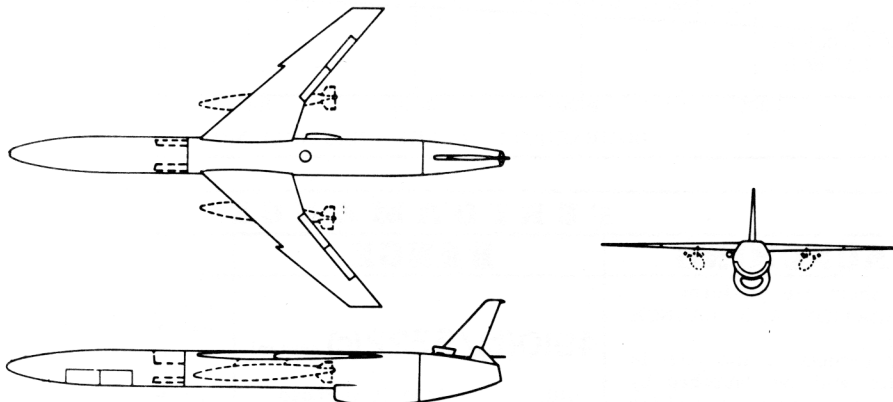


CLASSIFICATION CANCELLED
(OR CHANGED TO *unclassified*)
BY AUTHORITY OF *DDP Dir 5200.10*
(INDIVIDUAL OR WRITTEN AUTHORITY)
BY *Curran M. White 23Mar73*
(NAME & GRADE OF INDIVIDUAL MAKING CHANGE) (DATE)

Characteristics Summary

STRATEGIC MISSILE SM-62A



"SNARK"

NORTHROP

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

AVAILABILITY

PROCUREMENT

Number available			Number to be delivered in fiscal years			
TEST	INVENTORY	TOTAL	FY61			
0	30	30	0			

STATUS

- | | |
|--|--|
| 1. Design Initiated (Guidance System): Mar 46
2. First Flight (XSM-62): 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	LB	RPM	MIN
Mil:	10,500	*6150/9900	30**
Nor:	9000	5900/9650	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
 . . . (2) X-226-A3 Solid Rocket
 Mfr. 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: 3768 gal

GUIDANCE

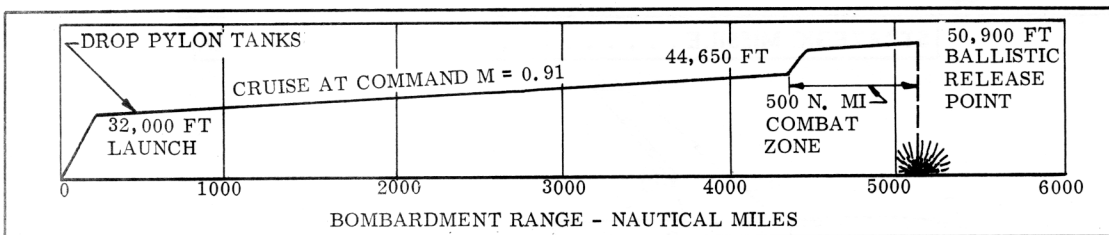
Model Mark I*
 Mfr
 Northrop Corp.
 Type Inertial, aided by stellar monitoring and airmass damping

*Includes N-80 Autopilot

Classification cancelled *Confidential*
or changed to *unclassified*
AUTH: *AFSG AFSC Sec Miss Guide - DOD Dir 5200.10*
BY *A.R. Sanderson 7 Feb 67*
Signature and Grade
23 Feb 1967

CG/SNARK SM-62A/char

Characteristics Summary Basic Mission **SM-62A**



PERFORMANCE

LAUNCHING	RANGE	S P E E D															
<p>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, launcher-mounted, fueled, and will have warheads and boosters installed.</p>	<p>4910(b)/5322(c) naut mi. with 6230 lb warhead at 531/— knots avg cruising speed in 9.3 hours</p>	<p>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</p>															
<p>WARHEAD Type MK-39Y1 Mod-1 Gross Weight 6230 lb FUZE Type . Barometric (Air Burst) with Impact for backup Arming Method . Time Heading Device</p>	<p>3082 fpm at sea level 49,603 lb (launch weight) military power</p>	<p>ALTITUDE Launch Sea Level Begin Cruise 32,000 ft End Cruise 44,650 ft Altitude over 50,900 ft the Target</p>															
	<p>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</p>	<p>OPERATIONAL</p> <p>The graph shows the maximum operational range in nautical miles over a five-season period. The range starts at approximately 5150 nautical miles in Summer (Su), peaks at about 5350 nautical miles in Winter (Wi), and returns to approximately 5150 nautical miles in the following Summer (Su). A 5% probability level is indicated.</p>															
<p>FUEL</p> <table border="1"> <thead> <tr> <th>Location</th> <th>No. Tanks</th> <th>Gal*</th> </tr> </thead> <tbody> <tr> <td>Fuselage</td> <td>8</td> <td>3038</td> </tr> <tr> <td>Ballistic Nose</td> <td>1</td> <td>137</td> </tr> <tr> <td>Pylon Tanks</td> <td>2</td> <td>593</td> </tr> <tr> <td></td> <td>Total</td> <td>3768</td> </tr> </tbody> </table> <p>Grade JP-5 Specification MIL-F-5624C *Usable fuel</p>	Location	No. Tanks	Gal*	Fuselage	8	3038	Ballistic Nose	1	137	Pylon Tanks	2	593		Total	3768		
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N O T E S

- Performance Basis:
 - Data Source: Flight Test
 - ICAO Standard Atmosphere and zero wind.
 - Range is the mean value of the operational range.
 - Target Accuracy: 50% within 2.0 nautical miles.
- Revision Basis: To reflect latest availability and procurement data.
- True Mach number corresponding to 0.91 command Mach number is 0.924.