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(Excerpt)

70 – Flight Performance and Planning

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1 A flight plan has been files for a flight departing at an uncontrolled aerodrome.

When has the actual take-off time been transmitted to ATC? (1,00 P.)

- ☐ Upon request from ATC.
- ☐ When landing is assured.
- ☑ Immediately after take-off.
- ☐ At deviation from expected off-block time by more than 15 min.

2 During a flight with a flight plan submitted, landing is conducted at an airfield other than the destination stated in the filed flight plan.

Who has to be contacted by the pilot immediately? (1,00 P.)

- ☐ Local office for aereal supervision.
- ☐ The flight manager on duty.
- ☑ Aeronatical Information Service (AIS).
- ☐ The police department.

3 Exceeding the maximum allowed aircraft mass is... (1,00 P.)

- ☑ not permissible and essentially dangerous.
- ☐ only relevant if the excess is more than 10 %.
- ☐ compensated by the pilot's control inputs.
- ☐ exceptionally permissible to avoid delays.

4 The center of gravity has to be located... (1,00 P.)

- ☑ between the front and the rear C.G. limit.
- ☐ behind the rear C.G. limit.
- ☐ in front of the front C.G. limit.
- ☐ right of the lateral C. G. limit.

5 The result of a rear C.G. position is... (1,00 P.)

- ☐ an increased fuel consumption.
- ☐ a decrease of range.
- ☑ a decrease of stability.
- ☐ an increased stall speed.

6 An aircraft must be loaded and operated in such a way that the center of gravity (CG) stays within the approved limits during all phases of flight.

This is done to ensure... (1,00 P.)

- ☐ that the aircraft does not exceed the maximum permissible airspeed during a descent.
- ☐ that the aircraft does not stall.
- ☐ that the aircraft does not tip over on its tail while it is being loaded.
- ☑ both stability and controllability of the aircraft.

7 The result of a front C.G. position is:
1. Increase in stability.
2. Increase in fuel consumption.
3. Increase in stall speed.
4. Increase in range. (1,00 P.)

- ☐ 2, 4
- ☐ 1, 2
- ☑ 1, 2, 3
- ☐ 2, 3, 4

8 The basic empty mass of an aircraft includes... (1,00 P.)

- ☐ the total mass of the aeroplane ready for a specific type of operation excluding unusable fuel and traffic load. The mass includes items such as crew and crew baggage.
- ☐ the total mass of an aeroplane ready for a specific type of operation including the required fuel and crew, but excluding traffic load.
- ☑ the mass of the aeroplane plus standard items such as unusable fuel and other unusable liquids, lubricating oil in engine and auxiliary units, fire extinguishers, pyrotechnics, emergency oxygen equipment, supplementary electronic equipment.
- ☐ the total mass of the aeroplane ready for a specific type of operation including crew, navigation instruments and engine cowling.

9 The empty weight and the corresponding center of gravity (CG) of an aircraft are initially determined... (1,00 P.)

- ☑ by weighing.
- ☐ through data provided by the aircraft manufacturer.
- ☐ by calculation.
- ☐ for one aircraft of a type only, since all aircraft of the same type have the same mass and CG position.

10 The density of AVGAS 100LL at 15° C is... (1,00 P.)

- ☐ 0.68 kg/l.
- ☐ 1.0 kg/l.
- ☐ 0.82 kg/l.
- ☑ 0.72 kg/l.

11 The conversion factor from kilogram [kg] into pounds [lb] is... (1,00 P.)

- ☐ kg x 2 = lb.
- ☑ kg x 2.205 = lb.
- ☐ kg / 2.205 = lb.
- ☐ kg x 0.454 = lb.

12 Baggage and cargo must be properly stowed and fastened, otherwise a shift of the cargo may cause... (1,00 P.)

- ☐ continuous attitudes which can be corrected by the pilot using the flight controls.
- ☐ structural damage, angle of attack stability, velocity stability.
- ☑ uncontrollable attitudes, structural damage, risk of injuries.
- ☐ calculable instability if the C.G. is shifting by less than 10 %.

13 Loads must be adequately secured in order to... (1,00 P.)

- ☐ carry extra fuel.
- ☐ allow steep turns.
- ☑ avoid any centre of gravity (C.G.) movements.
- ☐ prevent excessive 'g'-loading during the landing flare.

14 The total weight of an aeroplane is acting vertically through the... (1,00 P.)

- ☐ stagnation point.
- ☐ neutral point.
- ☐ center of pressure.
- ☑ center of gravity.

15 The term "center of gravity" is defined as... (1,00 P.)

- ☐ the heaviest point on an aeroplane.
- ☐ half the distance between the neutral point and the datum line.
- ☐ another designation for the neutral point.
- ☑ the point at which the total mass of the aeroplane is considered to act.

16 The center of gravity (CG) defines... (1,00 P.)

- ☐ the point on the longitudinal axis or its extension from which the centers of gravity of all masses are referenced.
- ☑ the point through which the force of gravity is said to act on a mass.
- ☐ the distance from the datum to the position of a mass.
- ☐ the product of mass and balance arm.

17 During an unaccelerated flight... (1,00 P.)

- ☐ drag equals lift and thrust equals gravity.
- ☐ thrust equals the sum of drag and gravity.
- ☐ thrust equals lift and drag equals gravity.
- ☑ thrust equals drag and lift equals gravity.

18 The term "datum" with regard to a mass and balance calculation defines... (1,00 P.)

- ☐ the point on the lateral axis of an aeroplane or its extension from which the centers of gravity of all masses are referenced.
- ☐ the point on the vertical axis of an aeroplane or its extension from which the centers of gravity of all masses are referenced.
- ☑ the point on the longitudinal axis of an aeroplane or its extension from which the centers of gravity of all masses are referenced.
- ☐ the distance from the reference plane to the center of gravity of an aircraft.

19 The term "moment" with regard to a mass and balance calculation is referred to as... (1,00 P.)

- ☐ sum of a mass and a balance arm.
- ☐ quotient of a mass and a balance arm.
- ☐ difference of a mass and a balance arm.
- ☑ product of a mass and a balance arm.

20 The term "balance arm" in the context of a mass and balance calculation defines the... (1,00 P.)

- ☑ distance from the datum to the center of gravity of a mass.
- ☐ distance of a mass from the center of gravity.
- ☐ point on the longitudinal axis of an aeroplane or its extension from which the centers of gravity of all masses are referenced.
- ☐ point through which the force of gravity is said to act on a mass.

21 The distance between the center of gravity and the datum is called... (1,00 P.)

- ☐ span width.
- ☑ balance arm.
- ☐ lever.
- ☐ torque.

22 The balance arm is the horizontal distance between... (1,00 P.)

- ☐ the front C.G. limit and the datum line.
- ☐ the C.G. of a mass and the rear C.G. limit.
- ☑ the C.G. of a mass and the datum line.
- ☐ the front C.G. limit and the rear C.G. limit.

23 The required data for a mass and balance calculation including masses and balance arms can be found in the... (1,00 P.)

- ☐ performance section of the pilot's operating handbook of this particular aircraft.
- ☑ mass and balance section of the pilot's operating handbook of this particular aircraft.
- ☐ documentation of the annual inspection.
- ☐ certificate of airworthiness.

24 When preparing to carry out the weighing procedure on an aircraft, which of the following is required? (1,00 P.)

- ☐ Drain all engine tank oil
- ☐ Remove service equipment
- ☑ Drain all useable fuel
- ☐ Remove the batteries

25 Which section of the flight manual describes the basic empty mass of an aircraft? (1,00 P.)

- ☐ Normal procedures
- ☐ Limitations
- ☐ Performance
- ☑ Weight and balance

26 The position of the center of gravity equals...

See figure (PFP-052e) (1,00 P.)

Siehe Anlage 1

- ☐ 147.5 in.
- ☐ 145.7 in.
- ☑ 142 in.
- ☐ 137.5 in.

PFP-052e

ITEM	MASS	ARM
Basic Empty Mass	3.156 lb	135,33 in
Front Seats	320 lb	135,50 in
Rear Seats	340 lb	177,00 in
Baggage	80 lb	248,23 in
Fuel	321,5 lb	150,31 in

27 What mass equals 102 litres of Avgas 100LL? (1,00 P.)

- ☐ 142 lbs
- ☐ 74 lbs
- ☐ 142 kg
- ☑ 74 kg

28 Calculated take-off mass = 2300 lbs, calculated CG = 95.75 in, fuel burn = 170 lbs on station 87.00 in.

Where is the CG situated after the landing? (1,00 P.)

- ☐ 97.39 in
- ☑ 96.45 in
- ☐ 94.11 in
- ☐ 96.57 in

29 Given values:
Calculated take-off mass = 746 kg
calculated CG = 37.1 cm
fuel burn = 30.5 l on station 45 cm.

Where is the CG situated after the landing? (1,00 P.)

- ☐ 37.2 cm
- ☐ 37.5 cm
- ☐ 36.3 cm
- ☑ 36.9 cm

30 Calculated take-off mass = 1082 kg, calculated CG = 0.254 m, fuel burn = 55 l on station 0.40 m.

Where is the CG situated after the landing? (1,00 P.)

- ☐ 24.6 cm
- ☐ 25.2 cm
- ☐ 25.4 cm
- ☑ 24.8 cm

31 The position of the center of gravity (including fuel) equals...

See figure(PFP-053e) (1,00 P.)

Siehe Anlage 2

- ☑ 37.1 cm.
- ☐ 0.401 m.
- ☐ 37.3 cm.
- ☐ 0.403 m.

PFP-053e

ITEM	MASS	ARM
Basic Empty Mass	560 kg	0,35 m
Pilot and Passenger	150 kg	0,4 m
Baggage	15 kg	0,65 m
Fuel	60 l	0,45 m

32 For the purpose of a flight preparation, the pilot calculates a total take-off mass of 750 kg and a total moment of 625 mmkg.

Which cross marks the center of gravity (CG)?

See annex (PFP-003) (1,00 P.)

Siehe Anlage 3

- ☐ 4
- ☐ 2
- ☑ 1
- ☐ 3

33 For the purpose of a flight preparation the pilot calculates a total take-off mass of 725 kg and a total moment of 650 mmkg.

Which cross marks the center of gravity (CG)?

See annex (PFP-004) (1,00 P.)

Siehe Anlage 4

☐ 1
☐ 2
☐ 4
☑ 3

34 For the purpose of a flight preparation the pilot calculates a total take-off mass of 775 kg and a total moment of 700 mmkg.

Which cross marks the center of gravity (CG)?

See annex (PFP-005) (1,00 P.)

Siehe Anlage 5

☐ 3
☐ 2
☑ 4
☐ 1

35 Which is the most recently determined empty mass and the associated center of gravity (CG) arm from the aircraft documentation?

See annex (PFP-006) (1,00 P.)

Siehe Anlage 6

☐ 5 kg; 1.3 m
☐ 4 kg; 1.1 m
☑ 498 kg; 280.59 m
☐ 512 kg; 285.39 m

36 How does the aircraft configuration influence take-off performance while all other parameters remaining constant?

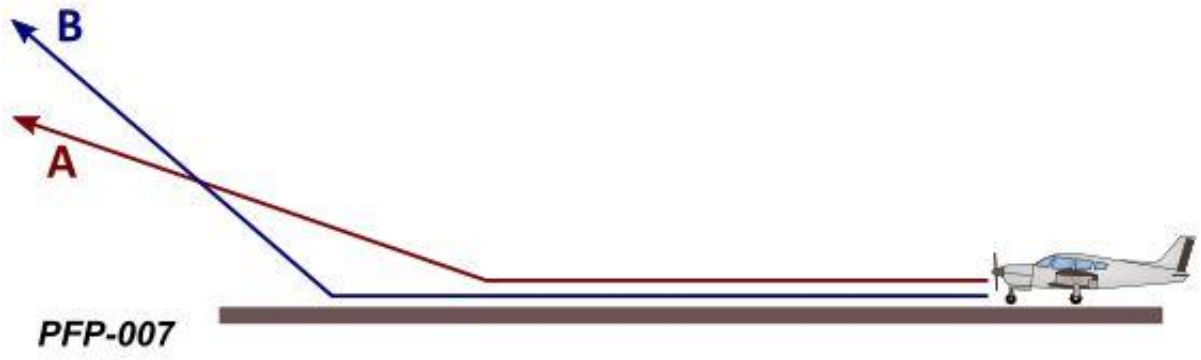
See figure (PFP-007) (1,00 P.)

Siehe Anlage 7

☐ Aircraft B has a higher tyre pressure than aircraft A
☐ Aircraft A has a higher tyre pressure than aircraft B

☐ Aircraft B has a higher flap setting than aircraft A

☑ Aircraft A has a higher flap setting than aircraft B



37 How does aircraft flap configuration influence the take-off performance?

(1,00 P.)

- ☐ A higher flap setting decreases ground roll and increases lift-off speed and climb performance
- ☐ A higher flap setting decreases ground roll and lift-off speed and increases climb performance
- ☐ A higher flap setting increases ground roll, lift-off speed, and climb performance
- ☑ A higher flap setting decreases ground roll and lift-off speed, but also climb performance

38 How does wind affect the take-off performance? (1,00 P.)

- ☐ Tailwind aids the aircraft in overcoming the initial drag at the commencement of the take-off roll. The take-off distance will decrease
- ☑ Tailwind reduces the relative wind on the airfoil. The take-off distance will increase
- ☐ Headwind causes an increased airflow around the wing. The take-off distance will increase
- ☐ Headwind imposes an increased drag on the aircraft. The take-off distance will increase

39 It is possible that the surface wind speed at an airport is reduced due to friction.

When a surface area with a minor tailwind condition is left during the initial climb, the pilot might expect... (1,00 P.)

- ☐ an increase in airspeed and rate of climb due to decreasing tailwind.
- ☐ a deacrease in airspeed and climb performance due to decreasing tailwind.
- ☐ an increase in airspeed and rate of climb due to increasing tailwind.
- ☑ a decrease in airspeed and rate of climb due to increasing tailwind.

40 Which factor shortens landing distance? (1,00 P.)

- ☐ High pressure altitude
- ☑ Strong head wind
- ☐ Heavy rain
- ☐ High density altitude

41 Unless the aircraft is equipped and certified accordingly... (1,00 P.)

- ☐ flight into known or forecast icing conditions is only allowed as long as it is ensured that the aircraft can still be operated without performance degradation.
- ☐ flight into forecast icing conditions is prohibited. Should the aircraft enter an area of icing conditions inadvertantly, the flight may be continued as long as visual meteorological conditions are maintained.
- ☑ flight into known or forecast icing conditions is prohibited. Should the aircraft enter an area of icing conditions inadvertantly, it should be left without delay.
- ☐ flight into areas of precipitation is prohibited.

42 The speed Vx means... (1,00 P.)

- ☑ that a given altitude is reached within minimum distance.
- ☐ that a given altitude is reached within minimum flight time.
- ☐ maximum altitude gain per 10 % power.
- ☐ that a given altitude is reached with minimum fuel consumption.

43 The angle of descent is defined as... (1,00 P.)

- ☐ the ratio between the change in height and the horizontal distance travelled within the same time, expressed in percent [%].
- ☑ the angle between a horizontal plane and the actual flight path, expressed in degrees [°].
- ☐ the ratio between the change in height and the horizontal distance distance travelled within the same time, expressed in degrees [°].
- ☐ the angle between a horizontal plane and the actual flight path, expressed in percent [%].

44 The term "steady flight" is defined as... (1,00 P.)

- ☐ flight with a steady power setting without changing course.
- ☐ climb or descent with a constant climb or descent rate in calm weather conditions.
- ☑ unaccelerated flight. The four forces thrust, drag, lift, and weight are in equilibrium.
- ☐ flight in smooth air without turbulence and a perfectly trimmed aircraft.

45 The speed Vy is defined as... (1,00 P.)

- ☐ best speed of climb.
- ☐ best angle of climb.
- ☐ best distance of climb.
- ☑ best rate of climb.

46 The speed VFE is defined as... (1,00 P.)

- ☐ stalling or minimum steady flight speed with the flaps retracted.
- ☑ maximum flap extended speed.
- ☐ stalling or minimum steady flight speed with the flaps extended.
- ☐ maximum landing gear extended speed.

47 The speed VS0 is defined as... (1,00 P.)

- ☐ maximum landing gear extended speed.
- ☐ stalling speed or minimum steady flight speed obtained in a specific configuration.
- ☑ stalling speed or minimum steady flight speed in landing configuration.
- ☐ never-exceed speed.

48 The beginning of the green arc (2) indicates which airspeed?

See figure (PFP-008) (1,00 P.)

Siehe Anlage 8

- ☑ VS1: Stall speed with flaps up
- ☐ VS0: Stall speed in landing configuration
- ☐ VFE: Maximum flap extended speed
- ☐ VNO: Maximum speed for normal operations

PFP-008

49 The end of the green arc (4) indicates which airspeed?

See figure (PFP-008) (1,00 P.)

Siehe Anlage 8

- ☑ VNO: Maximum speed for normal operations
- ☐ VNE: Never-exceed speed
- ☐ VFE: Maximum flap extended speed
- ☐ VS1: Stall speed with flaps up

PFP-008

50 The red marking at the end of the yellow arc (5) indicates which airspeed?

See figure (PFP-008) (1,00 P.)

Siehe Anlage 8

- ☐ VNO: Maximum speed for normal operations
- ☐ VFE: Maximum flap extended speed
- ☐ VS1: Stall speed with flaps up
- ☑ VNE: Never-exceed speed

PFP-008

51 Which climb speed may be used to optimize the rate of climb (e.g. to reach a desired altitude within minimum time)? (1,00 P.)

- ☐ Vy, the best angle of climb speed
- ☑ Vy, the best rate of climb speed
- ☐ Vx, the best rate of climb speed
- ☐ Vx, the best angle of climb speed

52 For a take-off from runway 22 and a reported wind of 250°/10 kt, the longitudinal wind component equals... (1,00 P.)

- ☐ 9 kt tailwind.
- ☐ 5 kt tailwind.
- ☑ 9 kt headwind.
- ☐ 5 kt headwind.

53 Given the following conditions, the take-off distance equals...

Outside air temperature: -20° C
Pressure Altitude: 5000 ft
Aeroplane mass: 750 kg
Headwind: 10 kt

See annex (PFP-009) (1,00 P.)

Siehe Anlage 9

- ☐ 450 m.
- ☑ 380 m.
- ☐ 410 m.
- ☐ 310 m.

54 A pilot wants to take off on runway 36, the reported wind is 240 degrees, 12 knots.

What is the value of the wind components acting on the aircraft on take-off and landing? (1,00 P.)

- ☐ Crosswind from the right 10.4 kt.
  Tailwind 6 kt.
- ☑ Crosswind from the left 10.4 kt.
  Tailwind 6 kt.
- ☐ Crosswind from the left 6 kt.
  Tailwind 10.4 kt.
- ☐ Crosswind from the right 6 kt.
  Headwind 10.4 kt.

55 What is the take-off distance at 750 kg take-off mass, standard (ISA) conditions at an elevation of 4000 ft with 5 kt tailwind?

See annex (PFP-009) (1,00 P.)

Siehe Anlage 9

- ☑ 900 m
- ☐ 320 m
- ☐ 630 m
- ☐ 480 m

56 What is the take-off distance at 705 kg take-off mass, OAT 20° C, QNH 1013 hPa at an elevation of 3500 ft with 5 kt tailwind?

See annex (PFP-009) (1,00 P.)

Siehe Anlage 9

- ☐ 720 m
- ☑ 880 m
- ☐ 790 m
- ☐ 820 m

57 A pilot wants to take off on runway 36, the reported wind is 240 degrees 12 knots.

What are the wind components acting on the aircraft on take-off and landing? (1,00 P.)

- ☐ Crosswind from the right 10.4 kt.
  Tailwind 6 kt.
- ☐ Crosswind from the right 6 kt.
  Headwind 10.4 kt.
- ☑ Crosswind from the left 10.4 kt.
  Tailwind 6 kt.
- ☐ Crosswind from the left 6 kt.
  Tailwind 10.4 kt.

58 Given the following conditions, the fuel consumption equals...

Pressure altitude: 2000 ft
Temperature: 31° C
RPM: 2400

See annex (PFP-012) (1,00 P.)

Siehe Anlage 10

- ☑ 19.5 l/h.
- ☐ 19.1 l/h.
- ☐ 21.7 l/h.
- ☐ 22.8 l/h.

59 Given the following conditions, the climb speed equals...

Outside air temperature: -20° C
Pressure altitude: 10000 ft

See annex (PFP-011) (1,00 P.)

Siehe Anlage 11

- ☐ 200 ft/min.
- ☐ 350 ft/min.
- ☑ 390 ft/min.
- ☐ 450 ft/min.

60 What range can be achieved at the following conditions?

Outside air temperature: 6° C
Pressure Altitude: 6000 ft
Power: 65 %

See annex (PFP-013) (1,00 P.)

Siehe Anlage 12

- ☐ 457 NM
- ☐ 503 NM
- ☐ 444 NM
- ☑ 482 NM

61 Given the following information, what range can be achieved?

Outside air temperature: 22° C
Pressure altitude: 2000 ft
Power: 55 %

See annex (PFP-013) (1,00 P.)

Siehe Anlage 12

- ☐ 550 NM
- ☐ 480 NM
- ☐ 450 NM
- ☑ 500 NM

62 Given the following conditions, the TAS equals...

Outside air temperature: 10° C
Pressure altitude: 6000 ft
Power: 65 %

See annex (PFP-014) (1,00 P.)

Siehe Anlage 13

- ☐ 96 kt.
- ☑ 92 kt.
- ☐ 88 kt.
- ☐ 100 kt.

63 Given the following conditions, the TAS equals...

Outside air temperature: -2° C
Pressure altitude: 8000 ft
Power: 75 %

See annex (PFP-014) (1,00 P.)

Siehe Anlage 13

- ☑ 104 kt.
- ☐ 100 kt.
- ☐ 95 kt.
- ☐ 110 kt.

64 Which maximum rate of climb can the aircraft reach at 9000 ft pressure altitude and OAT 12° C?

See annex (PFP-011) (1,00 P.)

Siehe Anlage 11

- ☑ 200 ft/min
- ☐ 250 ft/min

- ☐ 350 ft/min
- ☐ 300 ft/min

65 Which is the maximum rate of climb for the aircraft at 6500 ft pressure altitude and an OAT of 0° C?

See annex (PFP-011) (1,00 P.)

Siehe Anlage 11

- ☑ 480 ft / min
- ☐ 400 ft / min
- ☐ 520 ft / min
- ☐ 800 ft / min

66 What is the true airspeed (TAS) [kt] and fuel consumption [l/h] for cruise flight with 60 % power in flight level 60 under the following conditions?

Temperature: ISA - 20° C
QNH: 980 hPa

See annex (PFP-012) (2,00 P.)

Siehe Anlage 10

- ☐ 96 kt.
  19.1 l/h.
- ☑ 95 kt.
  19.6 l/h.
- ☐ 110 kt.
  25.1 l/h.
- ☐ 95,75 kt.
  19.8 l/h.

67 What is the true airspeed (TAS) [kt] and fuel consumption [l/h] for cruise flight with 70 % power in flight level 60 under the following conditions?

Temperature: ISA - 20° C
QNH: 980 hPa

See annex (PFP-012) (2,00 P.)

Siehe Anlage 10

- ☑ 110 kt.
  23.9 l/h.
- ☐ 100 kt.
  19.3 l/h.
- ☐ 95 kt.
  19.6 l/h.
- ☐ 105 kt.
  21.5 l/h.

68 What is the fuel flow and the true airspeed for cruise flight with 60 % power in flight level 85 at an OAT of -25° C?

See annex (PFP-014) (1,00 P.)

Siehe Anlage 13

☐ Fuel flow: 17 l.
TAS: 81 kt.

☐ Fuel flow: 17.5 l.
TAS: 83 kt.

☐ Fuel flow: 20 l.
TAS: 89 kt.

☑ Fuel flow: 18.5 l.
TAS: 85 kt.

69 At which airspeed do you climb to flight level (FL) 75 after a departure from an airfield which is located at a pressure altitude of 3000 ft with an initial mass of 3000 lbs?

OAT at airfield: 25° C
OAT in FL 75: 0° C

See annex (PFP-023)

(1,00 P.)

Siehe Anlage 14

☐ 90 kt
☐ 120 kt
☑ 110 kt

☐ 100 kt

70 What is the required fuel to climb from FL 65 to FL 95 under the following conditions?

Aircraft mass: 3000 lb.
OAT in FL 65: -5° C
OAT in FL 95: -15° C

See annex (PFP-023)
(1,00 P.)

Siehe Anlage 14

- ☑ 1 GAL
- ☐ 2 GAL
- ☐ 6 GAL

- ☐ 3 GAL

71 What is the required distance to climb from FL 65 to FL 95 under the following conditions:

Aircraft mass: 3000 lb.
OAT in FL 65: -5° C
OAT in FL 95: -15° C

See annex (PFP-023) (1,00 P.)

Siehe Anlage 14

- ☑ 6 NM
- ☐ 3 NM
- ☐ 16 NM
- ☐ 10 NM

72 What is the required distance to climb to flight level (FL) 75 after a departure from an airfield which is located at a pressure altitude of 3000 ft with an initial mass of 3000 lbs?

OAT at airfield: 25° C
OAT in FL 75: 0° C

See annex (PFP-023)
(1,00 P.)

Siehe Anlage 14

- ☐ 10 NM
- ☐ 6 NM
- ☐ 4 NM
- ☑ 7 NM

73 The term "maximum elevation figure" (MEF) is defined as... (1,00 P.)

- ☐ the highest elevation within an area covering 30 minutes of latitude and 30 minutes of longitude.
- ☑ the highest elevation within an area covering 30 minutes of latitude and 30 minutes of longitude plus a safety margin, rounded to the next higher 100 ft.
- ☐ the highest elevation within an area covering 30 minutes of latitude and 30 minutes of longitude plus a safety margin of 1000 ft (305 m), rounded to the next higher 100 ft.
- ☐ the highest elevation within an area covering 1 degree of latitude and 1 degree of longitude plus a safety margin, rounded to the next lower 100 ft.

74 What is the purpose of "interception lines" in visual navigation? (1,00 P.)

- ☐ To visualize the range limitation from the departure aerodrome
- ☐ They help to continue the flight when flight visibility drops below VFR minima
- ☐ To mark the next available en-route airport during the flight
- ☑ They are used as easily recognizable guidance upon a possible loss of orientation

75 The VFR semicircular rules are based on the... (1,00 P.)

- ☐ true course (TC).
- ☐ magnetic heading (MH).
- ☑ magnetic course (MC).
- ☐ true heading (TH).

76 What is the lowest possible VFR flight level if a true course of 181° is selected and a variation of 3° east exists? (1,00 P.)

- ☐ FL 050
- ☐ FL 060
- ☑ FL 055
- ☐ FL 065

77 The upper limit of LO R 16 equals...

See annex (PFP-056) (1,00 P.)

Siehe Anlage 15

- ☐ FL150.
- ☐ 1 500 m MSL.
- ☑ 1 500 ft MSL.
- ☐ 1.500 ft GND.

78 The upper limit of LO R 4 equals...

See annex (PFP-030) (1,00 P.)

Siehe Anlage 16

☐ 4.500 ft AGL.

☑ 4.500 ft MSL.
☐ 1.500 ft MSL.

☐ 1.500 ft AGL.

79 How much taxi fuel must be consumed before take-off to reduce the aircraft mass to the maximum take-off mass?

Maximum ramp mass (MRM): 1150 kg
Actual ramp mass: 1148 kg
Maximum take-off mass (MTOM): 1145 kg (1,00 P.)

☐ 2 L
☐ 3 L
☐ 5 L
☑ 4 L

80 Considering the following fuel data, how much trip fuel is required?

Fuel for start-up and taxi: 5 L
Fuel for take-off and climb: 12 L
Fuel for cruise flight: 25 L
Fuel for descent, approach and landing: 7 L
Fuel for taxi and parking: 3 L
Fuel to alternate: 13 L
Final reserve fuel: 10 L
(1,00 P.)

☐ 75 L
☐ 52 L
☐ 49 L
☑ 44 L

81 According to the aeronautical chart, Friesach/Hirt (LOKH) has a 707 m grass runway. Prevailing runway is 17 due to a surface wind of 18010KT. The required landing distance for your aircraft under present conditions is 550 m. Considering the NOTAM below ,is it safe to plan LOKH as an alternate aerodrome?

See figure (PFP-026) (1,00 P.)

Siehe Anlage 17

- ☐ Don't know.
- ☐ Maybe.
- ☐ Yes.
- ☑ No.

PFP-026

B1066/11 NOTAMR B0680/11
Q)
LOVV/QMRCM/IV/NBO/A/000/999/4656N01426E005
E) THRESHHOLD RWY17 DISPLACED 207M INWARDS
DUE TO HIGH TREES 300M N OF RWY 17.
LANDING DISTANCE AVAILABLE (LDA) 500M.
TAKE-OFF RUN AVAILABLE (TORA) RWY 17/35
AND LANDING DISTANCE AVAILABLE (LDA)
RWY 35 707M.
MARKINGS ARE INSTALLED AT BOTH EDGES OF THE
RUNWAY ACCORDING ZFV.

82 Up to which altitude is an overflight prohibited according to the NOTAM?

See figure (PFP-024) (1,00 P.)

Siehe Anlage 18

- ☐ Height 9500 ft
- ☑ Altitude 9500 ft MSL
- ☐ Altitude 9500 m MSL
- ☐ Flight Level 95

PFP-024

```
A4604/11 NOTAMN
Q)
EDWW/QROLP/IV/NBO/W/000/095/5155N01037E004
A) EDWW
B) 1111180800  C) 1111181200
E) OVERFLYING PROHIBITED FOR ALL TRAFFIC RADIU
3.35NM CENTERED AROUND 515436N 0103725E DUE
TO DEMOLITION OF EXPLOSIVES AT ECKERTHAL,
(25NM S BRAUNSCHWEIG NDB BRU).
F) GND
G) 9500 FT AMSL
```

83 The EOBT (estimated off-block time) is specified in the ATS flight plan as... (1,00 P.)

- ☑ Coordinated Universal Time (UTC).
- ☐ Standard Time (ST).
- ☐ Local Mean Time (LMT).
- ☐ Central European Time (CET).

84 What is the nature of the flight shown in the given ATC flight plan?

See annex (PFP-051a) (1,00 P.)

Siehe Anlage 19

- ☑ Night flight under visual flight rules.
- ☐ Flight under instrument flight rules.
- ☐ Traffic pattern under visual flight rules.
- ☐ Border crossing flight.

85 The specified speed in the ATS flight plan equals:

See annex (PFP-051) (1,00 P.)

Siehe Anlage 20

- ☐ 1000 kt.
- ☐ 100 m/h.
- ☐ 100 km/h.
- ☑ 100 kt.

86 What must be considered for cross-border flights? (1,00 P.)

- ☐ Transmission of hazard reports
- ☐ Regular location messages
- ☐ Approved exceptions
- ☑ Requires flight plans

87 During a flight, a flight plan can be filed at the... (1,00 P.)

- ☑ Flight Information Service (FIS).
- ☐ Search and Rescue Service (SAR).
- ☐ next airport operator en-route.
- ☐ Aeronautical Information Service (AIS).

88 In comparison to the true airspeed in still air conditions, the TAS in a strong tailwind will be... (1,00 P.)

- ☐ the same for maximum range.
- ☐ significantly lower for maximum endurance.
- ☑ slightly lower for maximum range.
- ☐ slightly higher for maximum endurance.

89 What happens to the true airspeed at a constant indicated airspeed during a climb? (1,00 P.)

- ☐ It decreases
- ☑ It increases
- ☐ It remains constant below 5000 ft
- ☐ It remains constant above 5000 ft

90 Given the following data:

Take-Off fuel = 200 lbs
Alternate fuel = 40 lbs
Final reserve fuel = 30 lbs
After 25 minutes the remaining fuel is 120 lbs.

Assuming that fuel flow will remain unchanged,
the remaining time to the destination should not exceed:
(2,00 P.)

- ☐ 37.5 min
- ☐ 20.0 min
- ☑ 15.6 min
- ☐ 59.4 min

91 Given the following data for a VFR flight:

Take-off fuel: 180 kg including reserve fuel, which is 30% of take off fuel.
After half of the distance the remaining fuel is 100 kg.
Assume that cruise conditions will remain unchanged.

Determine the remaining fuel at the destination: (2,00 P.)

☐ 80 kg
☐ 40 kg
☐ 10 kg
☑ 20 kg

92 During a VFR flight the remaining usable fuel at a checkpoint is 80 USG.
Reserve fuel is 20 USG, remaining flight time according to flight plan is 2h 20min.

What is the highest acceptable fuel flow (FF) for the rest of the trip? (2,00 P.)

☐ FF = 8.6 USG/h
☐ FF = 42.9 USG/h
☑ FF = 25.7 USG/h
☐ FF = 34.3 USG/h

93 (For this questions, use attachment or CAP697 SEP1 Fig. 2.2 Table 2.2.3)

Planning a flight from EDWF (Leer Papenburg) to EDWH (Oldenburg Hatten), the following conditions apply:

Cruise level = FL 75
Temperature = ISA
Cruise weight = 3400 lbs
Power setting = 23.0 in. HG @ 2300 RPM

Determine True Airspeed (TAS) and Fuel Flow (FF): (2,00 P.)

Siehe Anlage 21

☐ TAS = 145 kt
FF = 71.1 GPH

☐ TAS = 160 kt
FF = 12.3 GPH

☑ TAS = 160 kt
FF = 11.9 GPH

☐ TAS = 145 kt
FF = 11.9 GPH

94 (For this questions, use attachment or CAP697 SEP1 Fig. 2.2 Table 2.2.3)

Planning a flight from EDWH (Oldenburg Hatten) to EDWF (Leer Papenburg), the following conditions apply:

Cruise level = FL 65
Temperature = ISA+20
Cruise weight = 3400 lbs
Power setting = 23.0 in. HG @ 2300 RPM

What Indicated Airspeed (IAS) and Fuel Flow (FF) can be expected? (2,00 P.)

Siehe Anlage 21

- ☑ IAS = 142 kt
  FF = 11.5 GPH
- ☐ IAS = 145 kt
  FF = 11.9 GPH
- ☐ IAS = 158kt
  FF = 11.5 GPH
- ☐ IAS = 150 kt
  FF = 12.3 GPH

95 (For this questions use attachment or CAP697 SEP1 Fig. 2.2 Table 2.2.3)

For planning a VFR flight, the following data are given:

Flight time with planning "overhead-overhead" = 2h 43min
Pressure Altitude = 6.500 ft
Temperature = ISA-20
Power setting = 2300 RPM
Taxi Fuel = 2 USG
Additional time for climb = 7 min,
Additional time for approach and landing = 10 min
The reserve fuel has to be 30% of trip fuel.

Determine the minimum block fuel: (2,00 P.)

Siehe Anlage 21

- ☐ 47.3 USG
- ☑ 50.4 USG
- ☐ 43.8 USG
- ☐ 39.2 USG

96 (For this questions use attachment or CAP697 SEP1 Fig. 2.2 Table 2.2.3)

For planning a VFR flight, the following data are given:

Flight time with planning "overhead-overhead" = 2h 42min
Pressure Altitude = 7.500 ft
Temperature = ISA
Power setting = 2300 RPM
Taxi Fuel = 2 USG
Additional time for climb = 8 min,
Additional time for approach and landing = 10 min
The reserve fuel has to be 30% of trip fuel.

Determine the minimum block fuel: (2,00 P.)

Siehe Anlage 21

☐ 51.8 USG
☐ 37.7 USG
☐ 46.4 USG
☑ 48.4 USG

97 Given the following data for a VFR flight:

Trip fuel = 70 US gallons
Contingency fuel = 5% of trip fuel
Alternate and final reserve fuel = 20 US gallons
Usable fuel at take-off = 95 US gallons
After half of the distance you read that you have consumed 40 US gallons.
Assume that fuel flow remains unchanged.

Which statement is correct? (2,00 P.)

☐ Upon landing 15.0 US gallons will remain in addition to alternate and final reserve fuel.
☐ Upon landing 5.0 US gallons will remain in addition to alternate and final reserve fuel.

☐ Upon landing, a total of 40.0 US gallons will remain.
☑ The remaining fuel is insufficient for a landing at destination with alternate and final reserve fuel remaining.

98 Given the following data for a VFR flight:

Trip fuel = 70 US gallons
Contingency fuel = 5% of trip fuel.
Alternate and final reserve fuel = 20 US gallons
Usable fuel at take-off = 90 US gallons
After half of the distance you read that you have consumed 30 US gallons.
Assume that fuel flow remains unchanged.

Which statement is correct? (2,00 P.)

- ☐ The remaining fuel is insufficient for a landing at destination with alternate and final reserve fuel remaining.
- ☐ Upon landing 30.0 US gallons will remain in addition to alternate and final reserve fuel.
- ☑ Upon landing 10.0 US gallons will remain in addition to alternate and final reserve fuel.
- ☐ Upon landing a total of 10.0 US gallons will remain.

99 (For this question, please use annex PFP-061)

According ICAO, what symbol indicates a group of unlighted obstacles? (2,00 P.)

Siehe Anlage 22

- ☑ C
- ☐ B
- ☐ A
- ☐ D

100 (For this question, please use annex PFP-062)

According ICAO, what symbol indicates a civil airport (not international airport) with paved runway? (2,00 P.)

Siehe Anlage 23

- ☐ D
- ☑ A
- ☐ B
- ☐ C

101 (For this question, please use annex PFP-063)

According ICAO, what symbol indicates a general spot elevation? (2,00 P.)

Siehe Anlage 24

- ☐ B
- ☑ C
- ☐ A
- ☐ D

102 Wie beeinflusst die Lufttemperatur die Leistung eines Kolbenmotors? (1,00 P.)

- ☐ Geringere Temperatur entspricht höherer Luftdichte, dies führt zu geringerer Motorleistung
- ☑ Höhere Temperatur entspricht geringerer Luftdichte, dies führt zu geringerer Motorleistung
- ☐ Höhere Temperatur entspricht höherer Luftdichte, dies führt zu höherer Motorleistung
- ☐ Geringere Temperatur entspricht geringerer Luftdichte, dies führt zu höherer Motorleistung

Anlage 1

PFP-052e

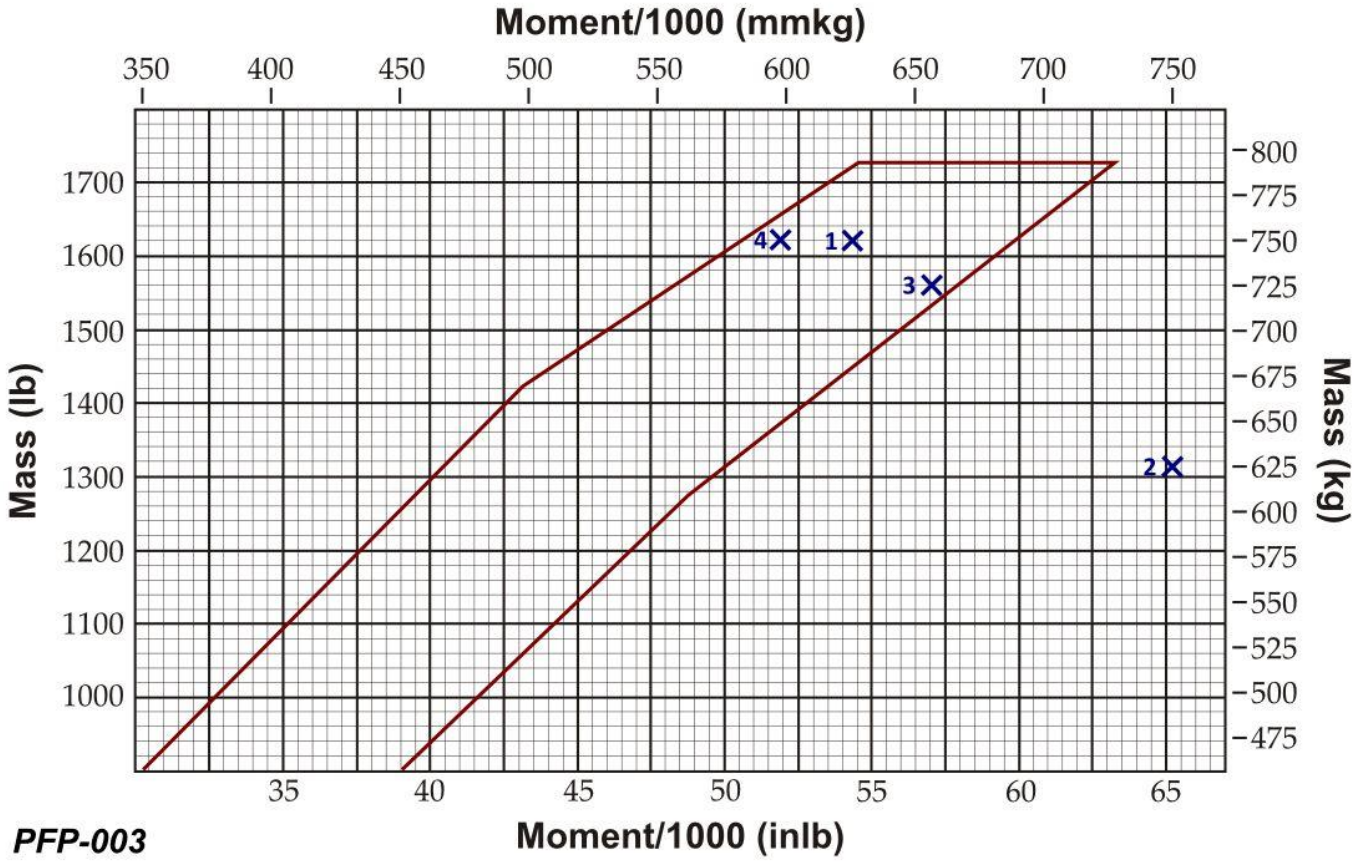
ITEM	MASS	ARM
Basic Empty Mass	3.156 lb	135,33 in
Front Seats	320 lb	135,50 in
Rear Seats	340 lb	177,00 in
Baggage	80 lb	248,23 in
Fuel	321,5 lb	150,31 in

Anlage 2

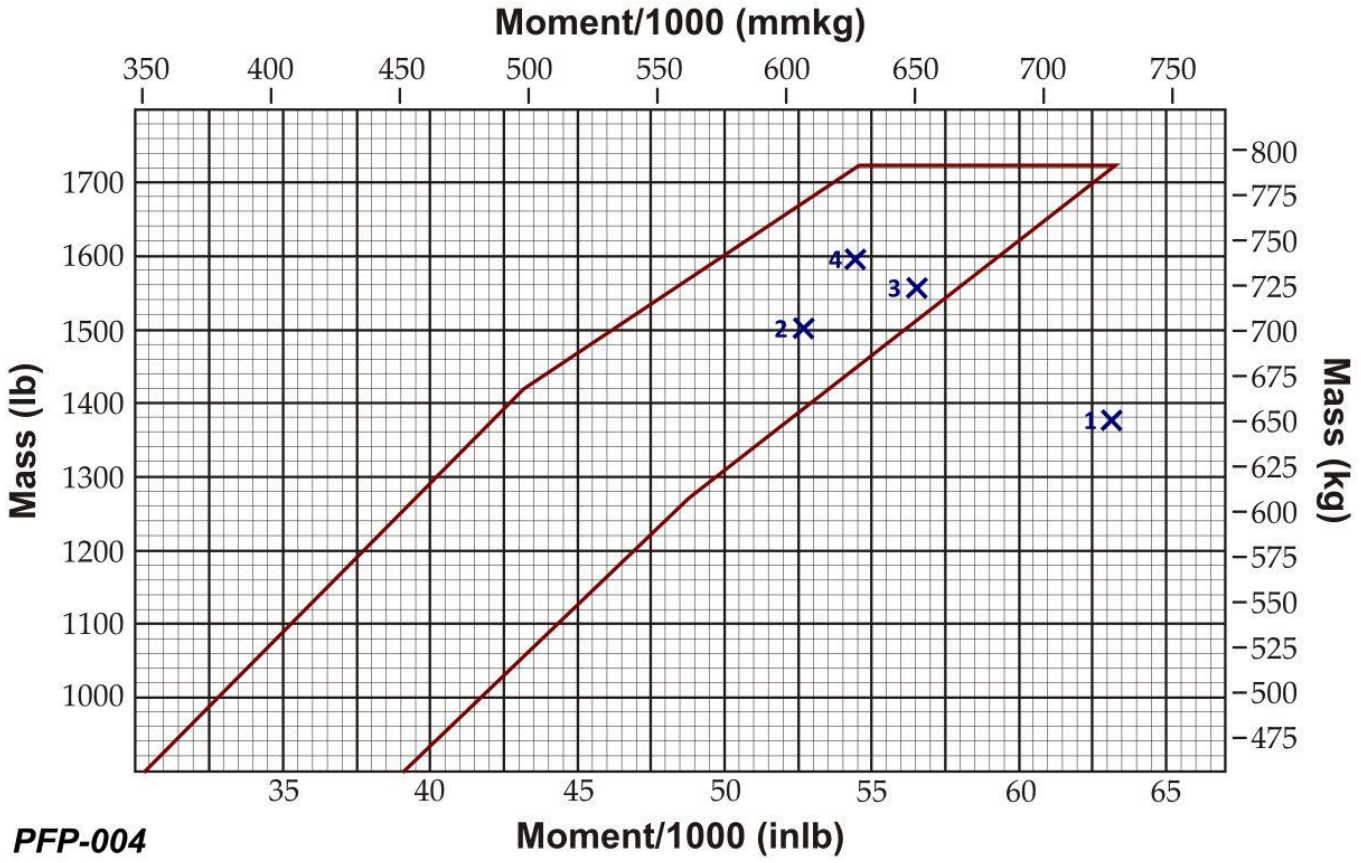
PFP-053e

ITEM	MASS	ARM
Basic Empty Mass	560 kg	0,35 m
Pilot and Passenger	150 kg	0,4 m
Baggage	15 kg	0,65 m
Fuel	60 l	0,45 m

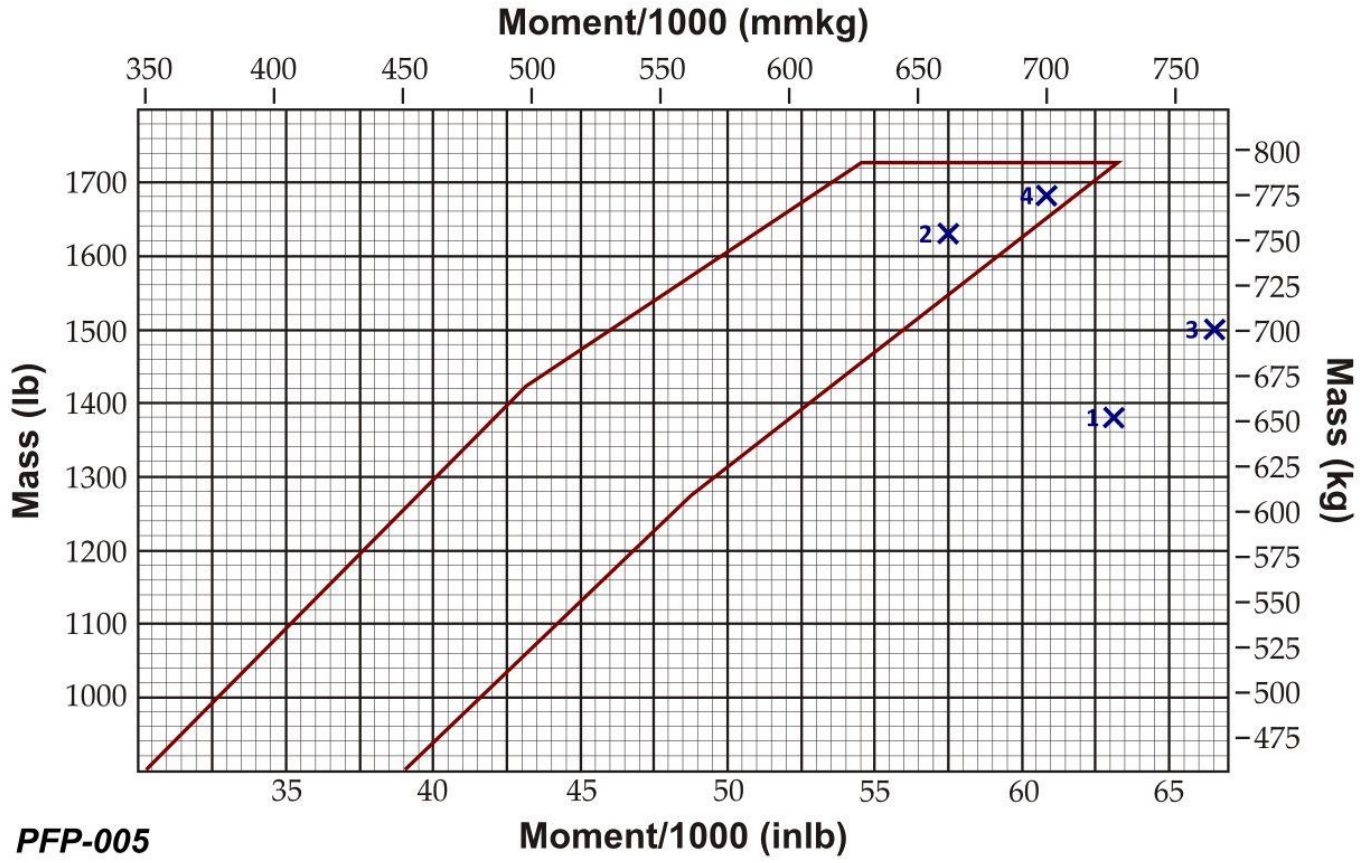
Anlage 3


Moment/1000 (mmkg)
350
400
450
500
550
600
650
700
750
Mass (lb)
1700
1600
1500
1400
1300
1200
1100
1000
Mass (kg)
800
775
750
725
700
675
650
625
600
575
550
525
500
475
4
1
3
2
35
40
45
50
55
60
65
Moment/1000 (inlb)
PFP-003

Anlage 4


Moment/1000 (mmkg)
350
400
450
500
550
600
650
700
750
1700
1600
1500
1400
1300
1200
1100
1000
Mass (lb)
800
775
750
725
700
675
650
625
600
575
550
525
500
475
Mass (kg)
4
3
2
1
35
40
45
50
55
60
65
Moment/1000 (inlb)
PFP-004

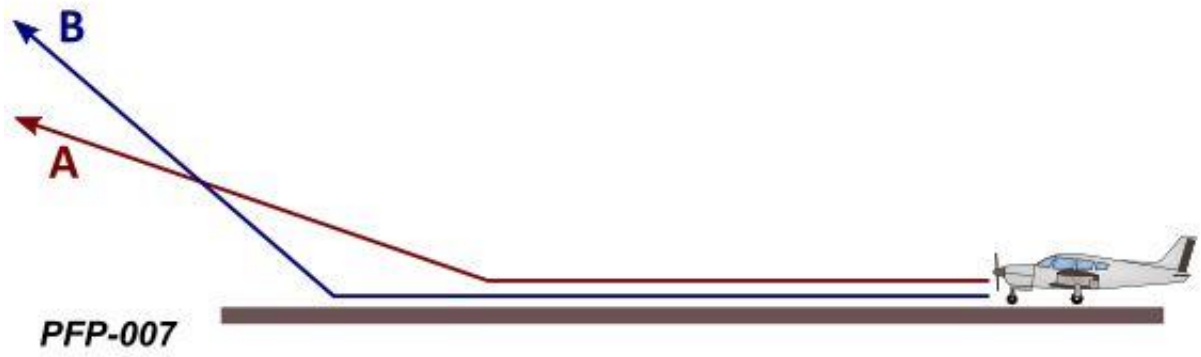
Anlage 5


Moment/1000 (mmkg)
350
400
450
500
550
600
650
700
750
Mass (lb)
1700
1600
1500
1400
1300
1200
1100
1000
Mass (kg)
800
775
750
725
700
675
650
625
600
575
550
525
500
475
1
2
3
4
35
40
45
50
55
60
65
Moment/1000 (inlb)
PFP-005

Anlage 6

Date	Entry No.		Description of part or modification	Changes of Weight						Actual		
				Addition (+)			Subtraction (-)			Empty Weight		
	IN	OUT		Weight [kg] ([lbs])	Arm [m ([in.]])	Moment [kgm] ([in.lbs])	Weight [kg] ([lbs])	Arm [m] ([in.])	Moment [kgm] ([in.lbs])	Weight [kg] ([lbs])	Arm [m] ([in.])	Moment [kgm] ([in.lbs])
2010	25.10.		GPS	5 kg	1,3 m	6,5 kgm				512 kg	285,39 m	146119 kgm
2010		10.11.	ADF				6 kg	1,1 m	6,6 kgm	506 kg	284,29 m	143850 kgm
2011		04.03.	Left aft seat				12 kg	4,8 m	57,6 kgm	494 kg	279,49 m	138068 kgm
2011	06.11.		HSI	4 kg	1,1 m	4,4 kgm				498 kg	280,59 m	139733 kgm
PFP-006												

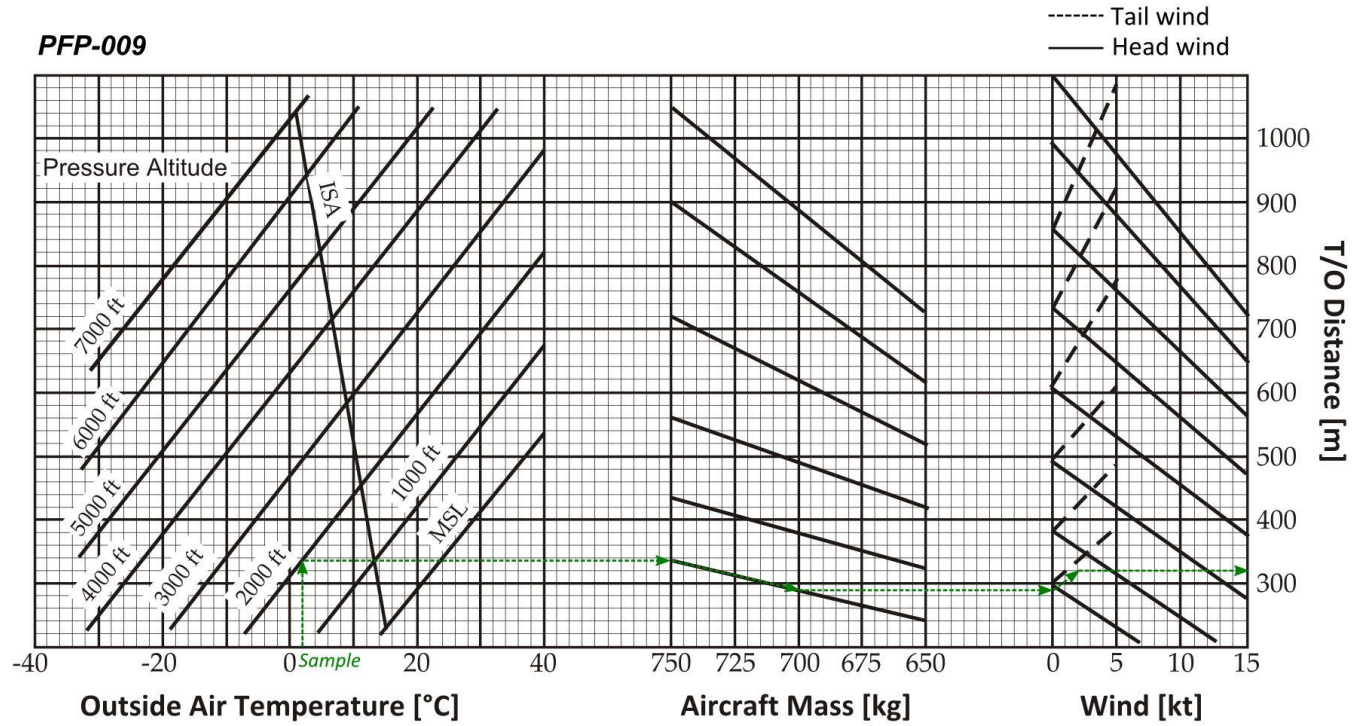
Anlage 7



Anlage 8

PFP-008

Anlage 9


PFP-009
Tail wind
Head wind
Pressure Altitude
ISA
7000 ft
6000 ft
5000 ft
4000 ft
3000 ft
2000 ft
1000 ft
MSL
Sample
1000
900
800
700
600
500
400
300
T/O Distance [m]
-40
-20
0
20
40
750
725
700
675
650
0
5
10
15
Outside Air Temperature [°C]
Aircraft Mass [kg]
Wind [kt]

Anlage 10

PFP-012

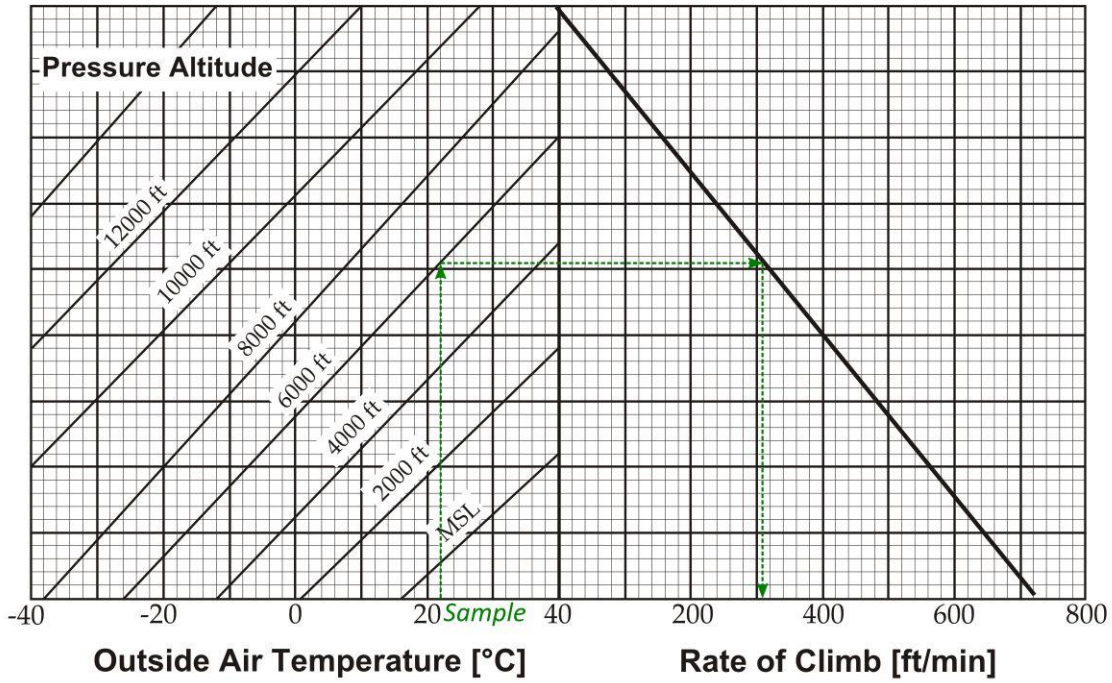
Performance

Aircraft mass: 785 kg

Pressure Altitude [ft]	RPM	20°C below ISA			ISA			20°C above ISA		
		BHP [%]	TAS [kt]	FF [l/h]	BHP [%]	TAS [kt]	FF [l/h]	BHP [%]	TAS [kt]	FF [l/h]
2000	2500	73	110	25,1	70	108	24,0	67	107	21,9
	2400	69	103	22,8	65	102	21,7	62	102	19,5
	2300	62	97	20,5	59	95	19,7	56	94	18,4
	2200	54	90	18,3	51	88	17,4	48	86	16,7
	2100	48	85	16,9	45	84	15,6	41	84	14,9
4000	2500	70	109	24,1	68	106	22,1	66	105	21,5
	2400	66	100	21,4	63	102	19,6	61	100	19,3
	2300	58	94	19,5	56	95	18,4	55	93	18,1
	2200	51	89	17,6	47	85	16,7	43	82	16,2
	2100	46	84	15,5	41	83	15,1	38	79	14,6
6000	2600	70	110	23,9	67	105	22,5	66	103	21,0
	2500	64	98	20,5	61	97	19,6	60	96	19,1
	2400	56	92	18,7	55	91	18,3	54	90	18,1
	2300	48	87	16,9	46	85	16,5	44	81	15,9
	2200	44	83	15,1	40	80	15,0	39	79	14,5

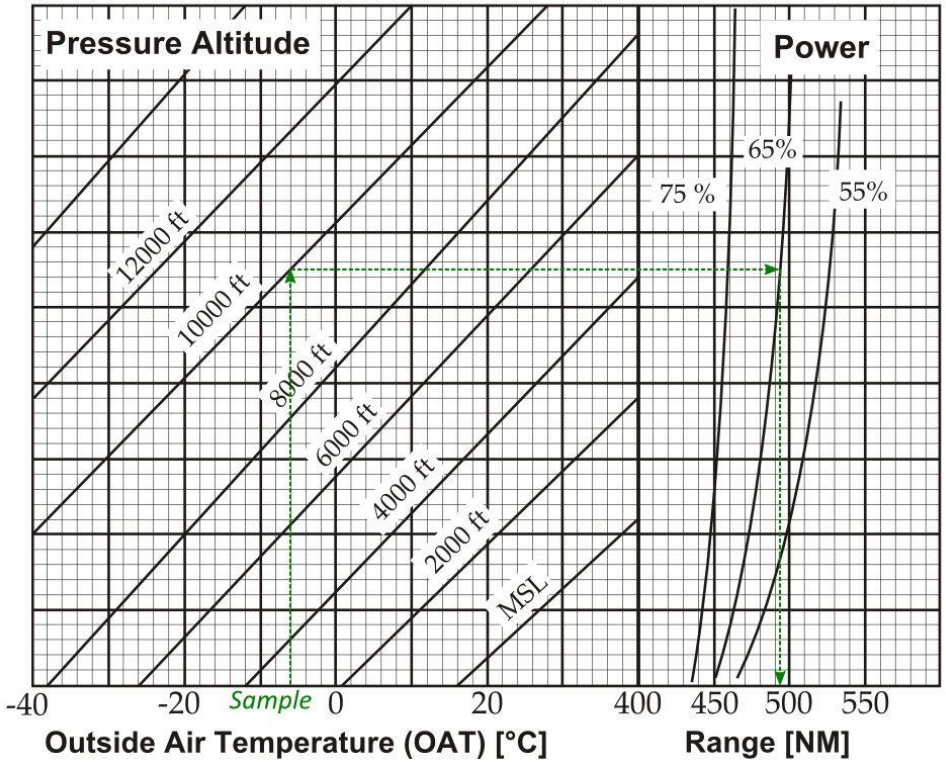
Anlage 11

PFP-011



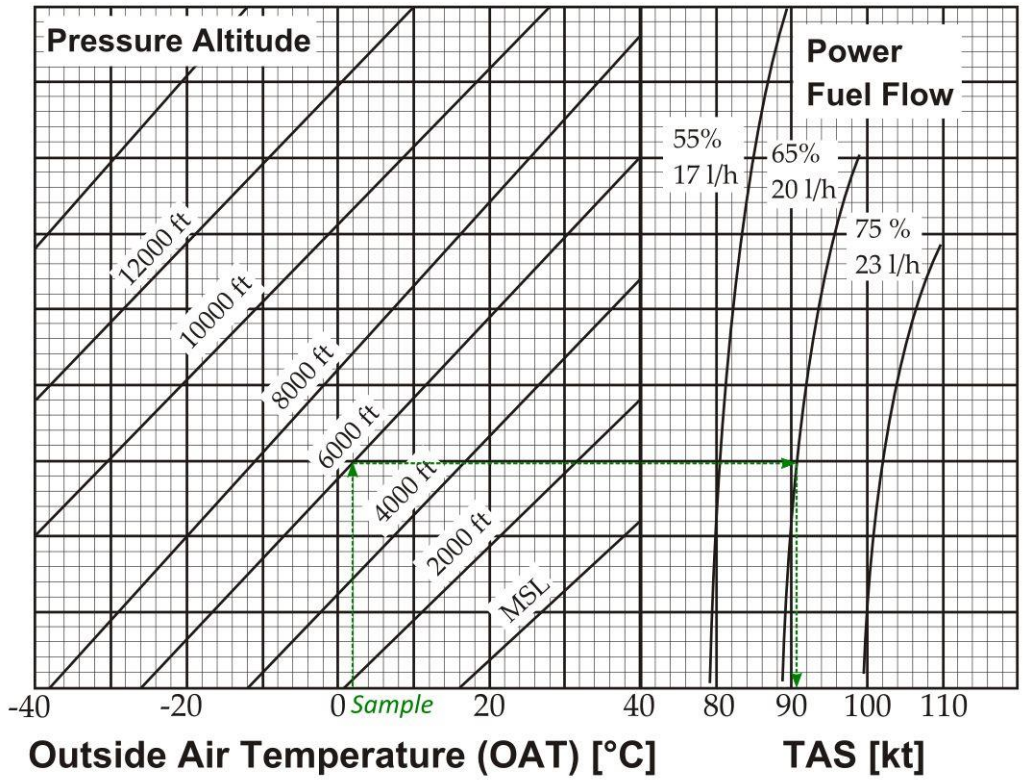
Anlage 12

PFP-013



Anlage 13

PFP-014

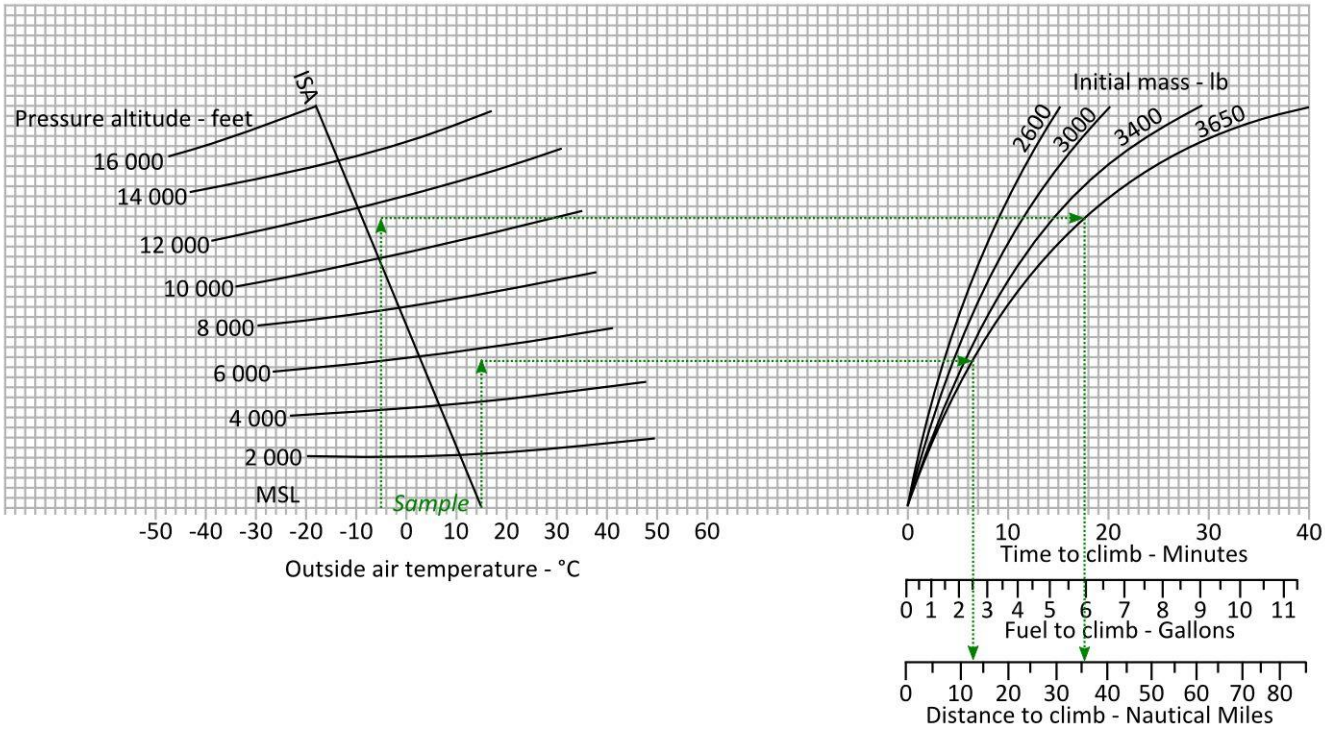


Anlage 14

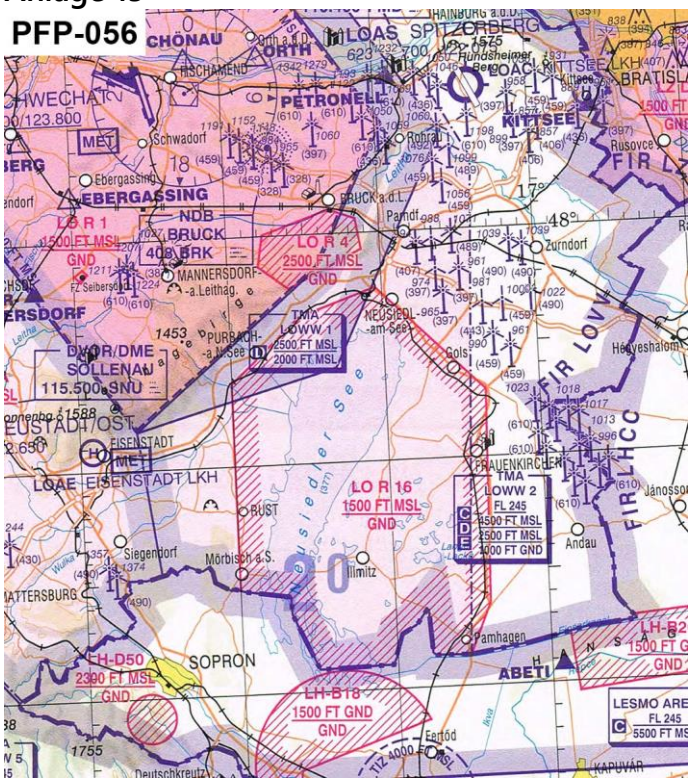
PFP-023

Conditions:
POWER: Full throttle, 2700 RPM
MIXTURE: Full rich
WING FLAPS: Up
COWL FLAPS: As required
CLIMB SPEED: 110 kt all masses

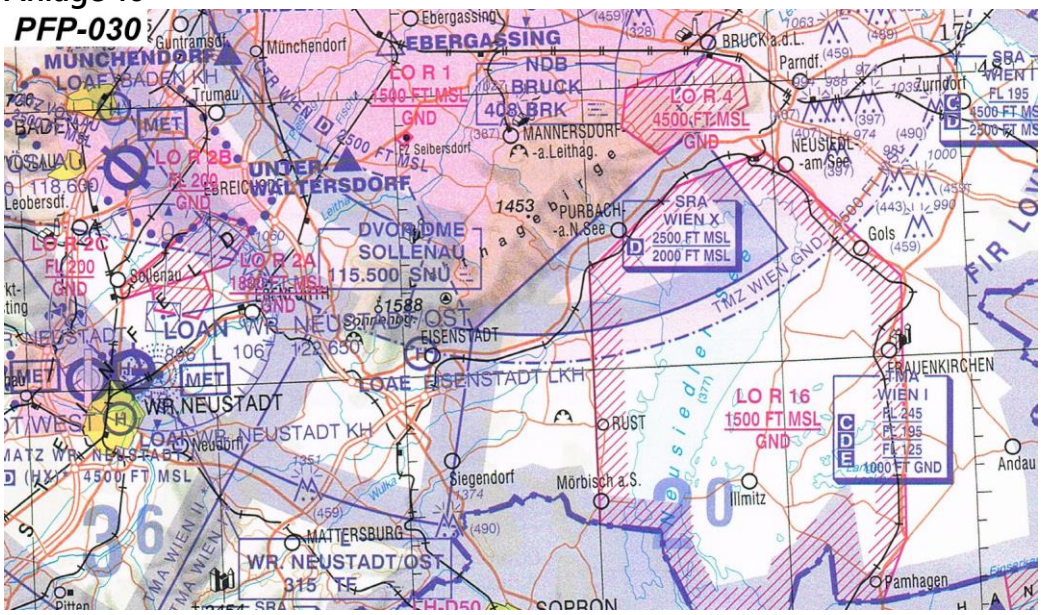
TIME, FUEL AND DISTANCE TO CLIMB



Anlage 15


PFP-056
CHÖNAU
LOAS
SPITZERBERG
PETRONELL
KITTSEE
BRATISL
Schwadorf
Rohrau
Rusovce
FIR L
EBERGASSING
NDB
BRUCK
BRK
LO R 1
1500 FT MSL
GND
LO R 4
2500 FT MSL
GND
MANNERSDORF
-a.Leithag.
Pamdf
Zurndorf
TMA
LOWW 1
2500 FT MSL
2000 FT MSL
NEUSIEDL
-am-See
Gols
Hegyeshalom
FIR LOVV
DVOR/DME
SOLLENAU
115.500 SNU
PURBACH
-a.L.See
EISENSTADT
MIL
LOAE EISENSTADT LKH
RUST
LO R 16
1500 FT MSL
GND
TMA
LOWW 2
FL 245
2500 FT MSL
3000 FT GND
FRAUENKIRCHEN
FIR LHCC
Andau
Siegendorf
Mörbisch a.S.
Illmitz
Neusiedler See
Pamhagen
LH-R2
1500 FT G
GND
EH-D50
2300 FT MSL
GND
SOPRON
ABETI
LH-R18
1500 FT GND
GND
Fertőd
LESMO ARE
FL 245
5500 FT MS
KAPUVÁR
Deutschkreutz

Anlage 16


PFP-030
EBERGASSING
NDB
BRUCK
408 BRK
LO R 1
1500 FT MSL
GND
LO R 4
4500 FT MSL
GND
MÜNCHENDORF
LOAE BADEN KH
LO R 2B
LO R 2C
LO R 2A
UNTER-
WALTERSDORF
DVOR/DME
SOLLENAU
115.500 SNU
LOAN WR NEUSTADT
LOAE EISENSTADT LKH
WR NEUSTADT
LOAR WR NEUSTADT KH
WR NEUSTADT/OST
315 TE
MATTERSBURG
SRA
WIEN X
2500 FT MSL
2000 FT MSL
LO R 16
1500 FT MSL
GND
WIEN I
FL 245
FL 195
FL 125
1000 FT GND
TMZ WIEN GND
FIR LOWW
Neusiedler See
RUST
Mörbisch a.S.
Illmitz
Siegendorf
EISENSTADT
FRAUENKIRCHEN
PURBACH
-a.N.See
NEUSIEDL
-am See
Gols
Parndf.
Zurndorf
BRUCK a.d.L.
MANNERSDORF
-a.Leithag.
Ebergassing
Guntramsdf.
Münchendorf
Trumau
Leobersdf.
Sollenau
Neudörfl
Pamhagen
Andau
SOPRON

Anlage 17

PFP-026

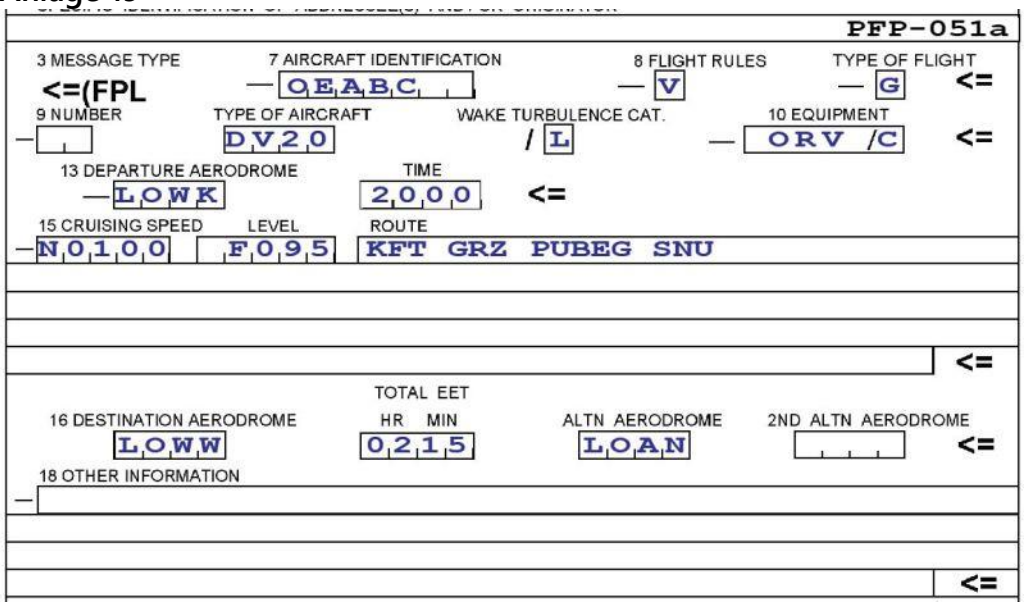
B1066/11 NOTAMR B0680/11
Q)
LOVV/QMRCM/IV/NBO/A/000/999/4656N01426E005
E) THRESHHOLD RWY17 DISPLACED 207M INWARDS
DUE TO HIGH TREES 300M N OF RWY 17.
LANDING DISTANCE AVAILABLE (LDA) 500M.
TAKE-OFF RUN AVAILABLE (TORA) RWY 17/35
AND LANDING DISTANCE AVAILABLE (LDA)
RWY 35 707M.
MARKINGS ARE INSTALLED AT BOTH EDGES OF THE
RUNWAY ACCORDING ZFV.

Anlage 18

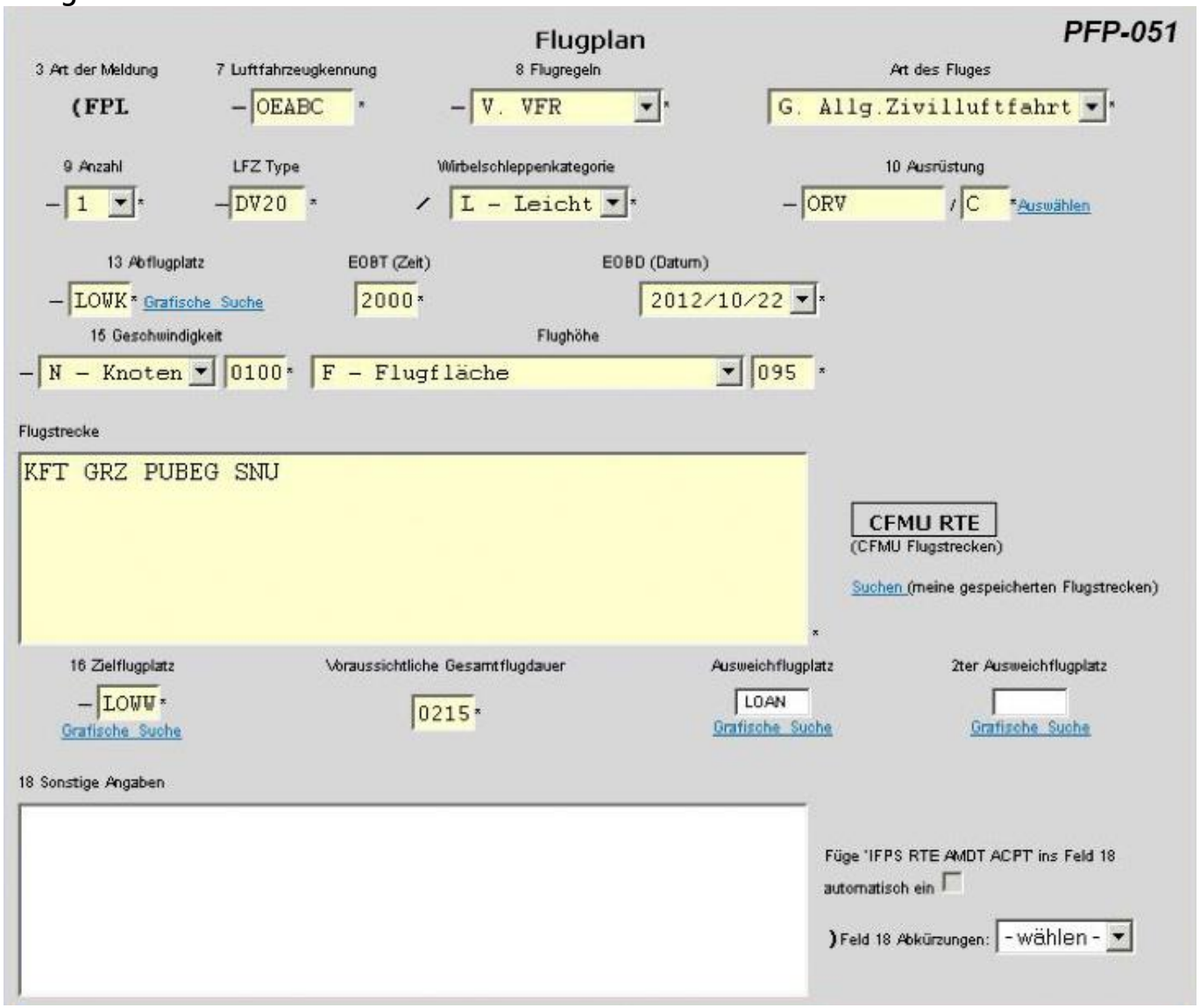
PFP-024

A4604/11 NOTAMN
Q)
EDWW/QROLP/IV/NBO/W/000/095/5155N01037E004
A) EDWW
B) 1111180800 C) 1111181200
E) OVERFLYING PROHIBITED FOR ALL TRAFFIC RADIUS
3.35NM CENTERED AROUND 515436N 0103725E DUE
TO DEMOLITION OF EXPLOSIVES AT ECKERTHAL,
(25NM S BRAUNSCHWEIG NDB BRU).
F) GND
G) 9500 FT AMSL

Anlage 19


PFP-051a
3 MESSAGE TYPE
<=(FPL
7 AIRCRAFT IDENTIFICATION
OEABC
8 FLIGHT RULES
V
TYPE OF FLIGHT
G
<=
9 NUMBER
TYPE OF AIRCRAFT
DV20
WAKE TURBULENCE CAT.
/ L
10 EQUIPMENT
ORV /C
<=
13 DEPARTURE AERODROME
LOWK
TIME
2000
<=
15 CRUISING SPEED
LEVEL
ROUTE
N0100
F095
KFT GRZ PUBEG SNU
<=
TOTAL EET
16 DESTINATION AERODROME
HR MIN
ALTN AERODROME
2ND ALTN AERODROME
LOWW
0215
LOAN
<=
18 OTHER INFORMATION
<=

Anlage 20


Flugplan
PFP-051
3 Art der Meldung
(FPL
7 Luftfahrzeugkennung
OEABC
8 Flugregeln
V. VFR
Art des Fluges
G. Allg.Zivilluftfahrt
9 Anzahl
1
LFZ Type
DV20
Wirbelschleppenkategorie
L - Leicht
10 Ausrüstung
ORV
C
Auswählen
13 Abflugplatz
LOWK
Grafische Suche
EOBT (Zeit)
2000
EOBD (Datum)
2012/10/22
15 Geschwindigkeit
N - Knoten
0100
Flughöhe
F - Flugfläche
095
Flugstrecke
KFT GRZ PUBEG SNU
CFMU RTE
(CFMU Flugstrecken)
Suchen (meine gespeicherten Flugstrecken)
16 Zielflugplatz
LOWW
Grafische Suche
Voraussichtliche Gesamtflugdauer
0215
Ausweichflugplatz
LOAN
Grafische Suche
2ter Ausweichflugplatz
Grafische Suche
18 Sonstige Angaben
Füge 'IFPS RTE AMDT ACPT' ins Feld 18 automatisch ein
) Feld 18 Abkürzungen:
- wählen -

Anlage 21

Table 2.2.3 **23.0 in. Hg (or full throttle) @ 2,300 rpm**
Off-peak EGT Cruise lean mixture @ cruise weight 3,400 lb

ISA Dev.	Press. Alt.	IOAT		Man. Press.	Fuel Flow		Airspeed	
°C	Feet	°C	°F	In. Hg	PPH	GPH	KIAS	KTAS
-20	0	-3	26	23.0	67.6	11.3	152	144
	2,000	-7	20	23.0	69.7	11.6	152	149
	4,000	-11	13	23.0	72.1	12.0	153	154
	6,000	-15	6	23.0	74.4	12.4	153	158
	8,000	-18	-1	22.4	73.8	12.3	150	160
	10,000	-23	-9	20.7	68.4	11.4	143	157
	12,000	-27	-16	19.2	63.8	10.6	135	153
	14,000	-31	-23	17.8	60.0	10.0	127	148
	16,000	-35	-31	16.4	56.3	9.4	117	141
0	0	17	62	23.0	65.4	10.9	147	145
	2,000	13	56	23.0	67.4	11.2	147	149
	4,000	9	49	23.0	69.4	11.6	148	154
	6,000	5	42	23.0	71.7	12.0	148	159
	8,000	2	35	22.4	71.1	11.9	145	160
	10,000	-3	27	20.7	66.2	11.0	137	157
	12,000	-7	20	19.2	61.8	10.3	129	152
	14,000	-11	13	17.8	58.5	9.8	120	146
	16,000	-15	5	16.4	55.3	9.2	109	137
+20	0	37	98	23.0	63.2	10.5	142	145
	2,000	33	92	23.0	65.1	10.9	143	149
	4,000	29	85	23.0	67.1	11.2	143	154
	6,000	25	78	23.0	69.0	11.5	142	158
	8,000	22	71	22.4	68.5	11.4	140	160
	10,000	17	63	20.7	64.0	10.7	132	156
	12,000	13	56	19.2	60.0	10.0	123	151
	14,000	9	48	17.8	57.1	9.5	113	142
	16,000	-	-	-	-	-	-	-

Figure 2.2 Recommended Cruise Power Settings (continued)

NOTE 1: Full-throttle manifold pressure settings are approximate.

NOTE 2: Shaded areas represent operation with full throttle.

NOTE 3: Fuel flows are to be used for flight planning. Lean

Bildschirmfoto

Anlage 22

A 

B 

C 

D 

PFP-061

Anlage 23

A 

B 

C 

D 

PFP-062

Anlage 24