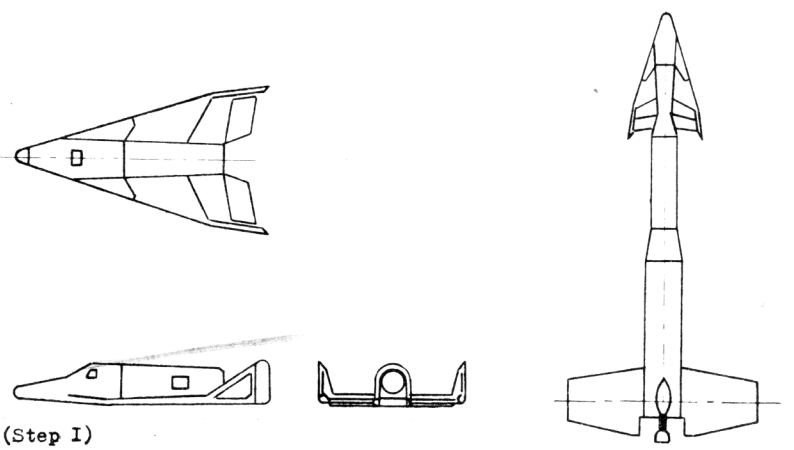


Characteristics Summary

TEST VEHICLE DYNA SOAR (L/D = 2.2)



Model 844-2005 (Step I)

Boeing

Booster:
Length (overall) . . . 115.7 ft
Dia (nom). 10.0 ft

Glider: Wing Area . . . 330 sq ft
Wing Span . . . 19.7 ft
Length . . . 34.7 ft

AVAILABILITY			PROCUREMENT			
Number available			Number to be delivered in fiscal years			
ACTIVE	RESERVE	TOTAL				

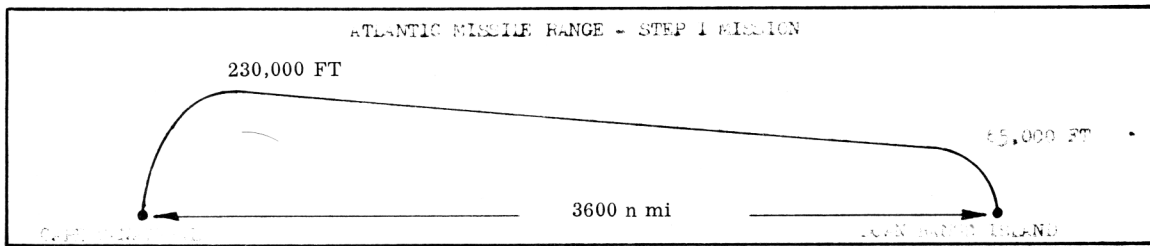
STATUS	
1. Design Initiated: April 60	3. Launch Date: Air Drop: Jul 63 Unmanned: Nov 63 Manned: Nov 64
2. Mock-up: Jun 61	

POWER PLANT		
Boost System:		
<u>Model</u>	<u>Mfr</u>	
Titan - Lot J (XSM-68A)	Martin	
<u>Engine</u>	<u>Mfr</u>	<u>Thrust (lb)</u>
(1) XLR87-AJ-1	Aerojet	300,000 @ SL
(1) XLR91-AJ-1	Aerojet	66,500 @ SL
Glider		
Separation Rocket		<u>Thrust (lb)</u> 7,000 @ SL

FEATURES
Crew 1
Capability of conducting research from 125 knots to beyond Satellite speed
Radiation - Cooled structure
Escape capsule
"Safety Boost" trajectory
Inertial navigator
Primary and secondary reference platforms
Reaction plus aerodynamic controls
Full-time three axis stability augmentation
Pilot vision
Skid-type landing gear

CLASSIFICATION CANCELLED
 (OR CHANGED TO *Unclassified*)
 BY AUTHORITY OF *DD Form 5200.10*
 (INDIVIDUAL OR WRITTEN AUTHORITY)
 BY *William M. White*
 (NAME & GRADE OF INDIVIDUAL MAKING CHANGE) *19 Feb 63*
 (DATE)

CHARACTERISTICS SUMMARY TEST MISSION DYNA SOAR



PERFORMANCE

L A U N C H	B O O S T	V E L O C I T Y
Site: Cape Canaveral Initial Heading: Due East	End of Boost Altitude: 230,000 ft Range: 360 n mi Time: 327 sec	Booster System. Burnout: 19,000 fps Note: All velocities are relative
A C C E L E R A T I O N	R A N G E	L A N D I N G
Peak load factor value during boost Stage 1: 4.0 Stage 2: 5.4	3600 n mi with 1000 lb payload in 39.0 min to 65,000 ft	Site: Low Range Island Landing Speed: 140 knots
G L I D E	W E I G H T S	L O A D S
Not available	Launch 243,700 lb Glider 10,008 lb Re-entry 9590 lb Landing 9168 lb	Pay load: 1000 lb Titan Stage 1: Propellant 164,243 lb Titan Stage 2: Propellant 47,274 lb

NOTES

1. Performance Basis:
 - (a) Estimated data
 - (b) Fuel density: First stage, RP-1 at 50.0 lb/cu ft; second stage, SF-1 at 4.4 lb/cu ft.
 - (c) Oxidizer density: LOX at 71.2 lb/cu ft.
2. Performance Reference:
 - (a) Boeing Reports Nr. D2-6909 "Preliminary System Design Report" - July 14, 1960