BASIC R/C MODEL DESIGN PARAMETERS

DATA BY ROMEY BUKOLT

ENGINE / WING AREA

ENGINE	WING AREA
.049	200 - 250 Sq. In.
.10	250 - 350 Sq. In.
.15	300 - 450 Sq. In.
.25	400 - 500 Sq. In.
.40	500 - 700 Sq. In.
.60	600 - 850 Sq. In.

ASPECT RATIO

A/R = SPAN / CHORD

WING A/R = 5-7:1
(GLIDERS) 10 - 16:1

WING INCIDENCE

0 - 1° MULTI
3 - 5° RUDDER ONLY

ENGINE THRUST

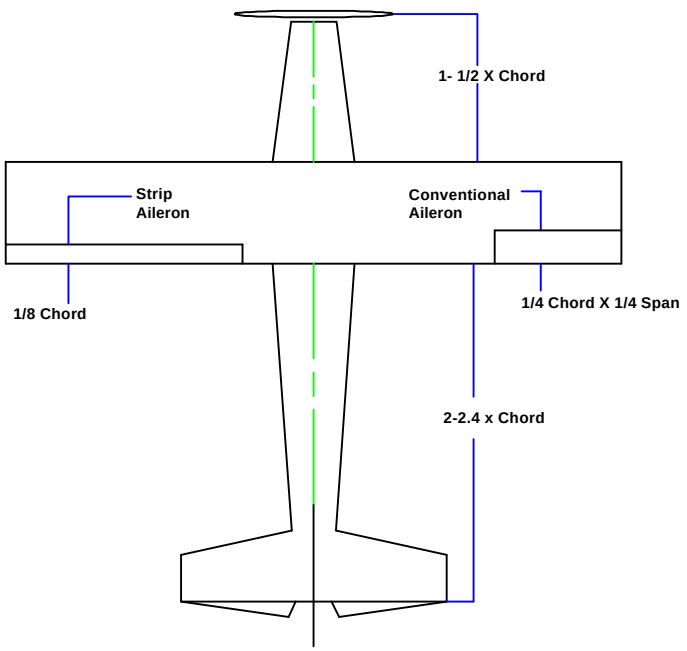
0 - 3° DOWN
0 - 3° RIGHT
3 - 5° RUDDER ONLY

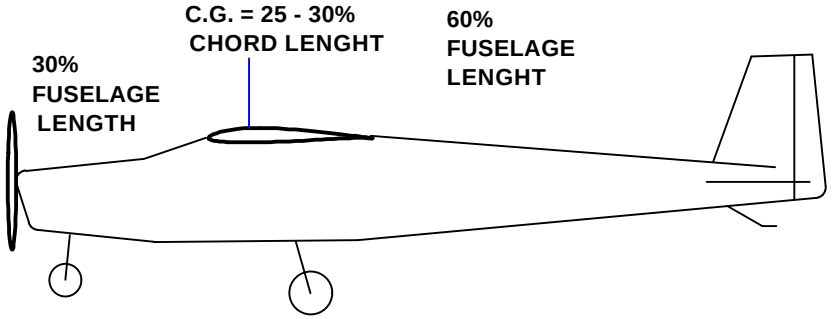
STAB INCIDENCE

0 TO 1° RUDDER ONLY
0° MULTI

LANDING GEAR

TRIKE GEAR MAIN 1-1/2" BACK OF C.G.
TAIL DRAGGER MAINS AT LEADING EDGE
SPREAD 1/4 WING SPAN





DIHEDRAL

W/AIL 0-3° / PANEL(EA TIP)
WO/AIL 3-5° /PANEL
RUDDER ONLY 4-6° / PANEL
LO WING 2 X HI WING DIHEDRAL

AILERON

AREA = 12% (1/8) WING AREA

STABILIZER

AREA= 20-22% WING AREA
ELEV AREA = 20% STAB
STAB A/R =3:1

VERTICAL FIN

AREA 1/3 STAB AREA
RUDDER AREA =
1/3 - 1/2 TOTAL FIN AREA

AIRFOIL SELECTION

FLAT BOTTOM - TRAINER, SLOW, DOCILE, POOR INVERTED FLIGHT
SEMI-SYMMETRICAL - GOOD LIFT, PENETRATION, AEROBATIC, INVERTED FLIGHT
SYMMETRICAL - PATTERN AEROBATIC

MAX THICKNESS = 15 - 18% @30 -40% BACK FROM LEADING EDGE
BLUNT LEADING EDGE - GOOD STALL CHARACTERISTICS
SHARP LEADING EDGE - GOOD HI SPEED PENETRATION