PATHFINDER FLYING CLUB (JUN 05)

Robin DR400/180

CHECKLIST

Max Gross Wt	**2425 lbs (1100kg)**
Max Fuel Wt	**299 lbs (137 kg)**

Whilst this flight guide has been produced with reference to the CAA approved aircraft flight manual, it is not subject to amendment and its use does not absolve pilots from operating the aircraft iaw the flight manual.

1. INITIAL CHECKS

On approaching the aircraft check:

General position	**Safe location to taxy**
Ground fire extinguisher	**Available**
Airframe	**Free from ice, contamination**

Before commencing the external checks carry out the following in the cockpit:

Parking brake	**ON**
Fire extinguisher	**Check, secure**
First aid kit	**Secure**
Headsets	**Available**
Documents	**Stowed**
Baggage area	**Loose articles secured (max 60 kg)**
Flaps	**Check operation**
Magneto switch	**OFF, key out**
Battery Switch	**ON**
Pitot heater	**ON /check/off**
Landing/taxy lights	**ON /check/off**
Navigation lights	**ON /check/off**
Strobe lights	**ON /check/off**
Stall warning vane	**Check operation + audible warning**
Fuel contents gauge	**Check contents and confirm with tech log and visual check of wing tanks**
Battery switch	**OFF**
Fuel Cock	**ON**

2. EXTERNAL CHECKS

Start at left wing inboard edge.

Left Wing

Fuel filler cap	secure
Flap	Condition, play, linkage, hinges
Undercarriage	Tyre, brake leaks, spat secure
Aileron	Condition, play, drains, hinges
Wing surfaces	Condition, drains
Inspection Cover	Security
Wingtip	Nav light
Leading Edge	Condition
Landing/taxy Light	Undamaged
Pitot Head	Remove cover/hole clear
Undercarriage	Condition, extension, tyre condition/creep, inflation. Brakes – damage and leaks, spat secure
Flap Underside	Condition, drains clear
Wing tank fuel drain	Check for water contamination

Forward Fuselage

Fuel drain	Check for water contamination (fuel selector on)
Canopy emergency Release - port	Wire tell-tale secure
Canopy Runner	Secure and undamaged
Cowling Port Side	Security, 3 fasteners, 1 lug with safety pin, 1 screw, no oil leaks
Fresh Air Intake	Clear
Propeller	Condition, spinner secure
Nosewheel	Condition, extension, tyre-cuts/creep/inflation, spat secure
Ram Air Inlet	Check clear
Cowling Stbd Side	Security, 3 fasteners, 1 lug with safety pin, 1 screw, oil leaks Oil Contents-minimum 6 US quarts, panel secure (do not over tighten dipstick)
Canopy Runner	Secure and undamaged
Canopy emergency Release - stbd	Wire tell-tale secure

Right Wing

Fuel filler cap	secure
Wing tank fuel drain	Check for water contamination
Leading Edge	Condition
Undercarriage	Condition, extension, tyre condition/creep, inflation. Brakes – damage and leaks, spat secure
Flap Underside	Condition
Wing surfaces	Condition, drains
Inspection Cover	Security
Wingtip	Nav light
Aileron	Condition, play, drains
Wing	Drains
Undercarriage	Tyre, brake leaks, spat secure
Flap	Condition, play, linkage, hinges

Rear Fuselage

Static Vent - Stbd	Clean, unobstructed
Fin fairing	Secure
Elevator	Secure, hinge clearance
Strobe Light	Condition
Rudder	DO NOT MOVE. Condition, stiff nut, nav lts, hinge clearance.
Trim Tab	Position, stiff nut, security, play, hinges
Static Vent - Port	Clean, unobstructed
Baggage Door	Secured [max 60 kg]

3. PRESTART CHECKS

Passenger Briefing	**Stated**
Harness	**Secure (3 straps) Solo, secure RH harness, rear seat harnesses**
Front Seats	**Adjusted and locked**
Headset	**Plugged in, don**
Master Switch	**ON, intercom set & check**
Circuit Breakers	**All made**
CO Monitor	**Normal**
Ammeter	**Condition**
Alternator	**OFF**
Throttle	**Free movement – Set closed**
Air Vents	**Closed**
Flight Instruments	**Check Condition**
Warning Lights	**Test**
Radios	**OFF**
Nav Equipment	**OFF**
Transponder	**OFF**
Cabin Heat	**OFF**
Pitot Heat	**OFF**
Instrument Lights	**OFF (except night flying)**
External Lights	**OFF (except nav lights for night flying)**
Carburettor Heat	**Full movement and Cold**
Engine instruments	**Condition**
Tacho Time (RPM gauge)	**Note reading**
Fuel Boost pump	**OFF**
Mixture	**Full movement and Rich (Up)**
Fuel Cock	**ON, Check contents – all tanks, Select left tank**
Parking Brake	**Set ON**
Trim	**Full free movement and set Neutral**
Flaps	**Up**
Controls	**Full free movement – correct sense (except rudder) – no play or excessive friction**
Canopy	**Closed and locked**

4. START CHECKS

Strobe Light	**ON**
Carb Heat	**OFF**
Fuel Pump	**ON - check fuel pressure rises**
Mixture	**Full rich**
Key In	**Mags off**
Throttle	**Prime as required(slowly pump throttle 4 times if cold, none if CHT ↑ 250'F), set 1/4" open**
Magneto	**Left**
Intercom	**OFF**
Propeller	**Clear -call "Clear Prop"**
Intercom	**ON**
Starter	**Press, release when engine fires (max 30 secs)**
Starter Engaged Light	**Out (If not, shutdown and investigate)**
Magnetos	**Both**
Throttle	**Set 1200 rpm**
Oil Pressure	**Rising within 30 seconds**
Alternator	**ON**

5. AFTER START CHECKS

Fuel Pump	**OFF**
Fuel cock	**Select right tank**
Alternator	**Charging**
Magneto	**Check for dead magneto**
Suction	**Indicating**
Horizon	**Erecting, adjust datum**
DI	**Synchronise**
Radios	**ON, frequencies set**
Nav Equipment	**ON, frequencies set**
Transponder	**Standby, 7000 set**
Radio	**RT check & taxy clearance**
Landing Light	**ON (night flying only)**

6. TAXY CHECKS

Brakes	**Check immediately (dual, both sides)**
Flight Instruments	**Check turn co-ordinator, slip ball, compass, DI, AI**
	Right turn: needle right, ball left, numbers increasing, AI steady
	Left turn: needle left, ball right, numbers decreasing, AI steady
Rudder	**Check full and free movement**

Park aircraft into wind with the nosewheel straight

Fuel cock	**select main tank**
Parking Brake	**ON**
Safety	**Canopy locked, controls central, clear behind**
Oil Pressure & temp	**Green range**
Fuel Pressure	**Green range**
Mixture	**Fully rich**
Carb heat	**Cold**
Throttle	**Set 2000 rpm - check brakes holding**
Suction	**Indicating – Green range**
Ammeter	**Positive charge indicating**
Carburetor Heat	**Select Hot - Check decrease in rpm then reselect Cold**
Magnetos	**Check Left & Right in turn. Max drop 175 rpm, max 50 rpm difference between Left & Right**
Mixture	**Lean until RPM reduction then reselect full rich**
Throttle	**Close. Check smooth idle 600 – 650. Reset 1200 rpm**

7. RUN UP/POWER CHECKS

8. PRE TAKE-OFF CHECKS (VITAL ACTIONS)

Pitot Heater	**As required**
Suction	**Check**
TC Flag	**Clear**
Flight Instruments	**Check and set – AI, DI, TC**
Engine Ts and Ps	**Check**
Transponder	**Test (check light on) set to ALT**
Carburetor Heat	**Cold**
Mixture	**Full rich**
Magnetos	**Both**
Fuel Cock	**ON, contents sufficient (*Note: Main tank is recommended for all circuit flying*)**
Fuel Pump	**ON, check pressure increase**
Flaps	**Take-off - check lift off speed (- 54 KIAS)**
Elevator Trim	**Set at Neutral**
Seat Belt	**Tight and secure**
Controls (Ail/Elev)	**Full & free movement**
Canopy	**Closed & locked**

TAKE-OFF BRIEF*:*
The following points must be briefed:

i. Operating pilot for the departure

ii. Runway length and crosswind

iii. Action in the event of an engine failure on the ground

iv. Action in the event of an eng fail after take-off

v. Action of non-operating pilot/passenger

Radio Call **As required**

9. RUNWAY CHECKS

Take-off Time	**Note**
Approach & Departure lanes	**Clear**
Compass/DI/Rwy Heading	**Aligned**

10. CHECKS DURING TAKE-OFF

Throttle	**Full pwr, min 2200 rpm**
Engine Temps & Pressures	**Check ASI Increasing**
Take-off speed (take-off flap)	**54 kias**

11. AFTER TAKE-OFF CHECKS

Climb speed (2425 lb)
Flaps at take-off
- best rate 81 kias, best angle 70 kias
Flaps up
- best rate 92 kias, best angle 76 kias

Engine Temps & pressures	**Check**
Flaps	**Raise A/R**

12. AIRFIELD DEPARTURE CHECKS

Fuel Pump	**OFF (at safe height)**
Landing Light	**OFF**
Radio/Nav Equipment	**Set (obtain FIS/RIS/RAS)**
Altimeter	**Set (Note airfield QNH/QFE if returning)**

13. CRUISE, PERIODIC & DESCENT (REJOIN) CHECKS

Fuel	Fuel pumps as required Fuel cock as required Throttle set as required Mixture set as required Contents & pressure checked Fuel tank selection
Radios/Navaids	Set as required Transponder - ALT Ammeter charging Circuit breakers in
Engine	Ts & Ps checked Carb ice check CO Monitor - Normal
Direction Indicator	Align with compass Check suction
Altimeter	Set as required

14. ENTERING LOW LEVEL

Before descending carry out FREDA checks, then:

Harnesses	Secure
External Lights	All ON
Lookout	Clear entry area

Height	Sufficient to recover by briefed height
Airframe	Flaps up – as required No mist/ice on canopy
Security	Harnesses secure Canopy locked Loose articles stowed
Engine	Fuel pump ON Fuel cock – Main tank Mixture rich Fuel contents & pressure checked Ts & Ps checked Carb ice check
Location	Clear of: Active airfields Built up areas Controlled airspace & cloud Danger /Restricted areas Good horizon available
Lookout	Clear above and below. Min 180° before first stall, then 90°

Stalling speeds:	
- Flaps up	***57 kias***
- Flaps take-off	***53 kias***
- Flaps land	***51 kias***

15. STALLING CHECKS

16. PRE-LANDING CHECKS

Brakes	**OFF**
Undercarriage	**Down & Locked.**
Mixture	**Fully Rich**
Fuel cock	**ON, contents sufficient. (Note: Main tank is recommended for all circuit flying)**
Fuel pump	**ON**
Indicators	**Ts & Ps checked**
Carb Heat	**Hot**
Hatches	**Secure**
Harnesses	**Secure**
Flap	**Take-off (max 92 kias)**

17. FINALS CHECKS

Clearance	**Obtained**
Carburetor Heat	**Cold**
Flaps	**As required**
Brakes	**Toes Clear**

18. CROSSWIND/GUSTING LANDING

Flaps	**Take-off**
App Speed	**70 kias + ½ wind gusts**
Correct for drift	

Demonstrated crosswind 22 kias

19. GO AROUND

Carb heat	**Cold**
Throttle	**Open Fully**
Speed	**67 kias**
When safe to do so:	
Flaps	**Take-off**
Speed	**78 kias**

20. AFTER LANDING CHECKS

Landing time	**Note**
Pitot Heat	**OFF**
External Lights	**As required (Strobe light ON)**
Nav Equipment	**OFF**
Transponder	**OFF**
Carb Heat	**Cold**
Fuel pump	**OFF**
Flaps	**UP**
Trim	**Set neutral**

Fuel required ?

21. SHUTDOWN CHECKS

Parking Brake	**On**
Throttle	**Set 1200 rpm**
Radios	**Off**
Magnetos	**Dead Cut check**
Throttle	**Set 1000 rpm**
Mixture	**Idle Cut Off**
Alternator	**Off**
When propeller has stopped:	
Magnetos	**Off, key out**
Fuel Cock	**Off**
External Lights	**Off**
Master Switch	**Off**
Flaps	**Down**
Tacho Time	**Note reading**
Headsets	**Remove**
Harness	**Release, loosen & tidy straps**
Aircraft	**Vacate - remove personal belongings**

Chocks?

ROBIN DR400-180 – BASIC DATA

1. GENERAL CONSTRUCTION

The Robin DR400-180 Regent is a four-seat, single engine, low-wing monoplane of wooden construction.

2. REGISTRATION CATEGORY & PERFOMANCE GROUP

Aircraft classified as -	**Aeroplane (Landplane)**
Aircraft classified in -	**Performance Group 'E'**
Aircraft certificated in -	**Public Transport Category**

3. FLIGHT CONDITION LIMITATIONS

Flight in known or forecast icing conditions	**-**	**Not cleared**
Flight at night	**-**	**Cleared***
Flight in instrument Meteorological Conditions	**-**	**Cleared***

*** Flight permitted subject to carriage of appropriate equipment**

4. DIMENSIONS

Length	**:**	**7.10 m**
Wingspan	**:**	**8.72 m**
Height	**:**	**2.23 m**

5. ENGINE

Engine type	**:**	**Avco Lycoming 0-360-A3, 4 cylinder, 4 stroke**
Engine rating	**:**	**180 HP at 2700 RPM**
Max permitted RPM	**:**	**2700**
Avoid cont ops between 2150 & 2350 rpm		
Cylinder head temp range	**:**	**0º to 230º (Green arc)**
Propeller type	**:**	**Sensenich76EM8S5-0-64**
Propeller diameter	**:**	**1.93 m**
Propeller pitch	**:**	**Fixed (64")**

Associated Engine controls / indicators:
RPM gauge, throttle, magneto switch, starter button, starter engaged light, oil pressure gauge, oil temperature gauge, cylinder head temperature gauge.

6. ENGINE LUBRICATION

Oil type (all temps)	**:**	**SAE 15W-50 or 20W-50**
Oil capacity (max/min)	**:**	**8 US qts (club min 6)**
Oil consumption (cruise power)	**:**	**Approx 4 hrs per US qt**
Oil circulation	**:**	**Wetsump, Engine-driven pump**
Oil temperature (normal range)	**:**	**Max 118º C 60º – 118º C (green arc)**
Oil pressure (normal range)	**:**	**Min 25 psi (at idle) 55- 95 psi (green arc) Max 115 psi**

Oil pressure must be in green arc within 30 seconds of engine start.

7. FUEL SYSTEM

Fuel type	**:**	**AVGAS 100 LL**
Fuel pump	**:**	**Engine driven + electric booster**
Fuel capacity (total)	**:**	**41.8 Imp Gals (190 Litres)**
Fuel capacity (usable)	**:**	**41.58 Imp Gals (189 Litres)**
Fuel pressure – normal range	**:**	**35-550 mbar (Green arc)**
Fuel consumption	**:**	**Approx 6 Imp Gal/Hr @ 2300 RPM**

Fuel drain position	**:**	**Rear L.H.S of lower cowling + 1 drain for each wing tank and 2 drains for the main tank**

Associated controls / indicators :
Fuel cock, mixture control, throttle, fuel contents gauge, fuel pressure gauge, carburettor heat control.

Low fuel pressure & level warning light	**:**	**On annunciator panel**

8. IGNITION SYSTEM

Number / type of magnetos	**-**	**Two x Bendix**
Magneto switch settings	**-**	**Off – R – L – Both**
Impulse & spark retard device (for engine start)	**-**	**Left Magneto**
Dead cut check performed at	**-**	**1200 RPM**
Magneto drop check performed at	**-**	**2000 RPM**
Acceptable magneto drop @ 2000 RPM	**-**	**175 RPM**
Acceptable difference @ 2000 RPM	**-**	**50 RPM**

NB: 1. Magnetos are ground to earth when switched off.
2. Ignition key should only be removable with magnetos switched off.

9. ELECTRICAL SYSTEM

Battery voltage/current	**:**	**12 Volts DC / 25 Ampere hours**
Battery position	**:**	**Forward side of firewall, left hand side of engine**
Alternator	**:**	**12 Volt / 60 Ampere**

Associated controls / indicators:
Ammeter, circuit breakers, battery master switch, alternator switch, alternator warning light.

Electrically driven instruments & systems
Turn co-ordinator
Stall warning audio
Pitot head heater
Clock
Radios
Navigation aids
Internal and external lighting & strobe
Fuel booster pump and contents gauge
Starter motor and warning light
Engine instruments
Alternator warning light
Annunciator panel

10. VACUUM SYSTEM

Vacuum pump	**:**	**Engine driven**
Vacuum pressure (normal range)	**:**	**Green arc**
Minimum RPM for green arc	**:**	**1500 RPM**
Vacuum driven gyro instruments	**:**	**AI & DI**
Time to reach operating speed	**:**	**2 minutes**
Reliable time after vacuum failure	**:**	**1 minute**
Failure indication on AH and DI	**:**	**Nil**

11. PITOT & STATIC PRESSURE SYSTEMS

Pitot tube location	**:**	**Under leading edge port wing**
Pitot heating	**:**	**Electrical**
Instrument supplied	**:**	**Airspeed indicator**
Static source locations	**:**	**Each side of rear fuselage**
Instruments supplied	**:**	**Airspeed indicator, Vertical speed indicator**

Altimeter

12. UNDERCARRIAGE

Type	:	Fixed, tricycle with shock absorbers, pneumatic tyres and steerable nosewheel.
Tyre Pressures		
- nosewheel	:	26 PSI
- mainwheels	:	29 PSI
Oleo extensions	:	Approx 3 inches
Nose wheel steering	:	Via rudder pedals
Wheel brakes	:	Hydraulic disc brakes
Braking methods	:	Toe brakes and parking brake

13. CRITICAL SPEEDS

V_{ne}	Velocity never exceed	166	Kt
V_{no}	Velocity normal operations	140	Kt
V_a	Velocity manoeuvring	116	Kt
V_{fe}	Velocity flaps extended	92	Kt
	Lift-off speed (take-off flap)	50	Kt
	Lift-off speed (no flap)	53	Kt
	Best rate Climb speed		
	(take-off flap)	81	Kt
	(Flap up)	92	Kt
	Best angle Climb speed		
	(NB: Only when absolutely necessary, due to poor engine cooling)		
	(take-off) flap)	70	Kt
	(Flap up)	76	Kt
	Max Turbulence speed (flap up)	140	Kt
	Powered approach (Full flap)	68	Kt
	Best glide speed (range approx 2nm per 1000 feet)	81	Kt
	Best endurance speed	70	Kt
	Threshold speed (flaps extended)	60	Kt
	Threshold speed (no flap)	65	Kt
V_{so}	Velocity stall (take off flap : 18°)	53	Kt
V_{so}	Velocity stall (full flap : 40°)	51	Kt
V_{s1}	Velocity stall (no flap)	57	Kt
	Max cross-wind for take-off & landing	22	Kt

14. CRITICAL WEIGHTS

Maximum all up weight for take off and landing (Cat N)	1100	Kg
Basic empty weight (inc engine oil)	623	Kg
Maximum luggage compartment weight	60	Kg
Weight of full fuel load (180 litres)	130	Kg

EMERGENCY DRILLS

1. ENGINE FIRE IN FLIGHT

Fuel selector	OFF
Throttle	Fully open until engine stops – then closed
Mixture	ICO
Fuel Pump	OFF
Alternator	OFF
Cabin heat/ventilation	OFF
Max Glide speed	81 Kts

Carry out Forced Landing Cx — See 13.

2. ENGINE FIRE DURING START

Keep engine turning on starter

Fuel selector	OFF
Fuel pump	OFF
Throttle	Fully open
Mixture	ICO

Once fire is out turn off all electrical switches, vacate the aircraft and place it u/s.

If fire continues

Magnetos	OFF
Battery	OFF
Alternator	OFF

Vacate the aircraft and fight fire with available equipment

3. ELECTRICAL FIRE

Master Switch	OFF
Alternator	OFF
Circuit Breakers	Trip All
Cockpit Fire Drill	Action if necessary

Land as soon as possible

4. COCKPIT FIRE

Fresh Air Vents	Open
Radio	Emergency call Squawk 7700
Fire Extinguisher	As required*

For electrical fires

Cabin ventilation	Reduce
Alternator	OFF
Battery	OFF

Land ASAP if not extinguished.

* Halon fire extinguishers are a toxic hazard

5. FUMES IN THE COCKPIT

Cockpit Hot Air	OFF
Fresh Air Vents	Open
Engine Instruments	Check for sign of malfunction

If smell is electrical, carry out Electrical Fire checks
If smell is petrol, do not make electrical selection

Land as soon as possible

6. LOW OIL PRESSURE

Throttle	Use minimum practicable power Monitor Oil temperature

Assume engine failure is imminent
Land as soon as possible via precautionary forced landing pattern

If engine seizes carry out Engine Mechanical Failure (7) and Forced Landing checks (13)

7. ENGINE MECHANICAL FAILURE (Propeller stops suddenly perhaps with obvious signs of failure)

Adopt glide attitude and choose field for forced landing

Fuel	Throttle closed Mixture ICO Fuel cock OFF Fuel pump OFF
Ignition	Magnetos OFF
Radio	Emergency call Squawk 7700
Electrics	Master OFF Alternator OFF
Harness	Secure
Alternator	OFF

DO NOT ATTEMPT RESTART
On short final

Flaps	Full
Battery	OFF
Canopy	Unlock

8. ENGINE FAILURE (no signs of mechanical failure)

Select glide attitude and choose field for forced landing
If height sufficient (above 1500' agl) attempt restart

<u>Warning:</u> If the engine failed with unusual mechanical noise do not attempt restart.

Radio	**Emergency call**
Carburetor Heat	**Change setting**
Fuel selector	**Select alternate tank which contains fuel**
Fuel pump	**ON**
Mixture	**Fully rich**
Throttle	**¼" open**
Magnetos	**Both**

If engine does not start from windmilling operate starter

If engine has not started by 1500' agl carry out Forced Landing checks

9. <u>ENGINE FAILURE-PROPELLER TURNING</u>

If there is no Oil Pressure or an unusual mechanical noise carry out Engine Mechanical Failure drill, otherwise attempt restart procedure

10. <u>ENGINE FAILURE AFTER TAKE-OFF</u>

Select glide attitude	**78 kts**
Radio	**Emergency call**

Select landing area within 30° of hdg

Flaps	**As rqd**

If time permits

Mixture	**ICO**
Fuel selector	**OFF**
Fuel Pump	**OFF**
Magnetos	**OFF**
Battery	**OFF**
Canopy	**Unlock**

11. <u>ROUGH RUNNING ENGINE</u>

Change carburetor heat setting

Fuel pump	**ON**
- Fuel Pressure	**Indicating**
Fuel contents	**Sufficient**
- Fuel selector	**Change tanks**
Mixture	**Fully rich**
Ignition	**Select <u>best</u> of L-R-BOTH**
Electrics	**Master ON**
	Alternator OFF

If engine fails to start, carry out Engine Mechanical Failure and Forced Landing checks.

12. <u>ENGINE RESTART PROCEDURE</u>

Fuel	**Fuel pump ON**
	Fuel cock ON

	Throttle 1/4 open
	Mixture full rich
	Pressure checked
	Contents checked
Ignition	Both
Electrics	Alternator OFF
	Master ON

Either operate starter or carry out Air Start. Once the engine is running:

Throttle	Advance slowly-allow engine to warm
Alternator	ON

13. FORCED LANDING CHECKS

Glide at: (a) 65 kias - clean (still air glide range about 2nm/1000')
(b) 60 kias - flap take-off/land

Select suitable landing area & plan engine out approach

If appropriate and time permitting, carry out:

(1) Engine Restart Drill
(2) Engine Mechanical Failure Drill

When committed to Forced Landing

Harness	Secure
Passengers	Brief
Fuel pump	OFF
Mixture	ICO
Throttle	Close
Magnetos	OFF
Fuel selector	OFF
Alternator	OFF

On short final

Flaps	Full
Battery	OFF
Canopy	Unlock

14. DITCHING

Warning: Ditching is best carried out whilst engine power is still available to control the rate of descent.

Flaps	LAND
Speed	55 kias
Rate of descent	300 fpm

Do not round out - continue descent into water

In strong wind, land into wind; otherwise land parallel to the swell

15. ALTERNATOR FAILURE

Electrical Equipment	All off
Alternator	Off
Excitation CB	Set
Alternator CB	Set
Alternator	On

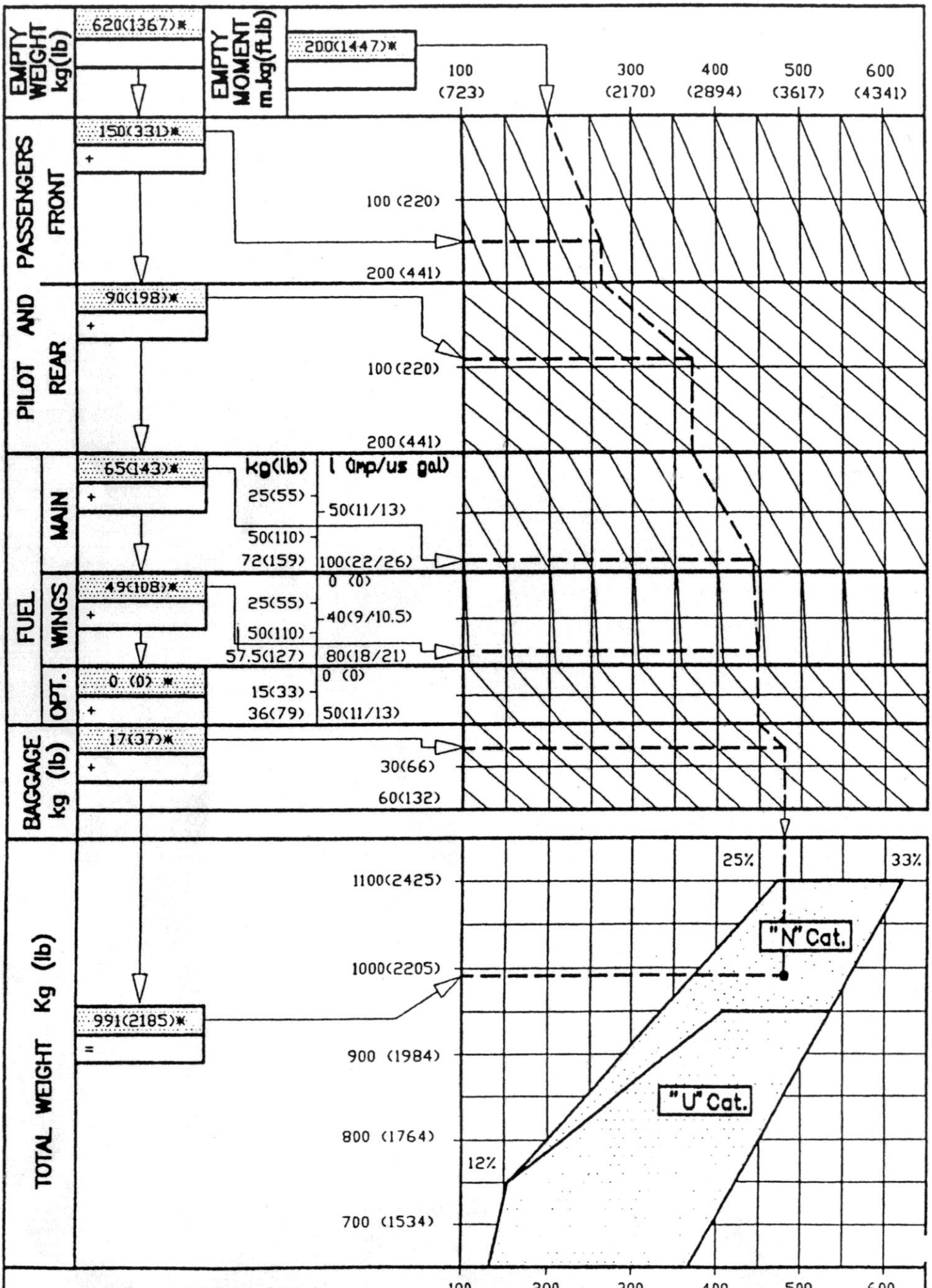
If alternator output restored, re-establish only essential electrical loads, land as soon as practicable

If alternator output not restored, use minimum electrical services and attain VMC. Battery duration approx 30 minutes.

16. COMMUNICATIONS/RADIO FAILURE

Radio/Intercom	
Switches	Check

Circuit Breakers	**Check**
Radio	**Change frequency**
Headset	**Check connections**
	Change headsets
Radio	**Switch Off/On**
Transponder	**Squawk 7600**


EMPTY WEIGHT kg(lb)
620(1367)*
EMPTY MOMENT m.kg(ft.lb)
200(1447)*
100 (723)
300 (2170)
400 (2894)
500 (3617)
600 (4341)
PILOT AND PASSENGERS FRONT
150(331)*
+
100 (220)
200 (441)
REAR
90(198)*
+
100 (220)
200 (441)
FUEL
MAIN
65(43)*
+
kg(lb)
l Qmp/us gal)
25(55)
50(11/13)
50(110)
72(159)
100(22/26)
WINGS
49(108)*
+
0 (0)
25(55)
40(9/10.5)
50(110)
57.5(127)
80(18/21)
OPT.
0 (0) *
+
0 (0)
15(33)
36(79)
50(11/13)
BAGGAGE kg (lb)
17(37)*
+
30(66)
60(132)
TOTAL WEIGHT Kg (lb)
991(2185)*
=
1100(2425)
1000(2205)
900 (1984)
800 (1764)
700 (1534)
25%
33%
"N" Cat.
"U" Cat.
12%