

 AS+	AC-5m FLIGHT MANUAL Aviastroitel, Moscow, Russia	DESCRIPTION OF THE AC-5M
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1.8.2 MAX L/D and performance speeds:

Max L/D	34:1 35:1 with performance package
Red Line (VNE)	119 kts (137 mph, 220 km/h)
Maneuvering (VA)	86 kts (99 mph, 160 km/h)
Spin & aerobatics	Intentional spin and aerobatics flying are temporarily restricted until the special Aviastroitel's permission will be issued
Approach Speed (VAPP).....	55 kts (63 mph, 102 km/h) plus wind considerations

NOTE:

At making a gliding approach in conditions of a strong turbulence of atmosphere, and also at a strong headwind the instrumental velocity should be increased on the average on 3-15 kts on a final approach glide, directly proportional to a wind velocities, but no more than 87 kts. (101 mph; 160 km/h).

1.8.3 High altitude flight

The never exceed speed (VNE) is reduced at pressure altitudes above 2000 meters (6500 ft.) as shown in the following table.

Pressure altitude		Never exceed speed (VNE)		
meters	feet	kts.	mph	km/h
0 - 2000	0 - 6500	119	137	220
2000 - 3000	6500 - 9800	112	129	207
3000 - 4000	9800 - 13100	106	122	196
4000 - 5000	13100- 16400	100	116	186
5000 - 6000	16400- 19600	95	110	177

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1.7 PHYSICAL DESCRIPTION

1.7.1 AC-5M specifications:

Empty weight (typical)	386 lbs.	175 kg
Max Gross	661 lbs.	300 kg
Max Payload	254 lbs.	115 kg
Load Factors	+4.5/-2.2	
Wing Loading		
- typical	7.45 lbs./sq.ft.	33 kg/sq.m.
- max gross weight	7.98 lbs. /sq.ft.	39 kg/ sq.m.
Wing Area	82.9 sq. ft.	7,7 sq.m.
Aspect Ratio	20.6	
Rated Aerotow Load	1200 lbs.	550 kg.

1.7.2. Dimensions:

Span	41 ft.	12,6 m
Length	17.2 ft	5,3 m
Height	4.3 ft	1,3 m

1.8 GLIDING FLIGHT CHARACTERISTICS

1.8.1 Performance speeds and critical sink rates:

WEIGHT	573 LBS	617 LBS	661 LBS
STALL SPEED			
.....[kts.]	39	41	43
[mph]	45	47	50
[km/h]	72	75	78
MIN SINK			
[fpm]	158	163	168
[m/s]	0,8	0,827	0,855
@ SPEED			
[kts.]	47	49	51
[mph]	54	57	59
[km/h]	88	91	95
SPEED MAX L/D			
[kts.]	51	54	57
[mph]	59	62	65
[km/h]	95	100	105
SINK RATE			
[fpm]	150	163	166
[m/s]	0,805	0,83	0,86
SINK @ 70 kts			
[fpm]	262	246	238
[m/s]	1,33	1,25	1,17