Characteristics Summary

STRATEGIC MISSILE ............ SM-62A

"SNARK" 

NORTHROP

Ref Wing Area (does not include leading edge or trailing edge extensions) .... 326.0 sq ft
Span ........................................ 42.3 ft
Length ...................................... 69.9 ft
Height ...................................... 14.8 ft

AVAILABILITY 

Number available

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<th>TEST</th>
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<th>TOTAL</th>
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PROCUREMENT 

Number to be delivered in fiscal years

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STATUS

1. Design Initiated (Guidance System): Mar 46
2. First Flight (SM-63): Aug 53
3. Completion of Cat. I Tests: Sep 58
4. First prod. delivery to SAC: Jun 59
5. In prod., operational: Mar 60
6. Last Production: Dec 60

Navy Equivalent: None

Mfr's Model: N-72

POWER PLANT

(1) J57-P-17
Pratt & Whitney
ENGINE RATINGS
SLS 10,500*6120/9600 Cont
Low spool/High spool
**Based on manufacturer's recommended limits. For an engine installed in a tactical missile, however, no time limit is imposed since the engine is considered to be expendable.
BOOSTER
Nr & Model: Allegany Ballistics Lab
Thrust: 130,000 lb
Duration: 4 sec

FEATURES

Wing: Low thickness ratio, high aspect ratio, and high degree of sweepback. Lateral and longitudinal control maintained by elevons on trailing edge.
Fuselage: Houses warhead, fuel, power plant, and guidance equipment.
External Fuel Tanks: Carried on pylons mounted beneath the wings and dropped when empty
Warhead: Delivered through release of missile ballistic nose section
Maximum Fuel Capacity: 5768 gal

GUIDANCE

Model: Mark I*
Mfr: Northrop Corp.
Type: Inertial, aided by stellar monitoring and airmass damping

*Includes N-80 Autopilot

20 DEC 60

SECRET

SM-62A
System 103A

57WC-4983
## Characteristics Summary Basic Mission

### Performance

**Launching**
- Mobile short rail platform
- Preparation and launch time: Twenty percent of the missile stockpile will be launched by D + 1 hour. The balance of the in-commission missiles will be launched by D + 3.5 hours. However, during periods of exigency, twenty percent can be launched in E + 15 minutes, an additional twenty percent in E + 30 minutes, and the balance within E + 3 hours. To meet this requirement, all missiles will be assembled, launched, mounted, fueled, and will have warheads and boosters installed.

**Range**
- 4910(b)/5322(c) naut mi. with 6230 lb warhead at 531 knots avg. cruising speed in 9.3 hours

**Speed**
- Climb speed schedule is 365 knots calibrated air speed below 28,400 feet and command M = 0.91 thereafter. Military Power is commanded for the combat zone to give increased altitude at constant Mach number.
- 540 knots available at military power over the target at 50,900 feet

**Climb**
- 3082 fpm at sea level
- 49,603 lb (launch weight) military power

**Operational**
- Launch: Sea Level
- Begin Cruise: 32,000 ft
- End Cruise: 44,650 ft
- Altitude over the Target: 50,900 ft

**Weights**
- Loading: lb
- Empty (not including warhead): 16,903
- Launch with Pylon Tanks (without boosters): 49,603
- Launch with Pylon Tanks (with boosters): 60,968

### Notes
1. Performance Basis:
   - (a) Data Source: Flight Test
   - (b) ICAO Standard Atmosphere and zero wind.
   - (c) Range is the mean value of the operational range.
   - (d) Target Accuracy: 50% within 2,000 nautical miles.
2. Revision Basis: To reflect latest availability and procurement data.
3. True Mach number corresponding to 0.91 command Mach number is 0.924.