

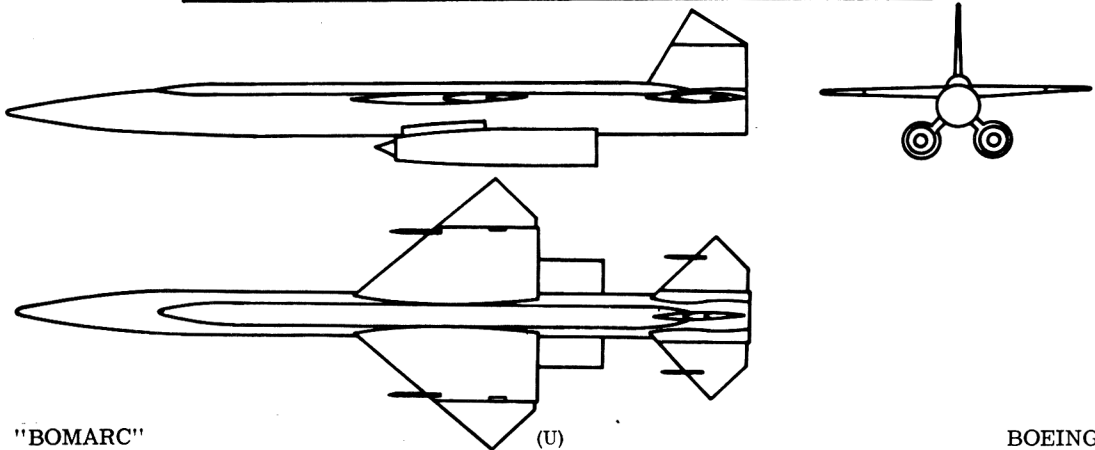
UNCLASSIFIED

CONFIDENTIAL

C5
CIM-10B Bomarc/par

Characteristics Summary

INTERCEPT MISSILE CIM-10B



Wing Area 141.9 sq ft Length 45.4 ft
 Span 18.2 ft Height 10.3 ft

AVAILABILITY			PROCUREMENT			
Number available			Number to be delivered in fiscal years			
TEST	INVENTORY	TOTAL				

(U) **STATUS**

1. Contract date 20 Feb 59	4. CAT II Start Oct 60
2. First delivery Oct 60	Complete May 62
3. CAT I Start Apr 59	5. CAT III Start Apr 61
Complete Sep 61	6. Operational date Jun 61

Navy Equivalent: None Mfr's Model : 631

(C) **POWER PLANT**

RAMJET (CRUISE)
 Nr & Model . . (2) RJ 43-MA-11
 Mfr Marquardt
 Thr (lb) (nom cruise) . . 1415
 Altitude (ft) 70,000
 Mach 2.7

ROCKET MOTOR (BOOST)
 Nr & Model (1) M-51
 Mfr Thiokol
 Thrust (lb) (nominal) . . 43,700
 Duration (sec) 32.2

(U) **FEATURES**

Mono-wing, tail control configuration
 Modified delta wing, 50° sweepback
 Pressure fed propellant system
 Prov. for kit installation of command destruct system for testing and training
 Target Search Capability
 MK-40-Y1 Mod O Nuclear Warhead

(C) **GUIDANCE**

Missile control is integrated with SAGE system
 LAUNCH: Follows pre-set course
 MID COURSE: Ground Mark X
 SIF Radar tracking
 Airborne Transponder
 Transfer from pre-set control to mid-course guidance is automatic
 SEARCH: Accomplish at 40,000 ft when using Low-Alt-Search-Option (LASO)
 TERMINAL: AN/DPN-53 Homing System

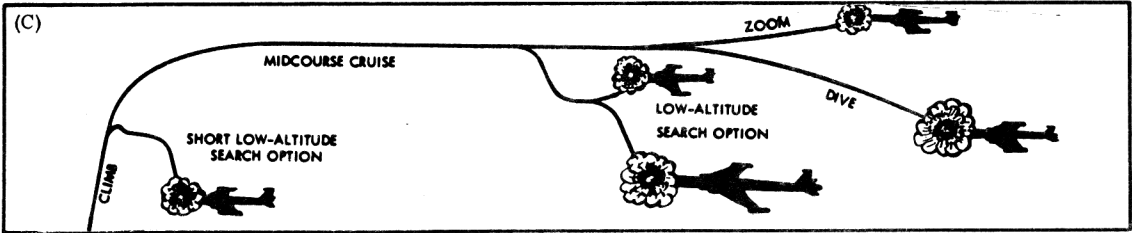
Classification cancelled or changed to Unclassified
 AUTH: EC 120 65
 By William M. White
 Signature and Grade 17/89/81

DOWNGRADED AT 3 YEAR INTERVALS;
 DECLASSIFIED AFTER 12 YEARS
 DOD DIR 5200.10

CONFIDENTIAL

UNCLASSIFIED

Characteristics Summary Basic Mission CIM-10B



P E R F O R M A N C E		
(C) ENDURANCE	(C) RANGE	(C) S P E E D
19 min	Aerodynamic Capability 95% Probability 420 n. mi. at High Alt 280 n. mi. at Low Alt with 385 lb payload at 2.70 M	CRUISE M = 2.70 at 71,000 ft SEARCH M = 2.70 at 71,000 ft M = 2.35 at 40,000 ft
(C) LAUNCHING	(C) CLIMB	(C) ALTITUDE
Launched automatically from individual weather protected shelters. Booster rocket ceases firing at approximately 40,000 ft. Ramjets ignite at approx. 5000 ft and take over full propulsion at boost burn out.	2600 fps at boost burnout	High Alt. Mission Cruise 71,000 ft Low Alt. Search Mission Cruise 71,000 ft Search 40,000 ft
(C) L O A D	(U) W E I G H T S	TARGET CRITERIA
Warhead *385 lb *Includes associated equipment Propellants Rocket 6486 lb Ramjet 2558 lb	Empty 6384 lb End Cruise 6848 lb Launch16,032 lb	(C) 0 - 300 ft weapons kill 300 - 3000 ft carrier kill

N O T E S

(U)

- Performance Basis:
 - System analysis and flight test data.
 - Performance Reference: Boeing Document D5-3090, Dec 31, 1958, "Aerodynamic Performance & Stability & Control Characteristics of Boeing Model 631".
- Revision Basis: To show changes to data in Power Plant and Load blocks. Also to indicate reclassification of security coverage of data contained in each block.