

SECTION 1 - GENERAL1. Description and Characteristics

Wing span	28 ft. 8 ins.
Length	22 ft. 10 ins.
Height	7 ft. 4 ins.
Propeller ground clearance	10 ins.
(with front tyre and oleo-leg deflated) :	
	positive

WING

The "Jodel" type wing is of the single spar type, covered with DACRON fabric.

Aspect ratio	5.35
Dihedral (wing-tip)	14°
Chord (rectangular section)	67.4"
Area	146,39 sq.ft

AILERONS

Total area	12.4 square feet
Deflection angles	(see page 1.17)

The ailerons are controlled from the control column, by means of bell cranks, cables and pulleys, and are statically balanced.

WING FLAPS

Total area 7.2 square feet

The flaps are manually operated by a lever located between the two front seats. They can be locked in three different positions.

- | | | |
|--|---|--------------|
| 1. Retracted | | |
| 2. Take-off ($15^{\circ}+0^{\circ}$
-5°) | } | (0.6 inches) |
| 3. Landing ($60^{\circ}+0^{\circ}$
-5°) | | (0.6 inches) |

NOTE : When set to the take-off or landing positions, a play of 0.6 inches (measured at the trailing edge) is normal.

TAILPLANE

Total area 31 square feet

The one-piece moving tailplane unit, statically balanced, is controlled by means of cables, and is equipped with a metal automatic anti-balance tab. The tab control is on the tunnel between the front seats and an index is graduated from 0 to 10.

- 0 = nose fully down
10 = nose fully up

Tailplane deflection angles	(see page 1.17)
Anti-tab area	2.8 square feet
Anti-tab deflection angles	(see page 1.17)

FIN AND RUDDER

Rudder area 6.8 square feet

The rudder is conventionally controlled by means of a rudder bar and cables.

Rudder deflection angles (see page 1.17)

LANDING GEAR

Fixed, tricycle type, with fairings and long-stroke oleo legs. The three wheels are of identical type. Removal of the wheel spats will considerably reduce level speeds and rates of climb.

The front landing gear is connected to the rudder bar by means of spring rods. During flight, the front wheel is automatically locked in alignment with the aircraft axis (oleo-leg extended).

Track	8 ft. 6 ins.
Wheel base	5 ft. 5 ins.
Wheel size	380 x 150
Tyres	

Tyre Pressures (p.s.i.)	Front	25
	Rear	28

Oleo leg strokes	Front	6.28"
	Rear	7.08"

Oleo leg inflating pressures (p.s.i.)	Front	64
	Rear	78

Fluid used - SHELL FLUID 4
BP AERO-HYDRAULIC NO. 1

BRAKES

Hydraulic braking system (independant on each wheel)

Braking is obtained by pushing the rudder bar pedals fully forward (from front seats)

The handbrake operates the brakes on both main wheels.

PARKING : Chocks must be used

HYDRAULIC FLUID : MIL.H.5606-A

POWER PLANT

Engine : LYCOMING O-360-A3A

4 horizontally opposed cylinders, direct drive, aircooled engine.

Max. continuous RPM	2700
Compression ratio	8.5 : 1
Max. cylinder head temp.	260°C.
Max. cylinder temp	160°C.
Direction of rotation	Clockwise
Firing order	1 : 3 : 2 : 4

OIL SYSTEM

Wet oil sump capacity	6 quarts
Oil pressure (idling)	25 psi
(normal)	64 to 90 psi
Oil grades : above 15°C	SAE 50 (100)
30°C to -20°C	SAE 40 (80)
Max oil temperature	118°C.

ELECTRICAL SYSTEM

A red warning lamp indicates failure to charge of the alternator. This circuit is protected by a 40 amp fuse.

FUEL

AVIATION TYPE FUEL

91/96 (MIN)
OR 100/130
OR 115/145

Fuel pressure :

max : 8 psi
desired : 3 psi
min : 0.5 psi

MAIN (REAR) FUEL TANK CAPACITY 24.4 IG(29 USG)

The fuel control cock is mounted on the instrument panel tunnel.

ENGINE CONTROLS

The engine controls include an ON/OFF carburetor heater control (pull-type) and a mixture control (yellow knob).

PROPELLORS

	1	2	3	4
Makers	SENSENICH	SENSENICH	SENSENICH	SENSENICH
Type	76 EM	76 EM	76 EM	76 EM
	8S50.64	8S50.68	8S50.58	8S50.54
Diameter *	76 "	76 "	76 "	76 "
Pitch	64 "	68 "	58 "	54 "
Min Speed (Full throttle, MSL, fixed pitch)	2300 RPM	2250 RPM	2500 RPM	2500 RPM

NOTE: Avoid continuous use between 2150 and 2350 RPM

* No reduction in diameter is permitted.

In Addition :

Propellor HO-27-HM-180/138

(\emptyset : 1,80 m, pitch : 1,38 m)

Minimum speed : 2400 RPM No RPM limitation

CABIN

Fitted with sliding jettisonable canopy, opening from rear to front.

The two front seats are adjustable (6 positions).

Front and rear seats are all fitted with fast-release safety belts.

Cabin Dimensions

Length	64"
Width	43.4"
Height	48.5"

Air conditioning

Two individually adjustable (flow and direction) fresh air vents are located on the instrument panel.

Cabin heating and canopy demisting controls are also fitted.

Heating is provided by means of a heat exchanger fitted around the RH exhaust manifold.

DESCRIPTION OF VARIOUS EQUIPMENT

a. STANDARD EQUIPMENT

Dual throttle controls (actuating pick-up
pump)
Mixture control (yellow knob)
Carburettor heater
Battery switch
Magneto selector key
Starter button
Cabin ventilation
Cabin heater control
Canopy demist control
Fuel cock (4 positions)
Stall warning (audio) "SAFE FLIGHT 164"
Handbrake
Tab control
Fuel gauge
Oil temperature gauge
Ammeter
RPM gauge (with hours-gone indicator)
Magnetic compass
Ball-type inclinometer
Airspeed indicator
Altimeter
Vertical speed indicator
Oil Cooler with thermostatic valve
Oil pressure indicator
Fuel pressure indicator

Warning lamps for : flaps
fuel reserve level (front &
rear)
oil pressure

alternator
Hook release
Circuit breakers
for :
warning lamps
indicators
electric pump
stall warning
starters
services
alternator

Tow hook and hook release handle
Cylinder Head Temperature gauge

b. OPTIONAL EQUIPMENT

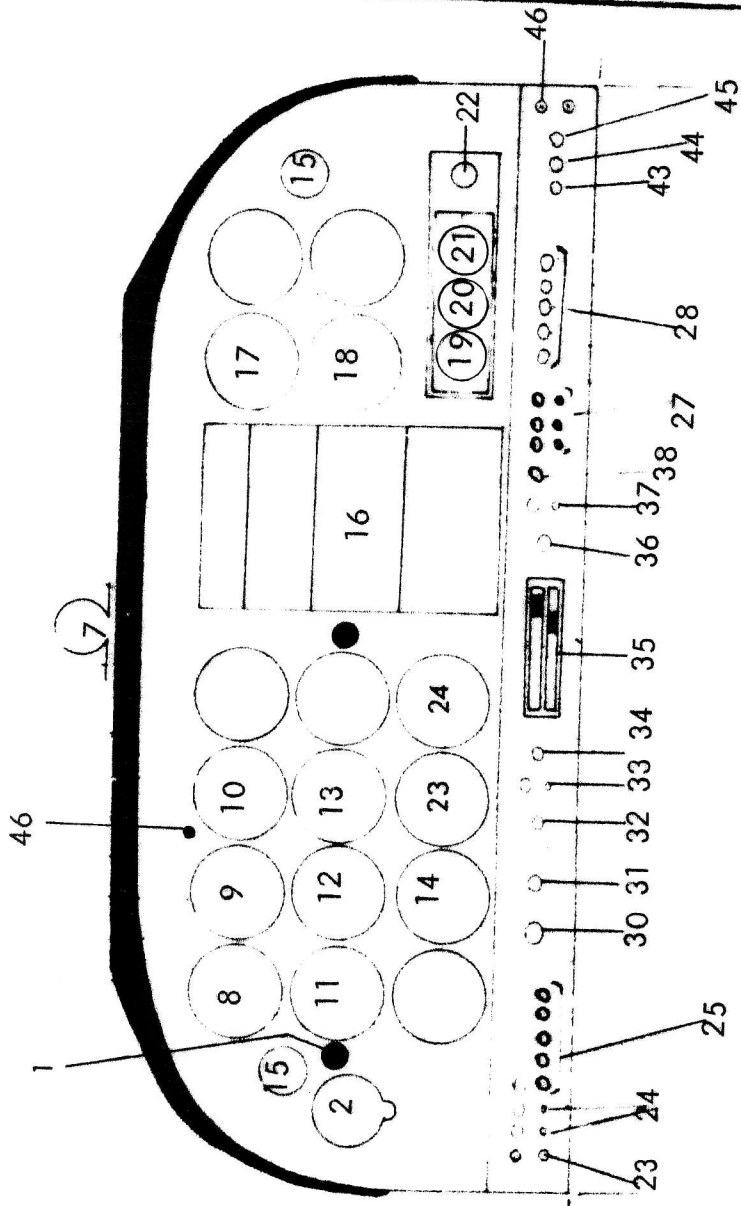
OAT gauge (canopy mounted)
OAT gauge (transmission type)
Compass (above instrument panel)
Electrical compass repeater
Mixture monitor unit
Inlet pressure gauge
3-pointer precision altimeter (in feet)
JAEGER clock
Chronometer
Vacuum pressure gauge (for blind flying panel)
Suction DI
Suction-driven Artificial Horizon
Electrical AH (with switch and fuse)
Instrument panel lighting (2 red lamps with
dimmer switch)
Heated pitot head, warning lamp and switch
Turn and Slip indicator (electric, suppressed
with switch)
BRITAIN turn co-ordinator
Rotating Anti-collision beacon
VHF radio
ADF
VOR
ILS
DME
HF Radio

Marker beacon

Carburettor temperature gauge

RH and LH landing lamps, switch and fuse

Navigation lamps

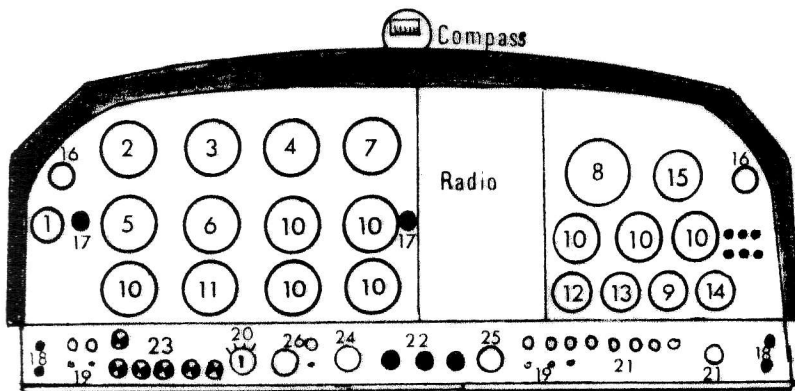


INSTRUMENT PANEL Nr 1

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1. Throttle control
2. Clock (option)
7. Magnetic compass (option)
8. Airspeed indicator
9. Artificial horizon (option) or compass
10. Altimeter
11. Turn and Slips indicator
12. Directionnal Indicator (option)
13. Vertical speed indicator
14. Suction gauge (option)
15. Fresh air vent
16. Radio (option)
17. Intake pressure (option)
18. RPM gauge
19. Rear tank gauge
20. Oil temperature
21. Anmeter
22. 40 A Fuse
23. Headset jacks (option)
24. Circuit breakers
25. Warning lights
26. Instrument panel lights (option)
27. Circuit breakers
28. Fuses
30. Magneto switches
31. Starter
32. Battery switch
33. Alternator switch
34. Mixture control
35. Heating controls
36. Carburetor heater
37. Electric pump switch
43. 44. 45. Fuses
46. Hook release warning light

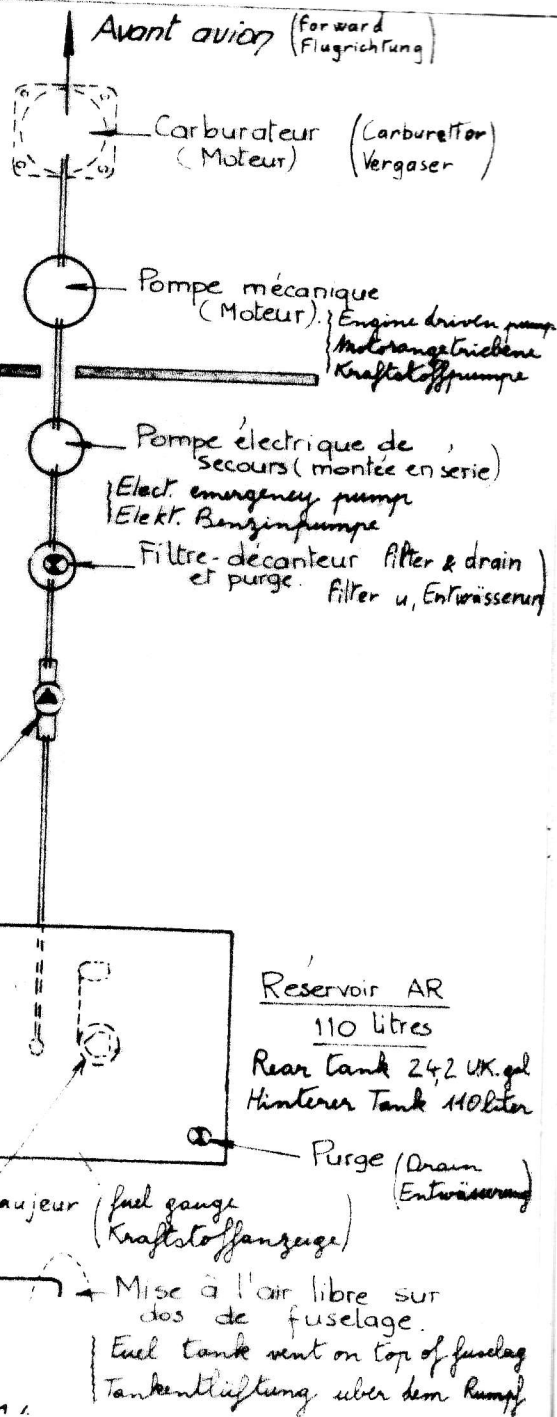
INSTRUMENT PANEL - Nr 2



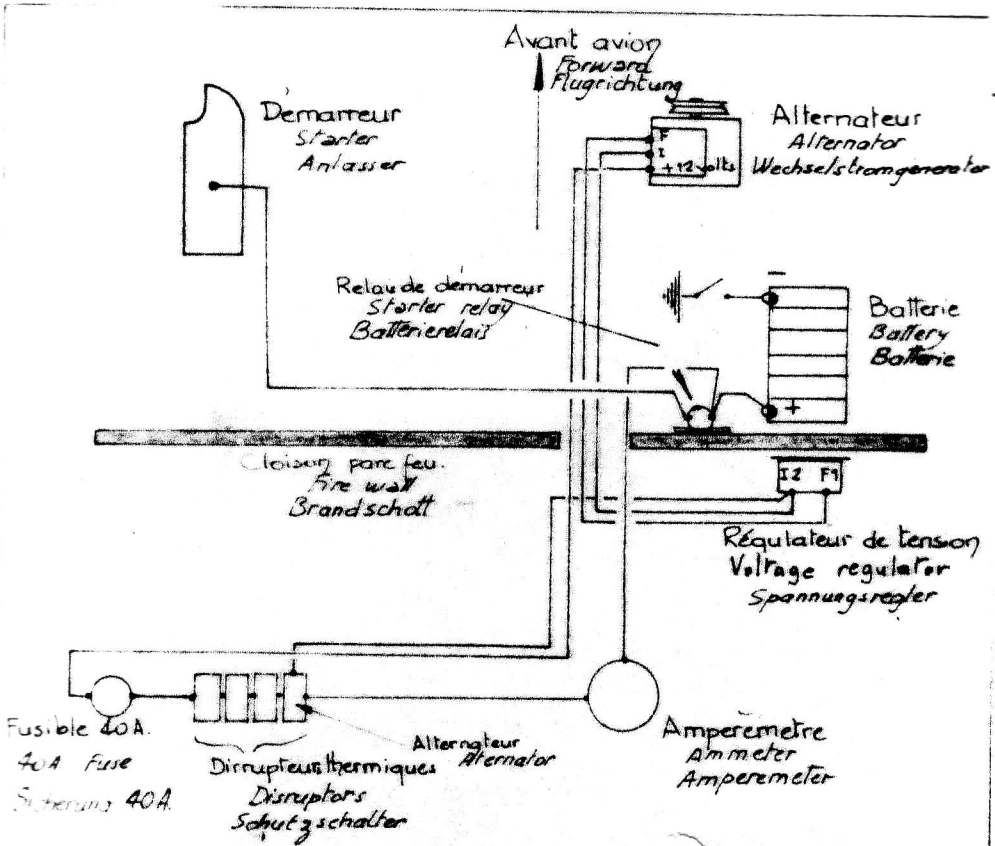
- | | |
|--------------------------|------------------------------------|
| 1 - Stop watch (option) | 23 - Warning lights |
| 2 - Airspeed indicator | 24 - Mixture control |
| 3 - Artificial horizon | 25 - Carburetor heater |
| 4 - Altimeter | 26 - Battery and alternator switch |
| 5 - Turn/bank indicator | |
| 6 - Directional (opt.) | |
| 7 - Rate of climb | |
| 8 - RPM indicator | |
| 9 - Fuel pressure (opt.) | |
| 10 - Options | |
| 11 - Vacuum gauge (opt.) | |
| 12 - Oil temperature | |
| 13 - Oil pressure | |
| 14 - Amp. or voltmeter | |
| 15 - Fuel gauge | |
| 16 - Freshair vent | |
| 17 - Throttle control | |
| 18 - Radio jacks plugs | |
| 19 - Switches-breakers | |
| 20 - Magneto switch | |
| 21 - Breakers | |
| 22 - Heating/demisting | |

Circuit d'essence

Fuel System
Kraftstoffsystem



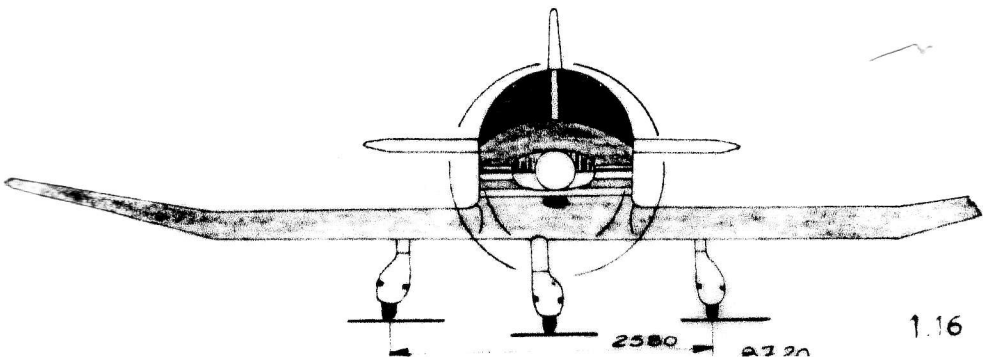
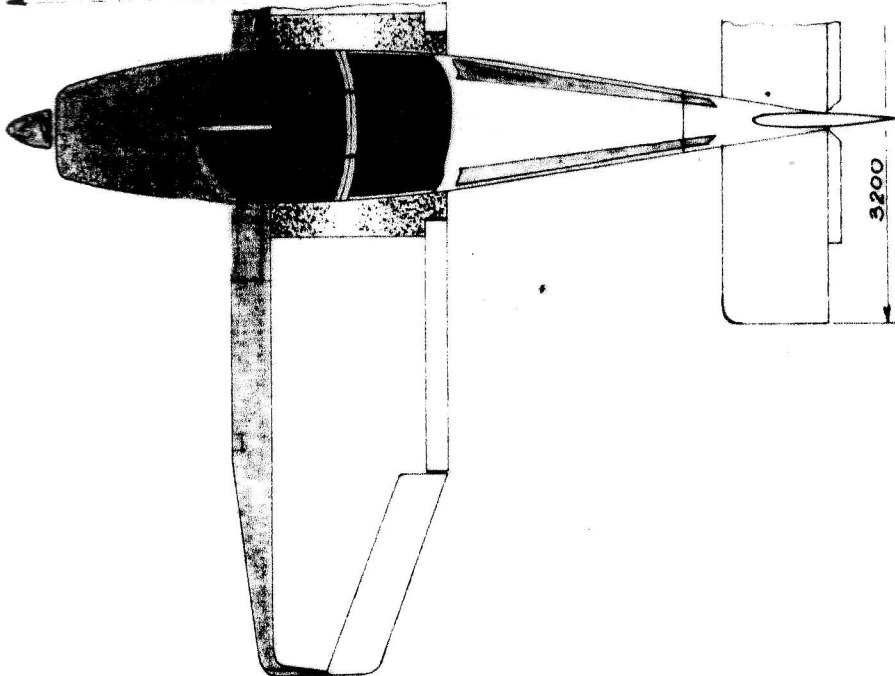
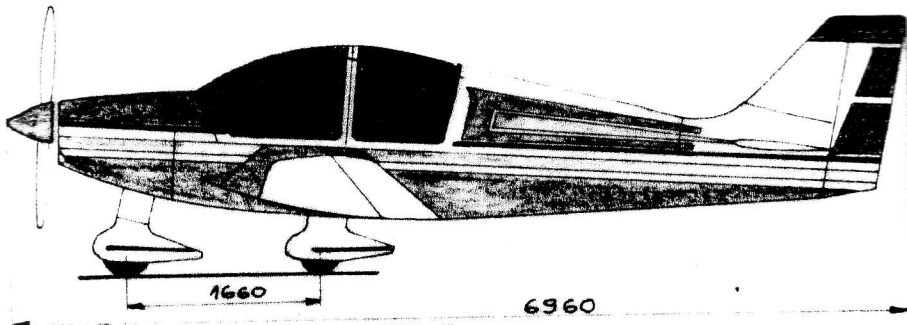
Remplissage du reservoir
du capot
Einfüllstutzen



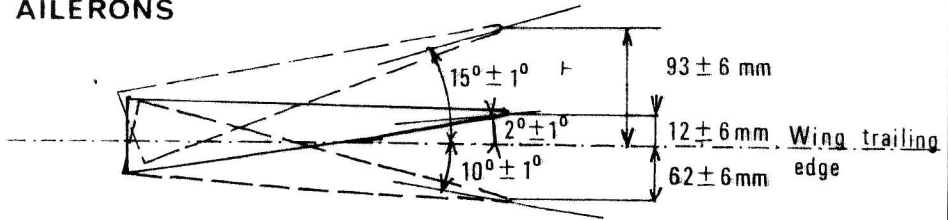
— Schéma de principe
du circuit électrique —

— Electrical system —

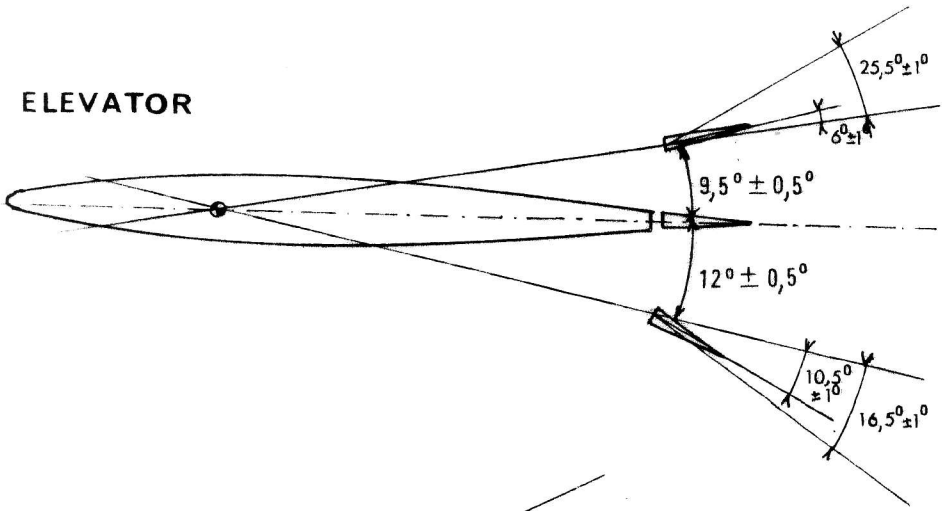
— Schema der Elektrischen Anlage —



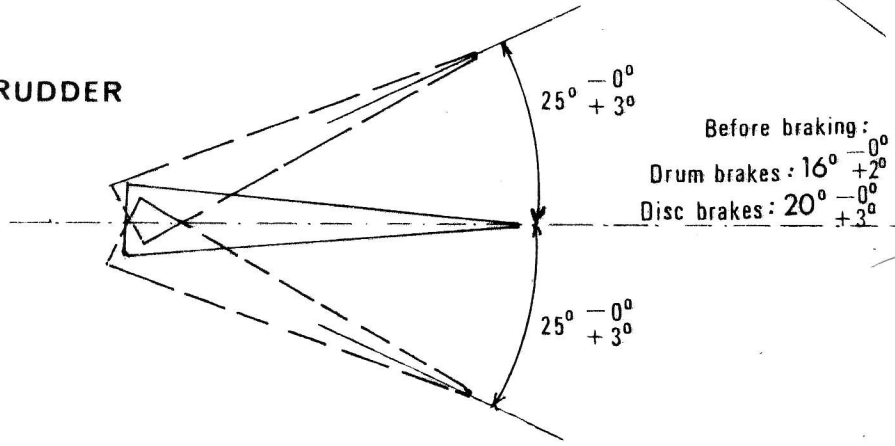
AILERONS



ELEVATOR



RUDDER



FLAPS

$60^\circ - 5^\circ + 0^\circ$