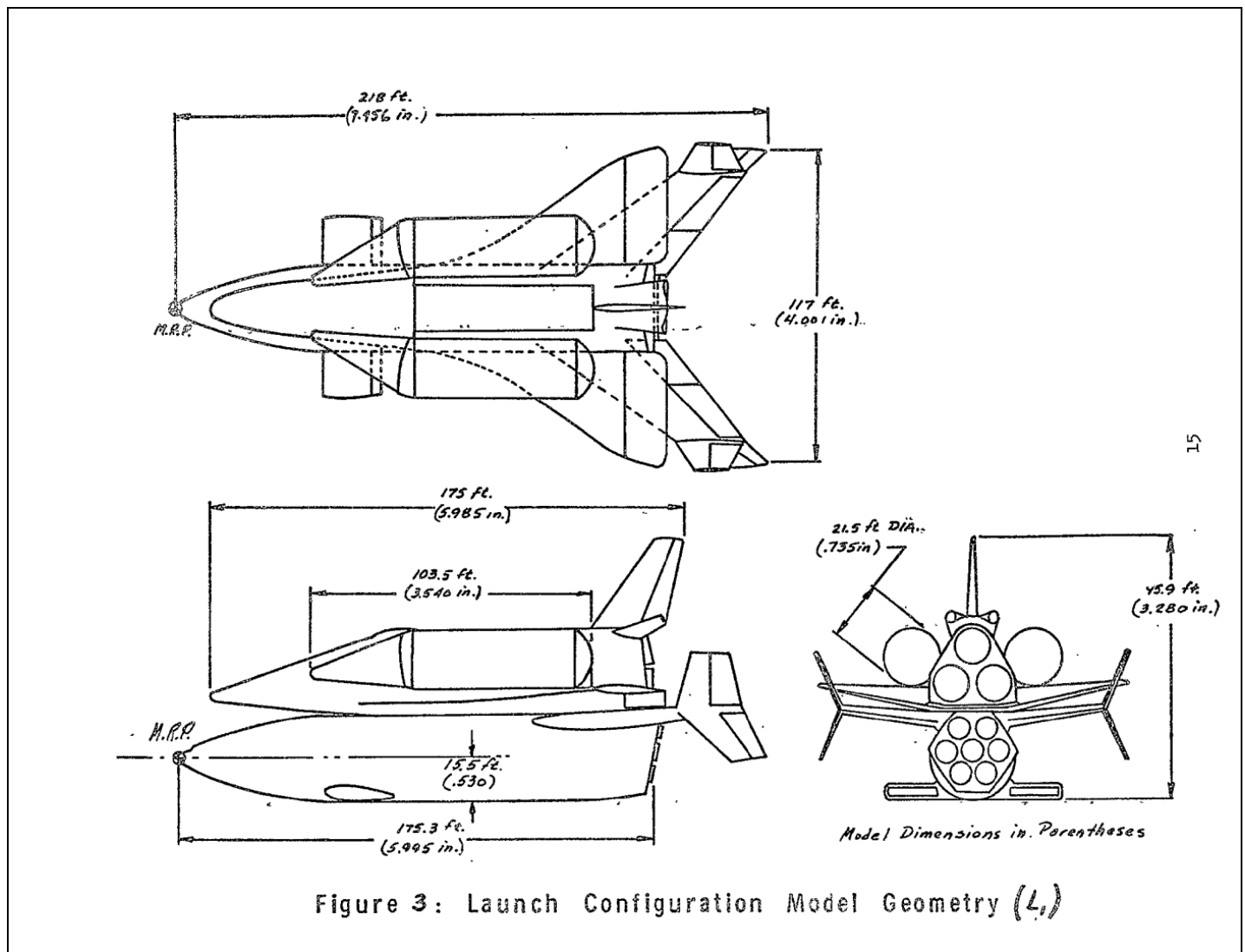


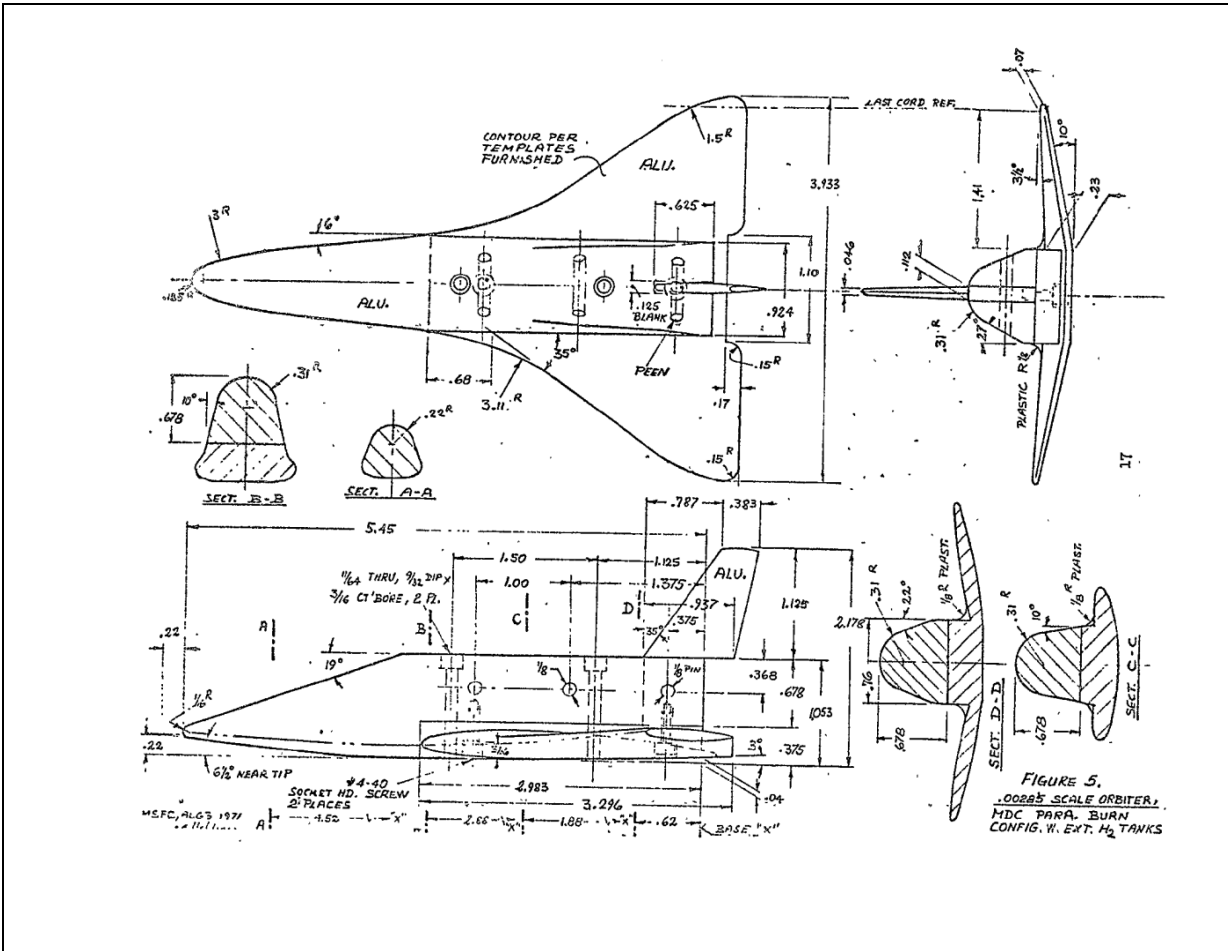
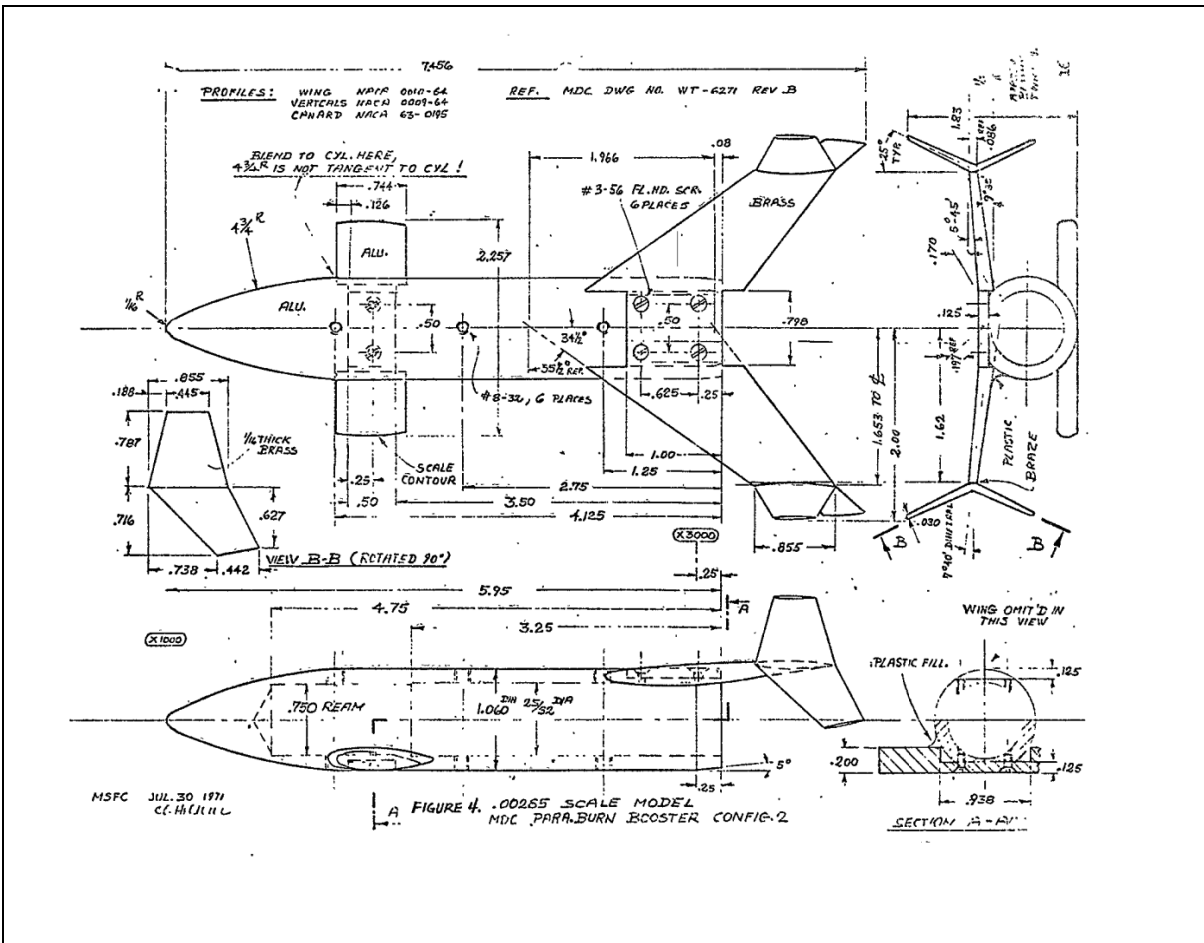
NOT REPRODUCIBLE

# DETERMINATION OF THE STATIC STABILITY CHARACTERISTICS OF THE 0.00285 -SCALE MDAC PARALLEL BURN LAUNCH CONFIGURATION

DMS-DR-1166  
 SEPTEMBER 1971  
 MSFC 14 INCH TRISONIC WIND TUNNEL

CONFIGURATION: MDAC Parallel Burn Launch Configuration, 0.00285 Scale  
 TESTING AGENCY: MSFC  
 TEST NO. & DATE: MSFC 501; August 9, 1971





NOT REPRODUCIBLE

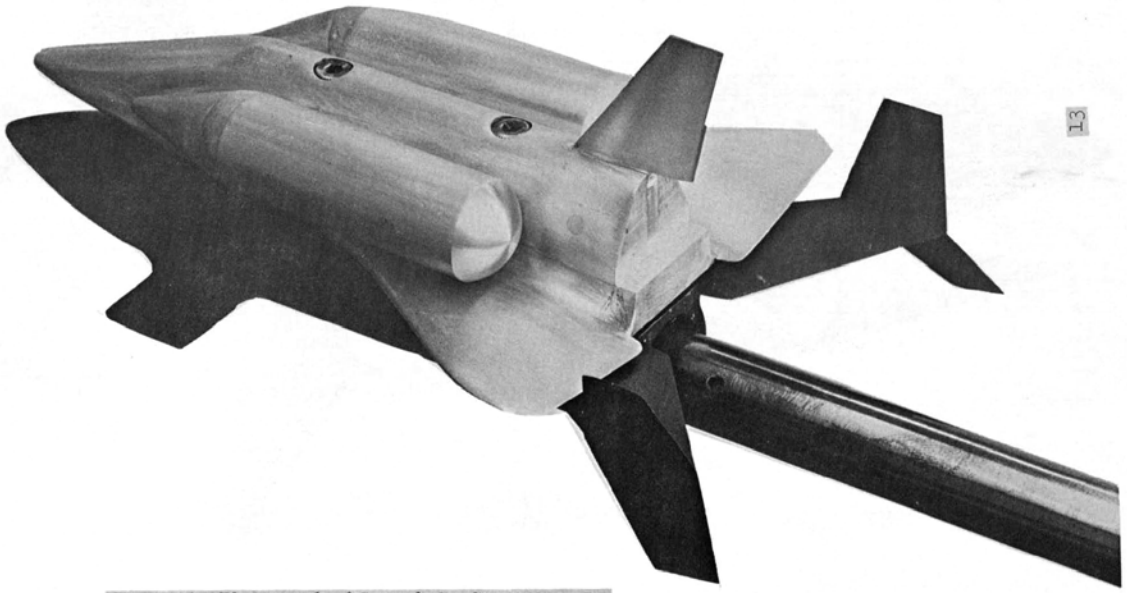


Figure 1 Photograph of Launch Configuration, L<sub>1</sub>

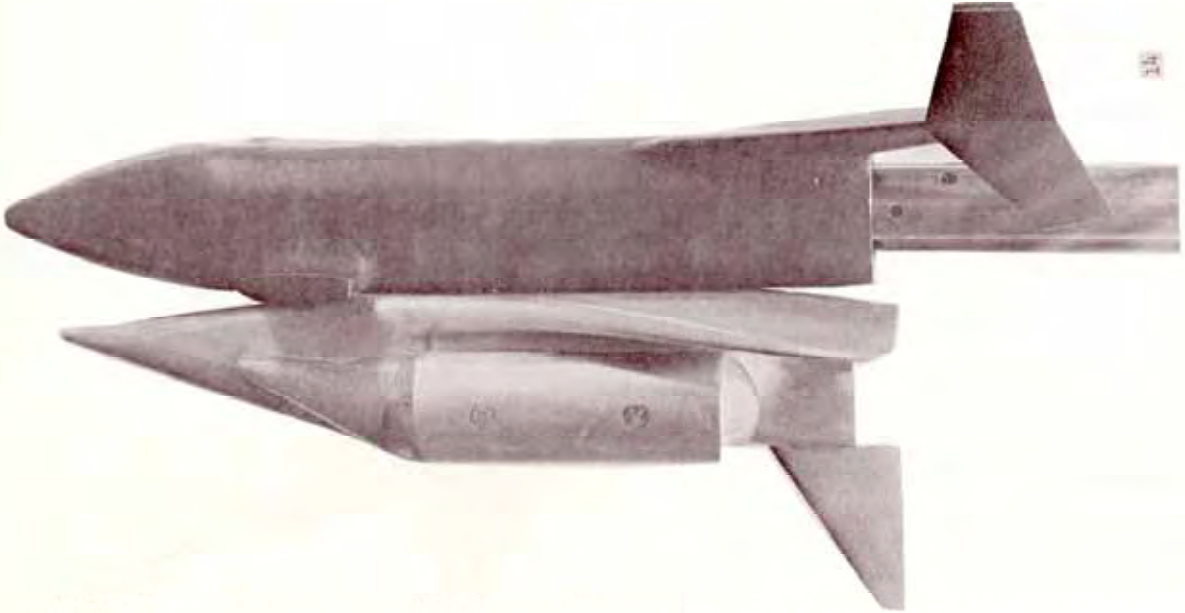


Figure 2 Photograph of Launch Configuration, L<sub>2</sub>