## Characteristics Summary

**STRATEGIC MISSILE . . . . . . XSM-64**

![Diagram of missile system]

### "NAVAHO"
- **Wing Area**: 418 sq ft
- **Length (Missile)**: 67.8 ft
- **(Booster)**: 76.4 ft
- **(Combination)**: 84.0 ft
- **Height**: 17.3 ft

### NORTH AMERICAN

<table>
<thead>
<tr>
<th><strong>AVAILABILITY</strong></th>
<th><strong>PROCUREMENT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number available</td>
<td>Number to be delivered in fiscal years</td>
</tr>
<tr>
<td>ACTIVE</td>
<td>RESERVE</td>
</tr>
</tbody>
</table>

### STATUS
- 1. Mock-up: Jul 52
- 2. First flight: Nov 56
- 3. Completion of development: Sep 58

Navy equivalent: None

### POWER PLANT
- (2) XJ47-W-5
- Wright Aero. Corp.

**ENGINE RATINGS**
- **ALT**: 55,000
- **LB**: 3050
- **MACH**: 2.75

**BOOSTER**
- Nr & Model... (1) XLR71-NA-1
- Mfr . . . . . North American
- **Thrust (lb)**: 240,000
- **Duration (sec)**: 64.8

### FEATURES
- **Low delta wing**
- **Completely movable forward surfaces**
- **Parallel mounted liquid rocket propelled booster**
- **Air conditioned guidance compartment**
- **Recoverable thru glide brakes, drag chute and tricycle gear with brakes**
- **Max fuel cap**: .6360 gal

### GUIDANCE

**SYSTEM**
- *Inertial*
- **AN/ARW-55 and AN/ARW-56 command guidance for recovery**

**CONTROL**
- System: Auto-navigator & auto-pilot

* For advanced versions
** For early flight tests
**Characteristics Summary Basic Mission**

**PERFORMANCE**

<table>
<thead>
<tr>
<th>ENDURANCE</th>
<th>RANGE</th>
<th>SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.3 minutes</td>
<td>1061 naut mi.</td>
<td>M = 2.75 at cruise power</td>
</tr>
<tr>
<td>M = 2.75 Cruise</td>
<td></td>
<td></td>
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</tbody>
</table>

**LAUNCHING**

Launched vertically from ground using booster providing 240,000 lb of thrust; booster separates at 46,300 ft.

**CLIMB**

- sea level, launching wt., max power

- ft alt, begin cruise wt., max power

**ALTITUDE**

Begin Cruise 59,100 ft.  
End Cruise 75,000 ft.

**LOAD WEIGHS**

- Fuel
- Booster:  
- Alcohol: 4330 gal
- Oxidizer: 4193 gal
- Missile:  
- JP-5: 6360 gal

- Empty (Missile) 21,665 lb
- Booster 3546 lb
- Landing 23,100 lb
- Launch (Missile) 60,000 lb  
(Booster) 75,843 lb

Combination 135,843 lb

**RECOVERY**

Recovery made thru automatic control of flight path and air speed in power-off condition.

Glide brakes used throughout letdown. Drag parachute and conventional brakes employed after touchdown on a tricycle gear.

**NOTES**

1. Performance Basis:  
   (a) Contractor's estimated data

2. Revision Basis:  
   (a) To revise performance

3. Future plans provide for advanced non-recoverable experimental versions which will be capable of flights to a range of 2435 nautical miles.