

FLIGHT PROFILE

AIRCRAFT: _____

1. BEST L/D:_____/1 @ ____KTS.

PLUS 1/2 WINDSPEED: _____KTS.

= SPEED TO FLY: _____ KTS.

2. L/D @ _____ KTS. = _____ /1
(wind adjusted glide ratio)

DEPARTURE: _____ FIELD ELEV. _____ PATTERN ALT. _____ MSL

DESTINATION: _____ FIELD ELEV. _____ PATTERN ALT. _____ MSL

DISTANCE: _____ MI.

WIND: _____° @ _____KTS.

For pattern altitude, add 1,000 ft. to field elevation.
OBSTACLE CLEARANCE: • 1,500 ft. with headwind
• 500 ft. with tailwind

SF: Safety Factor : glide slope reduction 0.5 ~ 0.7

GLIDE RATIO WITH HEADWIND:

$$\text{Formula: } \frac{(\text{Speed to fly} - \text{wind})}{\text{Speed to fly}} \times \text{wind adjusted glide ratio} \times \text{SF} = \text{Adjusted glide angle}$$

Formula: $\left(\frac{\text{ } - \text{ } }{\text{ } } \right) = \text{ } \% \times \text{ } = \text{ } \times \text{ } = \text{ } : 1$
safety factor

GLIDE RATIO WITH TAILWIND:

$$\frac{\text{Formula: (Best L/D speed + wind)}}{\text{Best L/D speed}} \times \text{best L/D glide ratio} \times \text{SF} = \text{Adjusted glide angle}$$

Formula: $\left(\frac{\quad + \quad}{\quad} \right) = \quad \% \times \quad = \quad \times \quad = \quad : 1$

$\frac{\quad}{\quad}$ safety factor

FT.
(000)

14

13

12

11

10

9

8

7

6

5

4

3

2

1

MI.	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76
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