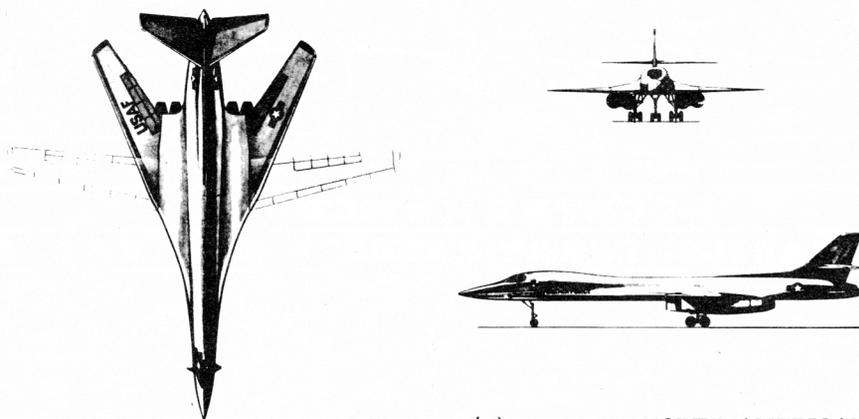


*A1 (North American Rockwell)*  
*B-1A*

# Characteristics Summary

BOMBER . . . . . B-1A



(U) NORTH AMERICAN ROCKWELL

Wing Area . . . . . 1946 sq ft      Length . . . . . 145.3 ft  
 Span (sweep angle 15°) . . . . . 136.7 ft      (U) Height . . . . . 33.6 ft  
 (sweep angle 67.5°) . . . . . 77.8 ft

A V A I L A B I L I T Y			P R O C U R E M E N T			
Number available			Number to be delivered in fiscal years			
ACTIVE	RESERVE	TOTAL				

(U) **S T A T U S**

1. Date of Contract: Jun 70
2. First Flight: Dec 74

Navy Equivalent: None

(C) **POWER PLANT**

(4) F101-GE-100

General Electric

ENGINE RATINGS

S. L. S.	LB	- RPM	- MIN
Max	*29,850	- †	- Cont
Intermed:	16,150	- ‡	- Cont

\* Afterburner  
 † HPR/LPR 14, 820/8115  
 ‡ HPR/LPR 14, 850/8115

(C) **FEATURES**

Crew . . . . . 4

Variable-Sweep Wing  
 Single slotted flaps  
 Leading-edge slats  
 External Compression Inlet  
 Spoilers  
 Power operated controls  
 Automatic pilot  
 Rotary Missile Launcher  
 Air Refueling Prov.  
 Crew compartment provides  
 "shirt-sleeve" environment  
 Crew escape system consists  
 of an ejectable module

(C) Max fuel capacity: 34, 104 gal

(C) Internal:	30, 786 gal
(C) Weapons Bay:	3318 gal

(U) **ARMAMENT**

MISSILES

Nr	Type
24 (int).	SRAM . . . AGM-69A
8 (ext)	SRAM . . . AGM-69A

BOMBS

Nr	Class	(lb)
30 . .	M117 or M117R . . .	750
84 . .	MK82 or MK82 SN . .	500
24 . .	MK84 . . . . .	2000
135 .	Bluff shape . . . . .	500

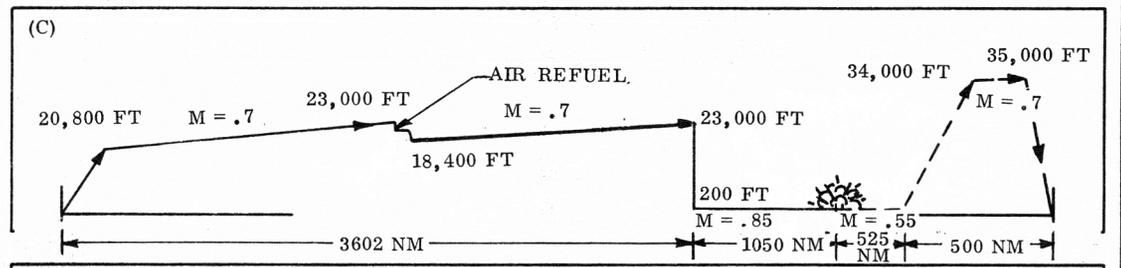
ELECTRONICS

Specific Avionics equipment  
 will be determined during RDT  
 & E program.

CLASSIFIED BY B-1 SECURITY CLASSIFICATION GUIDE  
 EXEMPT FROM GENERAL DECLASSIFICATION  
 SCHEDULE OF EXECUTIVE ORDER 11652  
 EXEMPTION CATEGORY 3  
 DECLASSIFY ON 31 DEC 1987

*update 11/1/88*

*Characteristics Summary Basic Mission* . . . . . B-1A



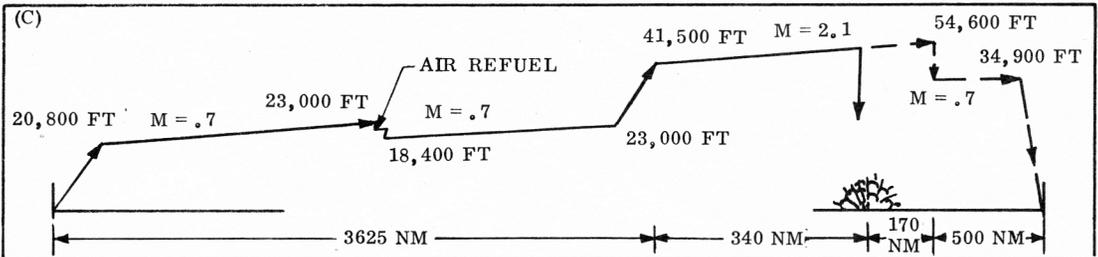
<b>PERFORMANCE</b>		
<b>COMBAT RADIUS</b> (C)	<b>FERRY RANGE</b> (C)	<b>S P E E D</b> (C)
(C) 5675 naut. mi  with 50,000 lb payload at a penetration & target speed of .85 mach/562 knots  in 12.7 hours.	6242 naut. mi  with 33,195 gal fuel at 417 knots avg. in 15.0 hours at 395,000 lb T.O. wt.	COMBAT .95 mach/628 knots at 200 ft alt, max thrust  MAX 2.2 mach/1262 knots at 53,200 ft alt, max thrust  BASIC 1.9 mach/1095 knots at 35,000 ft alt, max thrust
<b>CLIMB</b> (C)	<b>CEILING</b> (C)	<b>TAKE-OFF</b> (C)
2600 fpm sea level, take-off weight intermediate thrust	24,600 ft 100 fpm, take-off weight intermediate thrust	ground run 5840 ft   — ft no assist   assisted
22,600 fpm sea level, combat weight maximum thrust	52,800 ft 500 fpm, combat weight maximum thrust	over 50 ft height 7500 ft   — ft no assist   assisted
<b>LOAD</b> (C)	<b>WEIGHTS</b> (C)	<b>STALLING SPEED</b> (C)
Weapons: . . . . . 50,000 lb  Fuel (ramp): . . . . . 25,503 gal *(AAR): . . . . . 15,870 gal  *Transferred in flight from Tanker aircraft.	Empty . . . . . 173,000 lb Combat . . . . . 229,700 lb *Ramp Weight . . . . . 395,000 lb Take-off . . . . . 389,800 lb Max Inflight . . . . . 422,000 lb  * Limited by strength (landing gear)	158 knots power-off, landing config- uration, take-off weight  <b>(C) TIME TO CLIMB</b>  21 min, SL to initial cruise altitude (20,800 ft), T.O. wt, intermediate thrust.

**NOTES**

(U)

1. Performance Basis:
  - (a) Estimated data
  - (b) Wind tunnel data plus engine contractor's fuel flow data.
2. To reflect SPO Status data.

*Characteristics Summary Basic Mission* . . . . . B-1A



**PERFORMANCE**

<b>COMBAT RADIUS</b>		<b>(C) FERRY RANGE</b>	<b>(C) S P E E D</b>	
(C) 4610 naut. mi with 25,000 lb payload at a penetration & target speed of 2.1 mach/1205 knots  in 9.6 hours.		(C) 6242 naut. mi with 33,195 gal fuel at 415 knots avg. in 15.0 hours at 395,000 lb T.O. wt.	COMBAT 2.1 mach/1205 knots at 53,000 ft alt, max thrust  MAX 2.2 mach/1262 knots at 55,400 ft alt, max thrust  BASIC 1.9 mach/1095 knots at 35,000 ft alt, max thrust	
<b>(C) C L I M B</b>	<b>(C) C F I L I N G</b>	<b>(C) TAKE-OFF</b>		
2600 fpm sea level, take-off weight intermediate thrust	24,600 ft 100 fpm, take-off weight intermediate thrust	ground run 5840 ft   — ft no assist   assisted		
22,600 fpm sea level, combat weight maximum thrust	52,800 ft 500 fpm, combat weight maximum thrust	over 50 ft height 7500 ft   — ft no assist   assisted		
<b>(C) L O A D</b>	<b>(C) W E I G H T S</b>	<b>(C) STALLING SPEED</b>		
Weapons . . . . . 25,000 lbs  Fuel (ramp): . . . . . 29,349 gal *(AAR): . . . . . 15,870 gal	Empty . . . . . 173,000 lb Combat . . . . . 225,925 lb Ramp . . . . . *395,000 lb Take-off . . . . . 389,800 lb Max Inflight . . . . . 411,526 lb	158 knots power-off, landing config- uration, take-off weight		
*Transferred in flight from Tanker aircraft.		<b>(C) TIME TO CLIMB</b>  21 min, SL to initial cruise altitude (20,800 ft), T.O. wt, intermediate thrust.		

**N O T E S**

- (U)
- Performance Basis:
    - Estimated data
    - Wind tunnel data plus engine contractor's fuel flow data.
  - To reflect SPO Status Data.

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This page is unclassified, but bears the overall classification of the document.

Jan 76  
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