

Part-FCL Question Bank

PPL(A)

*Acc. (EU) 1178/2011
and
AMC FCL.115, .120, 210, .215*

(Excerpt)

70 – Flight Performance and Planning (Austria)

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1 A flight plan has been filed 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.
- Immediately after take-off.
- At deviation from expected off-block time by more than 15 min.
- When landing is assured.

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.)**

- The flight manager on duty.
- Local office for aerial supervision.
- Aeronautical Information Service (AIS).
- The police department.

3 A cross-country flight is made using the ICAO 1 : 500.000 aeronautical chart. An overflight crosscheck shows that a distance of 6 cm in the chart has been passed within 9 minutes.**After how many more minutes, the overflight of another waypoint at a chart distance of additional 4 cm can be expected? (1,00 P.)**

- 12 min.
- 6 min.
- 18 min.
- 9 min.

4 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.

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

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

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

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

7 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.
- both stability and controllability of the aircraft.
- that the aircraft does not tip over on its tail while it is being loaded.
- that the aircraft does not stall.

8 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.)

- 1, 2, 3
- 2, 4
- 2, 3, 4
- 1, 2

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

- the total mass of the aeroplane ready for a specific type of operation including crew, navigation instruments and engine cowling.
- the total mass of an aeroplane ready for a specific type of operation including the required fuel and crew, but excluding traffic load.
- 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 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.

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

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

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

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

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

- $\text{kg} \times 2.205 = \text{lb}$.
- $\text{kg} \times 2 = \text{lb}$.
- $\text{kg} / 2.205 = \text{lb}$.
- $\text{kg} \times 0.454 = \text{lb}$.

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

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

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

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

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

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

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

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

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

- the distance from the datum to the position of a mass.
- 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 product of mass and balance arm.

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

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

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

- 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 point on the lateral 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.

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

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

21 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.
- point through which the force of gravity is said to act on a mass.
- point on the longitudinal axis of an aeroplane or its extension from which the centers of gravity of all masses are referenced.
- distance of a mass from the center of gravity.

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

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

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

- 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 datum line.
- the front C.G. limit and the rear C.G. limit.

24 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.
- documentation of the annual inspection.
- certificate of airworthiness.
- mass and balance section of the pilot's operating handbook of this particular aircraft.

25 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
- Drain all useable fuel
- Remove service equipment
- Remove the batteries

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

- Weight and balance
- Limitations
- Normal procedures
- Performance

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

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

Siehe Anlage 1

- 137.5 in.
- 145.7 in.
- 142 in.
- 147.5 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

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

- 142 lbs
- 142 kg
- 74 kg
- 74 lbs

29 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.)

- 94.11 in
- 97.39 in
- 96.57 in
- 96.45 in

30 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.)

- 36.3 cm
- 37.5 cm
- 37.2 cm
- 36.9 cm

- 31 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.)

- 25.2 cm
- 25.4 cm
- 24.6 cm
- 24.8 cm

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

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

Siehe Anlage 2

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

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

- 33 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

- 2
- 4
- 1
- 3

- 34 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

- 3
- 2
- 1
- 4

- 35 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

- 36 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

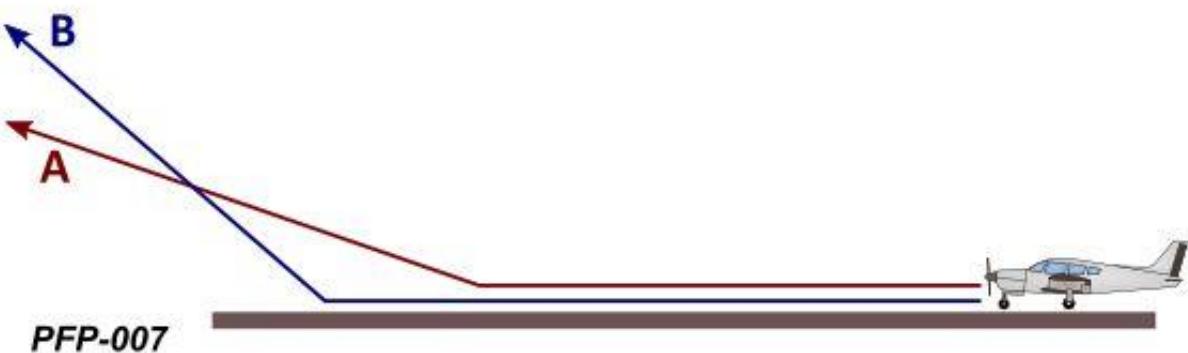
- 498 kg; 280.59 m
- 5 kg; 1.3 m
- 512 kg; 285.39 m
- 4 kg; 1.1 m

- 37 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 A has a higher tyre pressure than aircraft B
- Aircraft B has a higher tyre pressure than aircraft A
- Aircraft A has a higher flap setting than aircraft B
- Aircraft B has a higher flap setting than aircraft A



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

(1,00 P.)

- 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
- A higher flap setting decreases ground roll and increases lift-off speed and climb performance

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

- 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
- Tailwind aids the aircraft in overcoming the initial drag at the commencement of the take-off roll. The take-off distance will decrease

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

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

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

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

- flight into forecast icing conditions is prohibited. Should the aircraft enter an area of icing conditions inadvertently, the flight may be continued as long as visual meteorological conditions are maintained.
- 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 known or forecast icing conditions is prohibited. Should the aircraft enter an area of icing conditions inadvertently, it should be left without delay.
- flight into areas of precipitation is prohibited.

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

- that a given altitude is reached with minimum fuel consumption.
- 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.

44 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 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 travelled within the same time, expressed in degrees [°].

45 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.

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

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

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

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

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

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

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

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

Siehe Anlage 8

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

PFP-008



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

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

Siehe Anlage 8

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

PFP-008

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

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

Siehe Anlage 8

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

PFP-008

52 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
- Vx, the best rate of climb speed
- Vx, the best angle of climb speed
- Vy, the best rate of climb speed

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

- 5 kt tailwind.
- 9 kt headwind.
- 5 kt headwind.
- 9 kt tailwind.

54 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

- 310 m.
- 380 m.
- 450 m.
- 410 m.

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

56 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

- 630 m
- 900 m
- 320 m
- 480 m

57 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

- 790 m
- 820 m
- 720 m
- 880 m

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

59 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

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

60 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.
- 390 ft/min.
- 450 ft/min.
- 350 ft/min.

61 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
- 482 NM
- 444 NM
- 503 NM

62 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
- 500 NM
- 450 NM
- 480 NM

63 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**

- 88 kt.
- 100 kt.
- 92 kt.
- 96 kt.

64 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**

- 110 kt.
- 104 kt.
- 95 kt.
- 100 kt.

65 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**

- 300 ft/min
- 350 ft/min
- 200 ft/min
- 250 ft/min

66 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

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

67 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.
- 95,75 kt.
19.8 l/h.
- 95 kt.
19.6 l/h.
- 110 kt.
25.1 l/h.

68 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.
- 95 kt.
19.6 l/h.
- 100 kt.
19.3 l/h.
- 105 kt.
21.5 l/h.

69 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: 18.5 l.
TAS: 85 kt.
- Fuel flow: 17.5 l.
TAS: 83 kt.
- Fuel flow: 20 l.
TAS: 89 kt.

70 Calculate required time to climb to flight level (FL) 95 after a southeastbound departure from Mauterndorf (LOSM) with an initial mass of 3650 lbs.

**QNH in LOSM 1034 hPa
OAT in LOSM 20°C
OAT in FL 95 -5°C**

**See annex (PFP-022, PFP-023)
(1,00 P.)**

Siehe Anlagen 14, 15

- Time 8 min.
- Time 12,5 min.
- Time 15 min.
- Time 9,5 min.

71 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 15

- 100 kt
- 120 kt
- 90 kt
- 110 kt

72 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 15

- 1 GAL
- 3 GAL
- 2 GAL
- 6 GAL

73 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 15

- 16 NM
- 6 NM
- 3 NM
- 10 NM

74 Calculate the required distance to climb to flight level (FL) 95 after a departure from Mauterndorf (LOSM) with an initial mass of 3650 lbs.

QNH in LOSM 1034 hPa

OAT in LOSM 20°C

OAT in FL 95 -5°C

See annex (PFP-022, PFP-023) (1,00 P.)

Siehe Anlagen 14, 15

- Distance 17 NM.
- Distance 30 NM.
- Distance 19 NM.
- Distance 25 NM.

75 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 15

- 7 NM
- 6 NM
- 4 NM
- 10 NM

76 What is the meaning of the highlighted numbers on the chart?

See annex (PFP-016) (1,00 P.)

Siehe Anlage 16

- Lower limit of controlled airspace 134 ft above ground level
- Maximum elevation figure: 13.400 ft above mean sea level
- Minimum off route altitude for flights under instrument flight rules flight level 134
- Minimum safe altitude: 13.400 ft above mean sea level

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

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

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

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

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

80 On a VFR flight from Zell am See (LOWZ) direct to Mauterndorf (LOSM), which would be an adequate cruising level?

See annex (PFP-055) (1,00 P.)

Siehe Anlage 17

- FL 75.
- FL100.
- FL 105.
- FL 115.

81 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 065
- FL 060
- FL 050
- FL 055

82 The Maximum Elevation Firgure in the south of Zell am See (LOWZ) equals...

See annex (PFP-031) (1,00 P.)

Siehe Anlage 18

- 7.415 ft.
- 11.600 ft.
- 6.447 ft.
- 13.000 ft

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

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

Siehe Anlage 19

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

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

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

Siehe Anlage 20

- 4.500 ft MSL.
- 1.500 ft MSL.
- 1.500 ft AGL.
- 4.500 ft AGL.

85 On what frequency transmits DVOR/DME Tulln?

**See annex (NAV-012)
(1,00 P.)**

Siehe Anlage 21

- 111.400 MHz.
- 358 MHz.
- 358 KHz.
- 111.400 KHz.

86 On which frequency transmits the VOR/DME Villache?**See annex (PFP-036) (1,00 P.)****Siehe Anlage 22**

- 118.100 MHz.
- 112.900 MHz.
- 118.100 KHz.
- 112.900 KHz.

87 On what frequency transmits the NBD Klagenfurt?**See annex (PFP-021) (1,00 P.)****Siehe Anlage 23**

- 374 KHz.
- 113.100 KHz.
- 118.100 KHz.
- 405 KHz.

88 On which frequency transmits the DVOR/DME Salzburg?**See annex (NAV-008) (1,00 P.)****Siehe Anlage 24**

- 113.800 MHz.
- 113.300 MHz.
- 113.300 KHz.
- 118.800 KHz.

89 On which frequency transmits the DVOR/DME Linz?**See annex (PFP-043) (1,00 P.)****Siehe Anlage 25**

- 118.800 MHz.
- 116.600 KHz
- 327 KHz.
- 116.600 MHz.

90 On which frequency transmits the NDB Tulln?**See annex (NAV-012) (1,00 P.)****Siehe Anlage 21**

- 358 MHz.
- 111.400 KHz.
- 358 KHz.
- 111.400 MHz.

91 Which is the frequency of Wien flight information center (FIC) outside the Wien terminal area (TMA)?**See annex (PFP-020) (1,00 P.)****Siehe Anlage 26**

- 124,400 KHz
- 118,525 MHz
- 119,400 MHz
- 124,400 MHz

92 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.)**

- 4 L
- 3 L
- 2 L
- 5 L

93 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

- 94 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 27

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

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.

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

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

Siehe Anlage 28

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

PFP-024

A4604/11 NOTAMN

Q)

EDWW/QROL/P/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

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

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

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

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

Siehe Anlage 29

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

98 The specified speed in the ATS flight plan equals:

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

Siehe Anlage 30

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

99 Which statement is correct with regard to the given ATC flight plan?**See annex (PFP-047a) (1,00 P.)****Siehe Anlage 31**

- The border is expected to be overflowed after 28 minutes.
- Reporting point S will be overflowed in FL80.
- It is a domestic flight.
- The control zone will be left overhead SOPRON.

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

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

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

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

102 You plan a VFR flight from Friesach/Hirt (LOKH) to Klagenfurt (LOWK). Do you need to file an ATC flight plan? (1,00 P.)**Siehe Anlage 32**

- Yes.
- No.
- Only if Special VFR conditions are expected.
- Only for a Night VFR flight.

103 On a VFR flight from Mayerhofen bei Friesach (LOKM) to Zell am See (LOWZ), you overfly Mauterndorf (LOSM) four minutes later than estimated on your operational flight plan (OFP). To which conclusion does this lead? (1,00 P.)

- The wind prediction may not have been correct. A stronger tailwind than forecast will lead to around 5 minutes less flight time on the leg from LOSM to LOWZ. The fuel consumption will decrease accordingly.
- The aircraft flight manual was not correct about the cruise performance. The other data retrieved from the flight manual, such as take-off and landing performance, should be doubted, too.
- The departure time might have been noted incorrectly. As this is the most likely cause for the deviation from the calculated time overhead LOSM, there is nothing to worry about.
- The wind prediction may not have been correct. A stronger headwind than forecast will lead to around 5 minutes more flight time on the leg from LOSM to LOWZ. The fuel consumption will increase accordingly.

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

- slightly higher for maximum endurance.
- the same for maximum range.

- slightly lower for maximum range.
- significantly lower for maximum endurance.

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

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

106 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
- 15.6 min
- 59.4 min
- 20.0 min

107 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.)

- 40 kg
- 80 kg
- 20 kg
- 10 kg

108 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 = 34.3 USG/h
- FF = 42.9 USG/h
- FF = 25.7 USG/h

109 (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 33

- TAS = 145 kt
FF = 11.9 GPH
- TAS = 160 kt
FF = 11.9 GPH
- TAS = 145 kt
FF = 71.1 GPH
- TAS = 160 kt
FF = 12.3 GPH

110 (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 33

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

111 (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 33

- 47.3 USG
- 50.4 USG
- 43.8 USG
- 39.2 USG

112 (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 33

- 46.4 USG
- 48.4 USG
- 37.7 USG
- 51.8 USG

113 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, 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.
- Upon landing 5.0 US gallons will remain in addition to alternate and final reserve fuel.

114 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 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.
- Upon landing 30.0 US gallons will remain in addition to alternate and final reserve fuel.

115 (For this question, please use annex PFP-061)**According ICAO, what symbol indicates a group of unlighted obstacles? (2,00 P.)****Siehe Anlage 34**

- B
- A
- C
- D

116 (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 35**

- A
- C
- B
- D

117 (For this question, please use annex PFP-063)**According ICAO, what symbol indicates a general spot elevation? (2,00 P.)****Siehe Anlage 36**

- C
- A
- D
- B

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

- Höhere Temperatur entspricht geringerer Luftpumpe,
dies führt zu geringerer Motorleistung
- Geringere Temperatur entspricht geringerer Luftpumpe,
dies führt zu höherer Motorleistung
- Höhere Temperatur entspricht höherer Luftpumpe,
dies führt zu höherer Motorleistung
- Geringere Temperatur entspricht höherer Luftpumpe,
dies führt zu geringerer Motorleistung

Anlage 1

PFP-052e

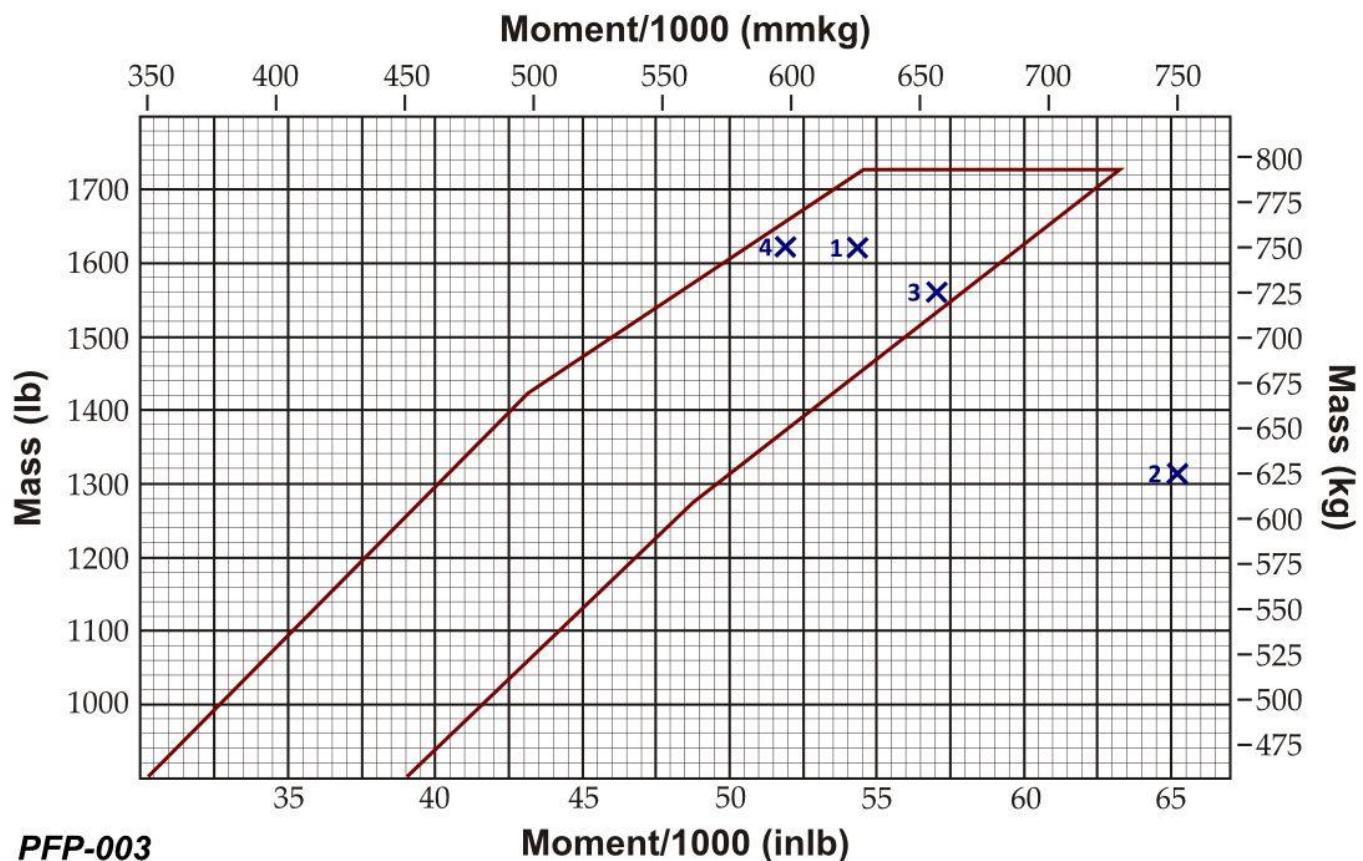
ITEM	MASS	ARM
Basic Empty Mass	3.156 lb	135,33 in
Front Seats	320 lb	135,50 in
Rear Seats	340 lb	177,00 in
Baggage	80 lb	248,23 in
Fuel	321,5 lb	150,31 in

Anlage 2

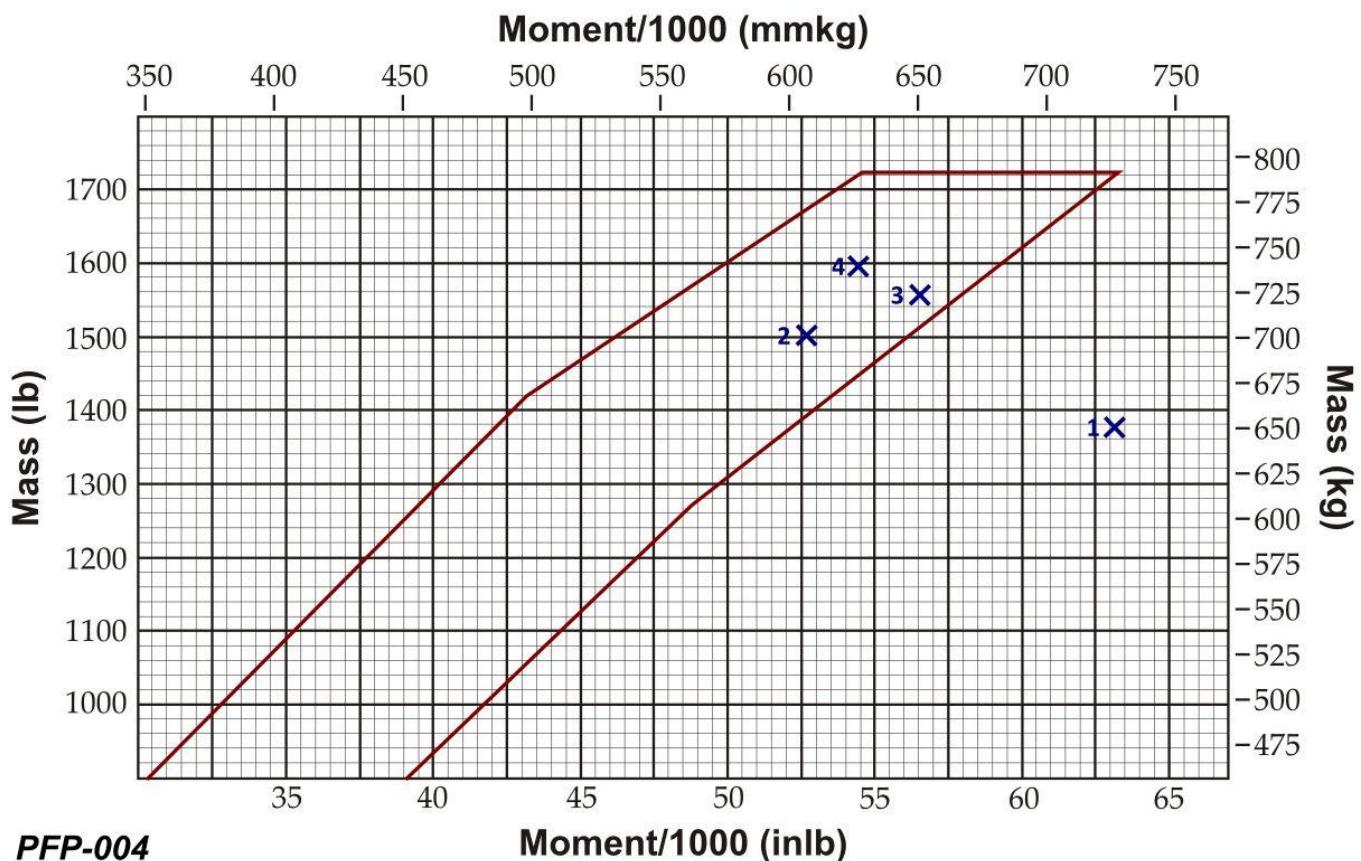
PFP-053e

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

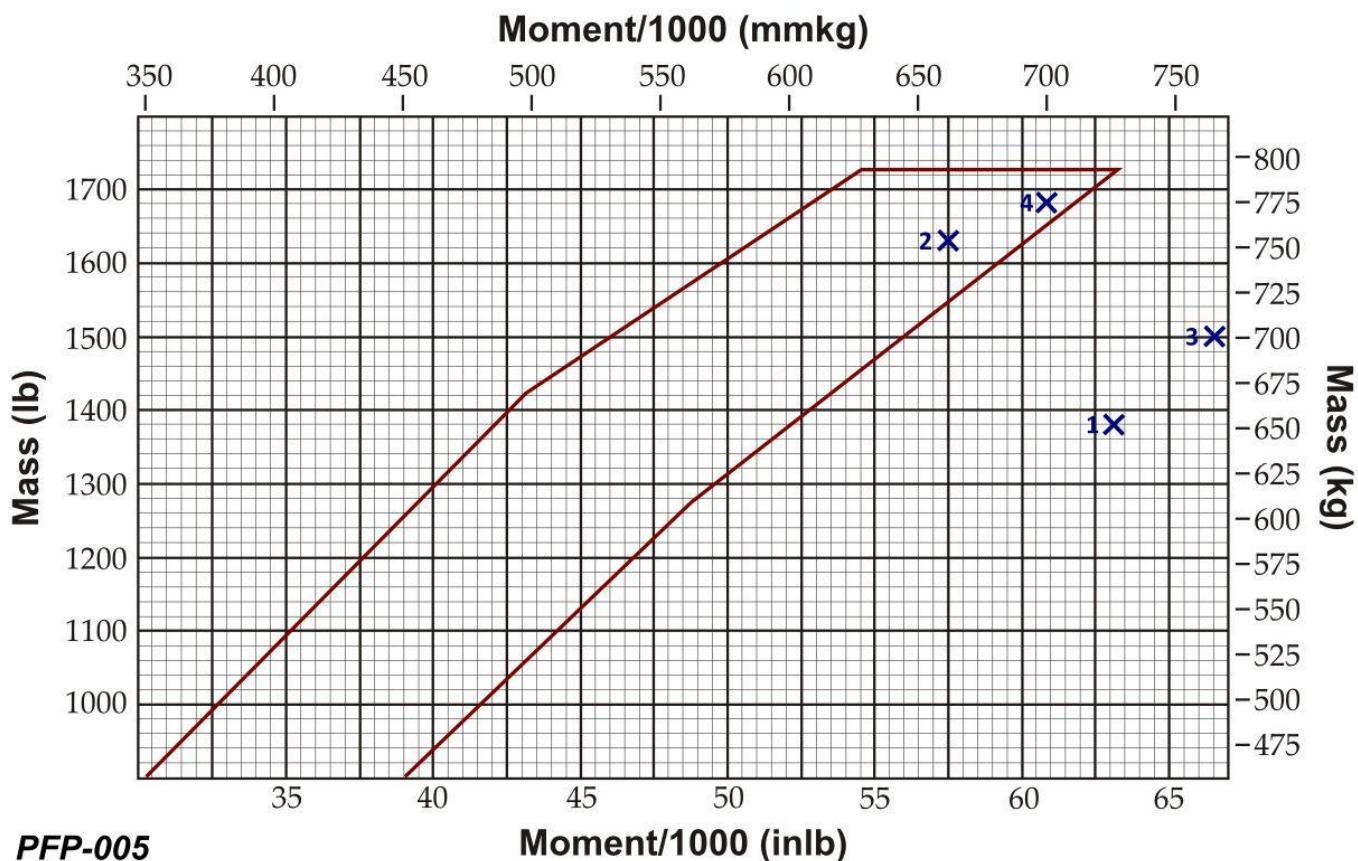
Anlage 3



Anlage 4

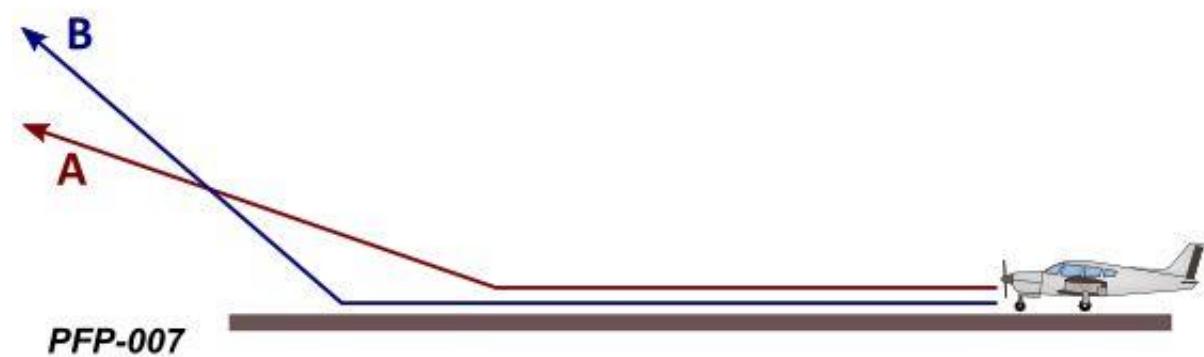


Anlage 5



Anlage 6

Anlage 7



PFP-007

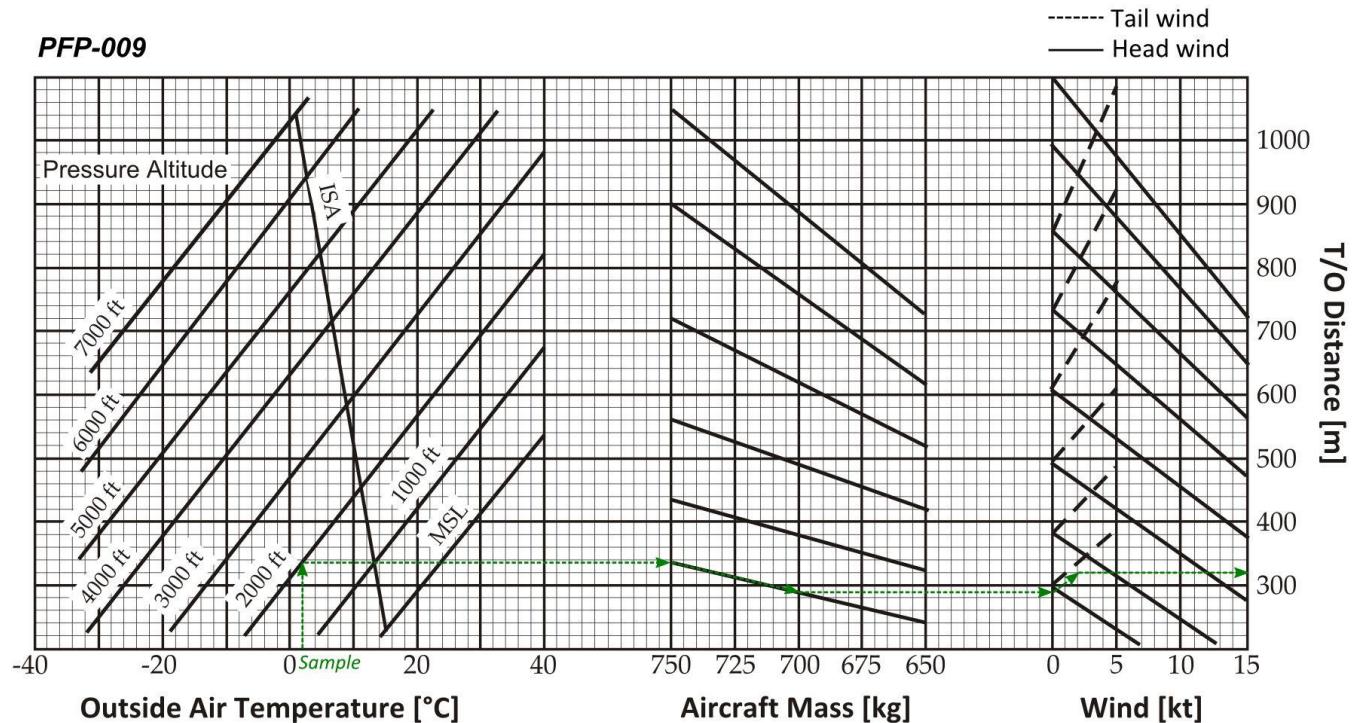
Anlage 8

PFP-008



Anlage 9

PFP-009



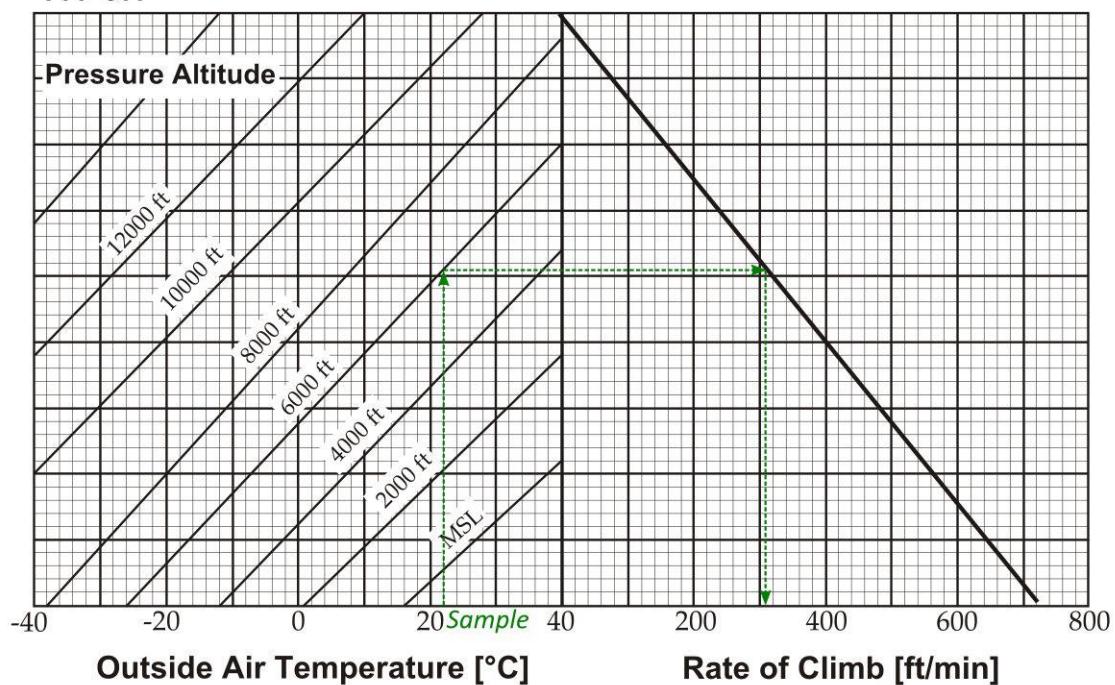
Anlage 10**PFP-012****Performance**

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

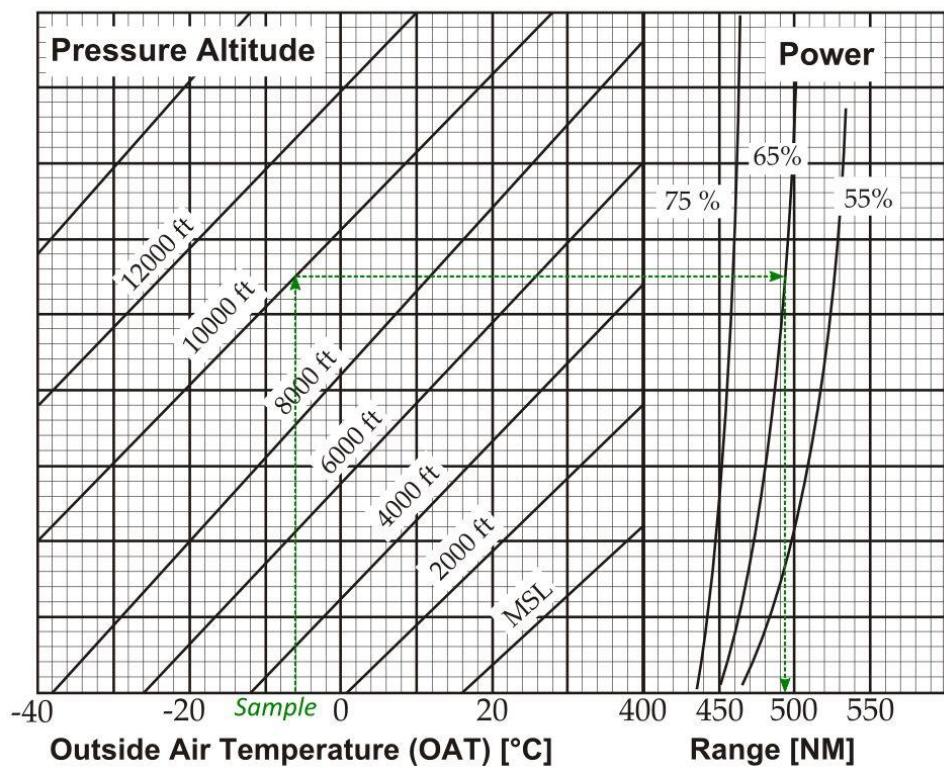
Anlage 11

PFP-011



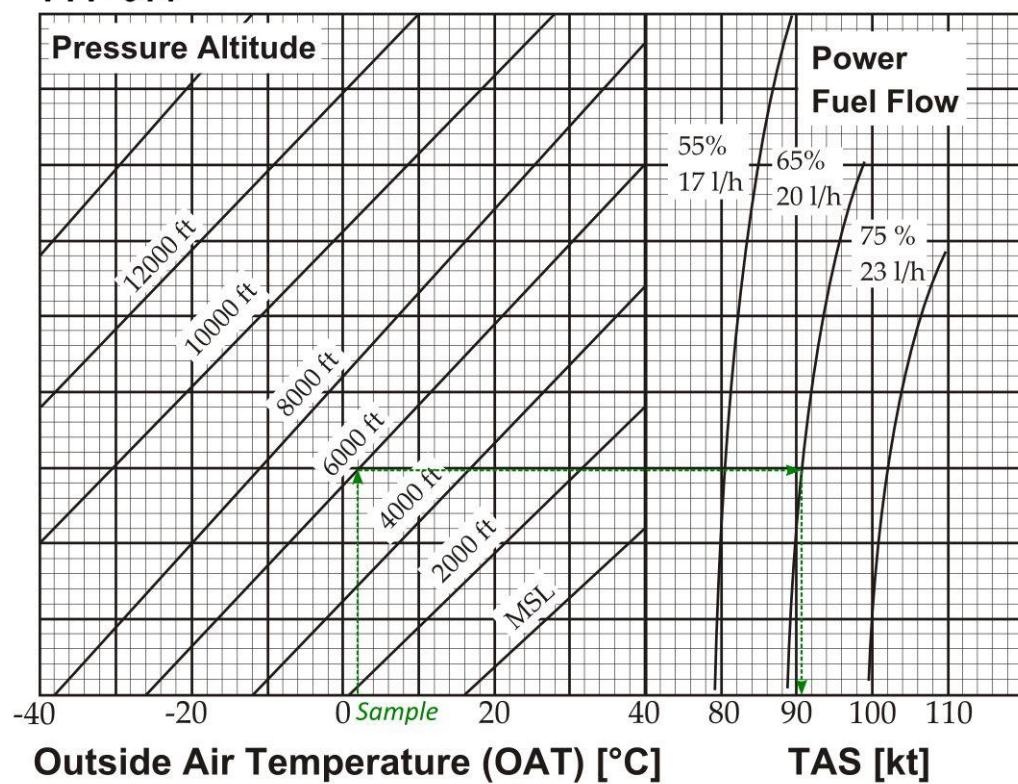
Anlage 12

PFP-013

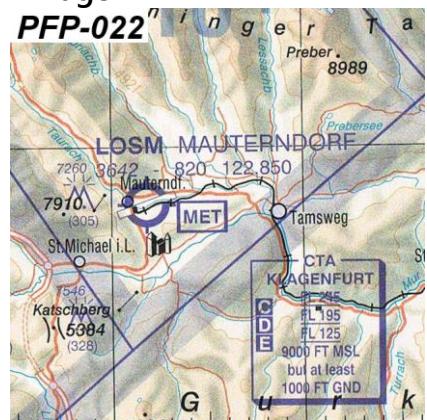


Anlage 13

PFP-014



Anlage 14



Anlage 15

Conditions:

POWER: Full throttle, 2700 RPM

PFP-023

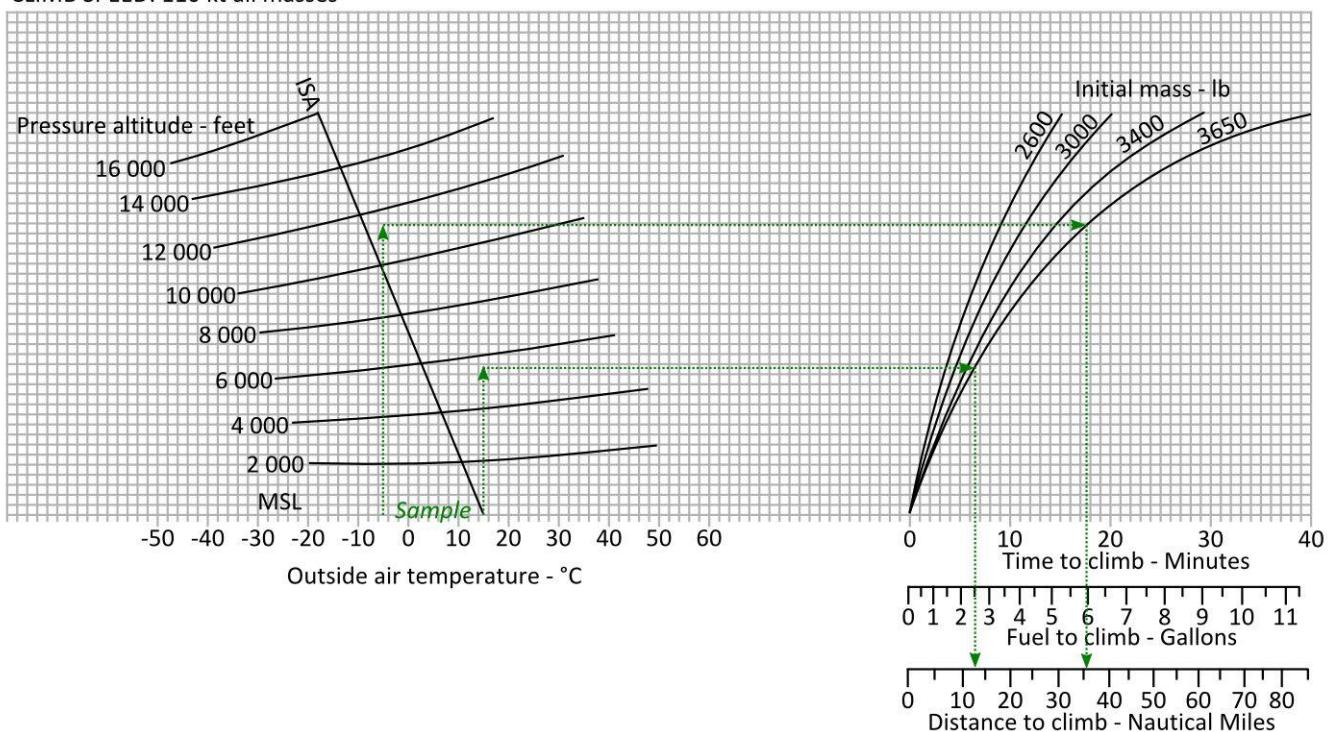
MIXTURE: Full rich

WING FLAPS: Up

TIME, FUEL AND DISTANCE TO CLIMB

COWL FLAPS: As required

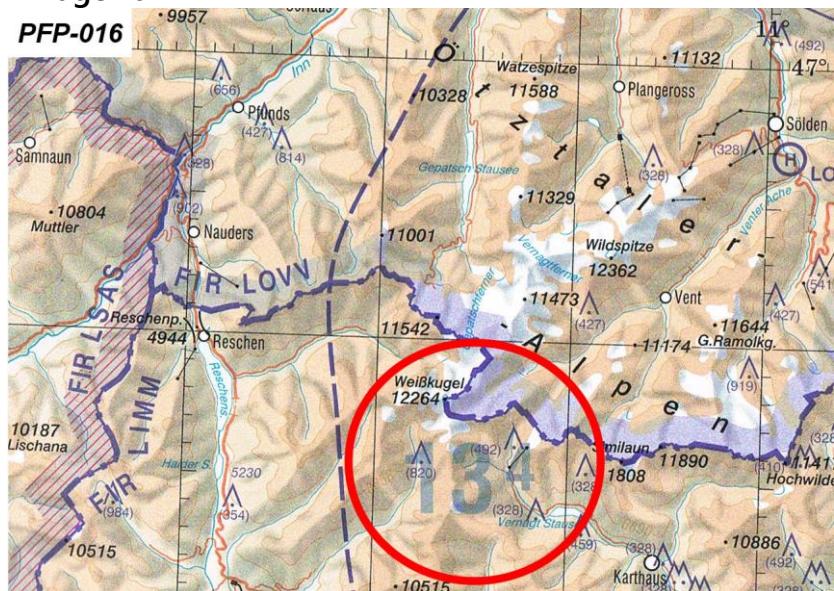
CLIMB SPEED: 110 kt all masses



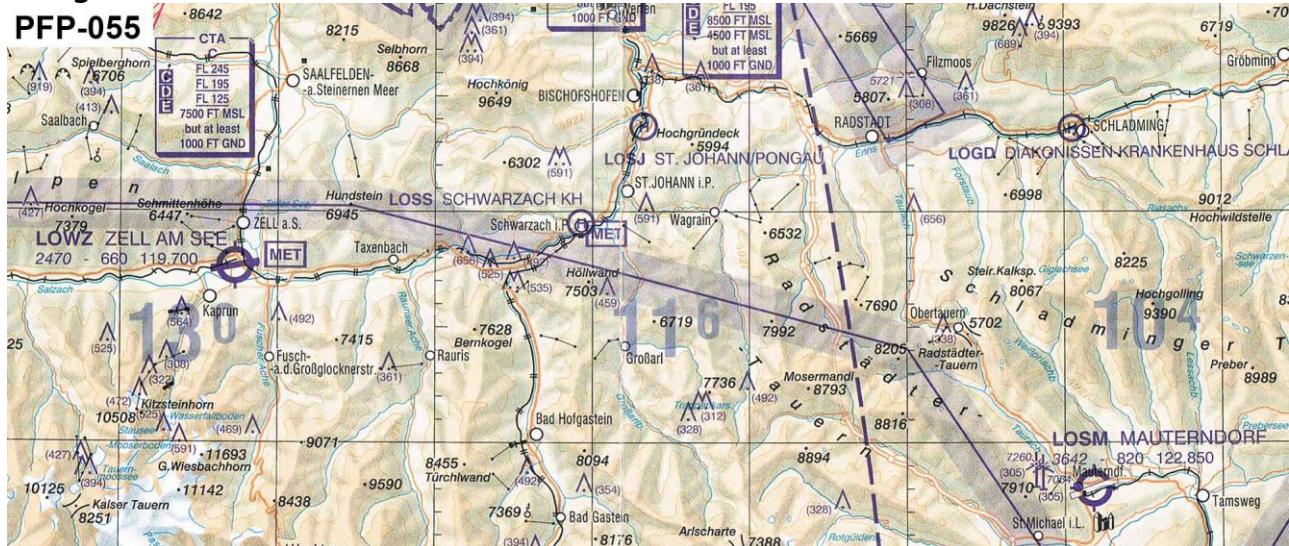
Anlagen zu den Aufgaben

Anlage 16

PFP-016

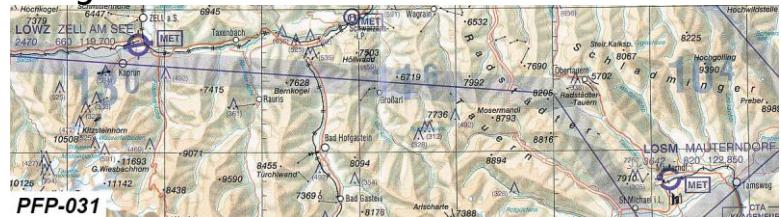


Anlage 17



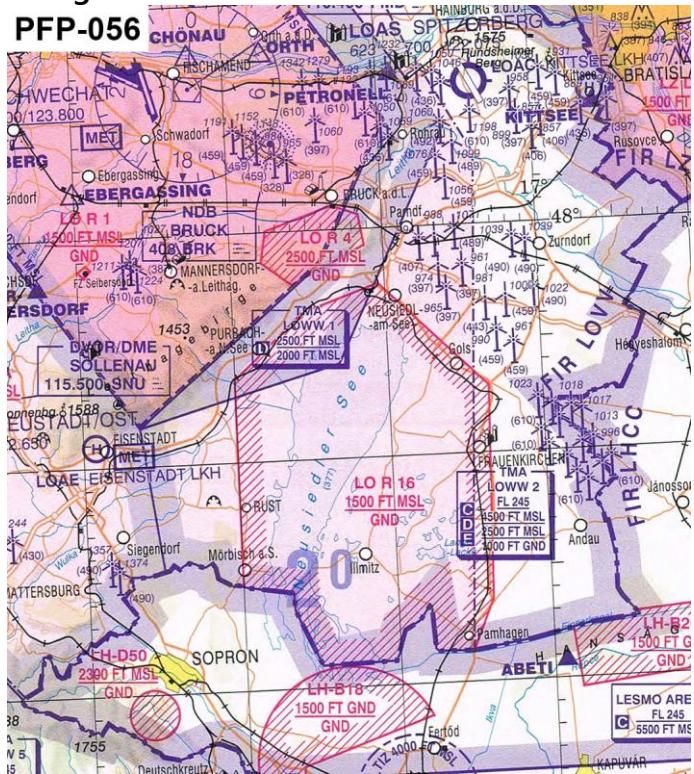
Anlagen zu den Aufgaben

Anlage 18

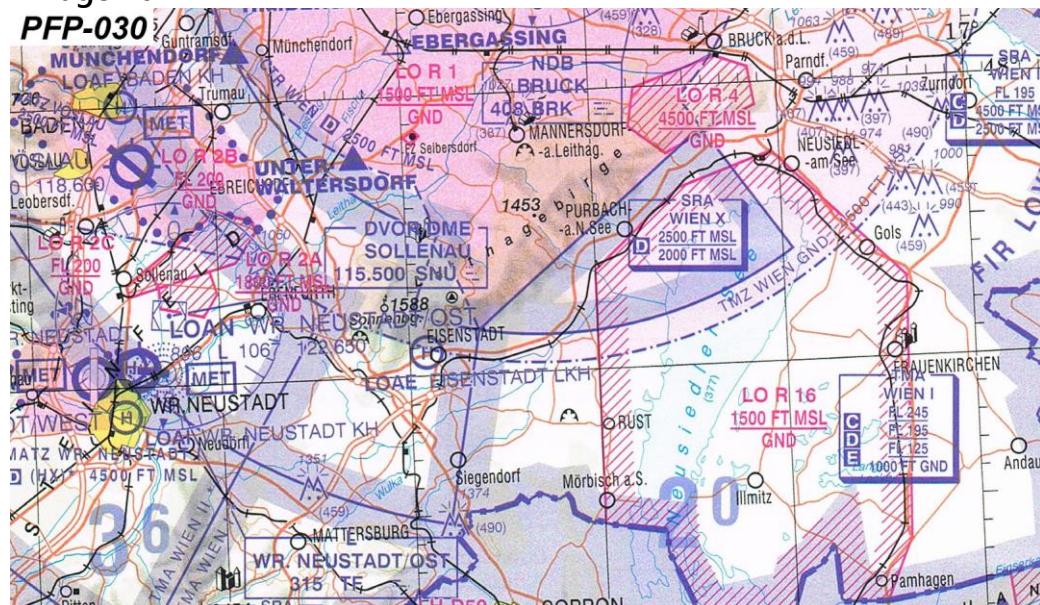


Anlage 19

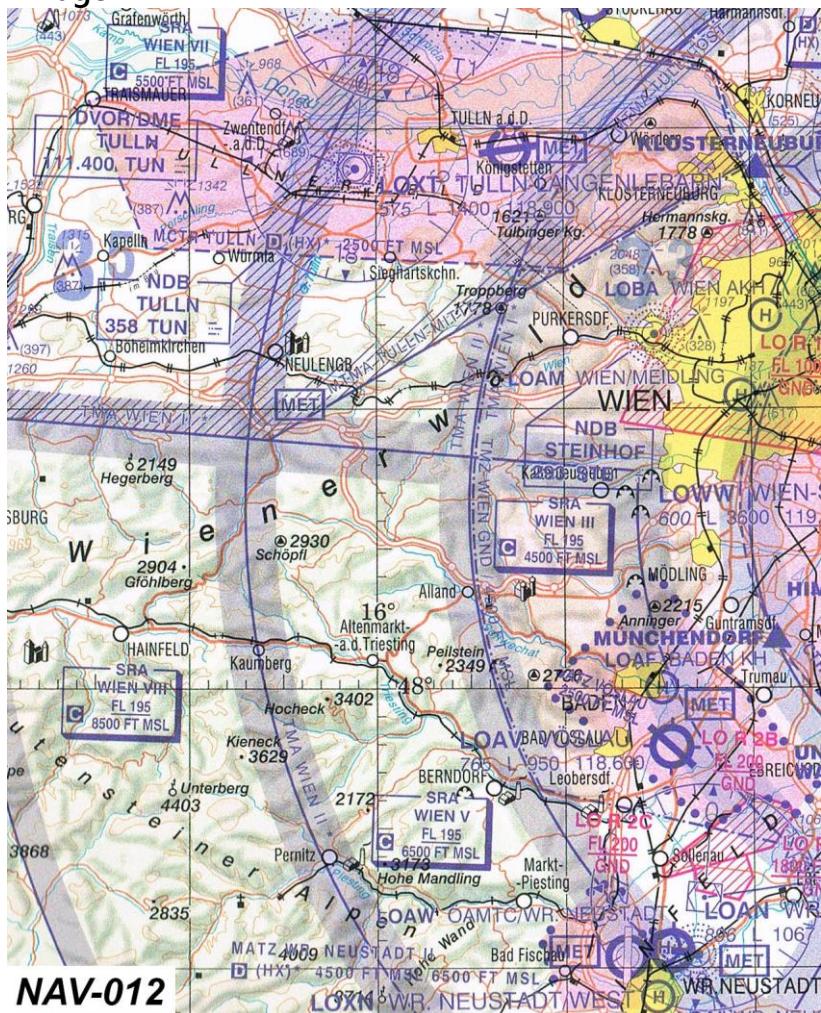
PFP-056



Anlage 20



Anlage 21



NAV-012

Anlage 22

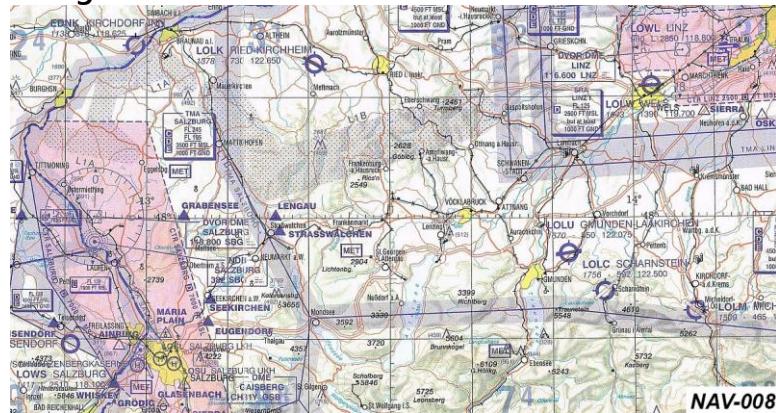


Anlage 23



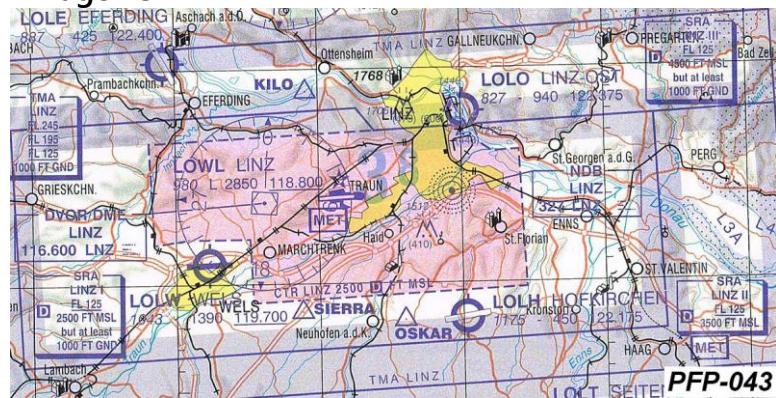
Anlagen zu den Aufgaben

Anlage 24



Anlagen zu den Aufgaben

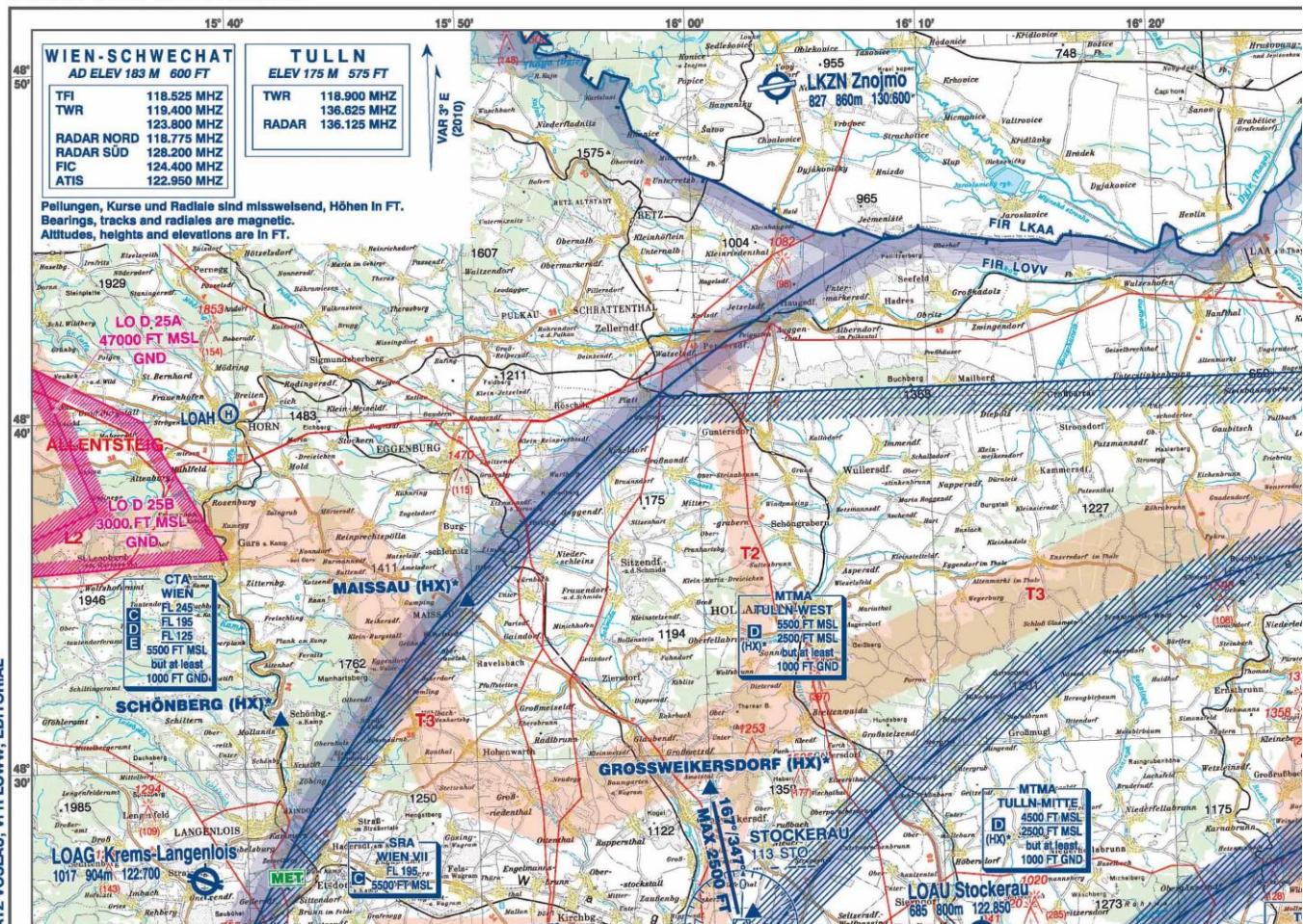
Anlage 25



Anlage 26

PFP-020

SICHTFLUGKARTE CHART FOR VFR FLIGHTS



Anlage 27

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 28

PFP-024

A4604/11 NOTAMN

Q)

EDWW/QROL/P/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 29

PFP-051a			
3 MESSAGE TYPE <=(FPL	7 AIRCRAFT IDENTIFICATION OE ABC	8 FLIGHT RULES V	TYPE OF FLIGHT G <=
9 NUMBER 1	TYPE OF AIRCRAFT DV20	WAKE TURBULENCE CAT. L	10 EQUIPMENT ORV /C <=
13 DEPARTURE AERODROME LOWK	TIME 2,0,0	<=	
15 CRUISING SPEED N,0,1,0,0	LEVEL F095	ROUTE KFT GRZ PUBEG SNU	
<=			
TOTAL EET			
16 DESTINATION AERODROME L,OWW	HR MIN 0,2,1,5	ALTN AERODROME LOAN	2ND ALTN AERODROME <=
18 OTHER INFORMATION 			
<=			

Anlage 30

PFP-051

Flugplan

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 / I - Leicht *	10 Ausrüstung - ORV / C *Auswählen
13 Abflugplatz - LOWK * Grafische Suche	EOBT (Zeit) 2000 *	EOBD (Datum) 2012/10/22 *	
16 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

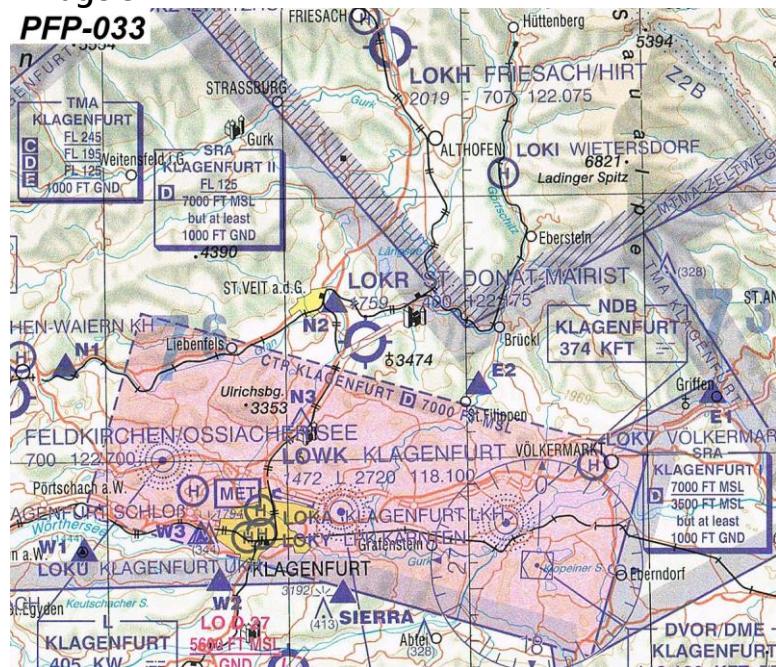
Füge 'IFPS RTE AMDT ACPT ins Feld 18 automatisch ein

) Feld 18 Abkürzungen: - wählen - ▾

Anlage 31

Anlage 32

PFP-033



Anlage 33

Table 2.2.3
Off-peak EGT **23.0 in. Hg (or full throttle) @ 2,300 rpm**
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
-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	17	62	23.0	65.4	10.9	147	145
0	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
	0	37	98	23.0	63.2	10.5	142	145
	2,000	33	92	23.0	65.1	10.9	143	149
+20	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 mixture fuel flows are shaded.

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Anlage 34

A 

B 

C 

D 

PFP-061

Anlage 35

- A 
- B 
- C 
- D 

PFP-062

Anlage 36

- A 300
- B (300)
- C · 1737
- D · 1737

PFP-063