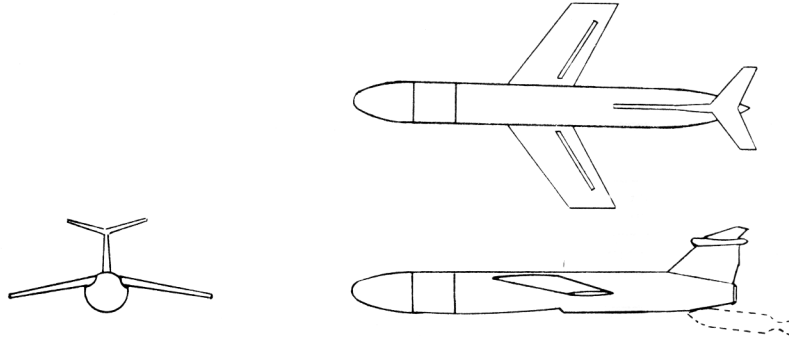


# Characteristics Summary

TACTICAL MISSILE . . . . . TM-76B



**MACE**

**MARTIN**

Wing Area . . . . . 151.5 sq ft      Length . . . . . 44.2 ft  
Span . . . . . 22.9 ft      Height . . . . . 9.7 ft

### AVAILABILITY

### PROCUREMENT

Number available			Number to be delivered in fiscal years			
ACTIVE	RESERVE	TOTAL				

### STATUS

- |                                   |                     |          |
|-----------------------------------|---------------------|----------|
| 1. First Inertial Guidance Flight | (YTM-76B) . . . . . | 6 Feb 58 |
| 2. First Production Delivery      | (TM-76B) . . . . .  | Jun 60   |
| 3. Final R & D Flight             | (YTM-76B) . . . . . | Nov 60   |
| 4. First Deployment               | (TM-76B) . . . . .  | Sep 61   |

Navy Equivalent: None

Mfr's Model:

### POWER PLANT

(1) J33-A-41  
ALLISON  
ENGINE RATINGS

S.L.S.	LB	RPM	MIN	(In flight)
Max:	5200	- 12,150	- 30	
Nor:	4600	- 11,750	- Cont	

BOOSTER

Nr & Model	(1) M16E1
Mfr	Thiokol
Thrust (lb)	*101,152
Duration (Sec)	2.67

\*Nominal (70°F)

### FEATURES

High level, low level or high-low level combination capabilities  
Up to 4 off-course deviations  
Non-emanating, non-jammable guidance  
Finger type spoilers for lateral control  
All movable stabilizer for pitch control  
Honeycomb wing and tail construction  
Launched from zero length launcher

Max Fuel Cap: 1029 gal

### GUIDANCE

INITIAL

Programmed pitch control and roll stabilization

MID-COURSE

Inertial guidance system computes missile position along a path by measuring and integrating missile accelerations from a reference launch vertical. Tangential acceleration renders missile range while lateral acceleration yields track, guides the missile to the target without ground reference.

TERMINAL

Terminal dive or terminal phase impact or airburst can be used.

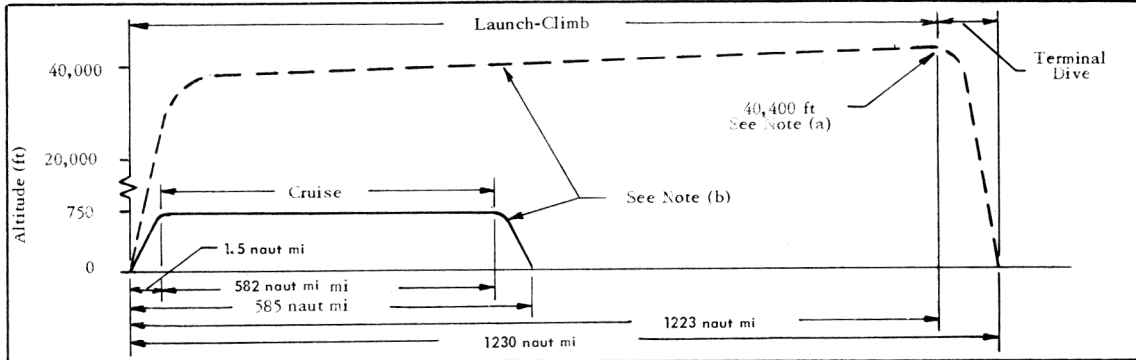
CONTROL

Autopilot

CLASSIFICATION CANCELLED  
 (OR CHANGED TO *Unclassified*)  
 BY AUTHORITY OF *DoD Dir 5200.10*  
 (INDIVIDUAL OR WRITTEN AUTHORITY)  
*Dir. M. White 28 Mar 73*  
 (DATE OF INDIVIDUAL MAKING CHANGE)

CONFIDENTIAL  
 DOWNGRADED AT 3 YEAR INTERVALS,  
 DECLASSIFIED AFTER 12 YEARS.  
 DOD DIR 5200.10  
*a. b. Lowman*  
*17 Apr 67*

*Characteristics Summary Basic Mission* ..... TM-76B



**PERFORMANCE**

<b>RANGE</b>		<b>S P E E D</b>
HIGH ALTITUDE <b>1230</b> naut mi at 490 kn avg in 2.5 hr avg	LOW ALTITUDE <b>585</b> naut mi at 503 kn avg in 1.16 hr avg	CRUISE <b>503</b> kn at 11,280 rpm (96%)
<b>LAUNCHING</b>	<b>CLIMB</b>	<b>ALTITUDE</b>
Ground launched. No catapult or runway required, RATO booster is used for additional thrust.	See Note (b) <b>3380</b> fpm at Sea Level	See Note (b) 40,400 ft at Dump
	<b>2200</b> fpm at Sea Level	Begin Cruise 750 ft End Cruise 750 ft
<b>L O A D</b>	<b>W E I G H T S</b>	<b>TARGET ACCURACY</b>
Fuel: total 1,029 gal protected 0% droppable 0% external 0%	Empty 9,046 lb  Launch 18,710 lb See Note (c)	SYSTEM CEP CEP 3600ft(1-1/2 hr) CEP 4500ft(2 hr) CEP 5000ft(1200n. m.)

**N O T E S**

1. PERFORMANCE BASIS:

- (a) Missile is detonated by airburst or upon impact.
- (b) MACE is capable of two basic missions: data appearing in upper blocks pertain to high altitude mission while lower block data pertain to low altitude mission.
- (c) Includes weight of booster rocket (charge and sling).

2. REVISION BASIS:

Data reCOORDINATED.