

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

STUDENT NAME:

DATE AND TIME:

01. Regarding the type of cloud, precipitation is classified as...

- a) Light and heavy precipitation
- b) Rain and showers of rain
- c) Showers of snow and rain
- d) Prolonged rain and continuous rain

02. Which is the purpose of the altimeter subscale?

- a) To reference the altimeter reading to a predetermined level such as mean sea level, aerodrome level or pressure level 1013.25 hPa
- b) To adjust the altimeter reading for non-standard temperature
- c) To set the reference level for the altitude decoder of the transponder
- d) To correct the altimeter reading for system errors

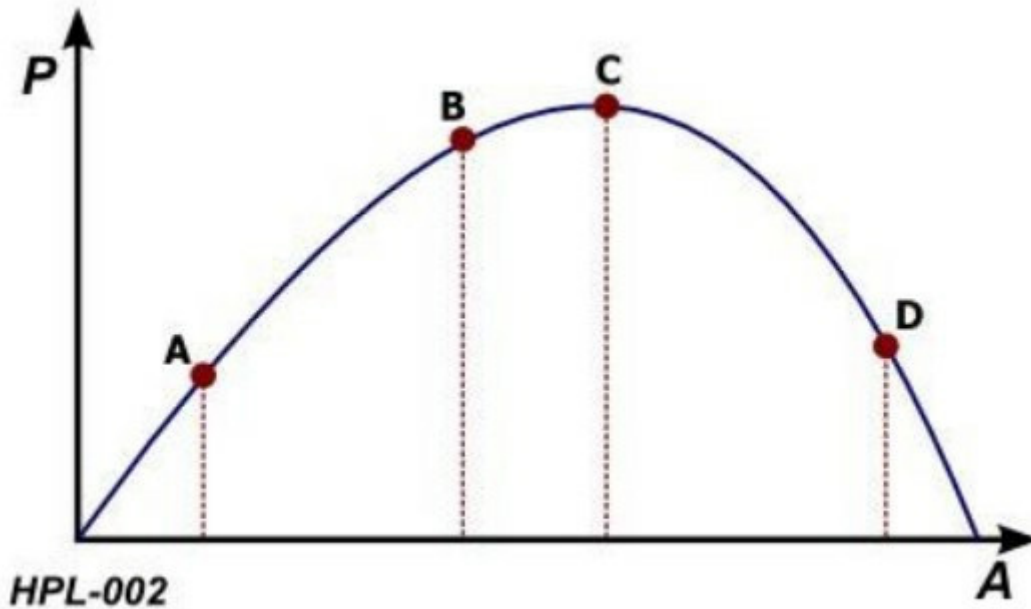
Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

03. The ideal level of arousal is at which point in the diagram? See figure (HPL-002) P = Performance A = Arousal / Stress



- a) Point A
- b) Point C
- c) Point D
- d) Point B

04. A pilot can contact FIS (flight information service)...

- a) Via internet
- b) Via radio communication
- c) By a personal visit
- d) Via telephone

05. Which of the following options are possible SSR-Transponder modes?

- a) B, R, S
- b) A, C, S
- c) A, C, R
- d) B, C, V

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

06. The majority of aviation accidents are caused by...

- a) Human failure
- b) Technical failure
- c) Geographical influences
- d) Meteorological influences

07. A risk factor for decompression sickness is...

- a) Scuba diving prior to flight
- b) 100 % oxygen after decompression
- c) Sports
- d) Smoking

Exam simulation

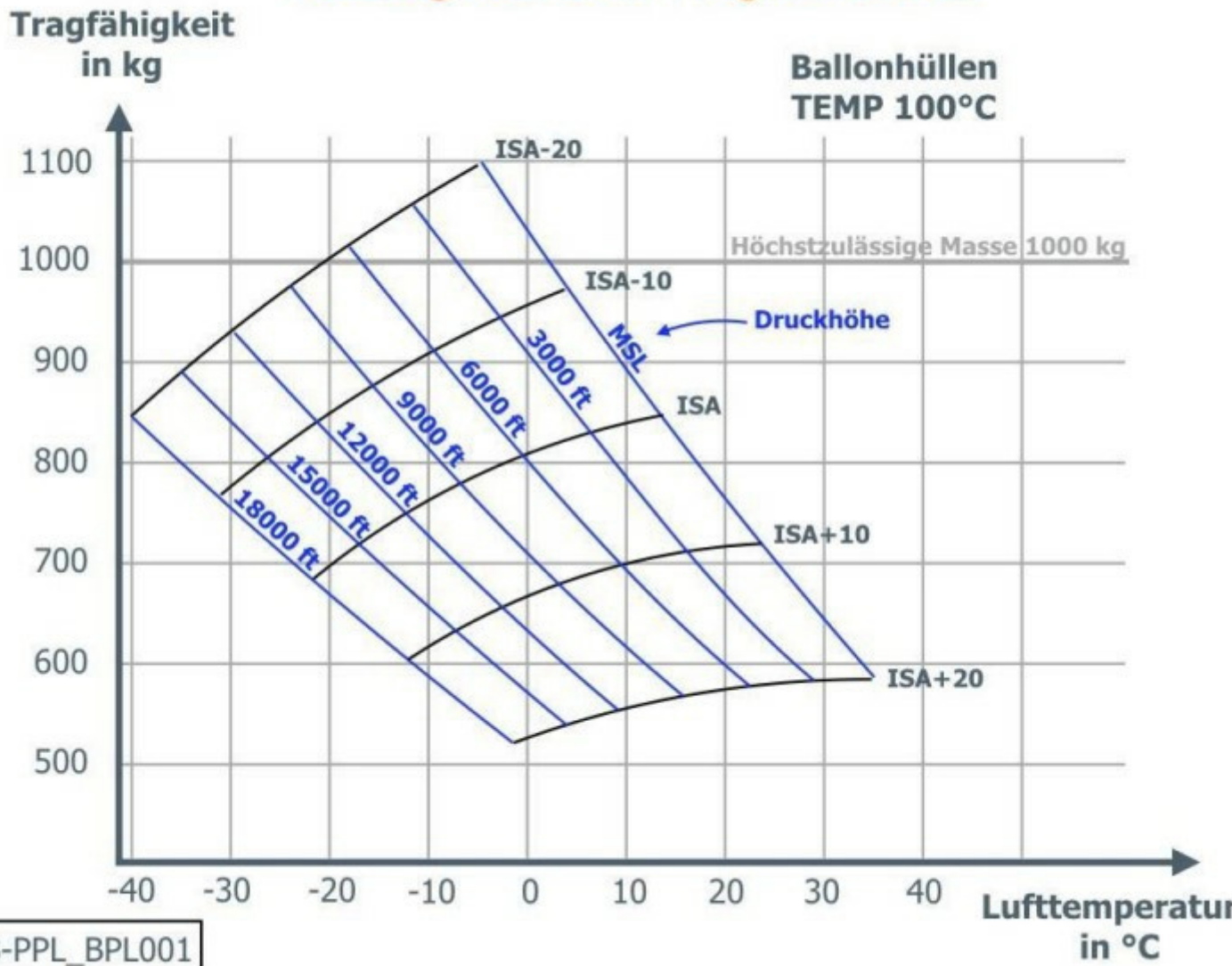
Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

08. Given the following masses: Empty mass 260 kg Instruments 20 kg per gas container (full): 30 kg per person: 80 kg Assuming ISA temperatures, how many persons may be carried in the basket at maximum, if the balloon with 4 gas containers has to climb up to pressure altitude 9.000 ft ? (use attachment ECQB-PPL_BPL001)

Auszug aus dem Flughandbuch



- a) 4
- b) 5
- c) 2
- d) 3

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

09. Damages at the basket ropes have to be fixed by:

- a) By the balloon pilot
- b) Upon the next Aeronautical Recurrence Certification
- c) By an Approved Aeronautical Workshop
- d) By tying with a part of a spare rope (during cruise)

10. What does the abbreviation "FIS" stand for?

- a) Flashing information service
- b) Flight information system
- c) Flashing information system
- d) Flight information service

11. Below maximum differential pressure of a gas balloon, temperature increase of the carrying gas by 1K results in:

- a) Volume decrease by 0.4%
- b) Volume increase by 0.4%
- c) Volume increase by 4%
- d) Volume decrease by 4%

12. When do you expect wind shear?

- a) During an inversion
- b) During a summer day with calm winds
- c) In calm wind in cold weather
- d) When passing a warm front

13. What is the correct way of establishing radio communication between D-EAZF and Dusseldorf Tower?

- a) Dusseldorf Tower over
- b) DEAZF is calling Dusseldorf Tower
- c) Tower from D-EAZF
- d) Dusseldorf Tower D-EAZF

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

14. Regularity messages are messages...

- a) Concerning aircraft and their passengers which face a grave and imminent threat and require immediate assistance
- b) Concerning the safety of an aircraft, a watercraft or some other vehicle or person in sight
- c) Sent by an aircraft operating agency or an aircraft of immediate concern to an aircraft in flight
- d) Concerning the operation or maintenance of facilities essential for the safety or regularity of aircraft operation

15. The altimeter's reference scale is set to airfield pressure (QFE). What indication is shown during the flight?

- a) Airfield elevation
- b) Pressure altitude
- c) Altitude above MSL
- d) Height above airfield

16. Which phrase is to be repeated three times before transmitting an urgency message?

- a) Pan Pan
- b) Help
- c) Urgent
- d) Mayday

17. Which statement is correct with regard to the polar axis of the Earth?

- a) The polar axis of the Earth crosses the geographic South Pole and the geographic North Pole and is at an angle of 23.5° to the plane of the equator
- b) The polar axis of the Earth crosses the magnetic south pole and the magnetic north pole and is perpendicular to the plane of the equator
- c) The polar axis of the Earth crosses the geographic South Pole and the geographic North Pole and is perpendicular to the plane of the equator
- d) The polar axis of the Earth crosses the magnetic south pole and the magnetic north pole and is at an angle of 66.5° to the plane of the equator

18. What is a latent error?

- a) An error which has an immediate effect on the controls
- b) An error which is made by the pilot actively and consciously
- c) An error which remains undetected in the system for a long time
- d) An error which only has consequences after landing

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

19. Which characteristic is important when choosing sunglasses used by pilots?

- a) Curved sidepiece
- b) Unbreakable
- c) No UV filter
- d) Non-polarised

20. What is the minimum flight visibility in airspace "E" for an aircraft operating under VFR at FL75?

- a) 1500 m
- b) 8000 m
- c) 3000 m
- d) 5000 m

21. Environmental air temperature and filling gas temperature are the same. Now, the free balloon descends into warmer air. What statement is correct?

- a) Descent force increases
- b) Descent force decreases
- c) Weight force increases
- d) Weight force decreases

22. While overflying a waypoint, it is stated that a distance of 3 NM has been taken 10 min. What will be the expected time of endurance for the complete distance of 18 NM?

- a) 60 min
- b) 90 min
- c) 12 min
- d) 180 min

23. A transponder with the ability to send the current pressure level is a...

- a) Mode C or S transponder
- b) Mode A transponder
- c) Transponder approved for airspace "B"
- d) Pressure-decoder

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

24. 5500 m equal...

- a) 7500 ft
- b) 18000 ft
- c) 10000 ft
- d) 30000 ft

25. The purpose of the drag lines of the parachute is ...

- a) To transfer the carrying force of the balloon in the top opening area
- b) To transfer the force from the pull rope to the parachute
- c) To keep the parachute in the center of the top opening
- d) To transfer the force from the pull rope to the free-balloon hull

26. With respect to aircraft accident and incident investigation, what are the three categories regarding aircraft occurrences?

- a) Incident, Serious incident, Accident
- b) Event, Serious event, Accident
- c) Happening, Event, Serious event
- d) Event, Crash, Disaster

27. The minimum length of the towing rope is:

- a) 20 m
- b) 50 m
- c) 100 m
- d) 30 m

28. The altimeter is switched from local QNH to 1013.25 hPa...

- a) When climbing above the transition altitude
- b) At 4000 ft
- c) At the decision height
- d) When descending below FL 100

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

29. What statement is correct with regard to change in temperature?

- a) During climb, the carrying gas warms due to thermal exchange with environmental air
- b) During descent, the carrying gas warms adiabatically
- c) During descent, the carrying gas warms due to thermal exchange with environmental air
- d) During climb, the carrying gas warms adiabatically

30. The Empty Mass of a gas balloon includes:

- a) Ballast packages, basket, hull, valve and towing rope
- b) Basket, burner, ballast packages, hull, net and towing rope
- c) Basket, basket ring, valve, net, hull and towing rope
- d) Burner, ballast packages, instruments, net and towing rope

31. In case of radio communication failure within a CTR (control zone), the pilot has to ...

- a) This has no consequences while in VMC
- b) Maintain current altitude until leaving the control zone
- c) Squawk transponder code A 7500
- d) Continue the ride according to last clearance; in case of imminent danger land immediately

32. After take-off with a balloon, obstacles at a distance of 300 m erect in expected flight path up to 40 m height. Rate of climb is expected with 1.5 m/s. What maximum actual wind speed can be accepted to maintain a clearance of 50 m above obstacles, assuming double the actual wind speed for calculation?

- a) 8 m/s
- b) 2.5 m/s
- c) 10 m/s
- d) 1 m/s

33. In what different ways can a risk be handled appropriately?

- a) Avoid, ignore, palliate, reduce
- b) Extrude, avoid, palliate, transfer
- c) Ignore, accept, transfer, extrude
- d) Avoid, reduce, transfer, accept

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

34. What effect has air temperature on the carrying force and on maximum take-off mass of a balloon?

- a) Maximum take-off mass is higher at low temperatures
- b) Maximum take-off mass is lower at low temperatures
- c) Carrying force is higher at low temperatures
- d) Carrying force is lower at low temperatures

35. What values are usually marked with a red line on instrument displays?

- a) Operational limits
- b) Caution areas
- c) Recommended areas
- d) Operational areas

36. What is the correct phrase to begin a blind transmission?

- a) Transmitting blind
- b) No reception
- c) Listen
- d) Blind

37. The burst of a hydrogen pressure line may result in what risk?

- a) The risk of hydrogen collecting in the basket and causing breath shortness
- b) The risk of hydrogen self-igniting and burning with a bright flame
- c) The risk of hydrogen dissipating to the atmosphere and poisoning the air
- d) The risk of hydrogen self-igniting and burning with invisible flame

38. The measurement of altitude is based on the change of the...

- a) Dynamic pressure
- b) Static pressure
- c) Differential pressure
- d) Total pressure

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

39. While overflying a waypoint, it is stated that a distance of 2 NM has been taken 10 min. What will be the expected time of endurance for the complete distance of 18 NM?

- a) 60 min
- b) 12 min
- c) 180 min
- d) 90 min

40. What is the meaning of the phrase "Roger"?

- a) Permission for proposed action is granted
- b) I understand your message and will comply with it
- c) An error has been made in this transmission. The correct version is...
- d) I have received all of your last transmission

41. Which are the official basic units for horizontal distances used in aeronautical navigation and their abbreviations?

- a) Feet (ft), inches (in)
- b) Yards (yd), meters (m)
- c) Nautical miles (NM), kilometers (km)
- d) Land miles (SM), sea miles (NM)

42. What is the relationship between pressure and volume of a dry gas at constant temperature?

- a) The volume increases by a factor of 4 with double pressure
- b) The volume is inversely proportional to pressure
- c) The ratio between pressure and volume is constant
- d) The volume increases proportional with pressure

43. Which process may result in an inversion layer at about 5000 ft (1500 m) height?

- a) Intensive sunlight insolation during a warm summer day
- b) Ground cooling by radiation during the night
- c) Advection of cool air in the upper troposphere
- d) Widespread descending air within a high pressure area

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

44. QFE is the...

- a) Altitude above the reference pressure level 1013.25 hPa
- b) Magnetic bearing to a station
- c) Barometric pressure adjusted to sea level, using the international standard atmosphere (ISA)
- d) Barometric pressure at a reference datum, typically the runway threshold of an airfield

45. From which altitude on does the body usually react to the decreasing atmospheric pressure?

- a) 7000 feet
- b) 12000 feet
- c) 2000 feet
- d) 10000 feet

46. What is the minimum flight visibility in airspace "C" at and above FL 100 for an aircraft operating under VFR?

- a) 10 km
- b) 8 km
- c) 5 km
- d) 1.5 km

47. The ratio between air pressures at different heights is referred to as:

- a) Height value
- b) Pressure number
- c) Height ratio
- d) Height number

48. According ISA, what is the density of air at MSL?

- a) 1.225 g/m³
- b) 1225 kg/m³
- c) 1.225 kg/m³
- d) 12.25 kg/m³

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

49. 1000 ft equal...

- a) 3000 m
- b) 300 m
- c) 30 km
- d) 30 m

50. What is the meaning of the abbreviation "TRA"?

- a) Temporary Radar Routing Area
- b) Temporary Reserved Airspace
- c) Terminal Area
- d) Transponder Area

51. Which abbreviation is used for the term "obstacle"?

- a) OBS
- b) OBST
- c) OBTC
- d) OST

52. What is the best combination of traits with respect to the individual attitude and behaviour for a pilot?

- a) Extroverted - stable
- b) Introverted - unstable
- c) Introverted - stable
- d) Extroverted - unstable

53. With regard to thunderstorms, strong up- and downdrafts appear during the...

- a) Mature stage
- b) Dissipating stage
- c) Thunderstorm stage
- d) Initial stage

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

54. What is the percentage of oxygen in the atmosphere at 6000 ft?

- a) 78 %
- b) 21 %
- c) 12 %
- d) 18.9 %

55. The dry adiabatic lapse rate has a value of...

- a) 1.0° C / 100 m
- b) 0.6° C / 100 m
- c) 0.65° C / 100 m
- d) 2° C / 1000 ft

56. What clouds and weather can typically be observed during the passage of a cold front?

- a) Strongly developed cumulus clouds (Cb) with showers of rain and thunderstorms, gusting wind followed by cumulus clouds with isolated showers of rain
- b) Wind becoming calm, dissipation of clouds and warming during summer; formation of extended high fog layers during winter
- c) Cirrus, thickening altostratus and altocumulus clouds, lowering cloud base with rain, nimbostratus
- d) In coastal areas during daytime wind from the coast and forming of cumulus clouds, dissipation of clouds during evening and night

57. At which height the load carrying capability of a gas balloon is reduced by approximately 50% compared to MSL?

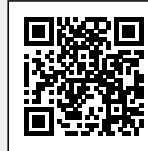
- a) At 6500 m
- b) At 11000 m
- c) At 18000 m
- d) At 1500 m

58. What ground features should preferably be used for orientation during visual flight?

- a) Power lines
- b) Rivers, railroads, highways
- c) Border lines
- d) Farm tracks and creeks

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

59. What weather conditions in Central Europe are typically found in high pressure areas during summer?

- a) Small isobar spacing with strong prevailing northerly winds
- b) Large isobar spacing with calm winds, formation of local wind systems
- c) Large isobar spacing with strong prevailing westerly winds
- d) Small isobar spacing with calm winds, formation of local wind systems

60. A flight is called a "visual flight", if the...

- a) Flight is conducted in visual meteorological conditions
- b) Visibility in flight is more than 8 km
- c) Flight is conducted under visual flight rules
- d) Visibility in flight is more than 5 km

61. What effect can sudden insolation from sunlight have on a gas balloon?

- a) The height at maximum differential pressure decreases
- b) The height at maximum differential pressure increases
- c) The hull pressure decreases
- d) A sudden increase in rate of descent

62. Where can the type of restriction for a restricted airspace be found?

- a) ICAO chart 1:500000
- b) NOTAM
- c) AIC
- d) AIP

63. Doubling the pressure of a dry gas at constant temperature results in a change of the volume to:

- a) Double the previous value
- b) Four times the previous value
- c) Half the previous value
- d) A quarter of the previous value

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

64. The emergency opening of a gas balloon is located where?

- a) To the side of the appendix
- b) At the upper pole
- c) At the equator
- d) To the side of the valve

65. Which distances to clouds have to be maintained during a VFR flight in airspaces C, D and E?

- a) 1000 m horizontally, 300 m vertically
- b) 1000 m horizontally, 1500 ft vertically
- c) 1500 m horizontally, 1000 m vertically
- d) 1500 m horizontally, 1000 ft vertically

66. What change results from an increase in temperature of the carrying gas and of the environmental air at a gas balloon at maximum differential pressure?

- a) The load capability decreases by 4% per K temperature change
- b) The load capability increases by 4% per K temperature change
- c) The load capability increases by 0.4% per K temperature change
- d) The load capability decreases by 0.4% per K temperature change

Exam simulation

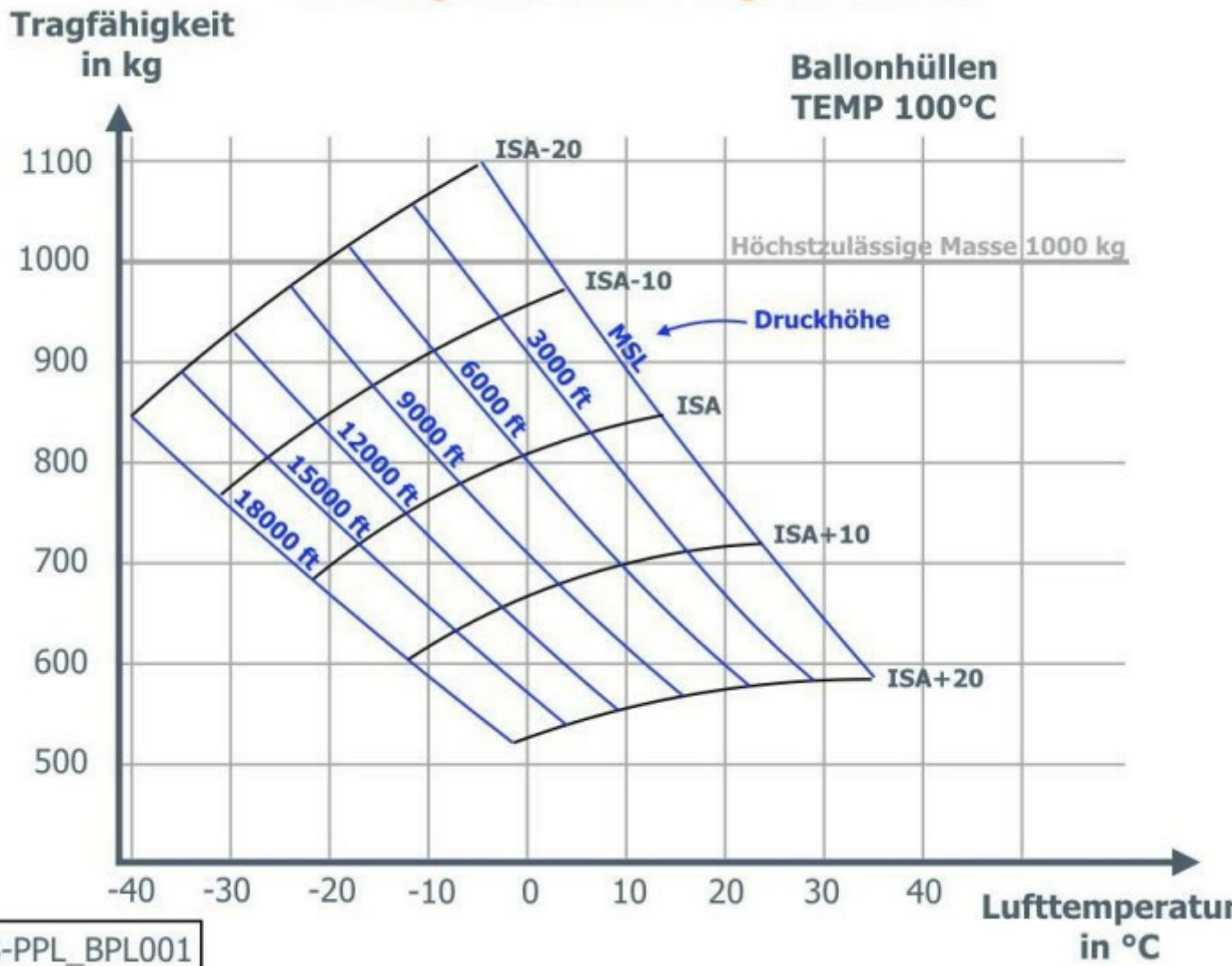
Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

67. Given the following masses: Empty mass 260 kg Instruments 20 kg per gas container (full): 30 kg per person: 80 kg Assuming temperature ISA+10, how many persons may be carried in the basket at maximum, if the balloon with 4 gas containers has to climb up to pressure altitude 12.000 ft ? (use attachment ECQB-PPL_BPL001)

Auszug aus dem Flughandbuch



ECQB-PPL_BPL001

- a) 3
- b) 5
- c) 4
- d) 2

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

68. What is the meaning of the abbreviation "ARC"?

- a) Airspace Restriction Criteria
- b) Airworthiness Recurring Control
- c) Airworthiness Review Certificate
- d) Airspace Rulemaking Committee

69. What difference will be experienced during take-off in presence of a strong surface inversion, compared to a take-off with decreasing temperature with height?

- a) During climb through an inversion, less ballast must be released and/or less heating is required
- b) During climb through an inversion, less ballast must be released and/or more heating is required
- c) During climb through an inversion, more ballast must be released and/or more heating is required
- d) During climb through an inversion, more ballast must be released and/or less heating is required

70. Point A on the Earth's surface lies exactly on the parallel of latitude of 47°50'27"N. Which point is exactly 240 NM north of A?

- a) 53°50'27"N
- b) 49°50'27"N
- c) 43°50'27"N
- d) 51°50'27"N

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

Response Scheme

Compare your answers with the following diagram and mark your score!

01: B	02: A	03: D	04: B
05: B	06: A	07: A	08: A
09: C	10: D	11: B	12: A
13: D	14: D	15: D	16: A
17: C	18: C	19: D	20: D
21: A	22: A	23: A	24: B
25: B	26: A	27: D	28: A
29: B	30: C	31: D	32: B
33: D	34: C	35: A	36: A
37: D	38: B	39: D	40: D
41: C	42: B	43: D	44: D
45: A	46: B	47: D	48: C
49: B	50: B	51: B	52: A
53: A	54: B	55: A	56: A
57: A	58: B	59: B	60: C
61: A	62: D	63: C	64: A
65: D	66: D	67: A	68: C
69: C	70: D		

Exam simulation

Quiz BPL Gas - Balloon Pilot License - Human Performance and limitations



QuizVds.it

Response form

Use this form to mark your answers

01: _____	02: _____	03: _____	04: _____
05: _____	06: _____	07: _____	08: _____
09: _____	10: _____	11: _____	12: _____
13: _____	14: _____	15: _____	16: _____
17: _____	18: _____	19: _____	20: _____
21: _____	22: _____	23: _____	24: _____
25: _____	26: _____	27: _____	28: _____
29: _____	30: _____	31: _____	32: _____
33: _____	34: _____	35: _____	36: _____
37: _____	38: _____	39: _____	40: _____
41: _____	42: _____	43: _____	44: _____
45: _____	46: _____	47: _____	48: _____
49: _____	50: _____	51: _____	52: _____
53: _____	54: _____	55: _____	56: _____
57: _____	58: _____	59: _____	60: _____
61: _____	62: _____	63: _____	64: _____
65: _____	66: _____	67: _____	68: _____
69: _____	70: _____		