

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER	1	2	3	
LOADING CONDITION	COMBAT 60% FUEL	COMBAT 60% FUEL	FIGHTER FULL FUEL	
GROSS WEIGHT LBS.	11345	11345	12946	
EMPTY WEIGHT (CALCULATED) LBS.	7555			
FUEL/OIL GALS.	400	400	667	
FIXED GUNS/AMMUNITION	4-20mm/800 rds. - MK6 Fire Control Sys. (MK8 Gunsight Unit)			
FLEXIBLE GUNS/AMMUNITION	NONE			
ENGINE POWER USED FOR PERFORMANCE	MILITARY	NORMAL	NORMAL	
WING LOADING LBS./SQ.FT.	45.4	45.4	51.8	
POWER LOADING ① LBS./BHP.				
V-MAX. SEA LEVEL KN.	508	454	454	
V-MAX. KN./FT.	492	474	473	
V-STALL GROSS WEIGHT ② KN.	86.6	86.6	92.4	
V-STALL WITHOUT FUEL ② KN.	76.9	76.9	76.9	
TIME-TO-CLIMB -10000FT- MIN.	1.7	2.9	3.4	
TIME-TO-CLIMB -20000FT- MIN.	3.8	6.5	7.7	
SERVICE CEILING FT.	48700	44700	43300	
TAKE-OFF DISTANCE -CALM- FT.			1201	
TAKE-OFF DISTANCE -15 KN- FT.			860	
TAKE-OFF DISTANCE -25 KN- FT.			662	
TAKE-OFF DISTANCE -50 FT. OBST. FT.				
TAKE-OFF TIME SECONDS				
RATE OF CLIMB -SL- FT./MIN.	6290	3890	3300	
MAX. RANGE /V-AV. ③ N MI./KN.			945/310	
RANGE /V-AV. -60% NSP-③- N MI./KN.				
SEARCH RADIUS /V-AV. -20% R- N MI./KN.				
A.S.W. RADIUS/V-AV. -20% R- N MI./KN.				
RADIUS (Special Problem) N MI.			320	
COMBAT RADIUS (R-3) N MI.			180	

ENGINE Allison J33-A-23 Turbo Jet

ENGINE RATING BHP/RPM/ALT.	MILITARY	NORMAL	WET TAKE OFF RATING
	4600# Static Thrust/11750 RPM/SL	3600# Static Thrust/11000 RPM/SL	5400# Static Thrust/11750RPM

AUX. FIXED	TANKAGE IN GALLONS		OFFENSIVE ARMAMENT
	OIL	FUEL	
PROTECTED		667	NONE
UNPROTECTED			
TOTAL - FIXED INTERNAL		667	
DROPPABLE			
DROPPABLE			
TOTAL		667	

NOTE	① BHP AT MAX. CRIT. ALT.
	② STALL - WITHOUT POWER
	③ AT 20,000' ALTITUDE

Supersedes XP9F-2 (Alt. Power Plant)
dtd 1 June 1947

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Performance is based on calculations. Range and radius are based on engine specification fuel consumption data increased by 7.5% to conform with past experience.

FIGHTER COMBAT RADIUS FORMULA NO. F-3-CONDITIONS NO. - 3 RADIUS=CLIMB/CRUISE-OUT=CRUISE BACK

<u>WARM-UP</u>	<u>RENDEZVOUS</u>	<u>CLIMB</u>	<u>CRUISE OUT</u>	<u>COMBAT</u>	<u>CRUISE BACK</u>	<u>RESERVE</u>
30 sec. at Max. Stat. Thrust	Climb to 5000 ft.	to 20000 ft.	at 20000 ft.	15 min. -V max. at 15000 ft.	at 20000 ft.	15 min. at 10000 ft.
<u>TAKE-OFF</u> 1 min. at T.O. Thrust	Mil. Thrust 10 min. REND. Vel. for Max. Range	Mil. Thrust	at Vel. for Max. Range	Mil. Thrust <u>RETURN</u> to 20000 ft. Mil. Thrust	at Vel. for Max. Range	15 min. at S.L. Vel. for max. End.

SPECIAL PROBLEM - CONDITION - 3

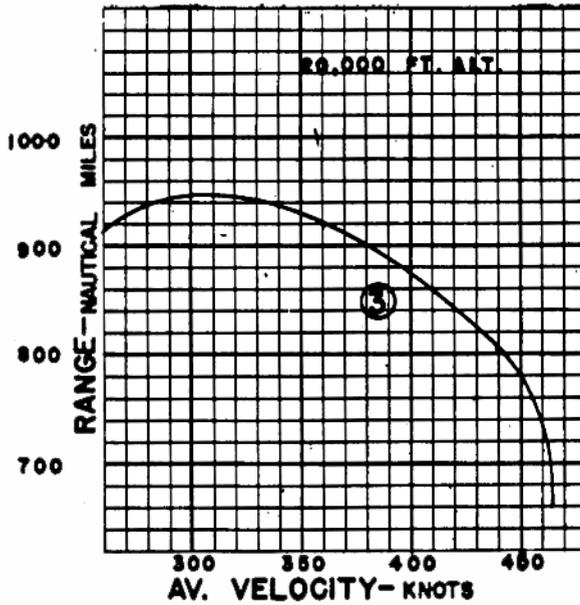
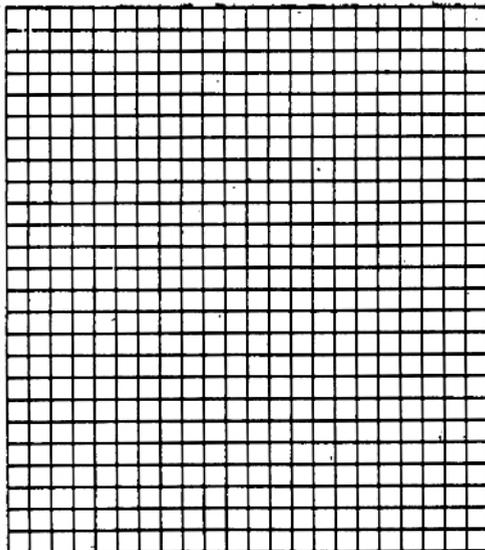
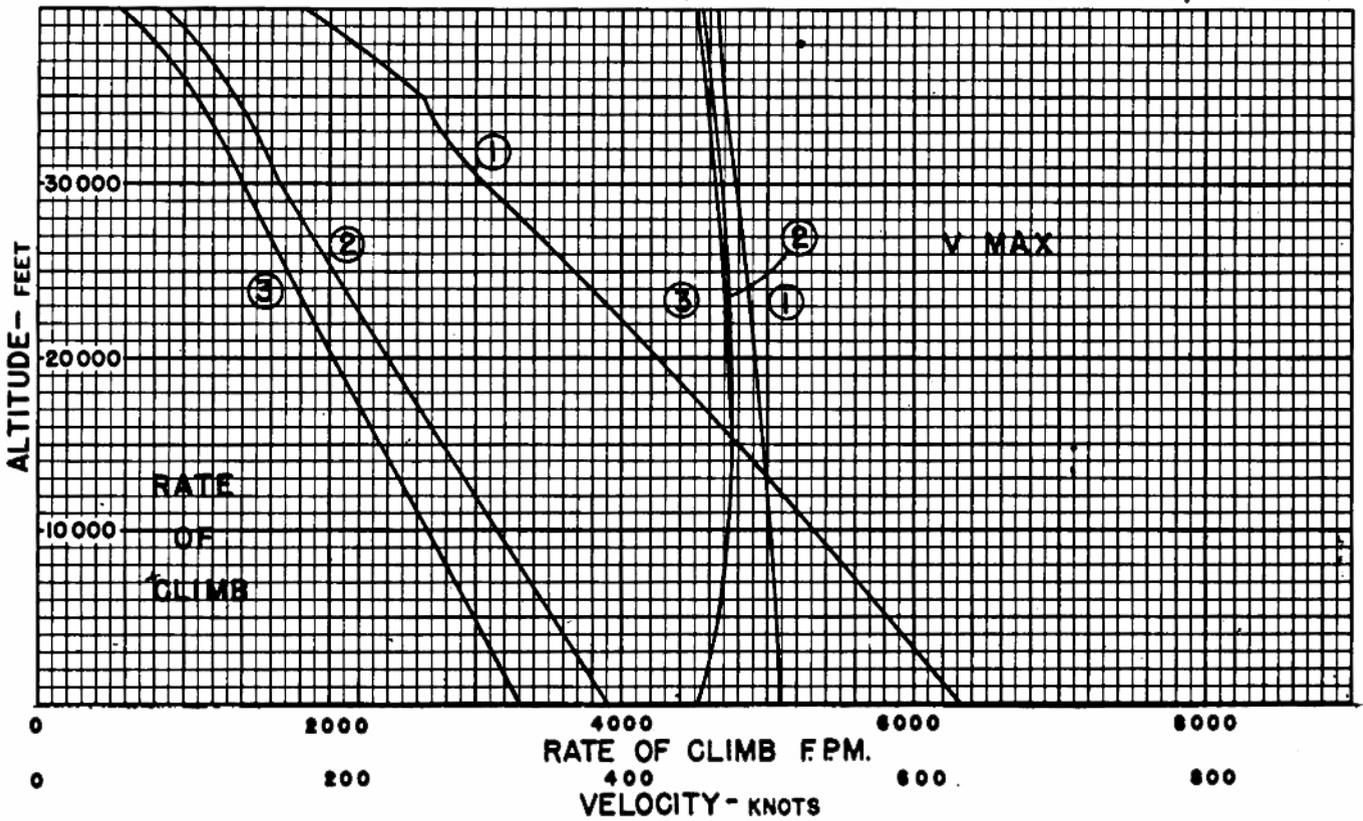
<u>WARM-UP</u>	<u>CLIMB</u>	<u>CRUISE-OUT</u>	<u>COMBAT</u>	<u>CRUISE BACK</u>	<u>DESCEND</u>
30 sec. at Max. Stat. Thr.	to 30000 ft.	at 30000 ft.	15 min. at 30000 ft.	at 30000 ft.	to 10000 ft.
<u>TAKE-OFF</u> 1 min. at T.O. Thrust	Max. Thr.	at Vel. for Max. Range	at Mil. Thr.	at Vel. for Max. Range	45 min. Rendezvous at 10000 ft. at Vel. for Max. End.

SPOTTING: 200 ft. length is required to spot 42 airplanes on the 96 ft. wide deck immediately aft of the forward ramp on CV-9 class carriers.

AIRPLANE PERFORMANCE

NAVAER - 1335 C (REV. 2-47)

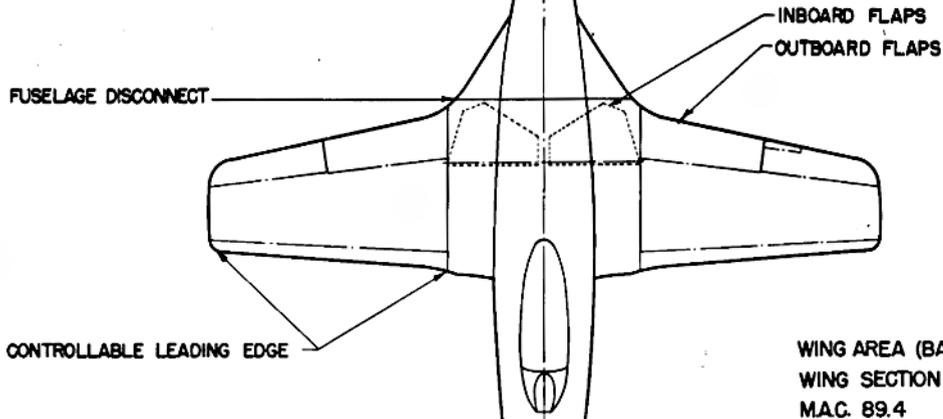
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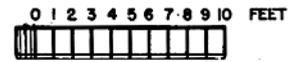
○ LOADING CONDITION COLUMN NUMBER

A-11067

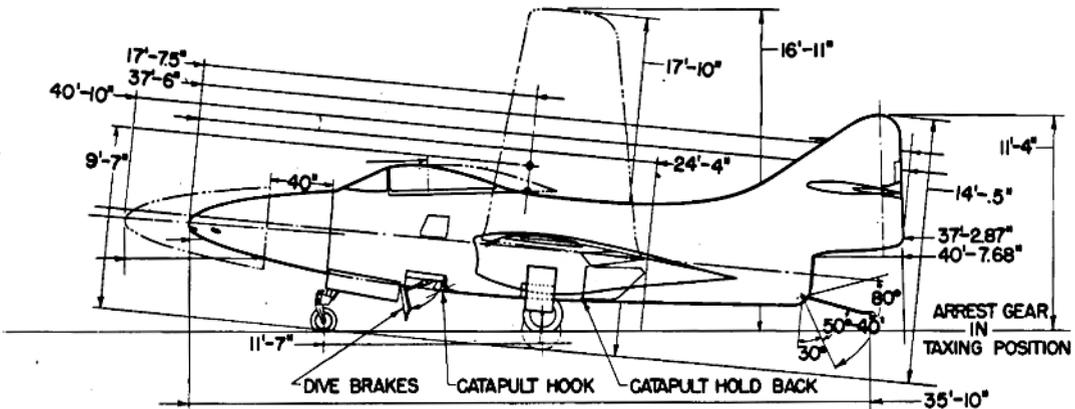
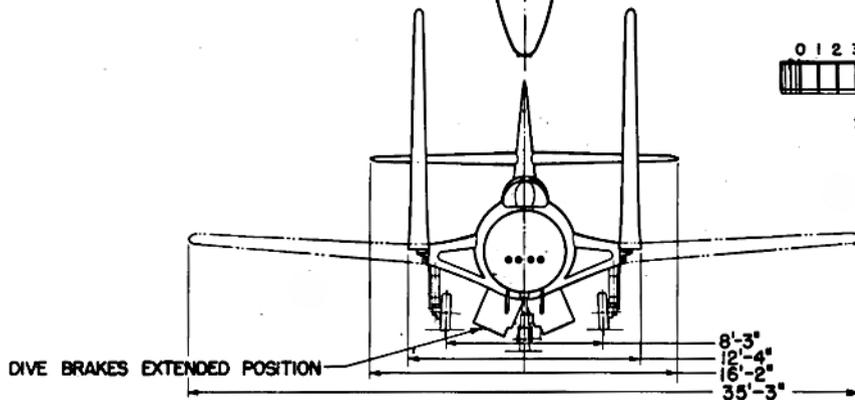
BUREAU OF AERONAUTICS
NAVY DEPARTMENT



WING AREA (BASIC) 250 SQ. FT.
WING SECTION N.A.C.A. 64,-A012
M.A.C. 89.4



SCALE



1 FEB, 1948

ARMAMENT & TANKS

NAVAER

PAGE 6

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

MODEL XF9F-2,3

-  BULLET RESISTANT GLASS
ARMOR PLATE
-  SELF-SEALING TANKS

- PROTECTION
- 1. PILOT FORWARD 72 LBS
 - 2. PILOT AFT 68 LBS
 - 3. SELF-SEALING CELLS 185 LBS

