



MEMORANDUM FOR RECORD

Missile Conversion POH Performance Charts

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300 CONVERSION PERFORMANCE

of the 300 CONVERSION
 (as tested on the Mooney 205 airframe)

SPEED, ALTITUDE AND POWER SETTINGS OF THE 300 MISSILE

POWER %	ALTITUDE FT.	SPEED KTS/TRUE	HP	MAP IN/HG	RPM	FUEL BURN GPH
100	MSL	188	300	29.9	2,650	27.0
80	MSL	185	240	25.0	2,550	18.0
76	MSL	180	228	24.0	2,450	17.8
65	MSL	175	195	22.0	2,350	15.7
55	MSL	165	165	19.0	2,250	13.9
78	7,500	193	234	24.5	2,550	18.9
76	7,500	185	228	24	2,450	17.8
65	7,500	180	195	22	2,350	15.7
55	7,500	175	165	19	2,250	13.9
65	12,500	183	195	20	2,550	15.7
55	12,500	180	165	18	2,250	13.9
50	12,500	175	150	17	2,250	11.8

CLIMB SPEED, RATE AND POWER SETTINGS OF THE 300 MISSILE

POWER %	RATE FT/MIN	SPEED KTS/TRUE	HP	MAP IN/HG	RPM	FUEL BURN GPH
Max 100	1,500	89	300	29	2,650	27.0
Best 88	1,200	115	264	25	2,550	19.8
Econ 80	1,000	120	240	24	2,450	17.8

TAKE-OFF AND LANDING DISTANCE

Take-off over a 50ft obstacle 1,200ft
 Landing over a 50ft obstacle 1,500ft

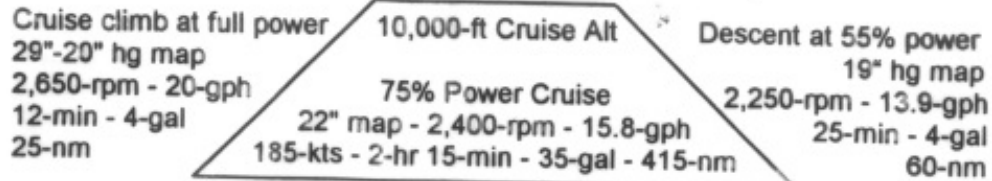
MAXIMUM RANGE OF THE 300 MISSILE (cruise altitude of 12,000 ft)

POWER %	SPEED KTS	RANGE NM	TIME HRS.
76	185	575	3.3
65	180	600	3.5
55	175	650	3.8

300 CONVERSION PERFORMANCE

AVERAGE PROFILE!

500-nm at Cruise Power of 72% (24" hg map - 2,400-rpm)



Total Trip of 500-nm on 43-gal in 2-hrs 52-min

SPECIFICATIONS of the new 300 MISSILE

Engine model	<u>Our 300 MISSILE</u> Continental IO-550-A
Horsepower	300-hp
Propeller	75" Hartzell 3-blade
Max. Takeoff Weight	3,200-lbs
Max. Landing Weight	3,083-lbs
Standard Empty Weight	2,010-lbs
Max. Useful Load	1,190-lbs
Wing Loading	18.3-lbs/ft
Power Loading	10.7-lbs/hp
Stall Speed	61-kts
Service Ceiling	18,800-ft
Max. Rate Of Climb	1,550-ft/min
Max. Level Speed (kts)	193-kts
Cruise Speed (kts) 77.5% η	186-kts
Takeoff Over 50ft Obstacle	1,200-ft