

**Flight Checklist for Normal Operations**

Massgebend ist das AFM (Parameters, Restrictions, Emergency, etc.)

**COCKPIT PREPARATION BEFORE STARTING ENGINE**

1	Aircraft + Cockpit Inspection	COMPLETED	1
2	Seats	ADJUSTED + LOCKED	2
3	Seat Belts, Shoulder Harness	ADJUSTED + FASTENED	3
4	Parking Brake	SET	4
5	Electric Switches	OFF	5
6	Aspen Switch	OFF	6
7	Avionic Master Switch	OFF	7
8	Battery, Alternator	ON	8
9	Circuit Breakers	IN	9
10	Annunciator Lights	CHECKED ON	10
11	Fuel Quantity	MAIN, AUXILIARY CHECKED	11
12	Fuel Selector	MAIN OPEN, AUXILIARY CLOSED	12
13	Mixture	RICH	13
14	Carburetor Heater	OFF	14
15	Elevator Trim	SET for TAKE OFF	15
16	Flaps	UP	16

**STARTING ENGINE**

1	Fuel Pump	ON, PRESSURE CHECKED	1
2	Priming	AS REQUIRED	2
3	Throttle	1 CM OPEN	3
4	Propeller Area	FREE	4
5	Ignition	MAGNETO LEFT	5
6	Starter	ENGAGED	6
7	Ignition	MAGNETOS BOTH	7
8	Oil Pressure	RAISED	8
9	Fuel Pump	OFF, PRESSURE CHECKED	9

**AFTER ENGINE START CHECK**

1	Oil Pressure	CHECKED	1
2	Alternator Output	CHECKED	2
3	Annunciator Lights	CHECKED OFF	3

**BEFORE TAXI**

1	Ventilation, Heater	AS REQUIRED	1
2	Aspen + Flarm Switches	ON	2
3	Avionic Master Switch	ON	3
4	Avionics	SET+ PRESELECTED	4
5	Flight Instruments	SET	5
6	Taxi Light	ON	6

Motorfluggruppe Langenthal	<b>Checklist Robin DR40</b>	v1.5 Jan 18	<b>2</b>
<b>TAXI CHECK</b>			
1	Brakes, Steering	CHECKED	1
2	Gyro Instruments	CHECKED	2
<b>RUN-UP</b>			
1	Parking Brake	SET	1
2	Taxi Light	OFF	2
3	Engine Temperature	GREEN	3
4	Throttle	2000 RPM	4
5	Alternator Output	CHECKED	5
6	Engine Instruments	CHECKED GREEN	6
7	Annunciators	CHECKED OFF	7
8	Magnetos	CHECKED (Drop RPM < 175 / Diff < 50)	8
9	Carburetor Heater	CHECKED	9
10	Mixture	CHECKED	10
11	Throttle	IDLE (600 - 700 RPM)	11
12	Throttle	1000 RPM	12
<b>DEPARTURE CHECK</b>			
1	Seat Belts, Shoulder Harness	FASTENED	1
2	Fuel Pump	ON, PRESSURE CHECKED	2
3	Fuel Quantity	CHECKED	3
4	Fuel Selector	MAIN OPEN, AUXILIARY CLOSED	4
5	Mixture	RICH / AS REQUIRED	5
6	Carburetor Heater	OFF	6
7	Magnetos	BOTH	7
8	Avionics	SET	8
9	Flight Instruments	SET	9
10	Elevator Trim	TAKE OFF	10
11	Flaps	SET, 1st STEP	11
12	Controls	FREE and CORRECT	12
13	Canopy	CLOSED	13
<b>DEPARTURE BRIEFING</b>			
1	Surface Wind, $V_x$ 70 KIAS $V_y$ 81 KIAS		
2	Routing, Altitude, Restrictions		
3	Emergencies, Best Glide 78 KIAS		
<b>LINE-UP</b>			
1	Approach Sector, Runway	CHECKED FREE	1
2	Lights	ON	2
3	Wind, Runway Heading	CHECKED	3
4	Transponder	SET 7000 or ACCORDING ATC	4

**TAKE OFF**

1	Brakes	RELEASED	1
2	Power	FULL POWER, RPM CHECKED	2
3	Speed	RISING	3

**CLIMB CHECK**

1	Flaps	UP (> 65 KIAS)	1
2	Power	CHECKED	2
3	Fuel Pump	OFF, PRESSURE CHECKED	3

**CRUISE CHECK**

1	Flight / Engine Instruments	CHECKED	1
2	Cruise Power Setting	ACCORDING AFM	2
3	Mixture Setting / Fuel	CHECKED	3

**DESCENT CHECK**

1	ATIS	RECEIVED	1
2	Flight Instruments, Avionics	SET	2
3	Cabin	CHECKED	3

**APPROACH BRIEFING**

- 1 Runway in Use
- 2 Routing, Altitude, Restrictions
- 3 Missed Approach Procedure
- 4 Surface Wind, Final Approach Speed

**APPROACH PREPARATION**

1	Altimeters	SET	1
2	Landing Light	CHECKED, ON	2
3	Fuel Pump	ON, PRESSURE CHECKED	3
4	Fuel Quantity	MAIN / AUXILIARY CHECKED	4
5	Fuel Selector	AUXILIARY CLOSED	5
6	Mixture	RICH	6
7	Carburetor Heater	AS REQUIRED	7
8	Flaps	AS REQUIRED	8

**FINAL CHECK**

1	Flaps	SET	1
2	Final Approach Speed	ESTABLISHED	2
3	Brakes (pressure)	CHECKED	3
4	Carburetor Heater	OFF	4

**GO AROUND**

1	Throttle	FULL POWER	1
2	Carburetor Heater	OFF	2
3	Attitude	ROTATE (> 65 KIAS)	3
4	Flaps	UP (slowly retract)	4

Motorfluggruppe Langenthal	<b>Checklist Robin DR40</b>				v1.5 Jan 18	<b>4</b>
<b>AFTER LANDING</b>						
1	Landing Light, Rotating Beacon	OFF				1
2	Fuel Pump	OFF				2
3	Flaps	UP				3
<b>ENGINE SHUT DOWN</b>						
1	Electrical Consumers	OFF				1
2	Avionics	121.500 CHECKED				2
3	Aspen Switch	OFF				3
4	Avionic Master Switch	OFF				4
5	Mixture	CUT OFF				5
6	Ignition	OFF				6
7	Alternator, Battery	OFF				7
8	Flaps	DOWN				8
9	Auxiliary Tank	CLOSED				9
10	Flight time Counter	NOTED				10
<b>SPEEDS FOR OPERATION AT MAXIMUM TAKE OFF MASS (MTOM)</b>						
	Rotate / Lift Off	Flaps 1	45 / 54	70 KIAS		
	Best Angle	Flaps up or 1	70	81 KIAS		
	Best Rate (up to 2000 ft AGL)	Flaps up	81	90 KIAS		
	Cruise Climb (above 2000 ft AGL)	Flaps up	90	62 KIAS		
	Approach	Flaps 1	80	> 65 KIAS		
	Final Approach	Flaps 2	62	78 KIAS		
	Go Around / Touch And Go	Flaps up	> 65	22 KT		
	Best Glide	Flaps up	78			
	Max. Demonstrated Crosswind		22			
<b>POWER SETTINGS</b>						
	Take Off and Climb		full power			
	Cruise and Descend up to 5000 ft AMSL		2300 RPM			
	Cruise and Descend above 5000 ft AMSL		2400 RPM			
	Approach Descend		2200 RPM			
	Circuit		2000 RPM			
<b>LOADING HB-KCJ</b>						
	MTOM		1000 kg			
						Max. cabin load remaining
	Empty (including 10 Liter unusable fuel)	624 kg =>	376 kg			
	Usable Fuel, Main 100 Liter	72 kg =>	304 kg			
	Usable Fuel, Auxiliary 50 Liter	36 kg =>	268 kg			
<b>PRIMING TABLE</b>						
	<b>-10 °C</b>	<b>0 °C</b>	<b>+10 °C</b>	<b>+20 °C</b>	<b>+30 °C</b>	
Engine Cold	6-7	4-5	2	1-2	1	
Engine Hot	1-3	1	0-1	0	0	

## Flight Checklist for Emergency

Massgebend ist das AFM

# FIRE ON GROUND

<b>1 Starter</b>	<b>CRANKING ENGINE (if not running)</b>	<b>1</b>
<b>2 Mixture</b>	<b>IDLE CUT OFF</b>	<b>2</b>
<b>3 Throttle</b>	<b>FULL OPEN</b>	<b>3</b>
<b>4 Fuel Pump</b>	<b>OFF</b>	<b>4</b>
<b>5 Fuel Selector</b>	<b>OFF</b>	<b>5</b>

### IF FIRE DOES NOT STOP

<b>6 Battery / Alternator</b>	<b>OFF</b>	<b>6</b>
<b>7 Magnetos</b>	<b>OFF</b>	<b>7</b>
<b>8 Pax and Crew</b>	<b>EVACUATE</b>	<b>8</b>

# FIRE IN FLIGHT

<b>1 Source of Fire</b>	<b>IDENTIFY</b>	<b>1</b>
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### ELECTRICAL FIRE (Smoke in cabin)

<b>1 Vents</b>	<b>OPEN (if smoke reduced CLOSE)</b>	<b>1</b>
<b>2 Battery / Alternator</b>	<b>OFF</b>	<b>2</b>
<b>3 Cabin Heat</b>	<b>OFF</b>	<b>3</b>

### LAND AS SOON AS PRACTICAL

### ENGINE FIRE

<b>1 Fuel Selector</b>	<b>OFF</b>	<b>1</b>
<b>2 Mixture</b>	<b>IDLE CUT OFF</b>	<b>2</b>
<b>3 Throttle</b>	<b>FULL OPEN</b> until engine stops then <b>CLOSED</b>	<b>3</b>
<b>4 Fuel Pump</b>	<b>OFF</b>	<b>4</b>
<b>5 Alternator</b>	<b>OFF</b>	<b>5</b>
<b>6 Cabin Heater and Defroster</b>	<b>OFF</b>	<b>6</b>
<b>7 Elevator Trim</b>	<b>BEST GLIDE 78 KIAS</b>	<b>7</b>

### PREPARE FOR POWER OFF EMERGENCY LANDING

## ***ENGINE POWER LOSS IN FLIGHT***

<b>1 Attitude</b>	<b>BEST GLIDE 78 KIAS</b>	<b>1</b>
<b>2 Fuel Selector</b>	<b>OPEN MAIN and AUX</b>	<b>2</b>
<b>3 Fuel Pump</b>	<b>ON</b>	<b>3</b>
<b>4 Mixture</b>	<b>RICH</b>	<b>4</b>
<b>5 Carburetor Heater</b>	<b>ON</b>	<b>5</b>
<b>6 Throttle</b>	<b>2 to 3cm OPEN</b>	<b>6</b>
<b>7 Ignition</b>	<b>BOTH</b>	<b>7</b>
<b>8 Engine Gauges</b>	<b>CHECK CAUSE OF POWER LOSS</b>	<b>8</b>

### **WHEN POWER IS RESTORED**

<b>9 Carburetor Heater</b>	<b>OFF</b>	<b>9</b>
<b>10 Fuel Pump</b>	<b>OFF</b>	<b>10</b>

### **WHEN POWER IS NOT RESTORED**

<b>11 Elevator Trim</b>	<b>BEST GLIDE 78 KIAS</b>	<b>11</b>
<b>PREPARE FOR POWER OFF</b>		

## ***EMERGENCY LANDING***

### **TRIMM FOR BEST GLIDE 78 KIAS**

### **LOCATE SUITABLE FIELD**

### **WHEN THE LANDING FIELD CAN EASILY BE REACHED**

<b>1 Seat Belts / Shoulder Harness</b>	<b>FASTENED</b>	<b>1</b>
<b>2 Fuel Pump</b>	<b>OFF</b>	<b>2</b>
<b>3 Mixture</b>	<b>IDLE CUT OFF</b>	<b>3</b>
<b>4 Throttle</b>	<b>CLOSED</b>	<b>4</b>
<b>5 Ignition</b>	<b>OFF</b>	<b>5</b>
<b>6 Fuel Selector</b>	<b>OFF</b>	<b>6</b>
<b>7 Battery / Alternator</b>	<b>OFF</b>	<b>7</b>
<b>8 Canopy (When Turning Final)</b>	<b>UNLOCK</b>	<b>8</b>
<b>9 Flaps</b>	<b>AS DESIRED</b>	<b>9</b>

## ***ALTERNATOR FAILURE***

### **NO ALTERNATOR OUTPUT**

- |          |                                   |                   |          |
|----------|-----------------------------------|-------------------|----------|
| <b>1</b> | <b>Alternator Switch</b>          | <b>CHECKED ON</b> | <b>1</b> |
| <b>2</b> | <b>Alternator Circuit Breaker</b> | <b>CHECKED IN</b> | <b>2</b> |

### **WHEN CHECKED AND STILL NOT OUTPUT**

- |          |                             |                               |          |
|----------|-----------------------------|-------------------------------|----------|
| <b>3</b> | <b>Alternator Switch</b>    | <b>OFF</b>                    | <b>3</b> |
| <b>4</b> | <b>Electrical Consumers</b> | <b>OFF AS PRACTICABLE</b>     | <b>4</b> |
| <b>5</b> | <b>Alternator Switch</b>    | <b>ON (after &gt; 10 sec)</b> | <b>5</b> |

### **IF STILL NO OUTPUT**

- |          |                             |                           |          |
|----------|-----------------------------|---------------------------|----------|
| <b>6</b> | <b>Electrical Consumers</b> | <b>OFF AS PRACTICABLE</b> | <b>6</b> |
|----------|-----------------------------|---------------------------|----------|

**LAND ON THE NEAREST AIRPORT AS PRACTICABLE**

## ***RADIO FAILURE***

- |          |                             |                |          |
|----------|-----------------------------|----------------|----------|
| <b>1</b> | <b>Radio</b>                | <b>ON</b>      | <b>1</b> |
| <b>2</b> | <b>Volume</b>               | <b>TEST</b>    | <b>2</b> |
| <b>3</b> | <b>Frequency</b>            | <b>CHECKED</b> | <b>3</b> |
| <b>4</b> | <b>Headset / Mike Plugs</b> | <b>CHECKED</b> | <b>4</b> |

### **IF NO RADIO CONTACT**

- |          |                    |                            |          |
|----------|--------------------|----------------------------|----------|
| <b>5</b> | <b>Transponder</b> | <b>7600 (if necessary)</b> | <b>5</b> |
| <b>6</b> | <b>Procedure</b>   | <b>ACCORDING AIP</b>       | <b>6</b> |