

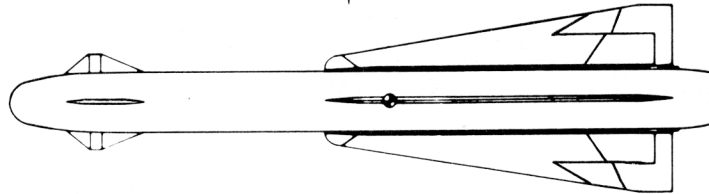
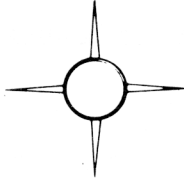
Unclassified

~~SECRET~~

SERVICE

Characteristics Summary

GUIDED AIRCRAFT ROCKET GAR-1



"FALCON"

HUGHES

Wing Area Not Applicable Length 77.8 in.
Span 20.0 in. Height 20.0 in.

AVAILABILITY

PROCUREMENT

Number available

Number to be delivered in fiscal years

ACTIVE	RESERVE	TOTAL				

STATUS

1. Project Initiated: Mar 47
2. Complete Guided Aircraft Rocket Project Initiated: Mar 48
3. First Air-to-Air Hit: Jun 52
4. First Falcon-Equipped Squadrons: Early 56

Navy Equivalent: None

Mfr's Model: D

POWER PLANT

(1) Solid Rocket Motor
T47 or T58*

Thiokol Chemical Corp.

THRUST RATINGS

S.L.S.	LB	- Duration (sec)
Nominal:	4600	- 1.3

* Later versions

FEATURES

Supersonic Guided Aircraft Rocket for destruction of subsonic and supersonic bombers.

Blast Type Warhead

Max Fuel Cap: 31 lb

GUIDANCE

- (a) INITIAL
None during boost phase
- (b) MID-COURSE & TERMINAL
Semi-Active X-Band Pulse Radar, Proportional Navigation.

CONTROL

Hydraulic: Initiated by the Error Signal from Target Seeker

15 NOV 54

~~SECRET~~

GAR-1
(AIR-AIR)

Forms to reflect target characteristics & performance data.

Deleted as A/C Rocket, listed as Guided Missile

*4 to 5
UPGRADED AT 9 YEAR INTERVAL
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10
9.8. Lowelton
11 Apr 67*

48 addnl

Characteristics Summary Basic Mission GAR-I

NOT APPLICABLE

P E R F O R M A N C E

ENDURANCE	RANGE	S P E E D
NOT APPLICABLE	5000 ft to 25,000 ft	Launching speed of aircraft plus 2000 ft/sec

LAUNCHING	CLIMB	ALTITUDE
Short Length Rail: Extended from wing tip pods in F-89H and from missile bays in F-102A; approximately 20 seconds required from time target is sighted to time rocket is launched.	NOT APPLICABLE	Effective up to 60,000 ft

L O A D	W E I G H T S	TARGET ACCURACY
Warhead: 8 lb Fuel: (Thiokol Base). 31 lb	Burnout 96 lb Launch 127 lb	P _k - .50 to .95 for salvo of 6 rockets against sub- sonic and supersonic bombers

N O T E S

1. Performance Basis:
(a) Estimated data (Not substantiated by WADC)
2. Revision Basis: To reflect latest characteristics and performance data.