1. A public transport aeroplane with reciprocating engines is flying from PARIS to LYON. The final reserve corresponds to:
45 minutes at holding speed

2. In a flight plan when the destination aerodrome is A and the alternate aerodrome is B, the final reserve fuel for a turbojet engine aeroplane corresponds to:
30 minutes holding 1,500 feet above aerodrome B

3. An aeroplane flies at an airspeed of 380 kt. It flies from A to B and back to A. Distance AB = 480 NM. When going from A to B, it experiences a headwind component = 60 kt. The wind remains constant.
The duration of the flight will be:
2h 35min

4. During a flight at night a position has to be reported to ATC. The aeroplane is at a distance of 750 NM from the groundstation and at flight level 350. The frequency to be used is:
5649 kHz

5. According to the chart the minimum obstruction clearance altitude (MOCA) is 8500 ft. The meteorological data gives an outside air temperature of -20°C at FL 85. The QNH, given by a met. station at an elevation of 4000ft, is 1003 hPa.
What is the minimum pressure altitude which should be flown according to the given MOCA?
8800 ft

6. During an IFR flight in a Beech Bonanza the fuel indicators show that the remaining amount of fuel is 100 lbs after 38 minutes. The total amount of fuel at departure was 160 lbs. For the alternate fuel, 30 lbs is necessary. The planned fuel for taxi is 13 lbs. Final reserve fuel is estimated at 50 lbs. If the fuel flow remains the same, how many minutes can be flown to the destination with the remaining fuel?
12 minutes

7. VFR flights shall not be flown over the congested areas of cities at a height less than
1000 ft above the highest obstacle within a radius of 600 m from the aircraft

8. How many feet you have to climb to reach FL 75?
Given: FL 75; departure aerodrome elevation 1500 ft; QNH = 1023 hPa; temperature = ISA; 1 hPa = 30 ft
6300 ft

9. Given:
Dry operating mass (DOM)= 33510 kg
Load= 7600 kg
Final reserve fuel= 983 kg
Alternate fuel= 1100 kg
Contingency fuel 102 kg
The estimated landing mass at alternate should be :
42195 kg

10. Given:
Dry operating mass (DOM)= 33000 kg
Load= 8110 kg
Final reserve fuel= 983 kg
Alternate fuel= 1100 kg
Contingency fuel 102 kg
The estimated landing mass at alternate should be :
42195 kg

11. Given:
Dry operating mass (DOM)= 33510 kg
Load= 7600 kg
Trip fuel (TF)= 2040 kg
Final reserve fuel= 983 kg
Alternate fuel= 1100 kg
Contingency fuel= 5% of trip fuel
Which of the listed estimated masses is correct?
Estimated landing mass at destination= 43295 kg

12. (For this question use Flight Planning Manual MEP1 Figure 3.1)
A flight is to be made from one airport (elevation 3000 ft) to another in a multi engine piston aeroplane (MEP1). The cruising level will be FL 110. The temperature at FL 110 is ISA - 10° C. The temperature at the departure aerodrome is -1° C. Calculate the fuel to climb with mixture rich.
6 US gallon

13. (For this question use Flight Planning Manual MEP1 Figure 3.6)
A flight is to be made to an airport, pressure altitude 3000 ft, in a multi engine piston aeroplane (MEP1). The forecast OAT for the airport is -1° C. The cruising level will be FL 110, where OAT is -10° C.
Calculate the still air descent distance for:
145 KIAS
Rate of descent 1000 ft/min
Gears and flaps up
20 NM

14. A VFR flight planned for a Piper Seneca III. At a navigational checkpoint the remaining usable fuel in tanks is 60 US gallons. The alternate fuel is 12 US gallons. According to the flight plan the remaining flight time is 1h35min. Calculate the highest rate of consumption possible for the rest of the trip.
21.3 US gallons/hour

15. Given: maximum take-off mass 64 400 kg
maximum landing mass 56 200 kg
maximum zero fuel mass 53 000 kg
dry operating mass 35 500 kg
estimated load 14 500 kg
estimated trip fuel 4 900kg
minimum take-off fuel 7 400 kg
Find the maximum allowable take-off fuel:
11 100 kg

16. Given: True course (TC) 017; W/V 340/30; TAS 420 kt
Find: wind correction angle (WCA) and ground speed (GS)
WCA -2° ; GS 396 kt

17. A multi engine piston aeroplane is on an IFR flight. The fuel plan gives a trip fuel of 65 US gallons. The alternate fuel, final reserve included, is 17 US gallons. Contingency fuel is 5% of the trip fuel. The usable fuel at departure is 93 US gallons. At a certain moment the fuel consumed according to the fuel gauges is 40 US gallons and the distance flown is half of the total distance. Assume that fuel consumption doesn't change. Which statement is right?
The remaining fuel is not sufficient to reach the destination with reserves intact

18. Flight planning chart for an aeroplane states, that the time to reach the cruising level at a given gross mass is 36 minutes and the distance travelled is 157 NM (zero-wind). What will be the distance travelled with an average tailwind component of 60kt?
193 NM

19. You are flying a constant compass heading of 252°. Variation is 22°E, deviation is 3°W and your INS is showing a drift of 9° right. True track is?
280°

20. For a planned flight the calculated fuel is as follows:
Flight time: 3h06min
The reserve fuel, at any time, should not be less than 30% of the remaining trip fuel.
Taxi fuel: 8 kg
Block fuel: 118 kg
How much fuel should remain after 2 hours flight time?
30 kg trip fuel and 9 kg reserve fuel
Calculate trip + reserve fuel = 118 - 8 = 110 kg
Calculate the remaining fuel (trip + reserve) after 2 hours of flight: Total planned flight time is 186 minutes, remaining time after 2 hours is 66 minutes. Remaining fuel: 110 / 186 x 66 = 39 kg
Remaining fuel is 1.3 times remaining trip fuel (trip fuel plus 30% reserve) Remaining trip fuel is: 39/1.3 = 30 kg Remaining reserve fuel is: 0.3 x 30 = 9 kg

21. For a planned flight the calculated fuel is as follows:
Flight time: 2h42min
The reserve fuel, at any time, should not be less than 30% of the remaining trip fuel.
Taxi fuel: 9 kg
Block fuel: 136 kg
How much fuel should remain after 2 hours flight time?
25 kg trip fuel and 8 kg reserve fuel

22. Minimum planned take-off fuel is 160 kg (30% total reserve fuel is included). Assume the groundspeed on this trip is constant. When the aeroplane has done half the distance the remaining fuel is 70 kg. Is diversion to a nearby alternate necessary?
Diversion to a nearby alternate is necessary, because the remaining fuel is not sufficient

23. (For this Question use Flight Planning & Monitoring MEP1)
A flight has to be made with a multi engine piston aeroplane. For the fuel calculations take 5 US gallons for the taxi, and an additional 13 minutes at cruise condition to account for climb and descent. Calculated time from overhead to overhead is 1h47min. Power setting is 45%, 2600 RPM. Calculated reserve fuel is 30% of the trip fuel. FL 100. Temperature -5°C. Find the minimum block fuel.
47 US gallons

24. (For this Question use Flight Planning & Monitoring MEP1)
A flight has to be made with a multi engine piston aeroplane. For the fuel calculations take 5 US gallons for the taxi, and an additional 13 minutes at cruise condition to account for climb and descent. Calculated time overhead to overhead is 2h37min. Power setting is 65%, 2500 RPM. Calculated reserve fuel is 30% of the trip fuel. FL 120. Temperature 1°C. Find the minimum block fuel.
91 US gallons

25. (For this Question use Flight Planning & Monitoring SEP1 Fig. 2.2)
Given:
FL 75
OAT +10°C
Lean mixture
2300 RPM
Find:
Fuel flow in gallons per hour (GPH) and TAS.
11.6 GPH : TAS: 160 kt

26. (For this Question use Flight Planning & Monitoring SEP1 Fig. 2.1)
Given:
FL 75
OAT: +5°C
During climb: average head wind component 20 kt
Take-off from MSL with the initial mass of 3 650 lbs.
Find:
Time and fuel to climb.
9 min : 3,3 USG

27. (For this Question use Flight Planning & Monitoring SEP1 Fig. 2.1) Given:
FL 75
OAT: +5°C
During climb: average head wind component 20 kt
Take-off from MSL with the initial mass of 3 650 lbs.
Find:
Still air distance (NAM) and ground distance (NM) using the graph "time, fuel, distance to climb".
18 NAM : 15 NM

28. Given: True course (TC) 017°, W/V 340°/30 kt, True air speed (TAS) 420 kt
Find: Wind correction angle (WCA) and ground speed (GS)
WCA -2°, GS 396 kt

29. (For this Question use Flight Planning & Monitoring SEP 1, Fig. 2.1)
Given: Take-off mass 3500 lbs, departure aerodrome pressure altitude 2500 ft,
OAT +10°C,
First cruising level: FL 140, OAT -5°C
Find the time, fuel and still air distance to climb.
22 min, 6.7 GAL, 45 NAM

30. (For this Question use Flight Planning & Monitoring SEP1, Fig. 2.4)
Given: Aeroplane mass at start-up 3663 lbs, Aviation gasoline (density 6 lbs/gal)-fuel load 74 gal, Take-off altitude sea level, Headwind 40 kt, Cruising altitude 8000 ft, Power setting full throttle 2300 RPM 20°C lean of peak EGT
Calculate the range.
633 NGM

31. (For this question use Route Manual VFR + GPS chart ED-6)
Name the frequency of TANGO VORTAC (48°37'N, 009°16'E):
112.50 MHz

32. (For this question use Route Manual VFR + GPS chart ED-6)
Give the name and frequency of the Flight Information Service for an aeroplane in position (47°59'N, 010°14'E):
MÜNCHEN INFORMATION 126.95 MHz

33. (For this question use Route Manual VFR + GPS chart ED-6)
Give the frequency of STUTTGART ATIS:
126.125 MHz

34. (For this question use Route Manual VFR + GPS chart ED-6)
Give the frequency of ZÜRICH VOLMET:
127.20 MHz

35. Refer to the appropriate chart in the Student Pilot Route Manual: Which navigation aid is located in position 48°55'N, 009°20'E ?
VOR/DME

36. Refer to the appropriate chart in the Student Pilot Route Manual: Which navigation aid is located in position 48°23'N, 008°39'E?
VOR

37. Refer to the appropriate chart in the Student Pilot Route Manual: Which navigation aid is located in position 48°30'N, 007°34'E?
VOR/DME

38. Flying VFR from VILLINGEN (48°03.5'N, 008°27.0'E) to FREUDENSTADT (48°28.0'N, 008°24.0'E) determine the magnetic course.
356°

39. Flying VFR from VILLINGEN (48°03.5'N, 008°27.0'E) to FREUDENSTADT (48°28.0'N, 008°24.0'E) determine the distance.
24 NM

40. Flying VFR from VILLINGEN (48°03.5'N, 008°27.0'E) to FREUDENSTADT (48°28.0'N, 008°24.0'E).Determine the minimum altitude within a corridor 5NM left and 5 NM right of the courseline in order to stay 1000 ft clear of obstacles.
3900 ft

41. Flying VFR from PEITING (47°48.0'N, 010°55.5'E) to IMMENSTADT (47°33.5'N, 010°13.0'E) determine the magnetic course.
243°

42. Flying VFR from PEITING (47°48.0'N, 010°55.5'E) to IMMENSTADT (47°33.5'N, 010°13.0'E) determine the distance.
32 NM

43. Flying VFR from PEITING (47°48.0'N, 010°55.5'E) to IMMENSTADT (47°33.5'N, 010°13.0'E).Determine the minimum altitude within a corridor 5NM left and 5 NM right of the courseline in order to stay 1000 ft clear of obstacles.
6900 ft

44. The fuel burn off is 200 kg/h with a relative fuel density of 0,8. If the relative density is 0,75, the fuel burn will be:
200 kg/h

45. The fuel burn of an aircraft turbine engine is 220 l/h with a fuel density of 0,80. If the density is 0,75, the fuel burn will be:
235 l/h
Turbine engines require a constant fuel flow in kg/h (and not l/h!) for a given power output. This is because the energy content per kg fuel (so called: calorific value) of a given fuel is constant for different densities. Density varies for example due to temperature. In addition, it is such that the calorific value (per kg) of pretty much all liquid hydrocarbon fuels (like all the different grades of kerosene, but also diesel fuel, heating oil, or gasoline for piston engines) is almost the same for all fuels, the variations between different types of fuel are neglect able.
Therefore it is clear: For a given power, the fuel flow in kg/h must stay constant.
Calculate fuel flow in kg/h for density 0.80: FF = 220*0.8 = 176 kg/h Calculate volumetric fuel flow (l/h) for density 0.75: FF= 176/0.75 = 234.67 l/h

46. The measured course 042° T.
The variation in the area is 6° W and the wind is calm.
The deviation card is reproduced in the annex.
In order to follow this course, the pilot must fly a compass heading of:
052°

CH	000	045	090	135	...
Dev	-2	-4	-3	-1	

47. In the cruise at FL 155 at 260 kt TAS, the pilot plans for a 500 feet/min descent in order to fly overhead MAN VOR at 2 000 feet (QNH 1030). TAS will remain constant during descent, wind is negligible, temperature is standard. The pilot must start the descent at a distance from MAN of:

120 NM

48. An aircraft is in cruising flight at FL 095, IAS 155kt. The pilot intends to descend at 500 ft/min to arrive overhead the MAN VOR at 2 000 FT (QNH 1 030hPa). The TAS remains constant in the descent, wind is negligible, temperature standard. At which distance from MAN should the pilot commence the descent?

48 NM

IAS = 155 KT at FL 95, OAT = ISA = -4°C --> TAS = 178 KT !!
2'000 ft QNH = PA 1'541 ft
delta-H = 9500-1500 = 8000 ft
time to descend t= 8000/500 = 16 minutes
Distance to descend = 16/60 x 178 = 47.5 NM

49. An executive pilot is to carry out a flight to a French aerodrome, spend the night there and return the next day. Where will he find the information concerning parking and landing fees ?

In the GEN chapter of the French Aeronautical Information Publication (AIP)

50. You are to determine the maximum fuel load which can be carried in the following conditions :
- dry operating mass : 2800 kg
- trip fuel : 300 kg
- payload : 400 kg
- maximum take-off mass : 4200 kg
- maximum landing mass : 3700 kg

800 kg

51. After flying for 16 min at 100 kt TAS with a 20 kt tail wind component, you have to return to the airfield of departure. You will arrive after:

24 min

52. Planned and actual data as shown in the Flight Log excerpt.
Provided that flight conditions on the leg GAMMA to DELTA remain unchanged and fuel consumption remains unchanged, what fuel remaining should be expected at waypoint DELTA?

4550 kg

EXCERPT FROM FLIGHT LOG

Waypoint		ETA (h:min)	ATA (h:min)	Planned Remaining Fuel (kg)	Actual Remaining fuel (kg)
ALPHA		1:18	1:18	5690	5690
BETA		1:53	1:53	5340	5270
GAMMA		2:03	2:03	5240	5150
DELTA		2:53		4740	

ETA - Estimated time of arrival
ATA - Actual time of arrival

53. Planned and actual data as shown in the Flight Log excerpt.
Provided that flight conditions on the leg GAMMA to DELTA remain unchanged and fuel consumption remains unchanged, what fuel remaining should be expected at waypoint DELTA?
4475 kg

EXCERPT FROM FLIGHT LOG

Waypoint		ETA (h:min)	ATA (h:min)	Planned Remaining Fuel (kg)	Actual Remaining fuel (kg)
ALPHA		1:18	1:18	5690	5690
BETA		2:03	2:03	5375	5285
GAMMA		2:38	2:38	5130	4970
DELTA		3:33		4745	

ETA -	Estimated time of arrival
ATA -	Actual time of arrival

54. Planned and actual data as shown in the Flight Log excerpt.
Provided that flight conditions on the leg GAMMA to DELTA remain unchanged and fuel consumption remains unchanged, what fuel remaining should be expected at waypoint DELTA?
4690 kg

EXCERPT FROM FLIGHT LOG

Waypoint		ETA (h:min)	ATA (h:min)	Planned Remaining Fuel (kg)	Actual Remaining fuel (kg)
ALPHA		1:18	1:18	5690	5690
BETA		1:43	1:43	5440	5490
GAMMA		2:48	2:48	4790	4970
DELTA		3:23		4440	

ETA -	Estimated time of arrival
ATA -	Actual time of arrival

55. Planned and actual data as shown in the Flight Log excerpt.
Provided that flight conditions on the leg GAMMA to DELTA remain unchanged and fuel consumption remains unchanged, what fuel remaining should be expected at waypoint DELTA?

4590 kg

EXCERPT FROM FLIGHT LOG

Waypoint		ETA (h:min)	ATA (h:min)	Planned Remaining Fuel (kg)	Actual Remaining fuel (kg)
ALPHA		1:18	1:18	5690	5690
BETA		1:58	1:58	5210	5290
GAMMA		2:23	2:23	4910	5040
DELTA		3:08		4370	

ETA -	Estimated time of arrival
ATA -	Actual time of arrival

56. Planned and actual data as shown in the Flight Log excerpt.
Arriving overhead GAMMA you are cleared for direct routing to MIKE. The flight time for direct flight GAMMA to MIKE will be 1h 10 min. Provided that flight conditions on the direct leg GAMMA to MIKE remain unchanged and fuel consumption remains unchanged, what fuel remaining should be expected at waypoint MIKE?

1300 kg

EXCERPT FROM FLIGHT LOG

Waypoint		ETA (h:min)	ATA (h:min)	Planned Remaining Fuel (kg)	Actual Remaining fuel (kg)
...		...	...	...	...
...		...	...	...	...
ALPHA		1:07	1:07	3400	3400
BETA		1:17	1:17	3220	3200
GAMMA		1:42	1:42	2770	2700
DELTA		2:17		2140	
SIERRA		2:37		1780	
MIKE		2:52		1510	
...		...		...	
...		...		...	

ETA -	Estimated time of arrival
ATA -	Actual time of arrival

57.	Planned and actual data as shown in the Flight Log excerpt (Fuel Planning Section).
After a balked landing at the destination airport, you have to divert to the alternate airport with the gear extended. The re-calculated flight time to the alternate due to the reduced speed is 1h 20 min and the fuel flow will be 720 kg/h.
Final Reserve Fuel remains unchanged.
What will be the estimated landing mass at the alternate airport?
5874 kg

EXCERPT FROM FLIGHT LOG (FUEL PLANNING SECTION)

FUEL	Time	kg
TRIP	2:30	1200
CONTINGENCY	0:08	64
ALTERNATE	0:50	600
FINAL RESERVE	0:30	240
MINIMUM TOF	3:58	2104
EXTRA	1:50	880
TOF	5:48	2984
TAXI		50
RAMP		3034

MASS		kg
DOM		4560
PAYLOAD		490
ZFM		5050
TOF		2984
TOM		8034
TRIP FUEL		1200
EST LDG MASS (at DEST.)		6834

TOF	- Take off fuel
TOM	- Take off mass
ZFM	- Zero fuel mass
EST LDG MASS	- Estimated landing mass
DEST	- Destination airport

58. Planned and actual data as shown in the Flight Log excerpt (Fuel Planning Section).
After a balked landing at the destination airport, you have to divert to the alternate airport with the gear extended. The re-calculated flight time to the alternate due to the reduced speed is 1h 50 min and the fuel flow will be 840 kg/h.
Final Reserve Fuel remains unchanged.
What will be the estimated landing mass at the alternate airport?
5890 kg

EXCERPT FROM FLIGHT LOG (FUEL PLANNING SECTION)

FUEL	Time	kg
TRIP	2:00	1500
CONTINGENCY	0:06	60
ALTERNATE	1:10	840
FINAL RESERVE	0:30	240
MINIMUM TOF	3:46	2640
EXTRA	1:40	1000
TOF	5:26	3640
TAXI		50
RAMP		3690

MASS		kg
DOM		4610
PAYLOAD		680
ZFM		5290
TOF		3640
TOM		8930
TRIP FUEL		1500
EST LDG MASS (at DEST.)		7430

TOF	- Take off fuel
TOM	- Take off mass
ZFM	- Zero fuel mass
EST LDG MASS	- Estimated landing mass
DEST	- Destination airport

59. Planned and actual data as shown in the Flight Log excerpt (Fuel Planning Section).
After a balked landing at the destination airport, you have to divert to the alternate airport with the gear extended. The re-calculated flight time to the alternate due to the reduced speed is 2h 20 min and the fuel flow will be 780 kg/h.
Final Reserve Fuel remains unchanged.
What will be the estimated landing mass at the alternate airport?
5440 kg

EXCERPT FROM FLIGHT LOG (FUEL PLANNING SECTION)

FUEL	Time	kg
TRIP	3:20	1800
CONTINGENCY	0:10	90
ALTERNATE	1:50	1100
FINAL RESERVE	0:30	210
MINIMUM TOF	5:50	3200
EXTRA	1:50	990
TOF	7:40	4190
TAXI		50
RAMP		4240

MASS		kg
DOM		4370
PAYLOAD		500
ZFM		4870
TOF		4190
TOM		9060
TRIP FUEL		1800
EST LDG MASS (at DEST.)		7260

TOF	- Take off fuel
TOM	- Take off mass
ZFM	- Zero fuel mass
EST LDG MASS	- Estimated landing mass
DEST	- Destination airport

60. Planned and actual data as shown in the Flight Log excerpt (Fuel Planning Section).
After a balked landing at the destination airport, you have to divert to the alternate airport with the gear extended. The re-calculated flight time to the alternate due to the reduced speed is 1h 20 min and the fuel flow will be 720 kg/h. Final Reserve Fuel remains unchanged.
What will be the estimated landing mass at the alternate airport?
5669 kg

EXCERPT FROM FLIGHT LOG (FUEL PLANNING SECTION)

FUEL	Time	kg
TRIP	2:00	1080
CONTINGENCY	0:06	54
ALTERNATE	0:50	400
FINAL RESERVE	0:30	180
MINIMUM TOF	3:26	1714
EXTRA	1:35	855
TOF	5:01	2569
TAXI		50
RAMP		2619

MASS		kg
DOM		4350
PAYLOAD		790
ZFM		5140
TOF		2569
TOM		7709
TRIP FUEL		1080
EST LDG MASS (at DEST.)		6629

61. Planned and actual data as shown in the Flight Log excerpt (Fuel Planning Section).
After a balked landing at the destination airport, you have to divert to the alternate airport with the gear extended. The re-calculated flight time to the alternate due to the reduced speed is 1h 30 min and the fuel flow will be 600 kg/h. Final Reserve Fuel remains unchanged.
What will be the estimated landing mass at the alternate airport?
5642 kg

EXCERPT FROM FLIGHT LOG (FUEL PLANNING SECTION)

FUEL	Time	kg
TRIP	4:50	2030
CONTINGENCY	0:15	105
ALTERNATE	1:00	420
FINAL RESERVE	0:30	150
MINIMUM TOF	6:35	2705
EXTRA	2:00	840
TOF	8:35	3545
TAXI		50
RAMP		3595

MASS		kg
DOM		4567
PAYLOAD		460
ZFM		5027
TOF		3545
TOM		8572
TRIP FUEL		2030
EST LDG MASS (at DEST.)		6542

62. Planned and actual data as shown in the Flight Log excerpt.
Actual Ground Speed (GS) on the leg BETA to GAMMA will be 110 KT. If all other flight parameters remain unchanged, what fuel remaining should be expected at waypoint GAMMA?

2625 kg

EXCERPT FROM FLIGHT LOG

Waypoint		TAS	GS	LEGDIST	ACCDIST	ETE	ATE	ETA	ATA	Planned Remaining Fuel	Actual Remaining Fuel
		kt	kt	NM	NM	h:min	h:min	h:min	h:min	kg	kg
ALPHA		130	140	35	135	0:15	0:15	1:02	1:02	3004	3000
BETA		130	130	34	160	0:12	0:12	1:14	1:14	2908	2900
GAMMA		130	130	60	220	0:28		1:42		2684	
DELTA		130	130	34	265	0:21		2:03		2516	

ATA - Actual time of arrival
ATE - Actual time en-route
ETA - Estimated time of arrival
ETE - Estimated time en-route
ACC DIST - Accumulated distance
LEG DIST - Leg distance
TAS - True Airspeed
GS - Ground speed

63. Planned and actual data as shown in the Flight Log excerpt.
Actual Ground Speed (GS) on the leg BETA to GAMMA will be 105 KT. If all other flight parameters remain unchanged, what fuel remaining should be expected at waypoint GAMMA?

3260 kg

EXCERPT FROM FLIGHT LOG

Waypoint		TAS	GS	LEGDIST	ACCDIST	ETE	ATE	ETA	ATA	Planned Remaining Fuel	Actual Remaining Fuel
		kt	kt	NM	NM	h:min	h:min	h:min	h:min	kg	kg
ALPHA		140	120	32	132	0:16	0:16	0:59	0:59	3669	3670
BETA		140	130	34	157	0:12	0:12	1:11	1:11	3561	3560
GAMMA		140	130	58	215	0:27		1:38		3318	
DELTA		140	130	34	249	0:16		1:54		3174	

ATA - Actual time of arrival
ATE - Actual time en-route
ETA - Estimated time of arrival
ETE - Estimated time en-route
ACC DIST - Accumulated distance
LEG DIST - Leg distance
TAS - True Airspeed
GS - Ground speed

64. Planned and actual data as shown in the Flight Log excerpt.
Actual Ground Speed (GS) on the leg BETA to GAMMA will be 100 KT. If all other flight parameters remain unchanged, what fuel remaining should be expected at waypoint GAMMA?
2950 kg

EXCERPT FROM FLIGHT LOG

Waypoint		TAS	GS	LEGDIST	ACCDIST	ETE	ATE	ETA	ATA	Planned Remaining Fuel	Actual Remaining Fuel
		kt	kt	NM	NM	h:min	h:min	h:min	h:min	kg	kg
ALPHA		140	130	20	140	0:10	0:10	1:02	1:02	3466	3470
BETA		140	125	34	176	0:18	0:18	1:20	1:20	3340	3310
GAMMA		140	125	68	244	0:33		1:53		3109	
DELTA		140	125	34	269	0:12		2:05		3025	

ATA - Actual time of arrival
ATE - Actual time en-route
ETA - Estimated time of arrival
ETE - Estimated time en-route
ACC DIST - Accumulated distance
LEG DIST - Leg distance
TAS - True Airspeed
GS - Ground speed

65. If a pilot lands at an aerodrome other than the destination aerodrome specified in the flight plan, he must ensure that the ATS unit at the destination aerodrome is informed within a certain number of minutes of his planned ETA at destination. This number of minutes is:
30

66. An aircraft is flying from an airport to another.
In cruise, the calibrated airspeed is 150kt, true airspeed 180 kt, average groundspeed 210 kt, the speed box on the filed flight plan shall be filled as follows:
N0180

67. A repetitive flight plan (RPL) is filed for a scheduled flight: Paris-Orly to Angouleme, Paris Orly as alternate. Following heavy snow falls, Angouleme airport will be closed at the expected time of arrival. The airline decides before departure to plan a re-routing of that flight to Limoges.
The RPL must be cancelled for that day and a specific flight plan has to be filed

68. From the options given below select those flights which require flight plan notification:
I - Any Public Transport flight.
2 - Any IFR flight
3 - Any flight which is to be carried out in regions which are designated to ease the provision of the Alerting Service or the operations of Search and Rescue.
4 - Any cross-border flights
5 - Any flight which involves overflying water
2+4

69. On a flight plan you are required to indicate in the box marked "speed" the planned speed for the first part of the cruise or for the entire cruise.
This speed is:
The true airspeed

70. Which of the following statements regarding filing a flight plan is correct?
In case of flow control the flight plan should be filed at least three hours in advance of the time of departure

71. An aeroplane is on an IFR flight. The flight is to be changed from IFR to VFR. Is it possible?
Yes, the pilot in command must inform ATC using the phrase "cancelling my IFR flight"

72. You have a flight plan IFR from Amsterdam to London. In the flight plan it is noted that you will deviate from the ATS route passing the FIR boundary Amsterdam/London. The airway clearance reads: Cleared to London via flight planned route.
Which of the following statements is correct?
The route according to the flight plan is accepted

73. During an IFR flight TAS and time appear to deviate from the data in the flight plan. The minimum deviations that should be reported to ATC in order to conform to PANS-RAC are:
TAS 5% and time 3 minutes

74. How many hours in advance of departure time should a flight plan be filed in the case of flights into areas subject to air traffic flow management (ATFM)?
3:00 hours

75. A "current flight plan" is a:
Filed flight plan with amendments and clearance included

76. The navigation plan reads:
Trip fuel: 100 kg
Flight time: 1h35min
Taxi fuel: 3 kg
Block fuel: 181 kg
The endurance on the ICAO flight plan should read:
2h 49min

77. The navigation plan reads:
Trip fuel: 136 kg
Flight time: 2h45min
Calculated reserve fuel: 30% of trip fuel
Fuel in tank is minimum (no extra fuel on board)
Taxi fuel: 3 kg
The endurance on the ICAO flight plan should read:
3h34min

78. If your destination airport has no ICAO indicator, in the appropriate box of your flight plan, you write:
ZZZZ

79. For a flight plan filed before the flight, the indicated time of departure is:
The estimated off-block time

80. The cruising speed to write in the appropriate box of a flight plan is:
True air speed

81. In the appropriate box of a flight plan, for endurance, one must indicate the time corresponding to:
The total usable fuel on board

82. The maximum permissible take-off mass of an aircraft for the L wake turbulence category on a flight plan is:
7 000 kg

83. In the appropriate box of a flight plan form, concerning equipment, the letter to be used to indicate that the aircraft is equipped with a mode A 4096 codes transponder with altitude reporting capability is:
C

84. It is possible, in flight, to:
1 - file an IFR flight plan
2 - modify an active IFR or VFR flight plan
3 - cancel an active VFR flight plan
4 - close an active VFR flight plan
Which of the following combinations contains all of the correct statements?
1 - 2 - 3 - 4

85. When a pilot fills in a flight plan, he must indicate the wake turbulence category. This category is a function of which mass?
Maximum certified take-off mass

86. The planned departure time from the parking area is 1815 UTC
The estimated take-off time is 1825 UTC
The IFR flight plan must be filed with ATC at the latest at:
1715 UTC

87. In the appropriate box of a flight plan form, corresponding to the estimated time of departure, the time indicated is that at which the aircraft intends to :
Go off blocks

88. When completing an ATS flight plan, an elapsed time (Item 16) of 1 hour 55 minutes should be entered as:
0155

89. When completing an ATS flight plan for a European destination, clock times are to be expressed in:
UTC

90. In the ATS flight plan, for a non-scheduled flight which of the following letters should be entered in Item 8 (Type of Flight):
N

91. In the ATS flight plan item 15, it is necessary to enter any point at which a change of cruising speed takes place. For this purpose a "change of speed" is defined as:
5% TAS or 0.01 Mach or more

92. In the ATS flight plan item 15, when entering a route for which standard departure (SID) and standard arrival (STAR) procedures exist:
Both should be entered in the ATS plan where appropriate

93. When an ATS flight plan has been submitted for a controlled flight, the flight plan should be amended or cancelled in the event of the off-block time being delayed by:
30 minutes or more

94. When completing an ATS flight plan for a flight commencing under IFR but possibly changing to VFR, the letters entered in Item 8 (FLIGHT RULES) would be:
Y

95. In the ATS flight plan Item 19, if the number of passengers to be carried is not known when the plan is ready for filing:
"TBN" (to be notified) may be entered in the relevant box

96. In an ATS flight plan Item 15, in order to define a position as a bearing and distance from a VOR, the group of figures should consist of :
VOR ident, magnetic bearing and distance in nautical miles

97. An aircraft plans to depart London at 1000 UTC and arrive at Munich (EDDM) at 1215 UTC. In the ATS flight plan Item 16 (destination/EET) should be entered with:
EDDM 0215

98. In an ATS flight plan Item 15 (route), in terms of latitude and longitude, a significant point at 41°35' north 4°15' east should be entered as:
4135N00415E

99. In an ATS flight plan, Item 15 (route), a cruising pressure altitude of 32000 feet would be entered as:
F320

100. When an ATS flight plan is submitted for a flight outside designated ATS routes, points included in Item 15 (route) should not normally be at intervals of more than :
30 minutes flying time or 370 km

101. In the ATS flight plan Item 15, a cruising speed of 470 knots will be entered as:
N0470

102. In the ATS flight plan Item 13, in a flight plan submitted before departure, the departure time entered is the :
Estimated off-block time

103. In the ATS flight plan Item 15 (Cruising speed), when not expressed as a Mach number, cruising speed is expressed as:
TAS

104. In the ATS flight plan Item 10 (equipment), the letter to indicate the carriage of a serviceable transponder - mode A (4 digits-4096 codes) and mode C, is:
C

105. (For this question use Flight Planning Manual MEP 1 Figure 3.2)
A flight is to be made in a multi engine piston aeroplane (MEP1). The cruising level will be 11000ft. The outside air temperature at FL is -15 ° C. The usable fuel is 123 US gallons. The power is set to economic cruise. Find the range in NM with 45 min reserve fuel at 45 % power.
752 NM
The question states that "economy" power is set. The 45 minutes reserve fuel however, shall be calculated using 45% power.
Now read figure 3.2 on page 18 carefully: Find in the upper right corner that "Economy" cruise means 65% power.
Find at the bottom that the curves on the left side include already a reserve of 45 minutes at 45% power while the curves on the right include no reserve. So use the 65% power curve on the left side of the graph.
The cruise power setting is "economic cruise" and not 45% power!
Now, read the graph: In the right upper corner, it says: ECONOMY (65%)
Now, enter the graph at 11'000 ft and move right to the 65% power curve in the left half of the graph, where it says "RANGE - NAUTICAL MILES, WITH 45 MIN. RESERVE at 45% POWER"
Read there 762 NM range.
Calculate ISA temperature at FL110: 15 - 22 = -7°C Hence -15°C is 8° below ISA
Read the note above the curve: Per 1° below ISA, decrease range by 1 NM Calculate Range = 762-8 = 754 NM

106. A descent is planned from 7500 ft MSL so as to arrive at 1000 ft MSL 6 NM from a VORTAC.
With a GS of 156 kts and a rate of descent of 800 ft/min. The distance from the VORTAC when descent is started is:
27,1 NM

107. (For this Question use Flight Planning & Monitoring MEP1 Fig. 3.5)
Given:
FL 75
Lean mixture
Economy Power setting
Find:
Endurance in hours with no reserve
05:01

108. A sector distance is 450 NM long. The TAS is 460 kt. The wind component is 50 kt tailwind. What is the still air distance?
406 Nautical Air Miles (NAM)

109. The still air distance in the climb is 189 Nautical Air Miles (NAM) and time 30 minutes. What ground distance would be covered in a 30 kt head wind?
174 NM

110. Flying from SAULGAU airport (48°02'N, 009°31'E) to ALTENSTADT airport (47°50'N, 010°53'E). Find magnetic course and the distance.
Magnetic course 102°, distance 56 NM

111. Flying from ERBACH airport (48°21'N, 009°55'E) to POLTRINGEN airport (48°33'N, 008°57'E). Find magnetic course and the distance.
Magnetic course 287°, distance 41 NM

112. Flying from Position SIGMARINGEN (48°05'N, 009°13'E) to BIBERACH airport (48°07'N, 009°46'E). Find magnetic course and the distance.
Magnetic course 086°, distance 22 NM

113. (For this Question use Flight Planning & Monitoring SEP1)
A flight has to be made with the single engine sample aeroplane. For the fuel calculation allow 10 lbs fuel for start up and taxi, 3 minutes and 1 gallon of additional fuel to allow for the climb, 10 minutes and no fuel correction for the descent.
Planned flight time (overhead to overhead) is 03 hours and 12 minutes.
Reserve fuel 30% of the trip fuel.
Power setting is 25 in.HG (or full throttle), 2100 RPM, 20°C lean.
Flight level is 70 and the OAT 11°C.
The minimum block fuel is:
283 lbs
Calculate ISA temperature at FL70: T ISA = 15-7x2 = +1°C Hence the OAT is ISA + 10
Read Fuel flow from Table 2.2.2 (page 9), interpolate fuel flow between the different numbers: at ISA, fuel flow = (61.9 + 66.1) / 2 = 64 PPH at ISA + 20, FF = (63.9 + 60.2)/2 = 62.05 PPH Calculate FF at ISA +10: FF=(64+62.05)/2 = 63.025 PPH
Flight time overhead to overhead is 03:12 which is 192 minutes The climb will take 3 minutes more time because of the slower speed than cruise and also the fuel flow will be considerably higher. This is compensated by adding 3 minutes to the cruise time AND 1 gallon of fuel. The descent is not going to increase the flight time, usually the speed is not lower than during cruise. The 10 minutes for descent are included in the 03:12 cruise time.
Calculate cruise fuel: (192+3) x 63 / 60 = 204.75 lbs Addition for climb: 1 gallon = +6 lbs TRIP fuel: 210.75 lbs
Reserve: 30% of trip = 0.3 x 210.75 = 63.225 lbs Taxi: 10 lbs Minimum BLOCK: Taxi + TRIP + Reserve = 10 + 210.75 + 63.225 = 283.9 lbs

114. (For this Question use Flight Planning & Monitoring SEP1)
A flight has to be made with the single engine sample aeroplane. For the fuel calculation allow 10 lbs fuel for start up and taxi, 3 minutes and 1 gallon of additional fuel to allow for the climb, 10 minutes and no fuel correction for the descent.
Planned flight time (overhead to overhead) is 02 hours and 37 minutes.
Reserve fuel 30% of the trip fuel.
Power setting is 23 in.HG (or full throttle), 2300 RPM, 20°C lean.
Flight level is 50 and the OAT -5°C.
The minimum block fuel is:
265 lbs

115. (For this question use SPRM VFR & GPS chart ED-6)
Flying from EDSZ Rottweil Zepfenhan (48°12'N, 008°44'E) to EDPJ Laichingen airport (48°30'N, 009°38'E). Find magnetic course and the distance.
Magnetic course 063°, distance 41 NM

116. (For this question use SPRM VFR & GPS chart ED-6)
Flying from EDSZ Rottweil Zepfenhan (48°12'N, 008°44'E) to EDPJ Laichingen airport (48°30'N, 009°38'E). Determine the highest obstacle within a corridor 5 NM left and 5 NM right of the course line:
3760 ft

117. (For this question use SPRM VFR & GPS chart ED-6)
Flying from EDTM Mengen airport (48°03'N, 009°22'E) to EDPJ Laichingen airport (48°30'N, 009°38'E). Determine the highest obstacle within a corridor 5 NM left and 5 NM right of the course line:
2870 ft

118. (For this question use SPRM VFR & GPS chart ED-6)
What minimum grid area altitude is applicable for EDPJ Laichingen airport (48°30'N, 009°38'E)?
43

119. (For this question use SPRM VFR & GPS chart ED-6)
What is the elevation of ZURICH Kloten airport (47°28'N, 008°33'E)?
1416 ft

120. An aeroplane has the following masses:
ESTLWT= 50 000 kg
Trip fuel= 4 300 kg
Contingency fuel= 215 kg
Alternate fuel (final reserve included)= 2 100kg
Taxi= 500 kg
Block fuel= 7 115 kg
Before departure the captain orders to make the block fuel 9 000 kg.
The trip fuel in the operational flight plan should read:
4 300 kg

121. (For this question use Route Manual chart E(HI)4)
An aeroplane has to fly from Abbeville (50°08.1'N 001°51.3'E) to Biggin (51°19.8'N 00°00.2'E). What is the first FL above FL295 that can be flown on an IFR flight plan?
FL 310

122. (For this question use Route Manual chart E(HI)4)
An aeroplane has to fly from Abbeville (50°08.1'N 001°51.3'E) to Biggin (51°19.8'N 000°00.2'E). What is the distance of this leg?
100 NM

123. (For this question use Route Manual chart E(HI)4)
An aeroplane has to fly from Abbeville (50°08.1'N 001°51.3'E) to Biggin (51°19.8'N 00°00.2'E). At Biggin you can find : 141°. This is :
The magnetic great circle course from Biggin to Abbeville

124. (For this question use Route Manual chart E(HI)4&5)
An aeroplane has to fly from Salzburg (48°00.2'N 012°53.6'E) to Klagenfurt (46°37.5'N 014°33.8'E). Which statement is correct?
The airway UB5 can be used for flights to/from Klagenfurt and Salzburg

125. (For this question use Route Manual chart E(HI)4)
An aeroplane has to fly from Salzburg (48°00.2'N 012°53.6'E) to Klagenfurt (46°35.9'N 014°33.8'E). Which statement is correct?
The minimum grid safe altitude for the main part of this route is 13400 ft above MSL

126. (For this question use Route Manual chart E(HI)4)
An aeroplane has to fly from Salzburg (48°00.2'N 012°53.6'E) to Klagenfurt (46°37.5'N 014°33.8'E). At Salzburg there is stated on the chart D 113.8 SBG. That means :
VOR/DME with identification SBG frequency 113.8 MHz can be used

127. Unless otherwise shown on charts for standard instrument departure the routes are given with:
Magnetic course

128. (For this question use Route Manual chart SID PARIS Charles-De-Gaulle (20-3))
Planning a IFR flight from Paris (Charles de Gaulle) to London (Heathrow).
Find the elevation of the departure aerodrome.
387 ft

129. (For this question use Route Manual chart STAR LONDON Heathrow (10-2))
Planning a IFR flight from Paris (Charles de Gaulle) to London (Heathrow).
Find the elevation of the destination aerodrome.
80 ft

130. (For this question use Route Manual chart E(HI)4)
Planning a IFR flight from Paris Charles de Gaulle (N49 00.9 E002 36.9) to London Heathrow (N51 29.2 W000 27.9).
Find the average true course from Paris to London.
322°
This is a plotting question.
Take chart E(HI)4/5 and use your plotter.
Draw a line between VOR CHARLES DE GAULE 112.15 CDG and VOR LONDON 113.6 LON. Note the two VORs are exactly at the position given in the question. Read the true course between the two points on the meridian at half way between the two points and find the average True Course = 322°

131. (For this question use Route Manual chart E(HI)4)
Planning a IFR flight from Paris Charles de Gaulle (N49 00.9 E002 36.9) to London Heathrow (N51 29.2 W000 27.9).
Determine the preplanning distance by calculating the direct distance plus 10%.
The preplanning distance is:
207 NM

132. EGLL ILS DME Rwy 09L: The Decision Altitude (DA) for a ILS straight-in landing is :
280 ft

133. EHAM VORDME Rwy 22: The Missed Approach procedure is to climb to an altitude of (i)---- on a track of (ii) ----
(i) 2000 ft (ii) 160°

134. Planning an IFR-flight from Paris to London (Heathrow).
Assume: STAR is BIG 2A, Variation 5° W, en-route TAS 430 kts, W/V 280/40, descent distance 76NM.
Determine the magnetic course, ground speed and wind correction angle from ABB 116.6(N50 08.1 E001 51.3) to top of descent.
MC 321°, GS 396 kt, WCA -3°

135. Planning an IFR-flight from Paris to London (Heathrow).
Name the identifier and frequency of the initial approach fix (IAF) of the BIG 2A arrival route.
BIG 115.1 MHz

136. The minimum holding altitude (MHA) and maximum holding speed (IAS) at MHA at OCKHAM OCK 115.3 are:
7000 ft and 220kt

137. The route distance from CHIEVRES (CIV) to BOURSONNE (BSN) is :
96 NM

138. (For this question use Route Manual SID chart 10-3 for London Heathrow)
Which of the following is a correct Minimum Safe Altitude (MSA) for the Airport?
West sector 2100 ft within 25 NM

139. (For this question use Route Manual STAR chart 10-2A,B for Madrid Barajas)
For runway 33 arrivals from the east and south, the Initial Approach Fix (IAF) inbound from airway UR10 is :
VTB

140. (For this question use Route Manual SID chart 10-3 for Zurich)
Which is the correct ALBIX departure via AARAU for runway 16?
ALBIX 7S

141. EHAM: The route distance from runway 27 to ARNEM is:
67 NM

142. EHAM: Which of the following statements is correct for ANDIK departures from runway 19L?
Contact SCHIPOL DEPARTURE 119.05 passing 2000 ft and report altitude

143. EDDM: The correct arrival route and Initial Approach Fix (IAF) for an arrival from the west via TANGO for runway 08 L/R is:
AALEN 1T, IAF ROKIL

144. Planning an IFR-flight from Paris to London.
Determine the distance of the departure route ABB 8A.
74.5 NM

145. Planning an IFR-flight from Paris (Charles de Gaulle) RWY 27 to London.
Given: Distance from PARIS Charles-de-Gaulle to top of climb 50 NM
Determine the distance from the top of climb (TOC) to ABB 116.6.
24.5 NM

146. Planning an IFR-flight from Paris to London (Heathrow) via initial approach fix (IAF) Biggin VOR .
Given: distance from top of descent (TOD) to Rwy 27R is 76 NM
Determine the distance from ABB 116.6 to TOD.
46.4 NM

147. Planning an IFR-flight from Paris Charles de Gaulle to London. SID is ABB 8A.
Assume Variation 3° W, TAS 430kts, W/V 280/40 and distance to top of climb 50NM
Determine the magnetic course, ground speed and wind correction angle from top of climb to ABB 116.6.
MC 349°, GS 414 kt, WCA -5°

148. Of the following, the preferred airways routing from MARTIGUES MTG 117.3 (43°23'N 005°05'E) to ST PREX SPR 113.9 (46°28'N 006°27'E) above FL245 is :
UB282 DGN UB46

149. Of the following, the preferred airways routing from AMBOISE AMB 113.7 (47°26'N 001°04'E) to AGEN AGN (43°53°'N 000°52'E) above FL200 is:
UA34

150. Of the following, the preferred airways routing from CLACTON CLN 114.55 (51°51'N 001°09'E) to DINARD DIN 114.3 (48°35'N 002°05'W) above FL245 is:
UB29 LAM UR1 ORTAC UR14
The use of chart EHi 4 "CAA" is required!

151. The magnetic course/distance from DINKELSBUHL DKB 117.8 (49°09'N010°14'E) to ERLANGEN ERL 114.9 (49°39'N011°09'E) on airway UR11 is;
050°/47 NM

152. The magnetic course/distance from GROSTENQUIN GTQ 111.25 (49°00'N 006°43'E) to LINNA (49°41'N 006°15'E) on airway R7 is:
337°/46 NM

153. The magnetic course/distance from ELBE LBE 115.1 (53°39'N 009°36'E) to LUNUD (54°50'N 009°19'E) on airway H12 is:
352°/72 NM

154. The initial magnetic course/distance from EELDE EEL 112.4 (53°10'N 006°40'E) to WELGO (54°18'N 007°25'E) on airway A7 is:
024°/ 73 NM

155. The magnetic course/distance from CAMBRAI CMB 112.6 (50°14'N 003°09'E) to TALUN (49°33'N 003°25'E) on airway B3 is:
169°/42 NM

156. The magnetic course/distance from WALLASEY WAL 114.1 (53°23N 003°28'W° to LIFFY (53°29'N 005°30'W) on airway B1 is:
279°/85 NM

157. The magnetic course/distance from TRENT TNT 115.7 (53°03'N 001°40'W) to WALLASEY WAL 114.1 (53°23'N 003°08W) on airway UR3 is:
297°/57 NM

158. The magnetic course/distance from TANGO TGO 112.5 (48°37'N 009°16'E) to DINKELSBUHL DKB 117.8 (49°09'N 010°14E) on airway UR11 is:
052°/50 NM

159. The magnetic course/distance from ST PREX SPR 113.9 (46°28'N 006°27'E) to FRIBOURG FRI 115.1 (46°47'N 007°14'E) on airway UG60 is:
061°/37 NM

160. The magnetic course/distance from SALZBURG SBG 113.8 (48°00'N 012°54'E) to STAUB (48°44'N 012°38'E) on airway UB5 is:
346°/45 NM

161. The magnetic course/distance from ELBA ELB 114.7 (42°44'N 010°24'E) to SPEZI (43°49'N 009°34'E) on airway UA35 is:
332°/76 NM

162. The magnetic course/distance from LIMOGES LMG 114.5 (45°49'N 001°02'E) to CLERMONT FERRAND CMF 117.5 (45°47'N 003°11'E) on airway UG22 is:
094°/ 90 NM

163. The radio navigation aid at TOPCLIFFE (54°12'N 001°22'W) is a:
TACAN only, channel 84, (frequency 113.7 MHz)

164. The radio navigation aid serving STRASBOURG (48°30'N 007°34'E) is a:
VOR/TACAN, frequency 115.6 MHz

165. The radio navigation aid at ST DIZIER (48°38N 004°53'E) is a:
TACAN, channel 87, frequency 114.0 MHz
For full information, the use of chart EHi 4 "CAA" is recommended!

166. The radio navigation aid STAD (51°45'N 004°15'E) is:
An NDB, frequency 386 kHz

167. The radio navigation aid at CHIOGGIA (45°04'N 012°17'E) is a:
VOR/DME, frequency 114.1 MHz, and NDB frequency 408 kHz

168. The radio navigation aid on airway UG4 at LUXEUIL (47°41'N 006°18'E) is a:
VOR only, identifier LUL

169. The radio navigation aid at BELFAST CITY (54°37'N 005°53'W) is :
An NDB, frequency 420 kHz, NOT continuous operation

170. The radio navigation aid at SHANNON (52°43'N 008°53'W) is :
A VOR/DME, frequency 113.3 MHz

171. The VOR and TACAN on airway G9 at OSNABRUCK (52°12'N 008°17'E) are:
NOT frequency paired, and have different identifiers

172. The NDB at DENKO (52°49'N 015°50'E) can be identified on:
Frequency 440 kHz, BFO on

173. The airway intersection at RONNEBY (56°18'N 015°16'E) is marked by:
An NDB callsign N

174. From which of the following would you expect to find information regarding known short unserviceability of VOR, TACAN, and NDB?
NOTAM

175. From which of the following would you expect to find the dates and times when temporary danger areas are active
NOTAM and AIP (Air Information Publication)

176. From which of the following would you expect to find details of the Search and Rescue organisation and procedures (SAR)?
AIP (Air Information Publication)

177. From which of the following would you expect to find facilitation information (FAL) regarding customs and health formalities?
AIP (Air Information Publication)

178. Aeroplanes intending to use airway UR14 should cross GIBSO intersection (50°45'N 002°30'W) at or above:
FL250

179. An airway is marked 3500T 2100 a. This indicates that:
The minimum obstruction clearance altitude (MOCA) is 3500 ft

180. The minimum enroute altitude available on airway UR160 from NICE NIZ 112.4 (43°46'N 007°15'E) to BASTIA BTA 116.2 (42°32'N 009°29'E) is:
FL250

181. The minimum enroute altitude that can be maintained continuously on airway UA34 from WALLASEY WAL 114.1 (53°23'N 003°08'W) to MIDHURST MID 114.0 (51°03'N 000°37'W) is :
FL290

182. An airway is marked FL 80 1500 a. This indicates that:
The minimum enroute altitude (MEA) is FL 80

183. The minimum enroute altitude (MEA) that can be maintained continuously on airway G4 from JERSEY JSY 112.2 (49°13'N 002°03'W) to LIZAD (49°35'N 004°20'W) is :
FL140

184. An airway is marked 5000 2900a. The notation 5000 is the :
Minimum enroute altitude (MEA)

185. The minimum enroute altitude that can be maintained continuously on airway B65/H65 from DOXON (55°27'N 018°10'E) to RONNE ROE 112.0 (55°04'N 014°46'E) is :
FL100

186. An appropriate flight level for flight on airway UR1 from ORTAC (50°00'N 002°00'W) to MIDHURST MID 114.0 (51°03'N 000°37'W) is:
FL250

187. An appropriate flight level for flight on airway UG1 from ERLANGEN ERL 114.9 (49°39°'N 011°09'E) to FRANKFURT FFM 114.2 (50°03'N 008°38'E) is:
FL310

188. An appropriate flight level for flight on airway UG5 from MENDE-NASBINALS MEN 115.3 (44°36'N 003°10'E) to GAILLAC GAI 115.8 (43°57'N 001°50'E) is:
FL290

189. An appropriate flight level for flight on airway UR24 from NANTES NTS 117.2 (47°09'N 001°37'W) to CAEN CAN 115.4 (49°10'N 000°27'W) is:
FL310

190. For this question use chart 2E(LO): An appropriate flight level for flight on airway B3 from CHATILLON CTL 117.6 (49°08'N 003°35'E) to CAMBRAI CMB 112.6 (50°14'N 003°09'E) is :
FL170

191. An appropriate flight level for flight on airway R10 from MONTMEDY MMD 109.4 (49°24'N 005°08'E) to CHATILLON CTL 117.6 (49°08'N 003°35'E) is:
FL60

192. An appropriate flight level for IFR flight in accordance with semi-circular height rules on a course of 180° (M) is:
FL100

193. An appropriate flight level for IFR flight in accordance with semi-circular height rules on a magnetic course of 200° is:
FL310

194. LSZH: Aeroplane arriving via route BLM 2Z only, should follow the following route to EKRON int:
BLM R111 to GOLKE int then TRA R-247 inbound to EKRON int

195. EDDM: Which is the correct departure via KEMPTEN from runway 26L ?
KEMPTEN FIVE SIERRA

196. LSZH ILS Rwy 14: The minimum glide slope interception altitude for a full ILS is:
4000 ft

197. The Radio Altimeter minimum altitude for a CAT 2 ILS DME is :
100 ft

198. (For this question use Route Manual STAR chart 11-1, London Heathrow ILS DME Rwy 09R)
The Minimum Descent Altitude (MDA) for an ILS glide slope out, is:
480 ft

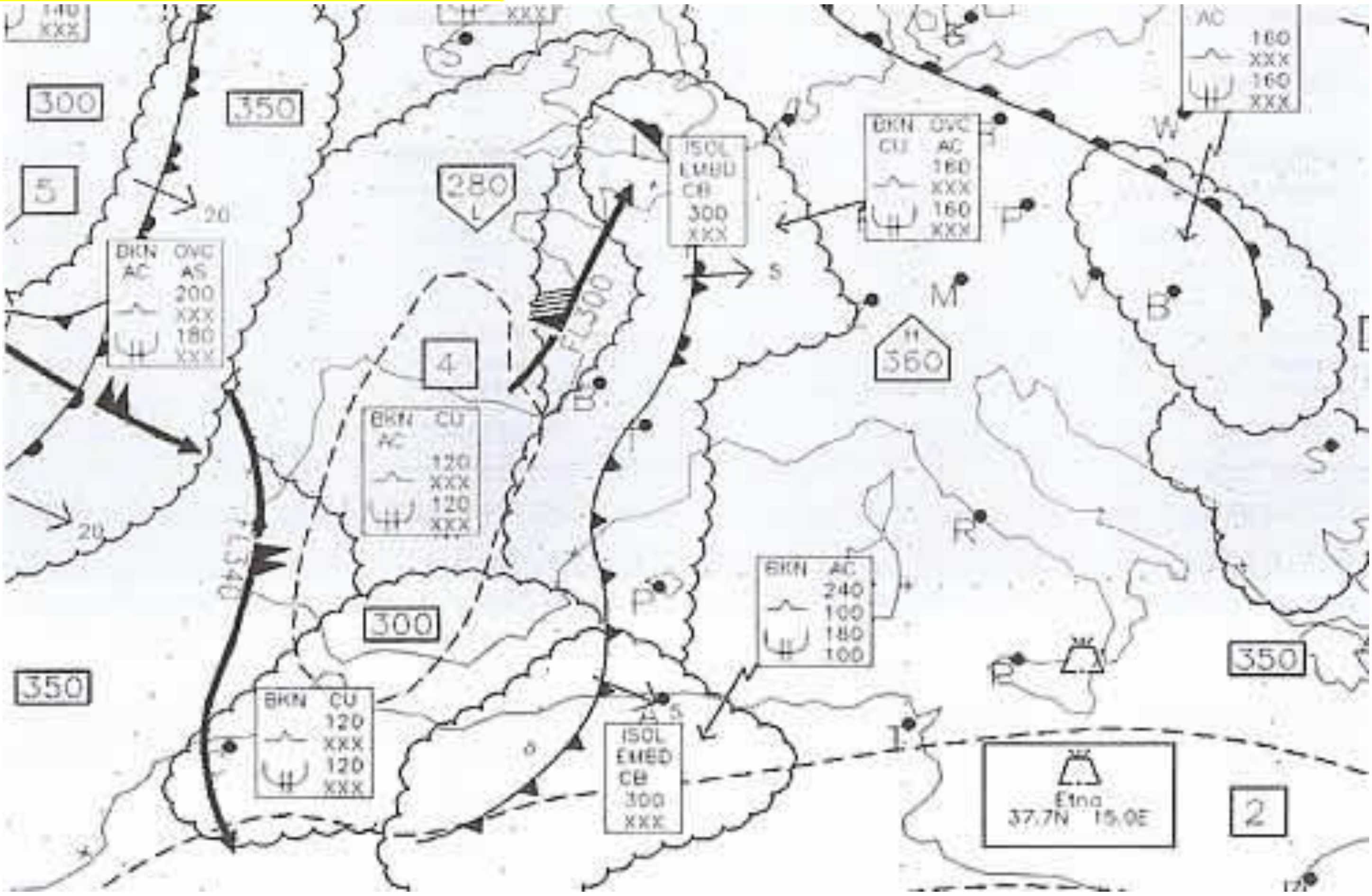
199. (For this question use Route Manual chart 21-2 Paris Charles de Gaulle ILS Rwy 27))
The crossing altitude and descent instruction for a propeller aircraft at COULOMMIERS (CLM) are :
Cross at FL60 descend to 4000 ft

200. EDDM ILS Rwy 26R: The ILS frequency and identifier are:
108.7 IMNW

201. LFPG ILS Rwy 09: The ILS localizer course is :
088°

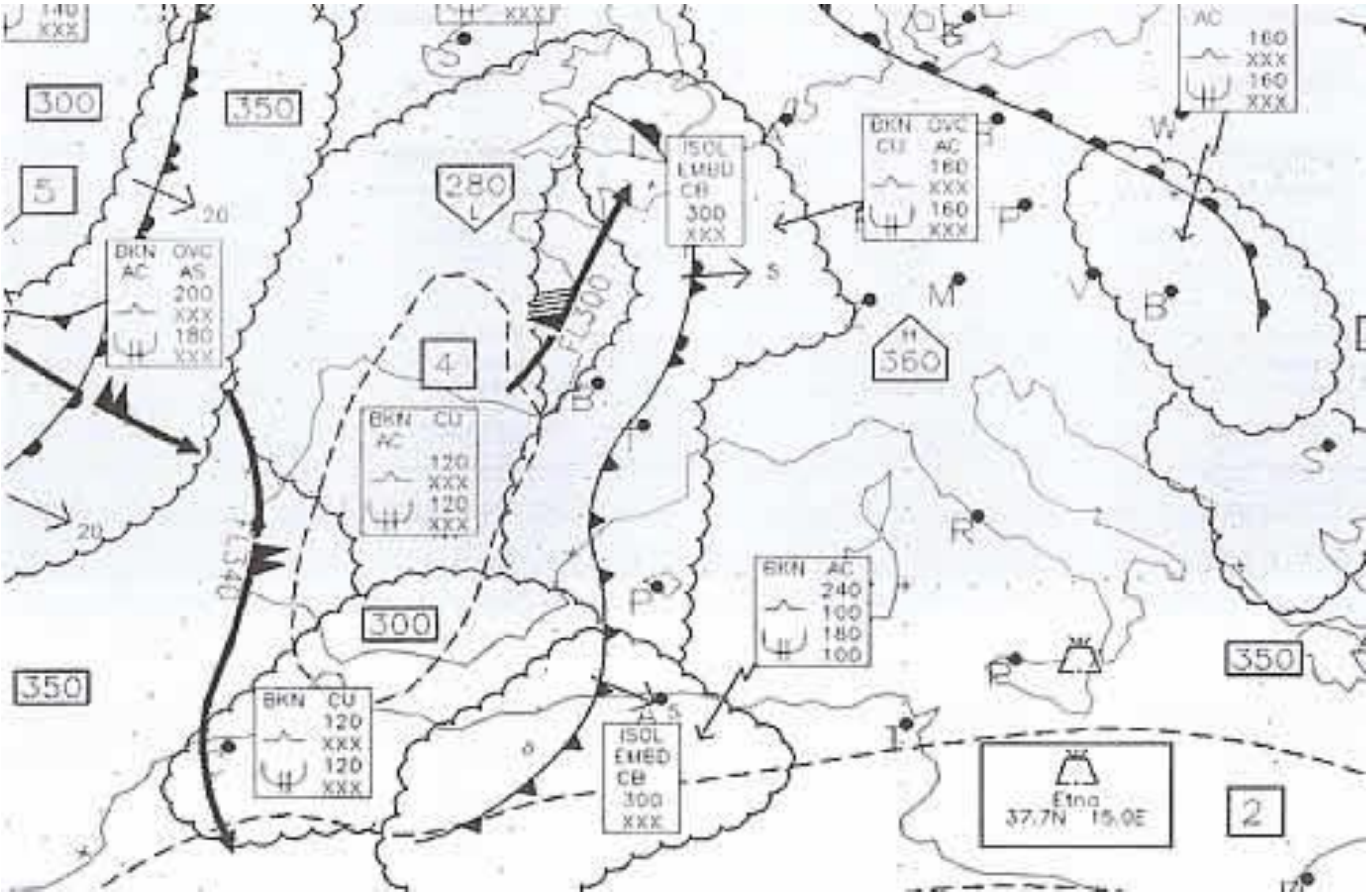
202. EDDM NDB DME Rwy 26L: The frequency and identifier of the NDB for the published approaches are:
400 MSW

203. Which describes the worst hazard, if any, that could be associated with the type of feature at 37.7°N 015°E ?
Engine flame out and windscreen damage



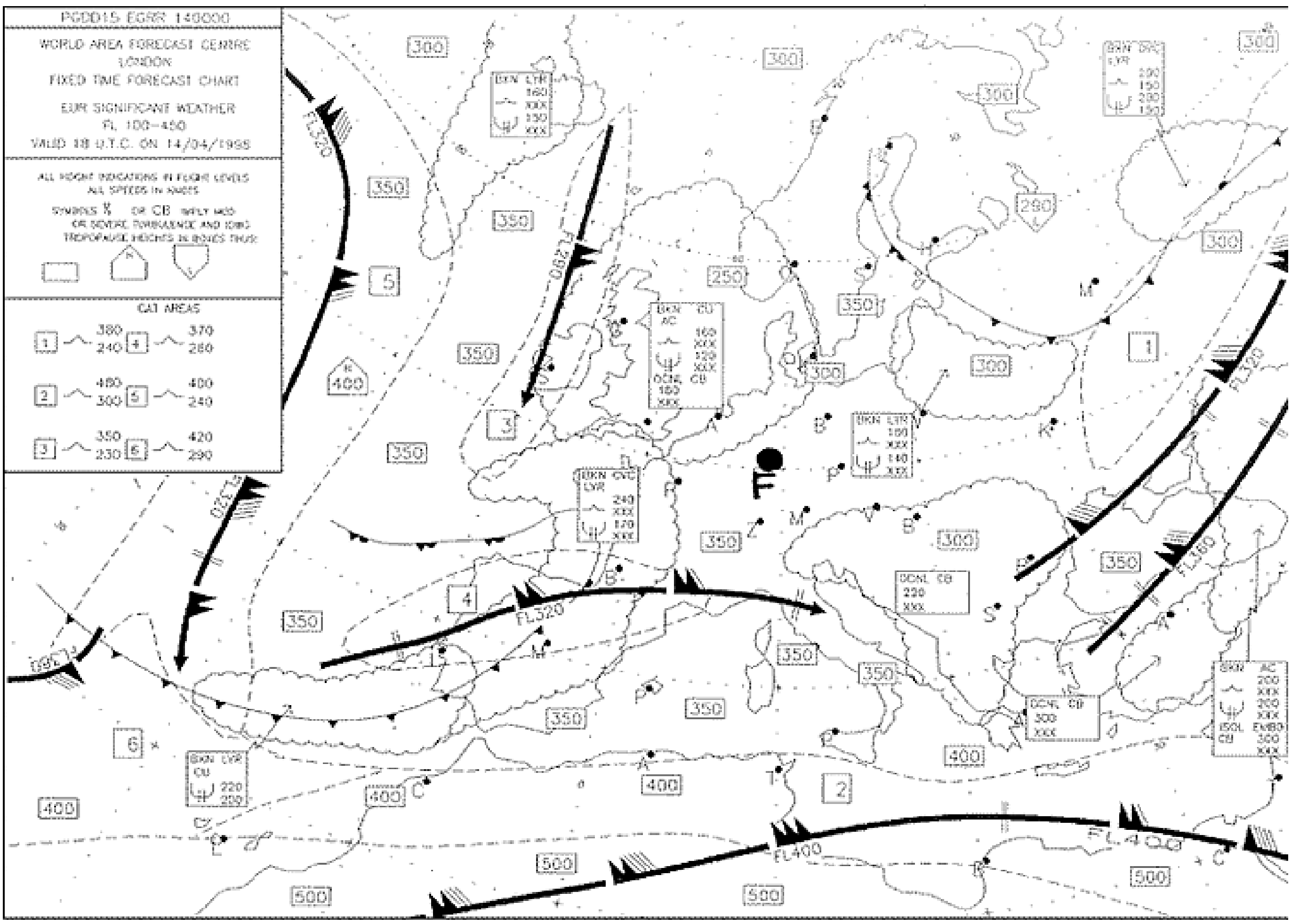
204. The surface weather system over England (53°N 002°W) is

An occluded front moving east



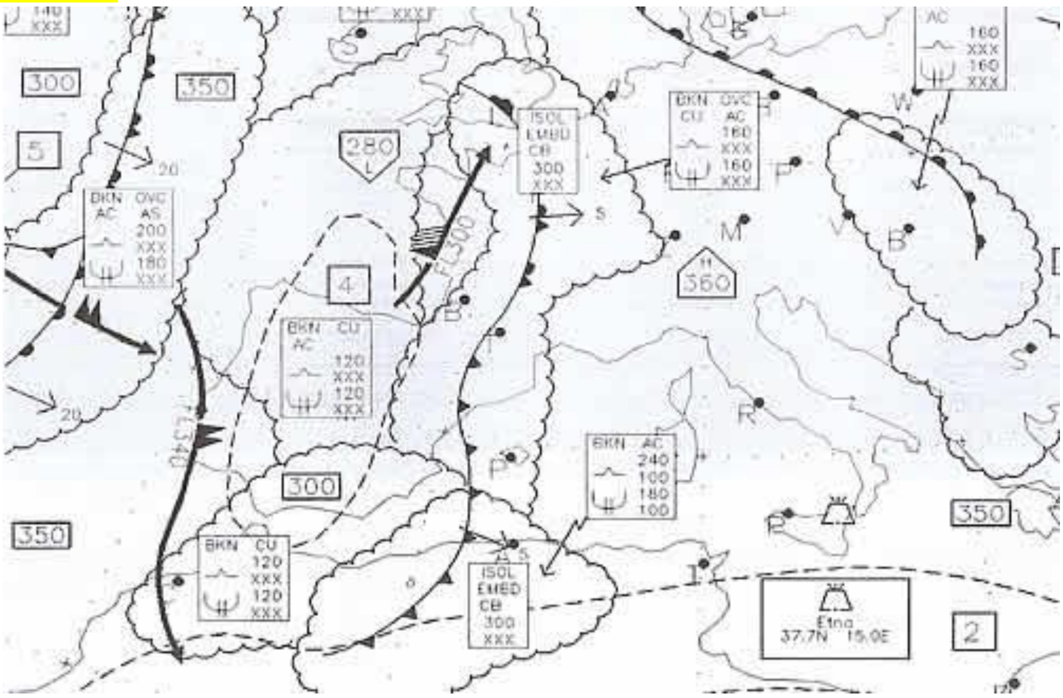
205. In the vicinity of PARIS (49°N 003°E) the tropopause is at about

FL350



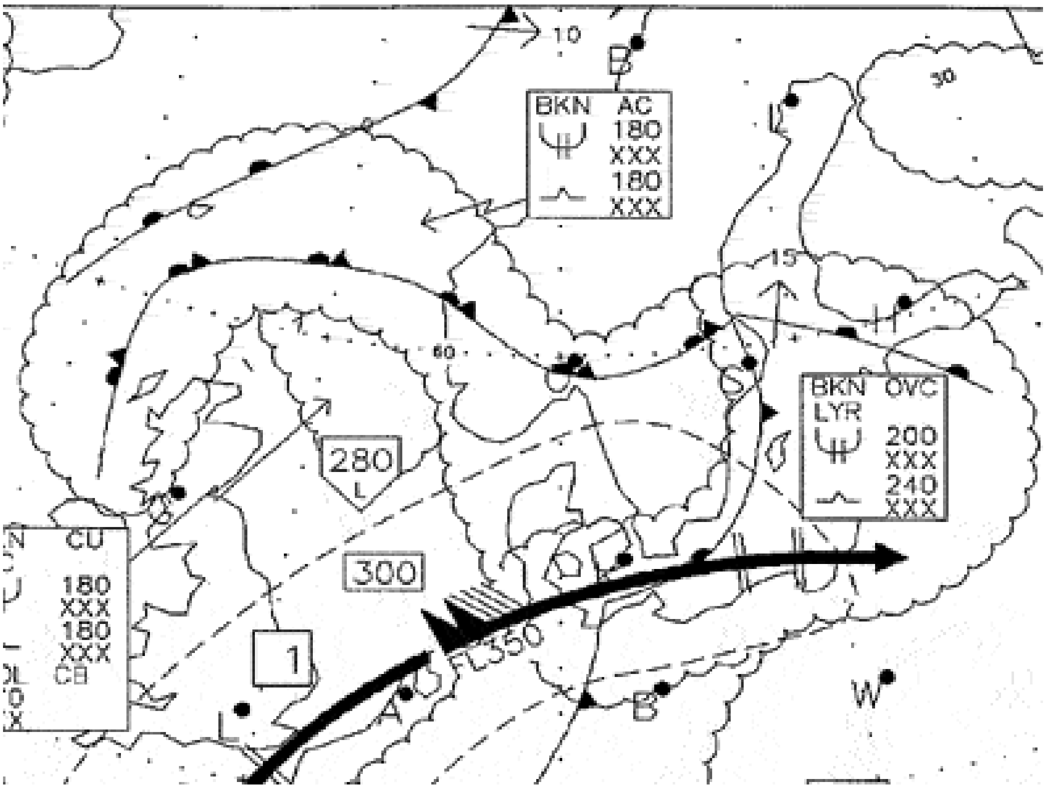
206. Which describes the maximum intensity of icing, if any, at FL110 in the vicinity of CASABLANCA (33°N 008°W) ?

Moderate



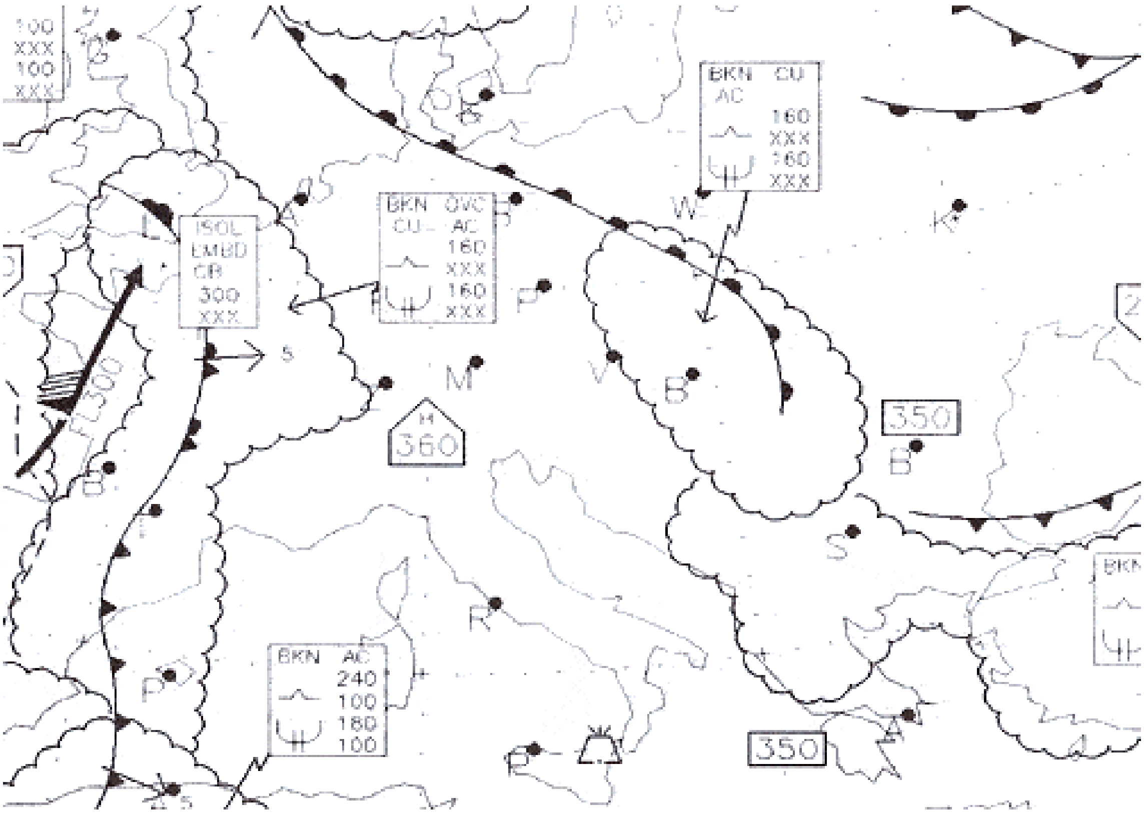
207. Which best describes the significant cloud, if any, forecast for the area southwest of BODO (67°N 014°E)

5 to 7 oktas AC, base below FL100, tops FL180



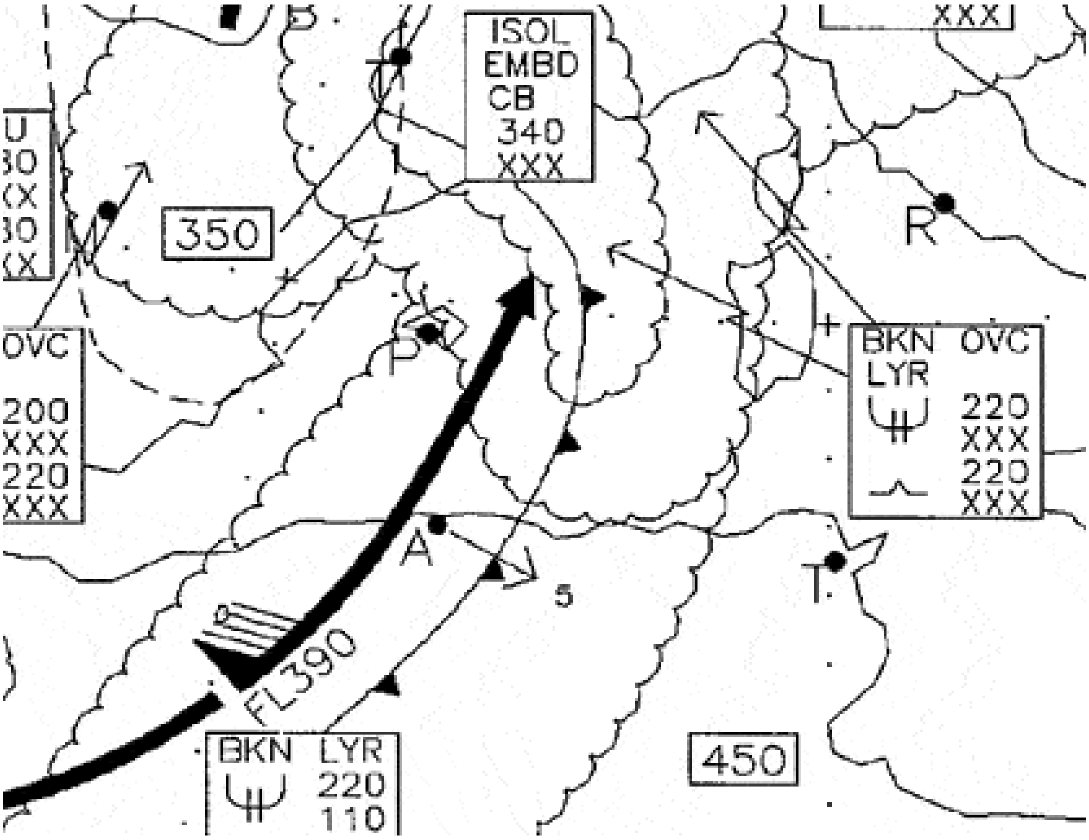
208. Which best describes the maximum intensity of icing, if any, at FL150 in the vicinity (west)of BUCHAREST (45°N 026°E) ?

Moderate



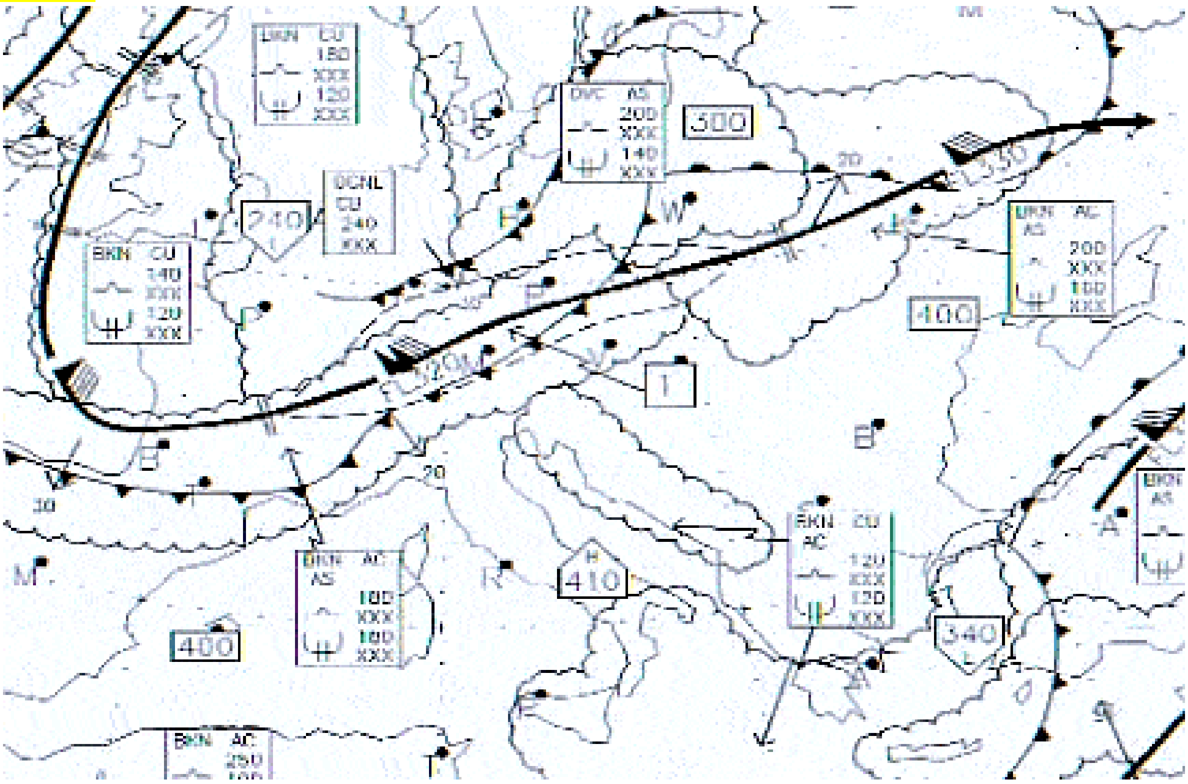
209. Which best describes the maximum intensity of CAT, if any, forecast for FL330 over TUNIS?

Nil



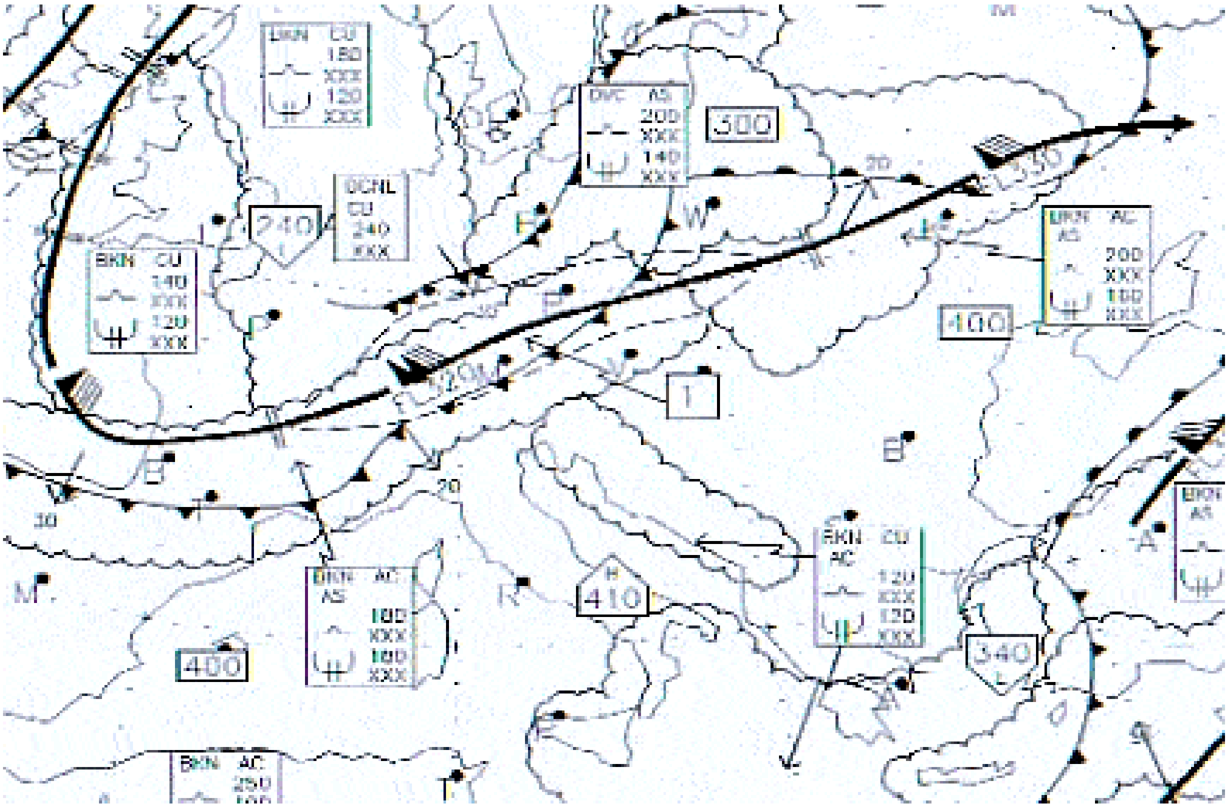
210. The maximum wind velocity (°/kt) shown in the vicinity of MUNICH (48°N 012°E) is :

260/130



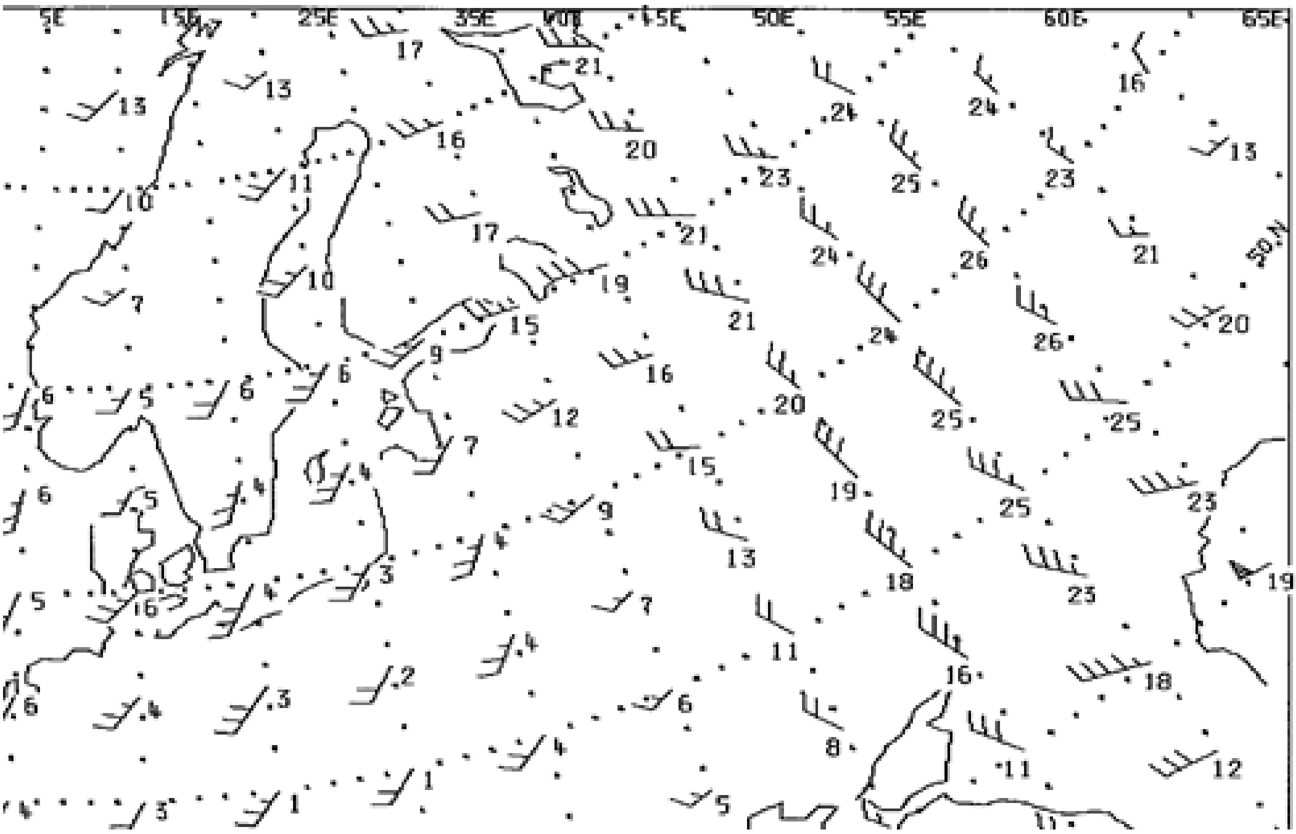
211. The wind velocity over GERMANY is

A maximum of 130 kt at FL320



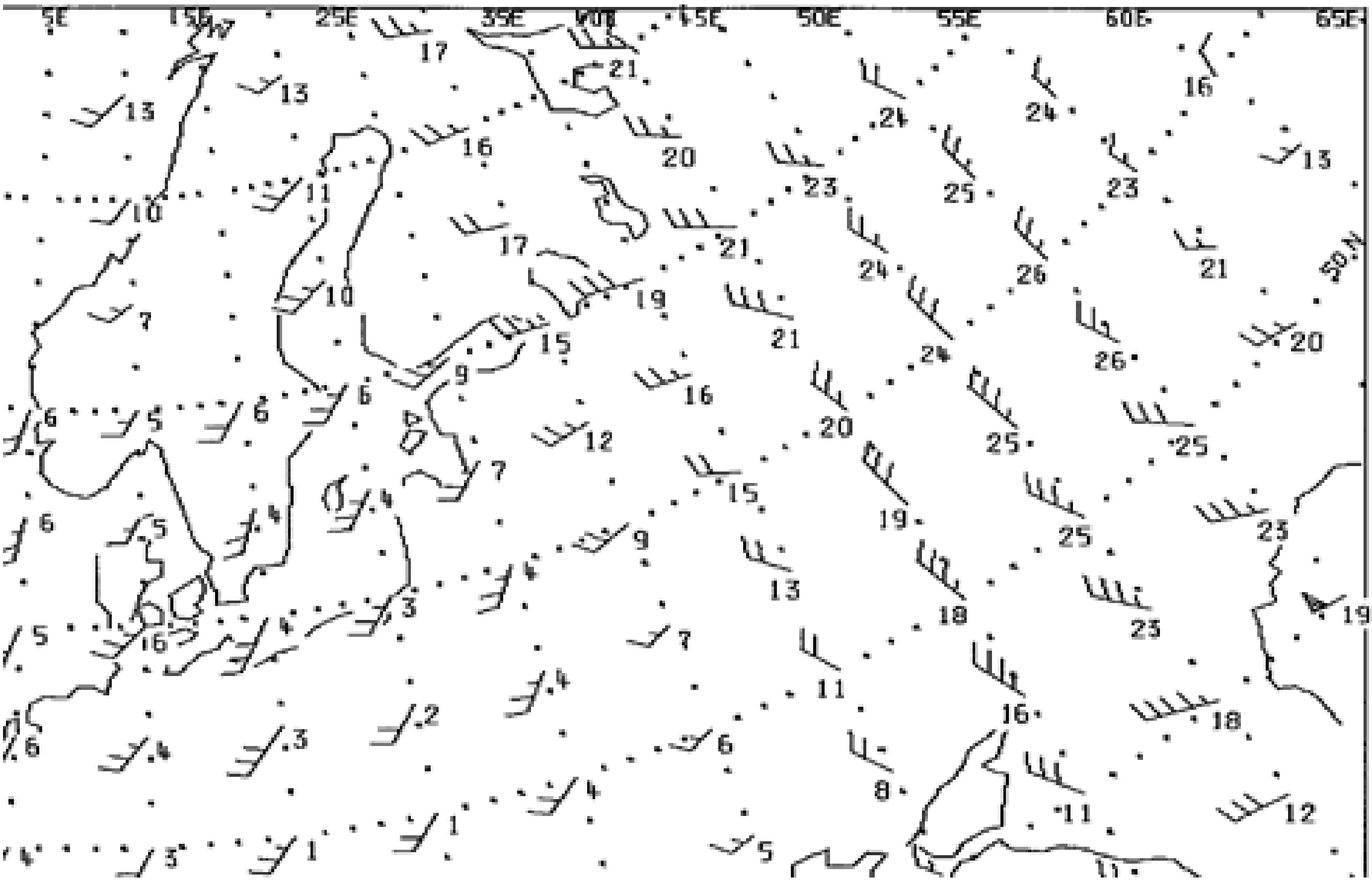
212. The wind direction and velocity (°/kt) at 50°N 040°E is:

350/35



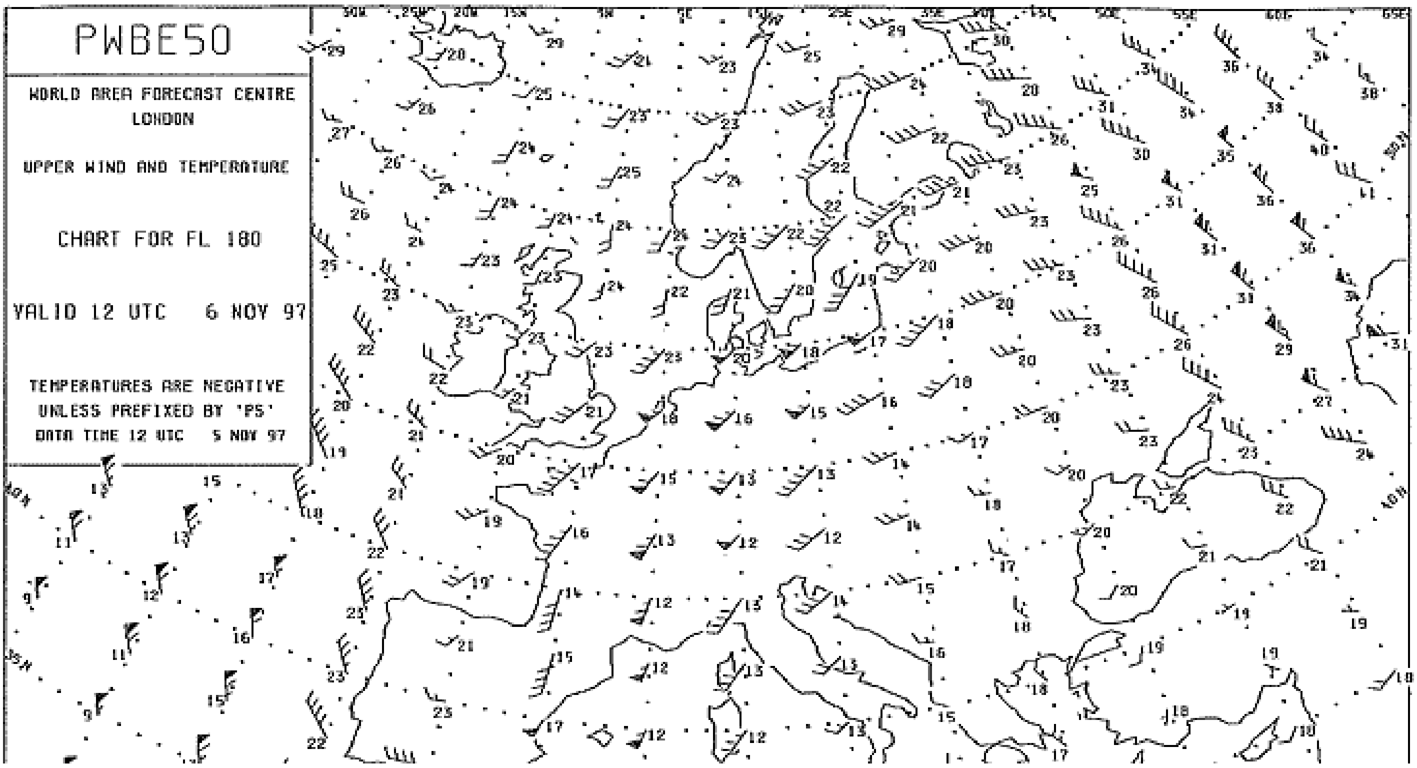
213. The wind direction and velocity (°/kt) at 60°N 015°E is

200/20



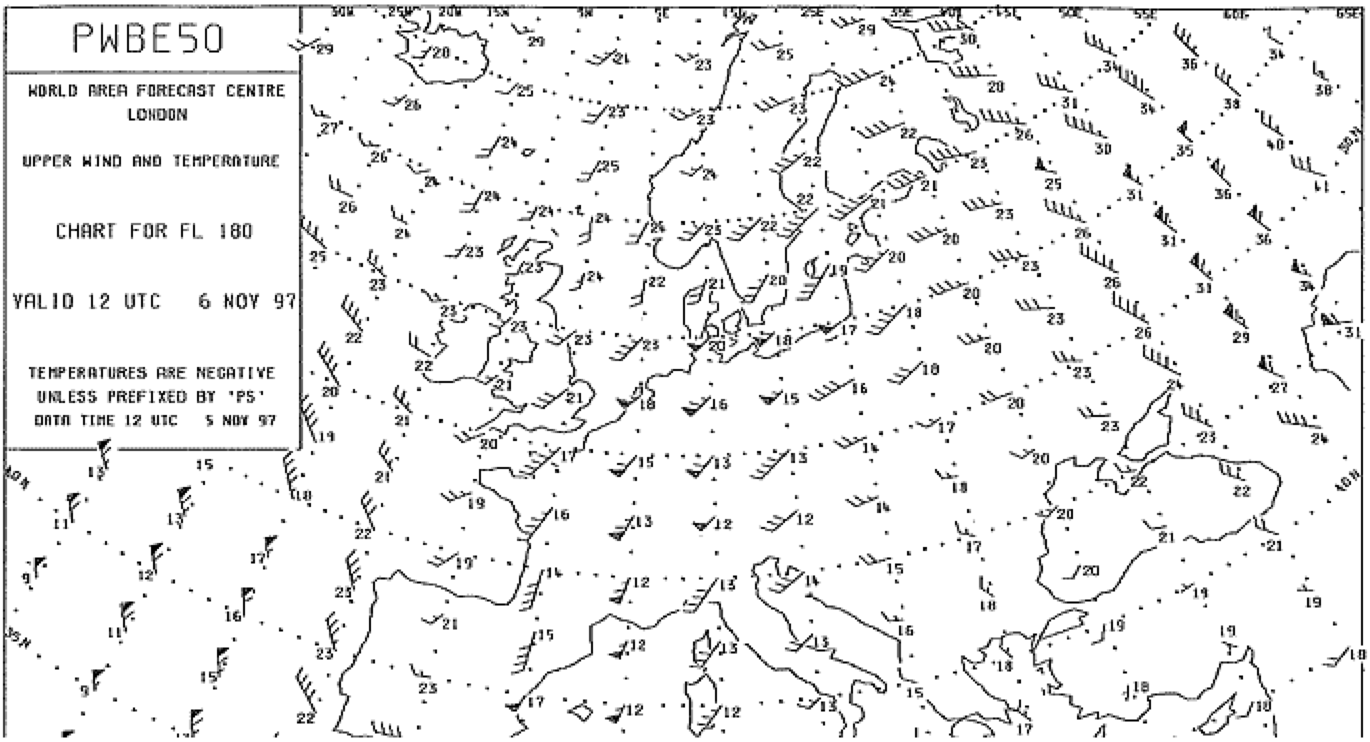
214. What is the mean temperature deviation (°C) from the ISA over 50°N 010°W ?

+/-0



215. The wind direction and velocity (°/kt) at 40°N 040°E is

330/20



216. What lowest cloud conditions (oktas/ft) are forecast for 1900 UTC at HAMBURG (EDDH) ?

5 to 7 at 500

List of TAFs

TAF EDDF ISSUED AT 042200
EDDF 0524 VRE03KT CAVOK
BECMG 0609 20005KT 9999 SCT030 BKN045 =

TAF EDDK ISSUED AT 042200
EDDK 0624 14005KT 7000 NSC
BECMG 0608 CAVOK
TEMPO 1115 9999 SCT040 =

TAF EDDL ISSUED AT 042200
EDDL 0624 16003KT 5000 NSC
BECMG 0608 CAVOK =

TAF EDDM TSSUED AT 042200
EDCM 0624 26005KT 9999 SCT035 =

TAF EDDN ISSUED AT 042200
EDDN 0624 26005KT 9999 SCT035 =

TAF EDDH ISSUED AT 042200
EDOH 0624 21010KT CAVOK
BECMG 0810 9999 SCT025 SCT040
PROB30 TEMPO 1218 7000 -RADZ BKN012
BECMG 1620 7000 BKN020
TEMPO 1824 4000 RADZ BKN005 =

TAF EDDS ISSUED AT 042200
EDDS 0624 26005KT 9999 SCT035 =

TAF EGLL ISSUED AT 042200
EGLL 0624 17005KT 5000 SCT040
PROB30 TEMPO 0607 1500 BR
BECMG 0811 23010KT 9999
BECMG 1619 BRNO15 =

TAF EHAM ISSUED AT 042200
EHAM 0624 VRB03KT CAVOK
BECMG 0710 21009KT SCT025 BKN080
PROB30 TEMPO 1218 7000 BR -RA SCT012 SCT035
BECMG 1215 27012KT
BECMG 2023 6000 BR SCT008 =

TAF EHBK ISSUED AT 040400
EHBK 1206 28011KT 7000 BR SCT012 SCT040
BECMG 1215 CAVOK
BECMG 1720 VRB03KT
BECMG 0104 20006KT 7000 BR SCT008 BKN012 =

217. What minimum visibility (m) is forecast for 0600 UTC at LONDON LHR (EGLL) ?
1500

List of TAFs
TAF EDDF ISSUED AT 042200
EDDF 0524 VRE03KT CAVOK
BECMG 0609 20005KT 9999 SCT030 BKN045 =

TAF EDDK ISSUED AT 042200
EDDK 0624 14005KT 7000 NSC
BECMG 0608 CAVOK
TEMPO 1115 9999 SCT040 =

TAF EDDL ISSUED AT 042200
EDDL 0624 16003KT 5000 NSC
BECMG 0608 CAVOK =

TAF EDDM TSSUED AT 042200
EDCM 0624 26005KT 9999 SCT035 =

TAF EDDN ISSUED AT 042200
EDDN 0624 26005KT 9999 SCT035 =

TAF EDDH ISSUED AT 042200
EDOH 0624 21010KT CAVOK
BECMG 0810 9999 SCT025 SCT040
PROB30 TEMPO 1218 7000 -RADZ BKN012
BECMG 1620 7000 BKN020
TEMPO 1824 4000 RADZ BKN005 =

TAF EDDS ISSUED AT 042200
EDDS 0624 26005KT 9999 SCT035 =

TAF EGLL ISSUED AT 042200
EGLL 0624 17005KT 5000 SCT040
PROB30 TEMPO 0607 1500 BR
BECMG 0811 23010KT 9999
BECMG 1619 BRNO15 =

TAF EHAM ISSUED AT 042200
EHAM 0624 VRB03KT CAVOK
BECMG 0710 21009KT SCT025 BKN080
PROB30 TEMPO 1218 7000 BR -RA SCT012 SCT035
BECMG 1215 27012KT
BECMG 2023 6000 BR SCT008 =

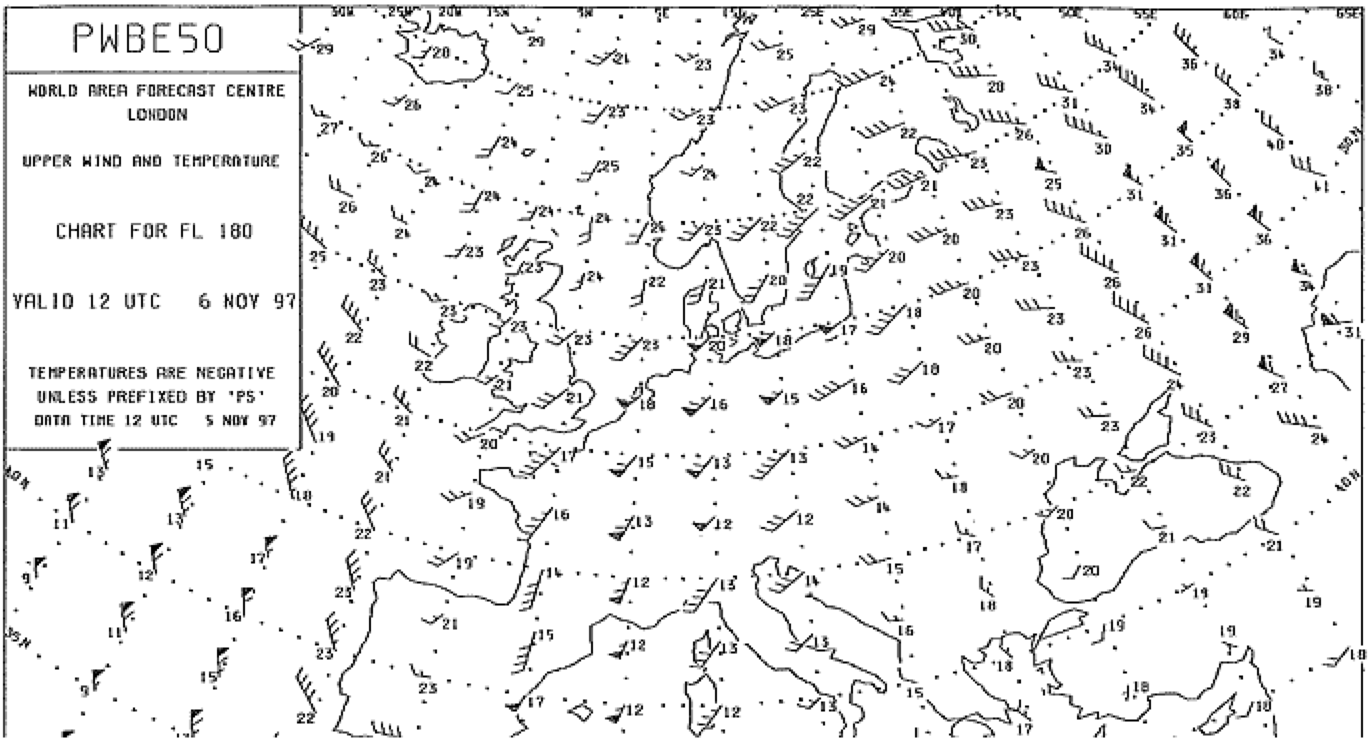
TAF EHBK ISSUED AT 040400
EHBK 1206 28011KT 7000 BR SCT012 SCT040
BECMG 1215 CAVOK
BECMG 1720 VRB03KT
BECMG 0104 20006KT 7000 BR SCT008 BKN012 =

218. What is the earliest time (UTC), if any, that thunderstorms are forecast for DUBAI (MDB) ?
1200
METAR/TAF LIST
PARIS / CHARLES-DE-GAULLE
LFPG/CDG
SA1330121330Z 27004KT 9999 SCT011 BKN050 09/08 Q1001 NOSIG=
FC1100r 120800Z 120918 30005KT 3500 BR BKN003 BECMG 0911 6000 SCT011 SCT050 BECMG 1113 9999 SCT020 BECMG TEMPO 1317 8000 -SHRA SCT025TCU BKN030 T08/12Z T09/15Z=
FT1000 121000Z 121812 27008KT 9999 BKN025 BECMG 1821 20005KT SCT030 BECMG 2124 6000 BECMG 0002 20008KT 2000 BR BKN005 TEMPO 0208 20004KT 0500 BCFG OVC001 BECMG 0810 18012KT 9999 SCT012 BECMG 1012 SCT020=
BORDEAUX / MERIGNAC
LFBD/BOD
SA1330121330Z 21005KT 9000 FEW030TCU FEW033CB SCT040 BKN100 09/08 Q1005 TEMPO 25015G25KT 3000 TSRA SCT005 BKN015CB=
FC1100r 121100Z 121221 28010KT 9999 -RA SCT020 FEW025CB SCT040 TEMPO 1218 25015G25KT 6000 SHRA SCT008 SCT020CB BKN033 PROB30 TEMPO 1218 28020G30KT 3000 TSRA SCT005 BKN015CB BKN030 BECMG 1821 22004KT 8000 NSW FEW006 BKN030=
FT1000 121000Z 121812 30010KT 9999 SCT020 FEW025CB BKN040 BECMG 1822 22004KT 8000 FEW006 BKN030 BECMG 0306 24005KT 6000 SCT007 SCT015 BKN090 BECMG 1012 -RA=
LYON / SATOLAS
LPLL/LYS
SA1330121330Z 14007KT 9000 -TSRA FEW020CB SCT033TCU BKN046 09/07 Q1003 NOSIG=
FC1100r 121100Z 121221 VRB03KT 9999 FEW010 SCT020 BKN040 BECMG 1821 33006KT TEMPO 1221 VRB15G20KT 4000 SHRA SCT008 BKN015=
FT1000 121000Z 121812 33004KT 9999 SCT025 BKN060 BECMG 2224 VRB02KT 8000 SCT010 SCT020 BECMG 0204 1500 BR BKN003 TEMPO 0407 0800 FG OVC002 BECMG 0810 33006KT 9999 SCT015 BKN030=
BASEL / MULHOUSE
LFSB/BSL
SA1330121330Z 23008KT 9999 -RA FEW020 SCT030 BKN066 06/05 Q1001 NOSIG=
FC1100r 121100Z 121221 18005KT 9000 -RA FEW015 BKN030 BKN060 TEMPO 1216 NSW BECMG 1517 9999 FEW030 BKN040 BKN080 TEMPO 1621 -SHRA=
DUBAI
OMDB/DXB
FT1000 121212 33015KT 9999 SCT030 BKN090 TEMPO 1209 5000 SHRA PROB40 TEMPO 1224 VRB40KT 1000 TSSH SCT025CB BECMG 1618 05010KT BECMG 0608 33013G23KT=
JOHANNESBURG / JAN SMUTS
FAJS/JNB
FT0900 120900Z 121212 36010KT 9999 FEW030CB FEW035 PROB40 TEMPO 1318 VRB15KT 3000 TSRA SCT030CB BKN080 FM2000 03005KT CAVOK BECMG 0204 SCT008 SCT100 PROB30 0305 3000 BCFG BKN004 FM0800 34012KT 9999 SCT025 T25/12Z T15/03Z T27/12Z

219. A METAR reads : SA1430 35002KT 7000 SKC 21/03 Q1024 =
Which of the following information is contained in this METAR ?
temperature/dewpoint

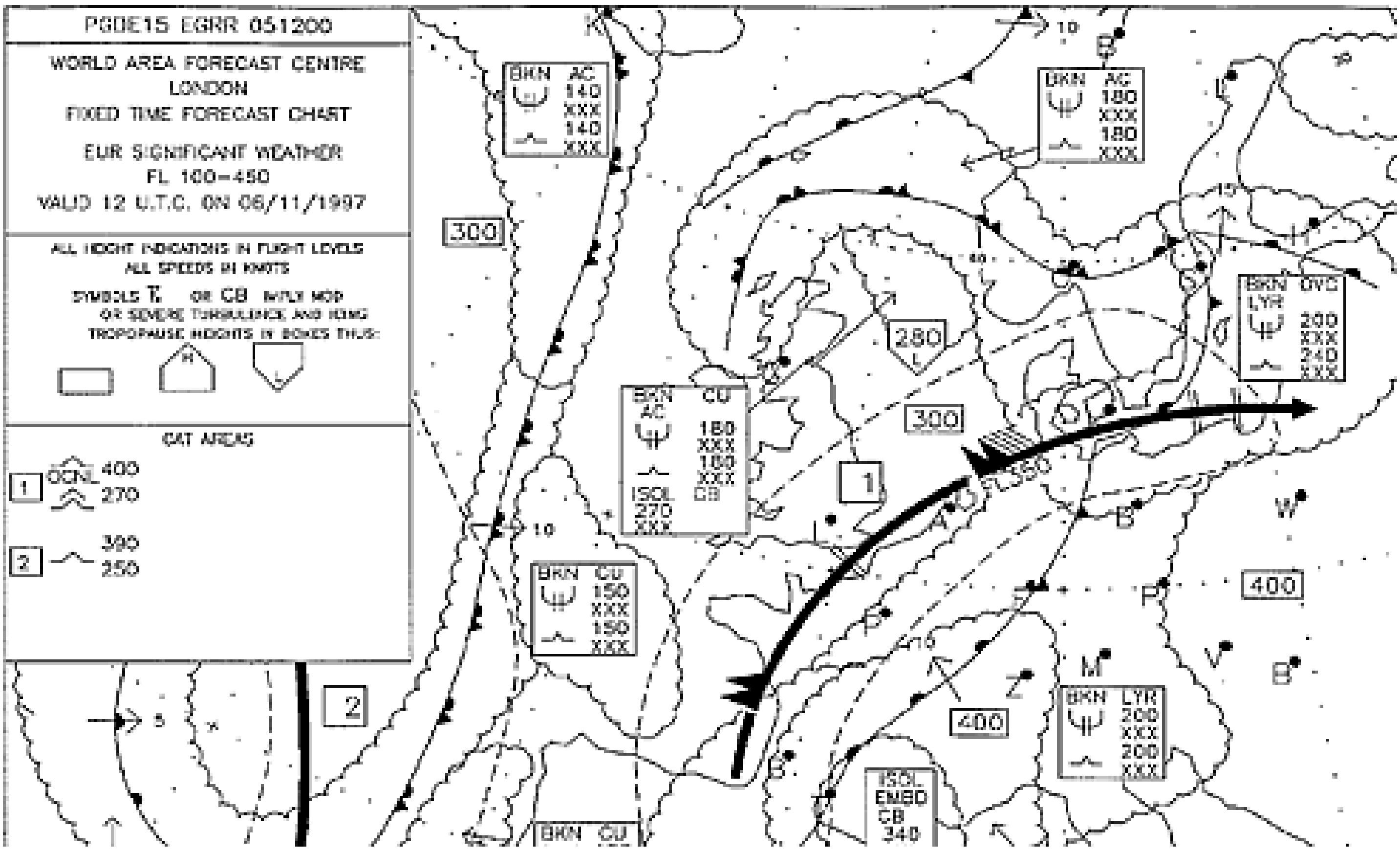
220. What mean temperature (°C) is likely on a course of 360° (T) from 40°N to 50°N at 040°E ?

-23



221. Which of the following flight levels, if any, is forecast to be clear of significant cloud, icing, turbulence, and CAT along the marked route from SHANNON (53°N 10°W) to BERLIN (53°N 13°E) ?

FL250



222. You must fly IFR on an airway orientated 135° magnetic with a MSA at 7 800 ft. Knowing the QNH is 1 025 hPa and the temperature is ISA + 10°, the minimum flight level you must fly at is:

90

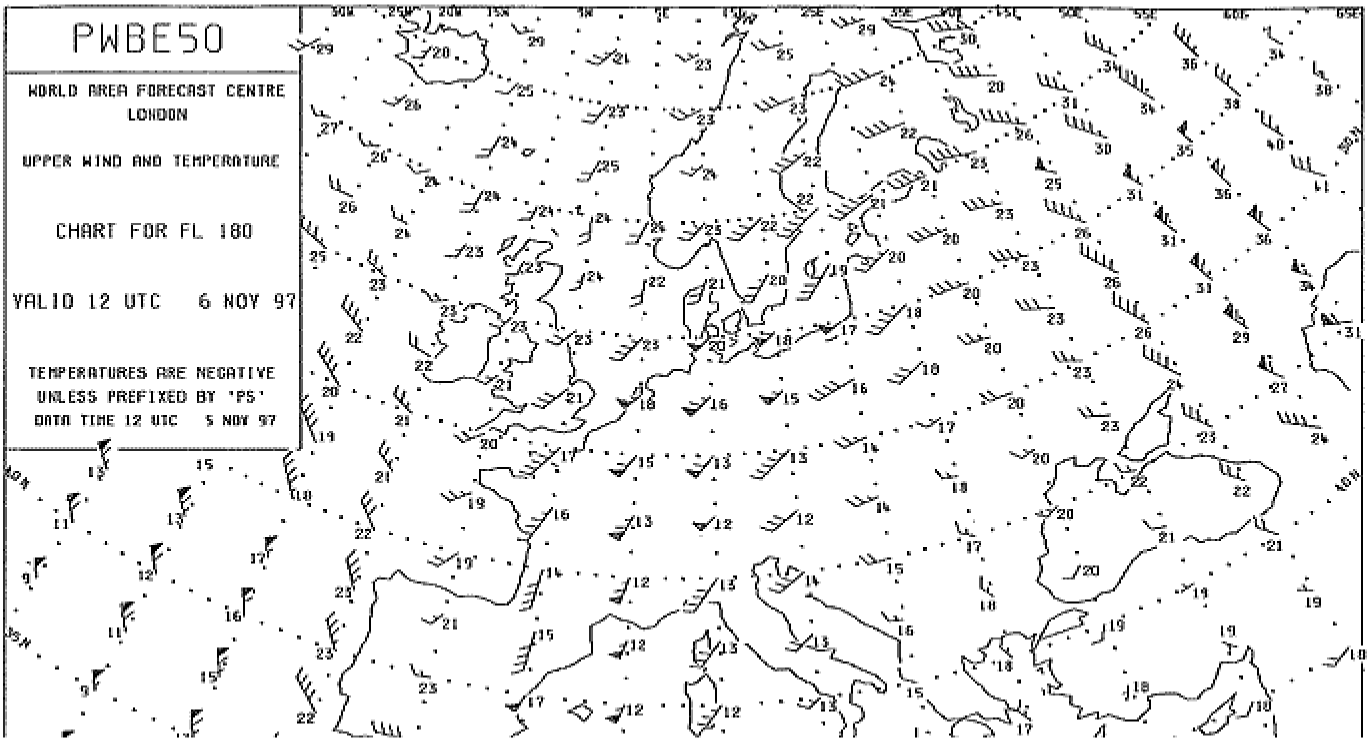
223. An aircraft, following a 215° true track, must fly over a 10 600 ft obstacle with a minimum obstacle clearance of 1 500 ft. Knowing the QNH received from an airport close by, which is almost at sea-level, is 1035 and the temperature is ISA -15°C, the minimum flight level will be:
140

224. On an IFR navigation chart, in a 1° quadrant of longitude and latitude, appears the following information "80". This means that within this quadrant:
The minimum safe altitude is 8 000 ft

225. On an instrument approach chart, a minimum sector altitude (MSA) is defined in relation to a radio navigation facility. Without any particular specification on distance, this altitude is valid to:
25 NM

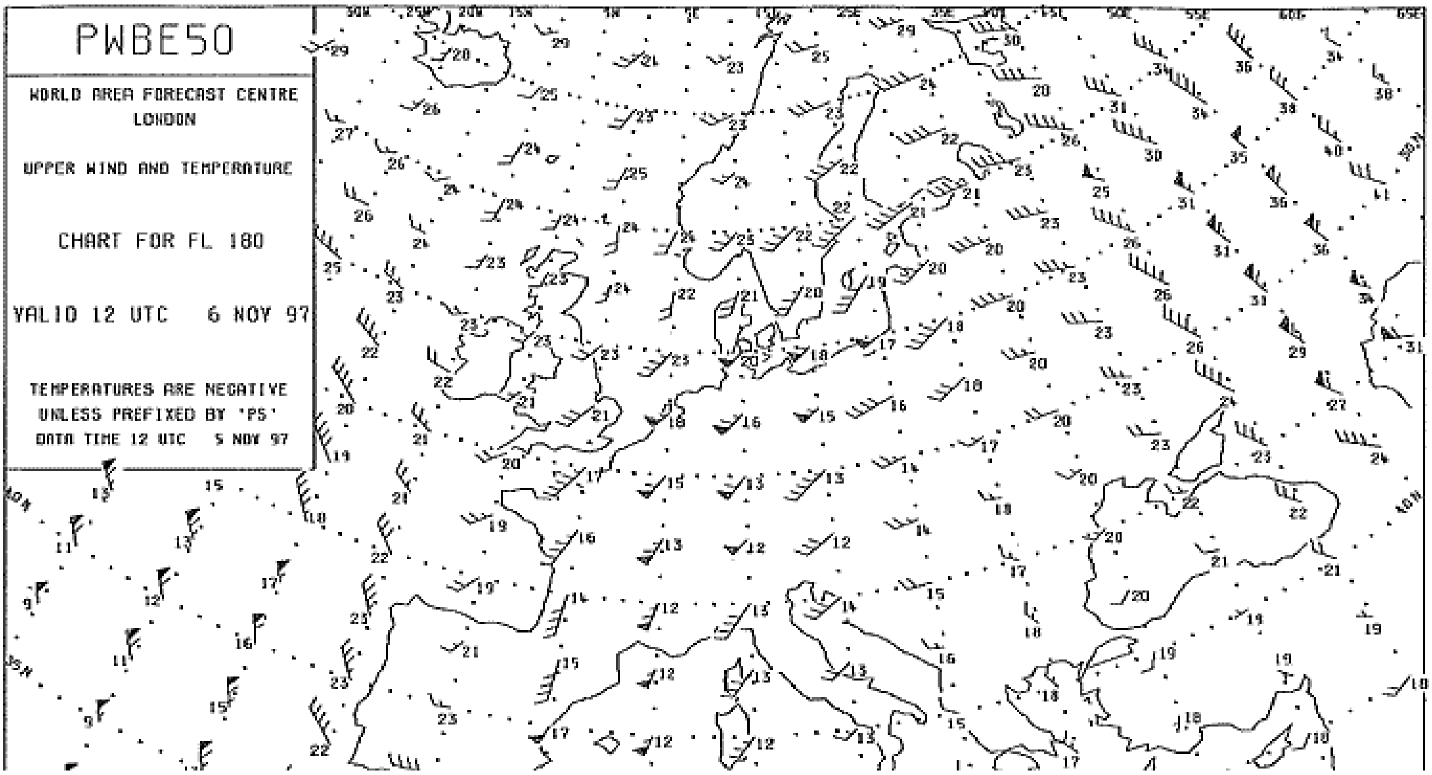
226. An IFR flight is planned outside airways on a course of 235° magnetic. The minimum safe altitude is 7800 ft. Knowing the QNH is 995 hPa, the minimum flight level you must fly is:
100

227. The W/V (°/kt) at 50°N015°W is:
320/40



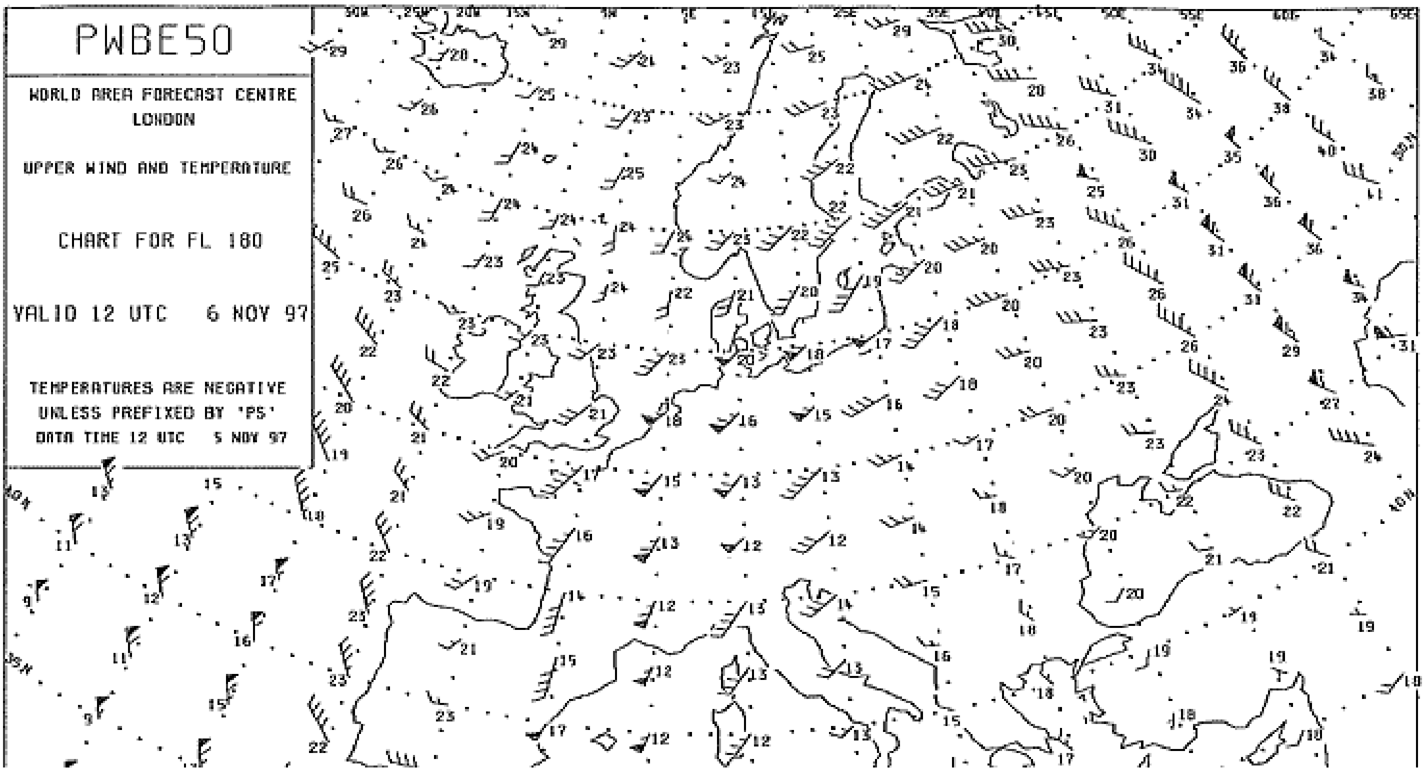
228. What mean temperature (°C) is likely on a true course of 270° from 025° E to 010°E at 45°N ?

-15



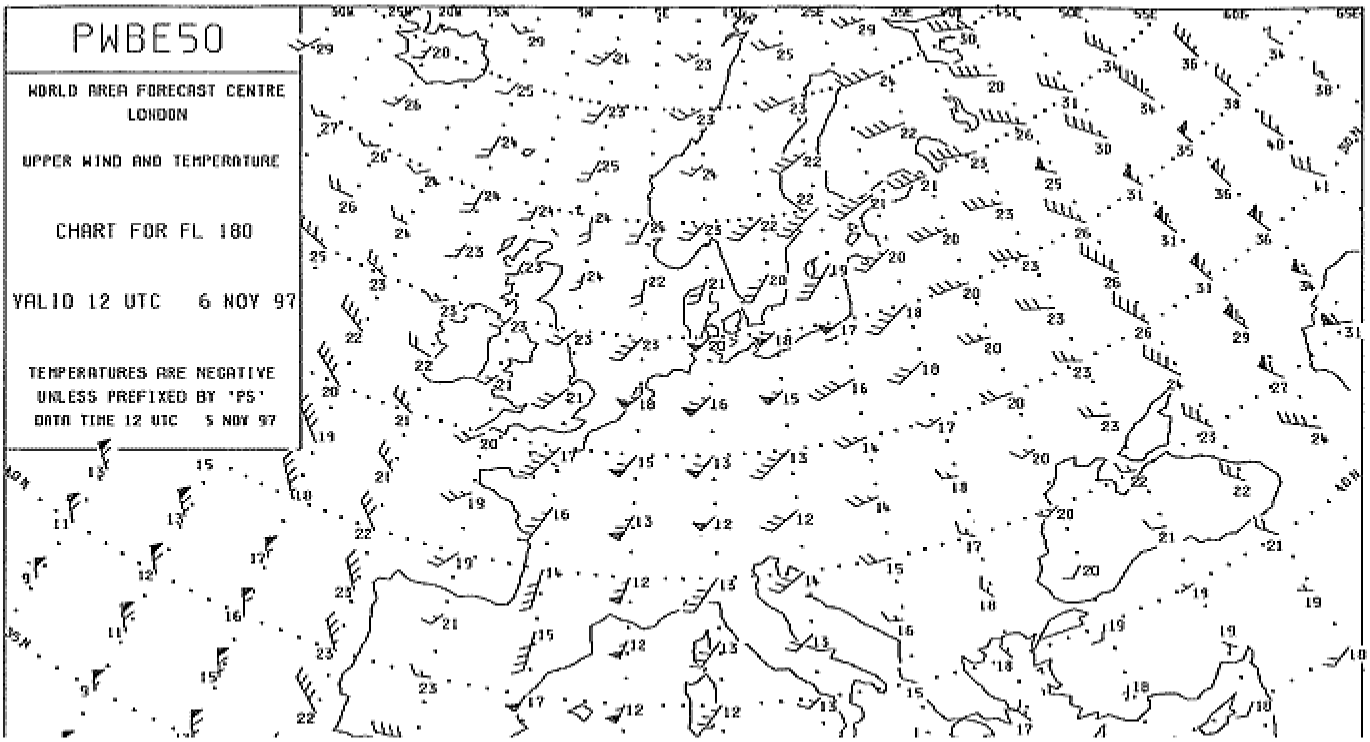
229. The W/V (°/kt) at 40°N 020°W is

350/60



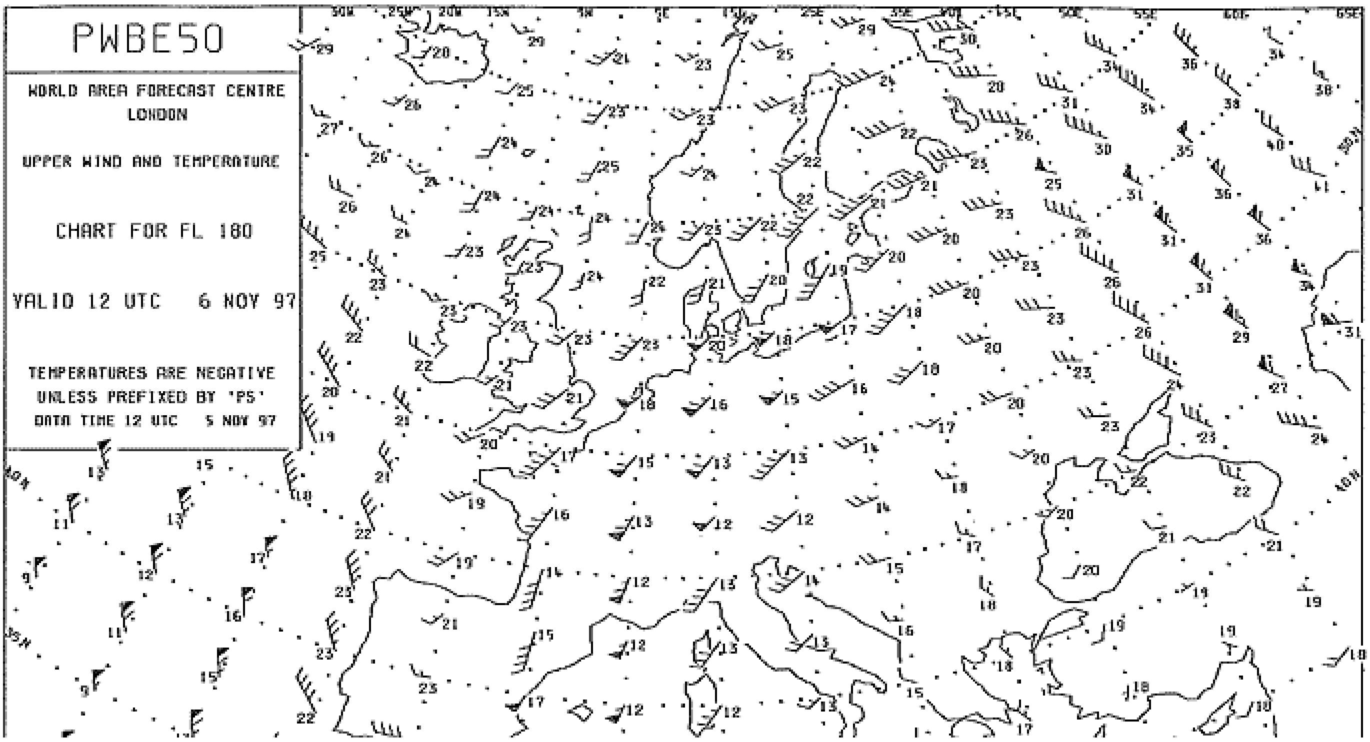
230. What is the temperature deviation (°C) from ISA over 50° N 010°E ?

+8

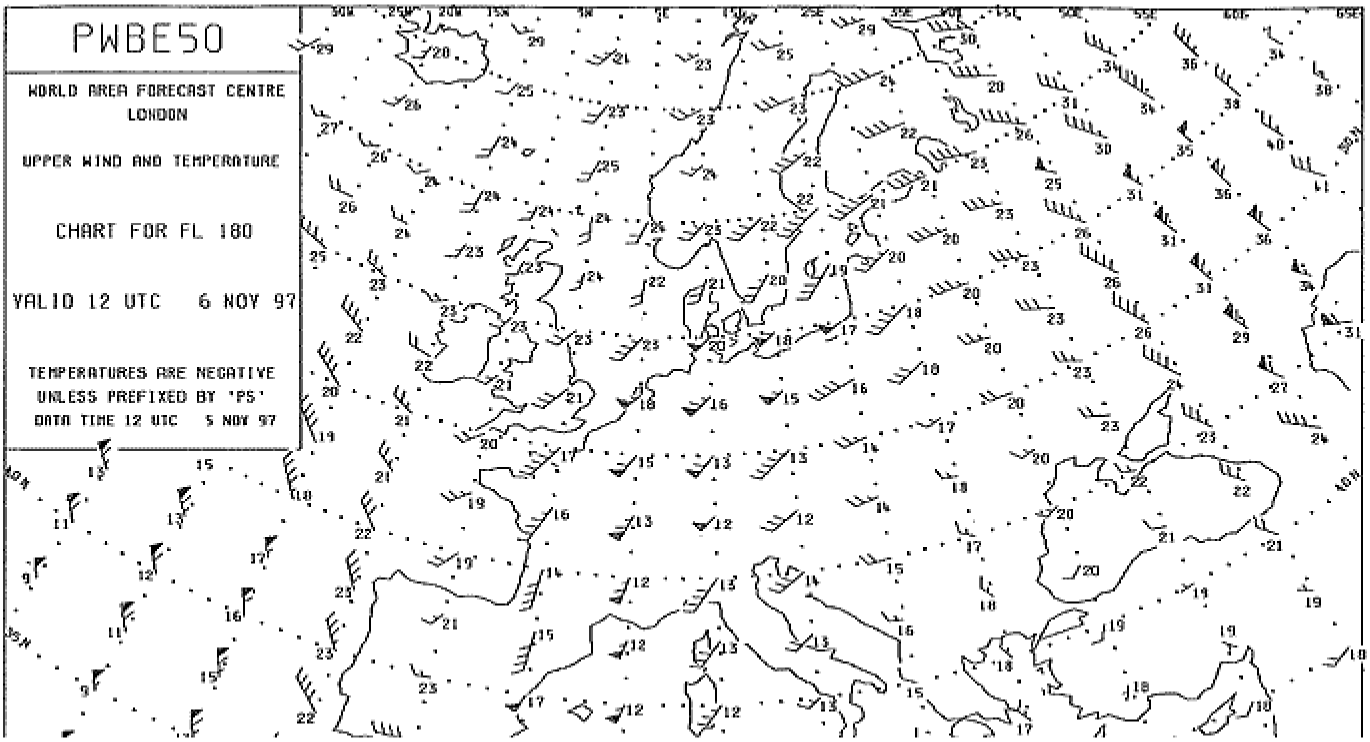


231. The W/V (°/kt) at 60° N015° W is

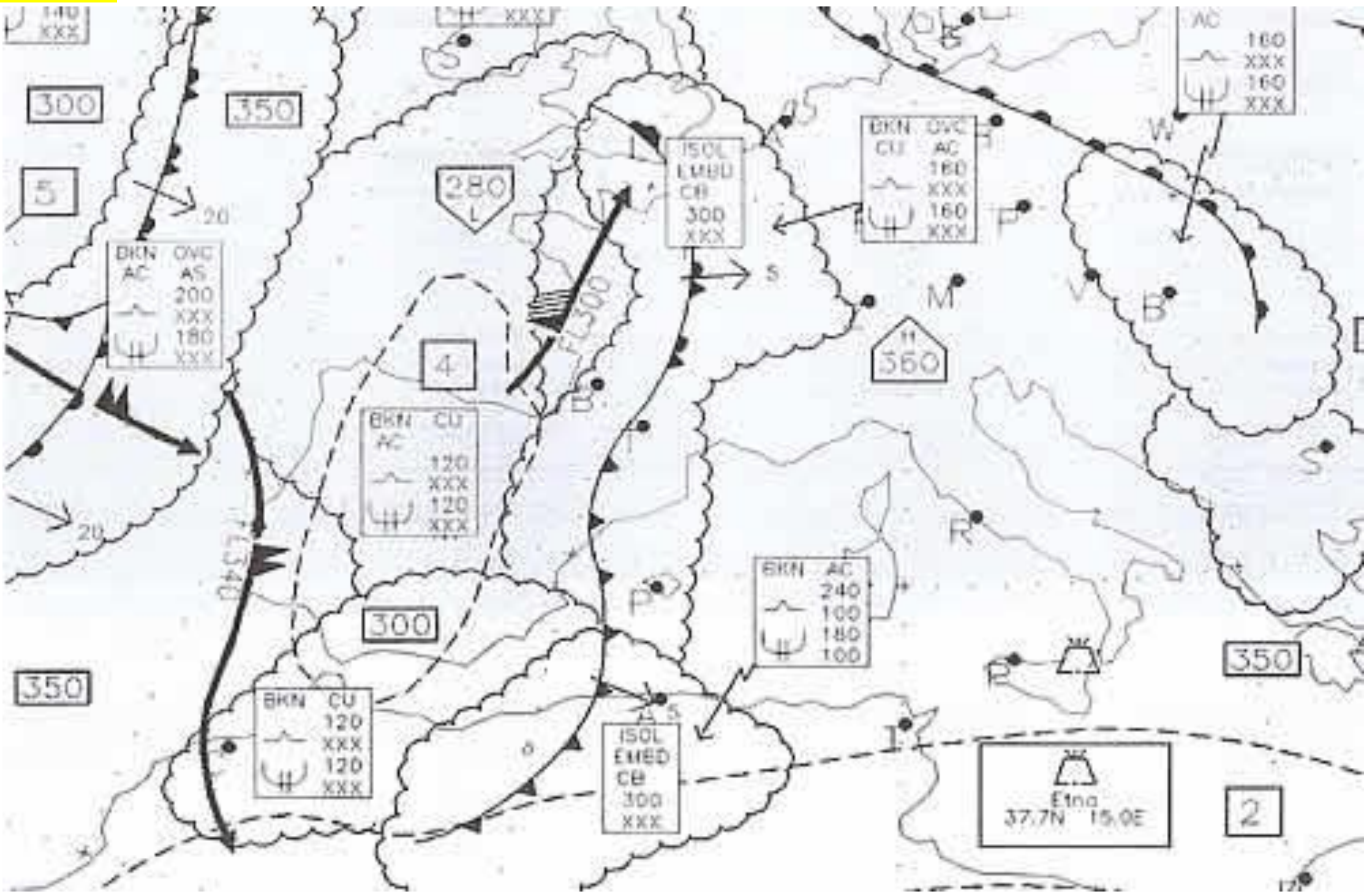
250/10



232. The approximate mean wind component (kt) along true course 180° from 50°N to 40°N at 005° W is **headwind 15 kt**

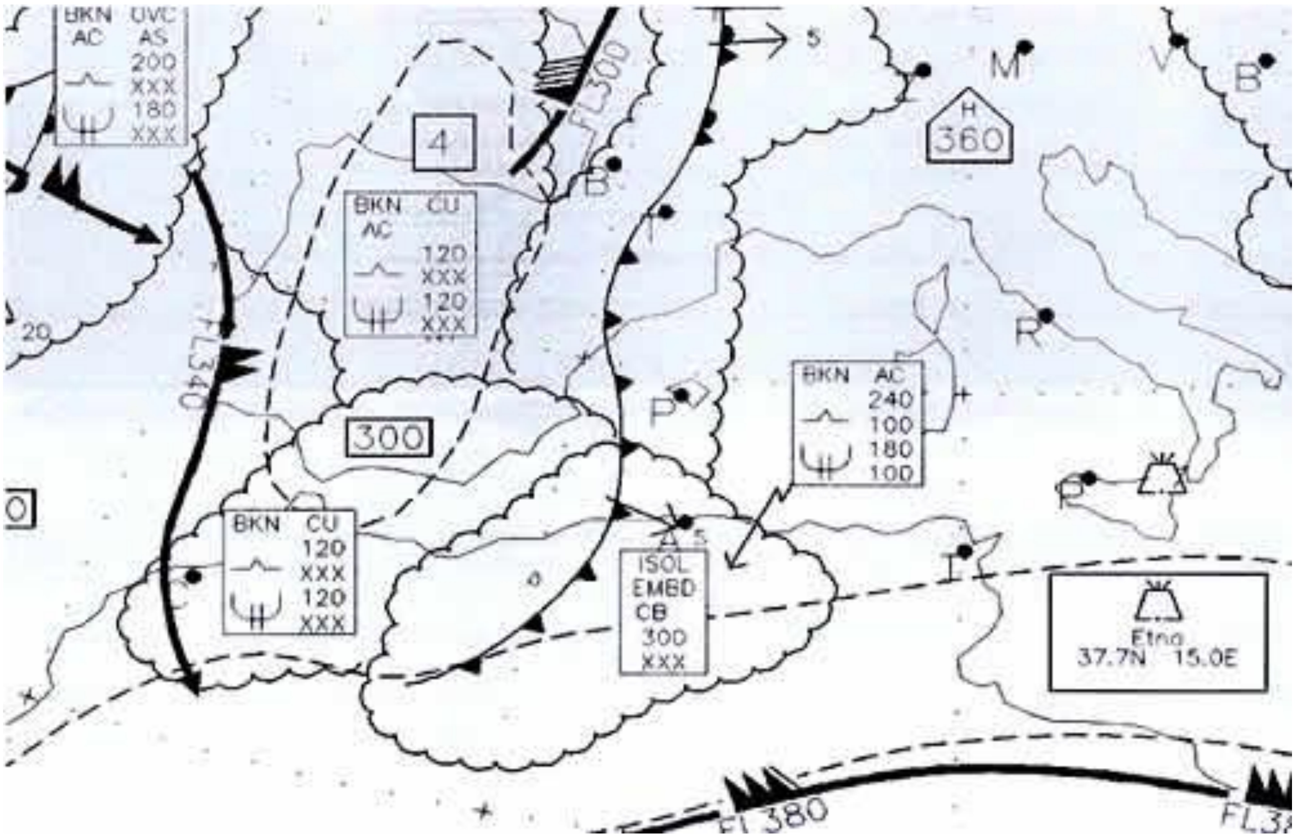


233. Which best describes the maximum intensity of icing, if any, at FL160 in the vicinity of BUDAPEST? **Moderate**



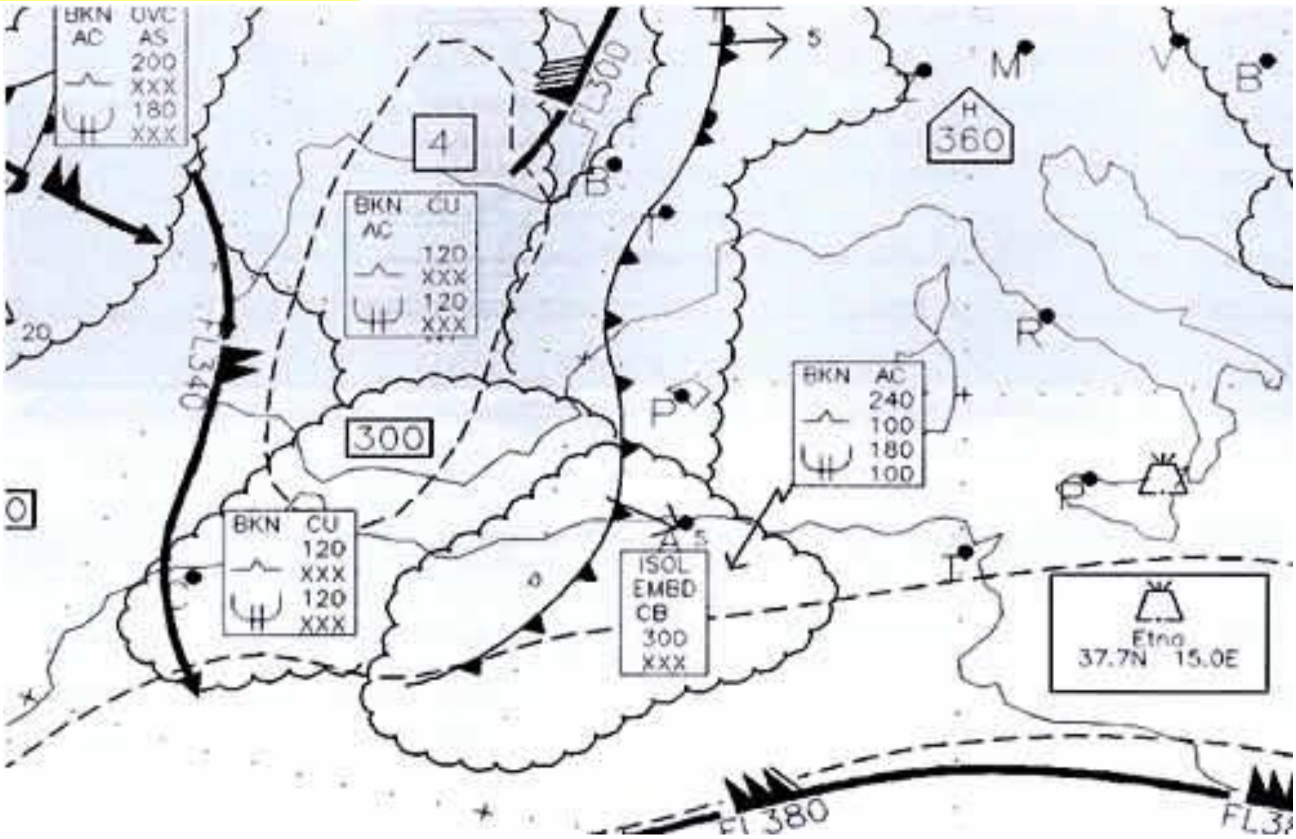
234. Which describes the intensity of turbulence, if any, at FL 150 in the vicinity of ALGIERS?

moderate or severe



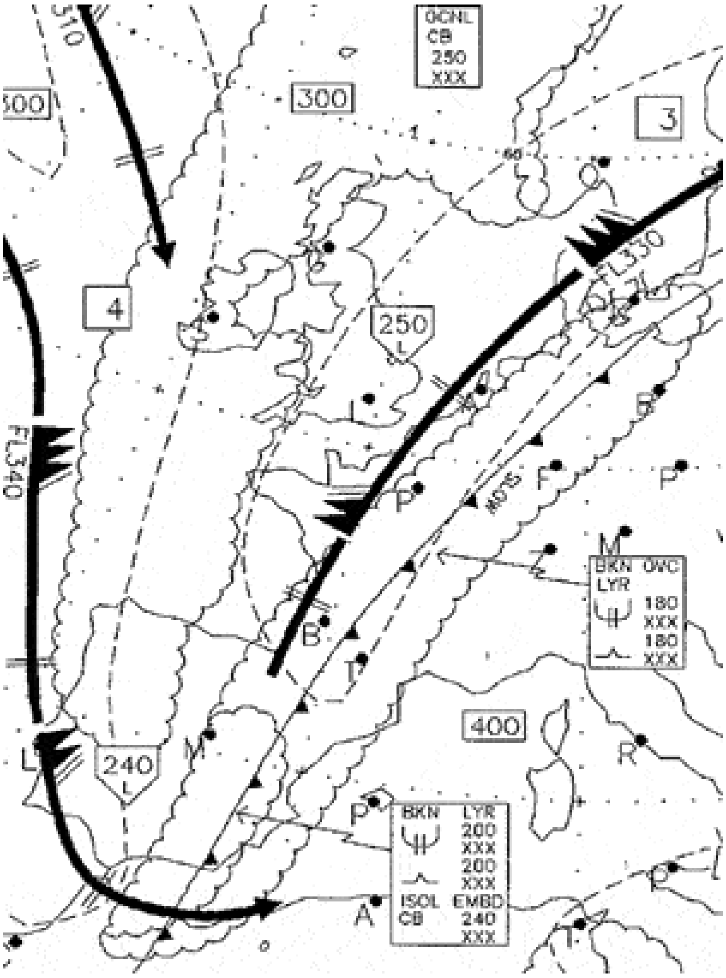
235. The surface system west of PALMA is a

cold front moving southeast



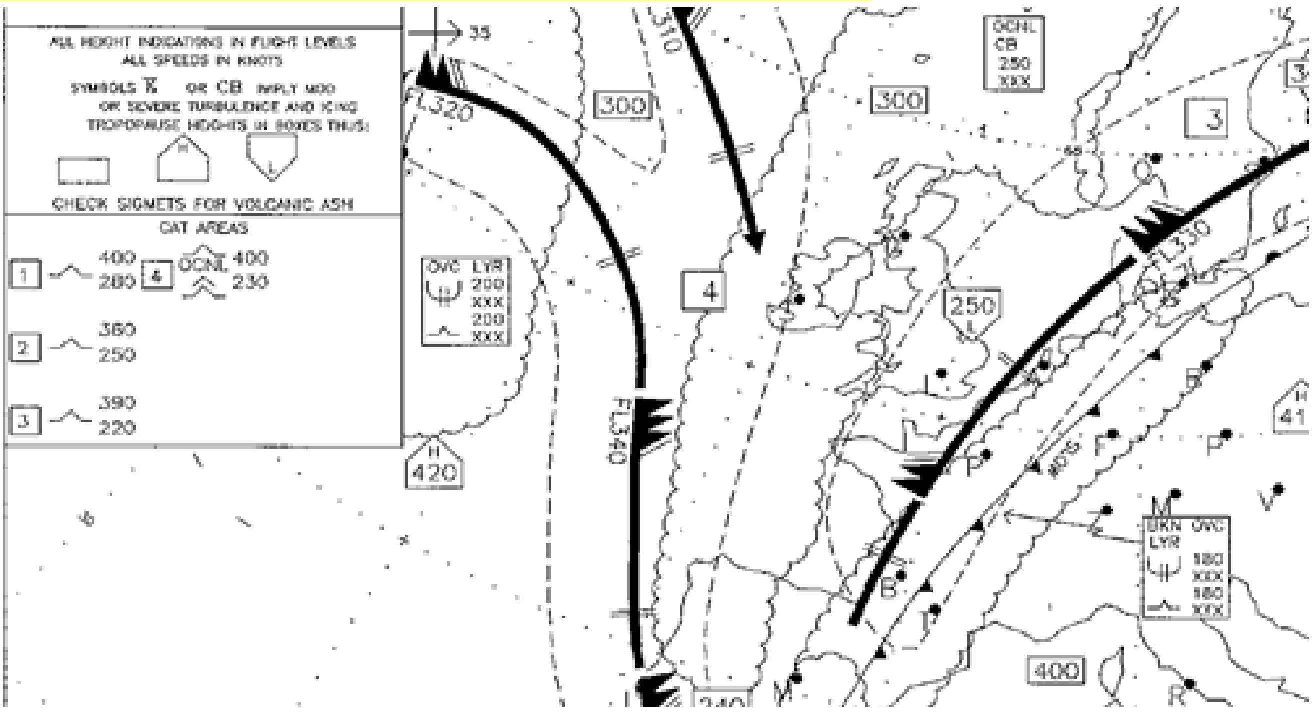
236. In the vicinity of GLASGOW the tropopause is at about FL

270



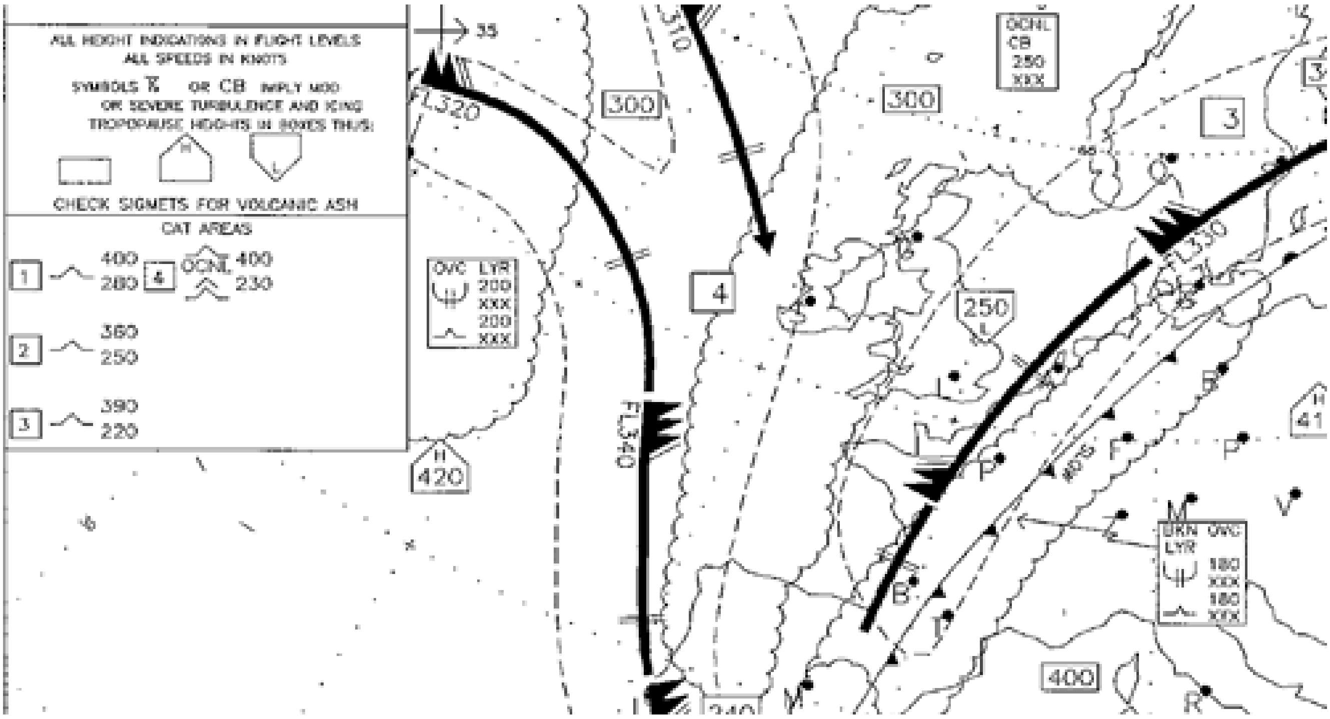
237. Which best describes the significant cloud forecast over TOULOUSE (44°N001°E) ?

broken/overcast layer, base below FL100 tops FL180, moderate icing



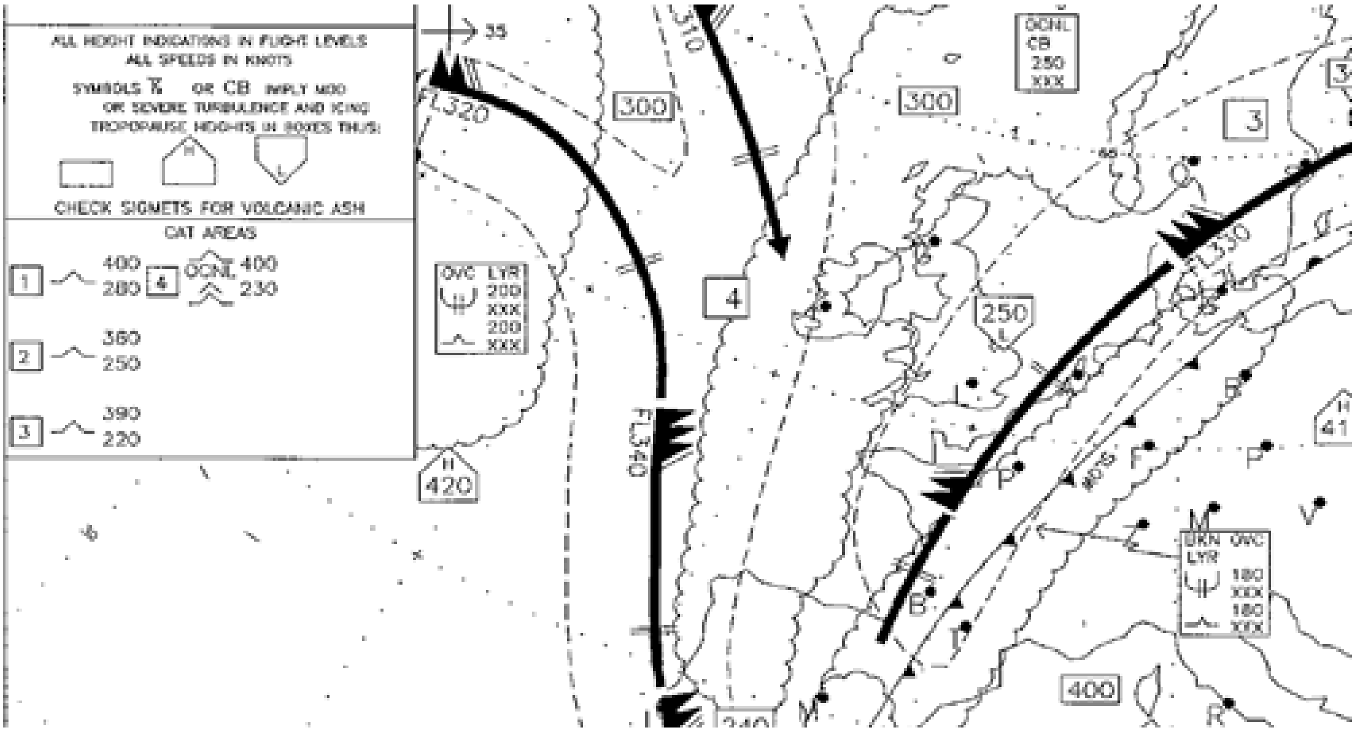
238. Which describes the maximum intensity of turbulence, if any, forecast for FL260 over TOULOUSE (44°N001°E) ?

Moderate



239. Over LONDON (51°N000°E/W), the lowest FL listed which is unaffected by CAT is:

220



240. What lowest cloud conditions (oktas/ft) are forecast for JOHANNESBURG/JAN SMUTS at 0300 UTC?
5 to 7 at 400

METAR/TAF LIST

PARIS / CHARLES-DE-GAULLE

LFPG/CDG

SA1330121330Z 27004KT 9999 SCT011 BKN050 09/08 Q1001 NOSIG=

FC1100r 120800Z 120918 30005KT 3500 BR BKN003 BECMG 0911 6000 SCT011 SCT050 BECMG 1113 9999 SCT020 BECMG TEMPO 1317 8000 -SHRA SCT025TCU BKN030 T08/12Z T09/15Z=

FT1000 121000Z 121812 27008KT 9999 BKN025 BECMG 1821 20005KT SCT030 BECMG 2124 6000 BECMG 0002 20008KT 2000 BR BKN005 TEMPO 0208 20004KT 0500 BCFG OVC001 BECMG 0810 18012KT 9999 SCT012 BECMG 1012 SCT020=

BORDEAUX / MERIGNAC

LFBD/BOD

SA1330121330Z 21005KT 9000 FEW030TCU FEW033CB SCT040 BKN100 09/08 Q1005 TEMPO 25015G25KT 3000 TSRA SCT005 BKN015CB=

FC1100r 121100Z 121221 28010KT 9999 -RA SCT020 FEW025CB SCT040 TEMPO 1218 25015G25KT 6000 SHRA SCT008 SCT020CB BKN033 PROB30 TEMPO 1218 28020G30KT 3000 TSRA SCT005 BKN015CB BKN030 BECMG 1821 22004KT 8000 NSW FEW006 BKN030=

FT1000 121000Z 121812 30010KT 9999 SCT020 FEW025CB BKN040 BECMG 1822 22004KT 8000 FEW006 BKN030 BECMG 0306 24005KT 6000 SCT007 SCT015 BKN090 BECMG 1012 -RA=

LYON / SATOLAS

LPLL/LYS

SA1330121330Z 14007KT 9000 -TSRA FEW020CB SCT033TCU BKN046 09/07 Q1003 NOSIG=

FC1100r 121100Z 121221 VRB03KT 9999 FEW010 SCT020 BKN040 BECMG 1821 33006KT TEMPO 1221 VRB15G20KT 4000 SHRA SCT008 BKN015=

FT1000 121000Z 121812 33004KT 9999 SCT025 BKN060 BECMG 2224 VRB02KT 8000 SCT010 SCT020 BECMG 0204 1500 BR BKN003 TEMPO 0407 0800 FG OVC002 BECMG 0810 33006KT 9999 SCT015 BKN030=

BASEL / MULHOUSE

LFSB/BSL

SA1330121330Z 23008KT 9999 -RA FEW020 SCT030 BKN066 06/05 Q1001 NOSIG=

FC1100r 121100Z 121221 18005KT 9000 -RA FEW015 BKN030 BKN060 TEMPO 1216 NSW BECMG 1517 9999 FEW030 BKN040 BKN080 TEMPO 1621 -SHRA=

DUBAI

OMDB/DXB

FT1000 121212 33015KT 9999 SCT030 BKN090 TEMPO 1209 5000 SHRA PROB40 TEMPO 1224 VRB40KT 1000 TSSH SCT025CB BECMG 1618 05010KT BECMG 0608 33013G23KT=

JOHANNESBURG / JAN SMUTS

FAJS/JNB

FT0900 120900Z 121212 36010KT 9999 FEW030CB FEW035 PROB40 TEMPO 1318 VRB15KT 3000 TSRA SCT030CB BKN080 FM2000 03005KT CAVOK BECMG 0204 SCT008 SCT100 PROB30 0305 3000 BCFG BKN004 FM0800 34012KT 9999 SCT025 T25/12Z T15/03Z T27/12Z

241. The lowest cloud conditions (oktas/ft) at BORDEAUX/MERIGNAC at 1330 UTC were
1 to 2 at 3000

242. The surface wind velocity (°/kt) at PARIS/CHARLES-DE-GAULLE at 1330 UTC was
270/04

243. What is the earliest time (UTC), if any, that thunderstorms are forecast for BORDEAUX/MERIGNAC (LFBD)?
1200

244. Which is the heaviest type of precipitation, if any, forecast for BORDEAUX/MERIGNAC at 1000 UTC ?
light rain

245. What minimum visibility is forecast for PARIS/CHARLES-DE-GAULLE at 2100 UTC ?
6000m

246. Which approach segment starts at the point where you report "established" ?
Intermediate approach

247. Which approach segment starts at the FAF and ends at the MAP?
Final approach

248. Act Hdg 250°
TAS 140 Kts
Wind 180/60Kt
GS?
132 Kts

249. Act Hdg 290° TAS 250 Kts Wind 135/75Kt GS?
320 Kts

250. (For this question use Route Manual chart E(HI)4&5)
An aeroplane has to fly from Salzburg (48°00.2'N 012°53.6'E) to Klagenfurt (46°37.5'N 014°33.8'E). Which statement is correct ?
The minimum grid safe altitude on this route is 13400 ft above MSL

251. On an IFR navigation chart, in a 1° quadrant of longitude and latitude, appears the following information "80". This means that within this quadrant:
the minimum safe altitude is 8000 ft

252. What affects the visibility for 1330 UTC at TUNIS (DTTA)?
Smoke

METAR/TAF

BALE/MULHOUSE
LFSB/MLH

SA1330	121330Z 23008KT 9999 RA FEW020 SCT030 BKN066 06/05 Q1001 NOSIG=
FC1100r	121100Z 121221 18005KT 9000 RA FEW015 BKN030 BKN060 TEMPO 1216 NSW BECMG 1517 9999 FEW030 BKN040 BKN080 TEMPO 1621 SHRA=

DUBAI
OMDB/DXB

FT1000	121212 33015KT 9999 SCT030 BKN090 TEMPO 1209 5000 SHRA PROB40 TEMPO 1424 VRB40KT 1000 TSSS SCT025CB BECMG 1618 05010KT BECMG 0608 33013G23KT=

JOHANNESBURG/JAN SMUTS
FAJS/JNB

FT0900	120900Z 121212 36010KT 9999 FEW030CB FEW035 PROB40 TEMPO 1318 VRB15KT 3000 TSRA SCT030CB BKN080 FM2000 03005KT CAVOK BECMG 0204 SCT008 SCT100 PROB30 0305 3000 BCFG BKN004 FM0800 34012KT 9999 SCT025 T25/12Z T15/03Z T27/12Z=

TUNIS/CARTHAGE
DTTA/TUN

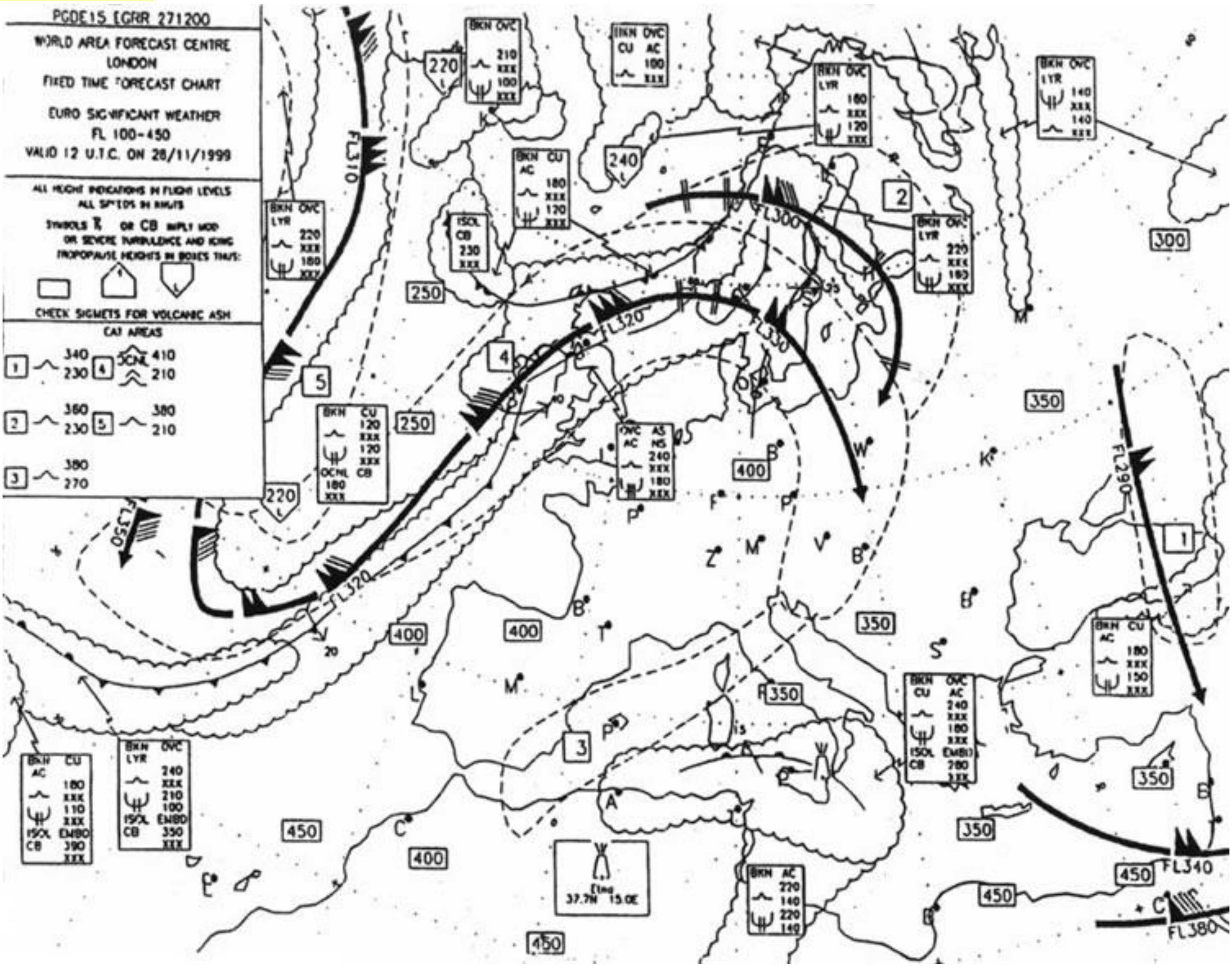
SA1330	121330Z 24008KT 6000 FU FEW023 BKN200 24/08 Q1007=

LONDON/HEATHROW
EGLL/LHR

SA1330	121330Z 28008KT 7500 SCT021 BKN050 04/03 Q1008 NOSIG=
FT1000	121000Z 121812 27008KT 9999 BKN025 BECMG 1821 20005KT SCT030 BECMG 2024 5000 BECMG 0002 VRB06KT 2200 BR BKN 005 TEMPO 0208 20003KT 1500 BR OVC002 BECMG 0810 VRB02KT 5500 BKN012 BECMG 1012 SCT020 9999=

253. On a flight from Cairo to Madrid at FL 350 when Mt. Etna is not active, what sort of in-flight weather hazard might you encounter?

Moderate CAT



254. What minimum visibility is forecast for 0600 UTC at LONDON LHR (EGLL)?

1500 metres

METAR/TAF

BALE/MULHOUSE
LFSB/MLH

SA1330	121330Z 23008KT 9999 RA FEW020 SCT030 BKN066 06/05 Q1001 NOSIG=
FC1100r	121100Z 121221 18005KT 9000 RA FEW015 BKN030 BKN060 TEMPO 1216 NSW BECMG 1517 9999 FEW030 BKN040 BKN080 TEMPO 1621 SHRA=

DUBAI
OMDB/DXB

FT1000	121212 33015KT 9999 SCT030 BKN090 TEMPO 1209 5000 SHRA PROB40 TEMPO 1424 VRB40KT 1000 TSSS SCT025CB BECMG 1618 05010KT BECMG 0608 33013G23KT=

JOHANNESBURG/JAN SMUTS
FAJS/JNB

FT0900	120900Z 121212 36010KT 9999 FEW030CB FEW035 PROB40 TEMPO 1318 VRB15KT 3000 TSRA SCT030CB BKN080 FM2000 03005KT CAVOK BECMG 0204 SCT008 SCT100 PROB30 0305 3000 BCFG BKN004 FM0800 34012KT 9999 SCT025 T25/12Z T15/03Z T27/12Z=

TUNIS/CARTHAGE
DTTA/TUN

SA1330	121330Z 24008KT 6000 FU FEW023 BKN200 24/08 Q1007=

LONDON/HEATHROW
EGLL/LHR

SA1330	121330Z 28008KT 7500 SCT021 BKN050 04/03 Q1008 NOSIG=
FT1000	121000Z 121812 27008KT 9999 BKN025 BECMG 1821 20005KT SCT030 BECMG 2024 5000 BECMG 0002 VRB06KT 2200 BR BKN 005 TEMPO 0208 20003KT 1500 BR OVC002 BECMG 0810 VRB02KT 5500 BKN012 BECMG 1012 SCT020 9999=

255. (For this question use Route Manual chart E(HI)1)

An aircraft is flying northbound on the direct route from DEAN CROSS that passes through position 57°00'N 003°10'W. Excluding RVSM, what is the first flight level above FL 400 that can be flown on this route?

FL 450

256. (For this question use Route Manual chart E(LO)1)
The magnetic course from DEAN CROSS 115,2 DCS (54°43'N 003°20'W) to NEWCASTLE 114,25 NEW (55°02'N 001°41'W) on airway W911D is:
077°

257. (For this question use Route Manual chart E(LO)1)
The magnetic course/distance from TALLA 113,8 TLA (55°30'N 003°21'W) to DEAN CROSS 115,2 DCS (54°43'N 003°20'W)on airway A2 is:
185°/47 NM

258. (For this question use Route Manual chart E(LO)1)
The minimum enroute altitude (MEA) than can be maintained continuously on airway W911D from NEWCASTLE 114,25 NEW (55°02'N 001°24'W) to DEAN CROSS 115,2 DCS (54°43'N 003°20'W) is:
FL 50

259. (For this question use Route Manual chart E(LO)1)
The Maximum Authorised Altitude (MAA) on airway W911D from DEAN CROSS 115,2 DCS (54°43'N 003°20'W) to NEWCASTLE 114,25 NEW (55°02'N 001°24'W) is:
FL 150

260. (For this question use Route Manual chart E(HI)1)
The initial magnetic course from TIREE 117.7 TIR (56°30'N 006°53'W) direct to INVERNESS 109.2 INS (57°32'N 004°03'W) is:
064°

261. (For this question use Route Manual chart E(HI)1)
The initial true course from INVERNESS 109.2 INS (57°32'N 004°03'W) direct to TIREE 117.7 TIR (56°30'N 006°53'W) is:
237°

262. (For this question use Route Manual chart E(HI)2)
An aircraft has to fly on airways from ODIN (55°35'N 010°39'E) to BOTTNA (57°45'N 013°48'E). Which of the following is an acceptable route for this flight?
ODN UR156 SKA UH42 BTD

263. (For this question use Route Manual chart E(HI)2)
An aircraft has to fly on airways from SKARA (58°23'N 013°15'E) to SVEDA (56°10'N 012°34'E). Once airborne, if approved, which of the following is an acceptable route for this flight?
SKA UH42 BTD UV30 HIL UR1 SVD

264. (For this question use Route Manual chart E(HI)2)
An aircraft is flying from BACKA (57°33'N 011°59'E) to BOTTNA (57°45'N 013°48'E) on airway UR46.
Which of the following would be a useful cross-reference to check the aircraft's position at CINDY?
HAR161/LAV092

265. (For this question use Route Manual chart E(HI)2)
An aircraft has to fly from AALBORG (57°06'N 010°00'E) to BOTTNA (57°45'N 013°48'E) on airway UR46.
What is the track distance for this flight?
130 NM

266. (For this question use Route Manual chart E(HI)2)
What is the meaning of the chart information for the beacon(s) at position 55°59'N 014°06'E?
NDB only, ident OE

267. (For this question use Route Manual chart E(LO)1)
The magnetic course/distance from POLE HILL 112.1 POL (53°44'N 002°06'W) to TALLA 113,8 TLA (55°30'N 003°21'W) on airway B4 is:
343°/114 NM

268. (For this question use Route Manual chart E(LO)1)
What are the applicable GRID MORAs for a flight from DEAN CROSS 115,2 DCS (54°43'N 003°20'W) to TALLA 113,8 TLA (55°30'N 003°21'W) on airway A2?
45 and 40

269. (For this question use Route Manual chart E(LO)1)
What are the magnetic course and distance when flying on airway B4 from the reporting point SHAPP (54°30'N 002°38'W) to the reporting point ESKDO (55°18'N 003°12'W)?
343°/52 NM

270. (For this question use Route Manual chart E(HI)1)
The radio navigation aid(s) at 57°32'N 004°03'W is/are:
VORDME, frequency 109.2 MHz

271. (For this question use Route Manual chart E(HI)2)
The radio navigation aid(s) at 56°17'N 010°47'E is a:
NDB, frequency 374 kHZ

272. (For this question use Route Manual chart E(HI)2)
The identifier of the radio navigation aid at 56°06'N 012°15'E is:
NOA

273. (For this question use Route Manual chart E(HI)2)
The radio navigation aid(s) at 55°26'N 011°38'E is/are:
VORDME, frequency 112.8 MHz

274. (For this question use Route Manual chart E(LO)1)
The radio navigation aid at LEEDS BRADFORD (53°52'N 001°39'W) is:
an NDB, frequency 402.5 kHz, NOT continuous operation

275. (For this question use Route Manual chart E(HI)2)
The navigation aid(s) at 55°59'N 014°06'E is/are?
NDB, frequency 363 kHz

276. (For this question use Route Manual chart E(HI)2)
The radio navigation aid(s) at 56°09'N 013°13'E is/are:
VOR, frequency 116.9 MHz

277. (For this question use Route Manual chart E(HI)1)
An aircraft has to fly from TALLA (55°30'N 003°21'W) to FINDO (56°22'N 003°28'W).
Excluding RVSM, what is the first flight level above FL400 that can be flown on this leg on an IFR flight plan?
FL430

278. (For this question use Route Manual chart E(LO)1)
The minimum enroute altitude (MEA) that can be maintained continuously on airway B226 from TALLA 113.8 TLA (55°30'N003°21'W) to reporting point ANGUS (56°22'N 003°03'W)is:
FL70

279. (For this question use Route Manual chart E(LO)1)
What is the Minimum Enroute Altitude (MEA) on airway W911D from DEAN CROSS 115,2 DCS (54°43'N 003°20'W) to NEWCASTLE 114,25 NEW (55°02'N 001°24'W)?
FL 50

280. (For this question use Route Manual chart E(HI)2)
An aircraft is flying from ALMA (55°25'N 013°34'E) to BACKA (57°33'N 011°59'E) on airways UB45 UH40 and UA9.
What is the total track distance for this flight?
143 NM

281. (For this question use Route Manual chart E(HI)1)
An aircraft has to fly from TIREE (56°30'N 006°53'W) direct to ABERDEEN (57°19'N 002°16'W).
What is the minimum grid safe altitude for this route?
5700 ft

282. (For this question use Route Manual chart E(HI)1)
What navigation aid(s) is/are available to civil aircraft at the military airfield of Kinloss (57°40'N 003°32?W)?
The range element only of TACAN on DME frequency 109.8 MHz

283. (For this question use Route Manual chart E(LO)1)
The appropriate flight level for flight on airway A2 from TALLA 113,8 TLA (55°30'N 003°21'W) to DEAN CROSS 115,2 DCS (54°43'N 003°20'W)is:
FL90

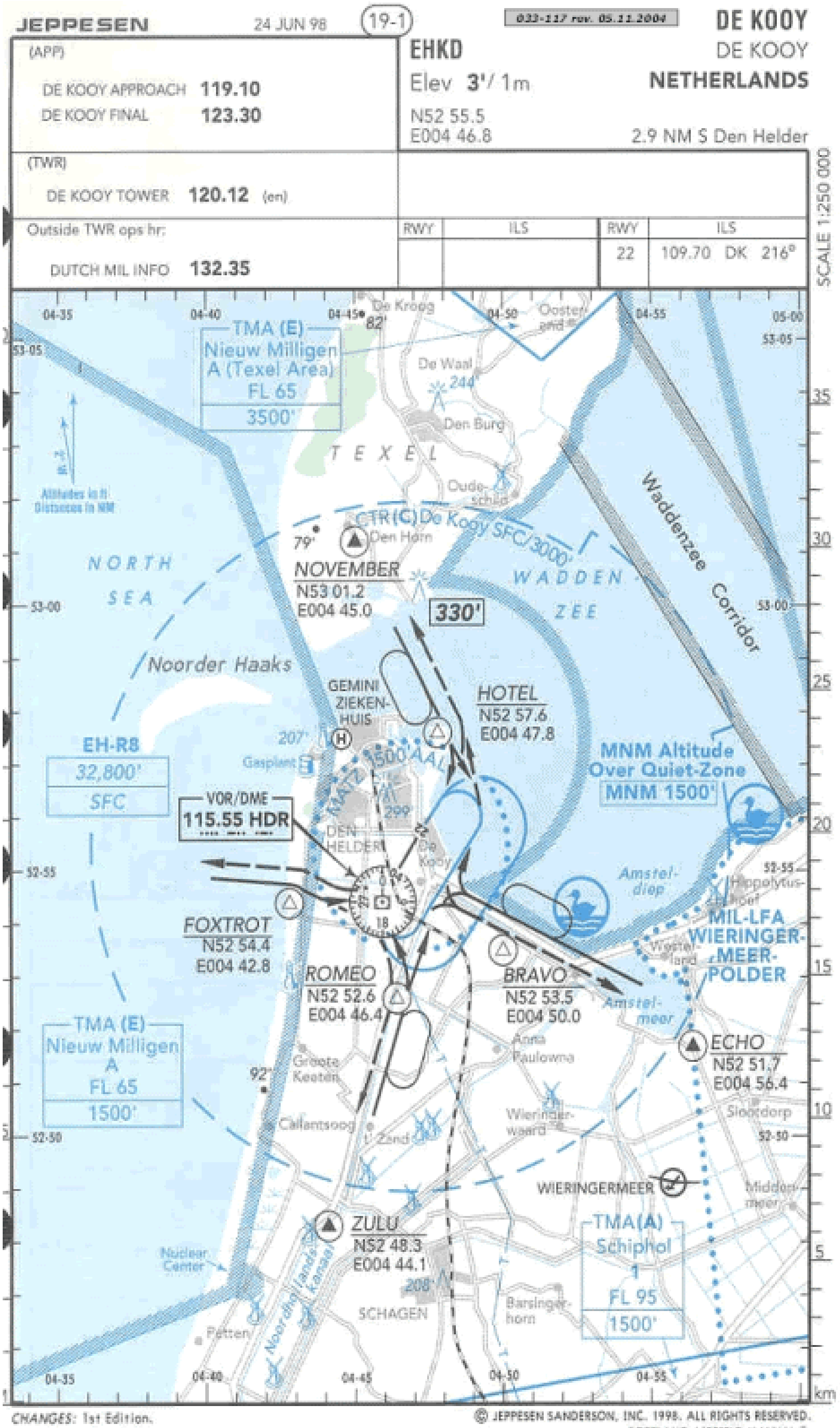
284. Excluding RVSM an appropriate flight level for IFR flight in accordance with semi-circular height rules on a course of 180°(M) is:
FL100

285. (For this question use Route Manual STAR chart 10-2D for London Heathrow)
The minimum holding altitude (MHA) and maximum holding speed (IAS) at MHA at OCKHAM OCK 115.3 are:
7000 ft and 220 kt

286. (For this question use Route Manual chart 10-9X, Amsterdam JAA minimums)
The Radio Altimeter minimum altitude for a CAT 2 ILS DME approach to RWY 01L is:
100 ft

287. What is (i) the frequency and (ii) the QDM of the ILS at the De Kooy aerodrome?

(i) 109.70, (ii) 216°M



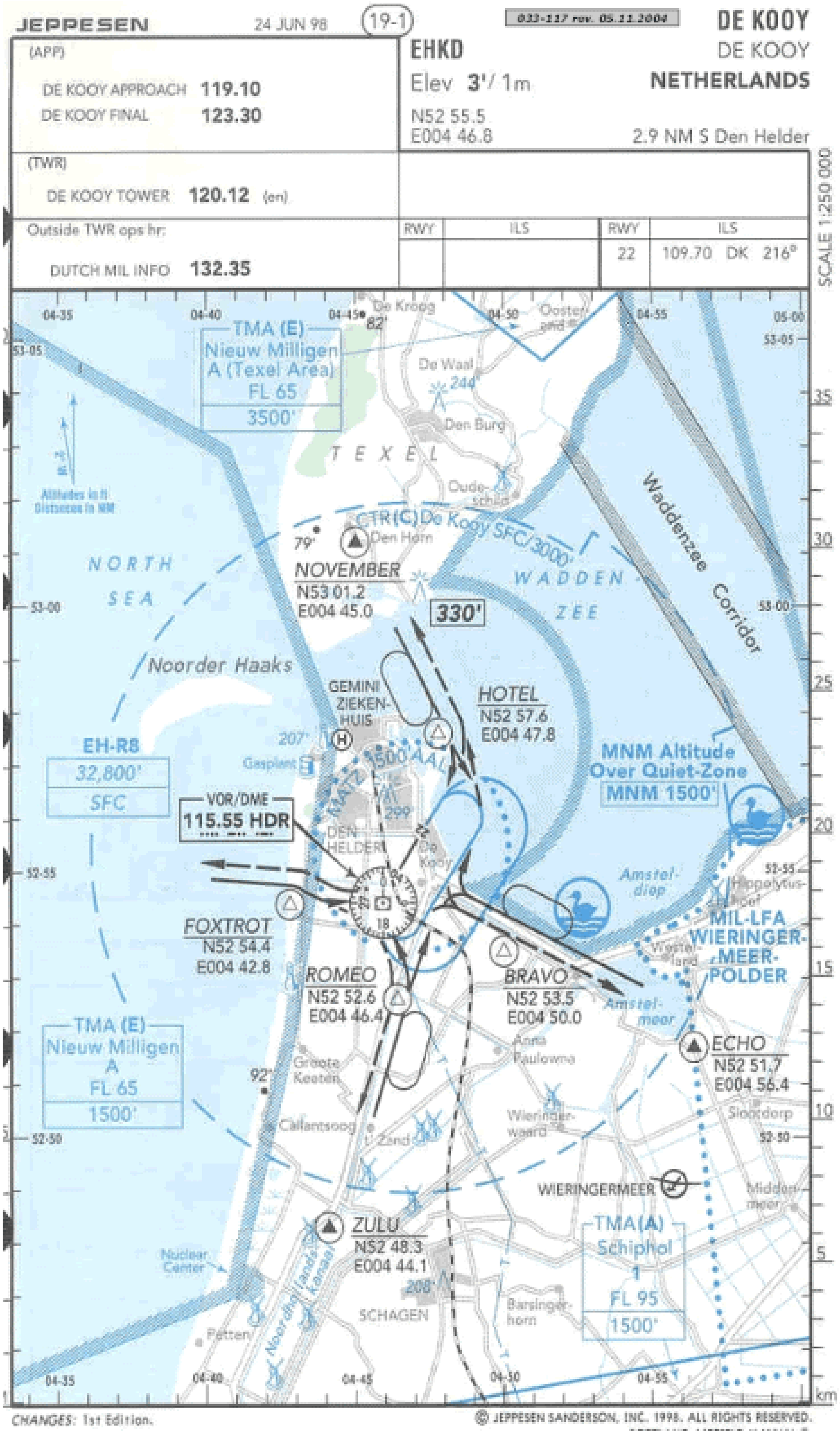
288. (For this question use Route Manual chart E(LO)1)

The magnetic course/distance from DEAN CROSS 115,2 DCS (54°43'N 003°20'W) to POLE HILL 112.1 POL (53°44'N 002°06'W) to on airway A2 is:

149°/73 NM

289. What is the minimum altitude it is permissible to fly over the "Quiet Zone" in the vicinity of De Kooy?

1500 ft



290. (For this question use Route Manual chart E(LO)5)

What is the track and distance shown on the chart from VOR/DME SKR (55°13,8'N 009°12,9'E) to overhead Esbjerg (55°31,6'N 008°33,2'E?

308°(M)/29 NM

291. Given:
Dry operating mass (DOM)= 33500 kg
Load= 7600 kg
Maximum allowable take-off mass= 66200 kg
Standard taxi fuel= 200 kg
Tank capacity= 16 100 kg
The maximum possible take-off fuel is:
15 900 kg

292. For flight planning purposes the landing mass at alternate is taken as:
Zero Fuel Mass plus Final Reserve Fuel and Contingency Fuel

293. Given: Leg Moulins (N46 42.4 E003 38.0)/Dijon(N47 16.3 E005 05.9).
Find: Route designator and total distance
Direct route, 69 NM

294. Given: Maximum allowable take-off mass 64400 kg, Maximum landing mass 56200 kg, Maximum zero fuel mass 53000 kg, Dry operating mass 35500 kg, Traffic load 14500 kg, Trip fuel 4900 kg, Minimum Take-off Fuel 7400 kg
Find: Maximum allowable take-off fuel
11100 kg

295. Given: Maximum allowable take-off mass 64400 kg, Maximum landing mass 56200 kg, Maximum zero fuel mass 53000 kg, Dry operating mass 35500 kg, Traffic load 14500 kg, Trip fuel 4900 kg, Take-off fuel 7400 kg
Find: Maximum additional load
3000 kg

296. On an ATC flight plan, an aircraft indicated as "H" for "Heavy"
is of the highest wake turbulence category

297. On a VFR flight plan, the total estimated time is:
the estimated time from take-off to overhead the destination airport

298. On an ATC flight plan, the letter "Y" is used to indicate that the flight is carried out under the following flight rules.
IFR followed by VFR

299. On an ATC flight plan, to indicate that you will overfly the way-point TANGO at 350 kts at flight level 280, you write:
TANGO / N0350 F280

300. When calculating the fuel required to carry out a given flight, one must take into account :
1 - the wind
2 - foreseeable airborne delays
3 - other weather forecasts
4 - any foreseeable conditions which may delay landing
The combination which provides the correct statement is :
1 - 2 - 3 - 4

301. On a ATC flight plan, to indicate that you will overfly the way-point ROMEO at 120 kt at flight level 085, you will write :
ROMEO / N0120 F085

302. The planned flight is over a distance of 440 NM. Based on the wind charts at altitude the following components are found: FL50: 30kt; FL100: 50kt; FL180: 70kt. Refer to the details of the aircraft's performance below. Which of the following flight levels (FL) gives the best range performance?
FL 180

Flight Level	40	80	120	160	200
TAS (knots)	190	198	204	212	220
Hourly fuel flow (l/hr)	210	202	182	170	156

303. Zurich ILS RWY 16:
The lowest published authorised RVR for an ILS approach, glide slope out, all other aids serviceable, aeroplane category A, is:
720 metres

304. EHAM ILS DME RWY 22:
The missed approach procedure is to climb to an altitude of (i).... on a track of (ii).....
(i) 2000 ft (ii) 160°

305. Zurich LSZH:
Select the correct coordinates for the Airport Reference Point from the appropriate chart:
N47.27.5/E008.32.9

306. The planned flight is over a distance of 400 NM. Based on the wind charts at altitude the following components are found: FL50: -30kt; FL70: -50kt; FL90: -50kt. Refer to the details of the aircraft's performance below. Which of the following flight levels (FL) gives the best range performance?
FL 090

Flight Level	40	80	120	160	200
TAS (knots)	190	198	204	212	220
Hourly fuel flow (l/hr)	210	202	182	170	156

307. (For this question use Route Manual chart E(LO)6)
Position NESLA at 49°48,6'N 002°44,4E is a:
Compulsory reporting point on G40 only

308. An aircraft is flying at MACH 0.84 at FL 330. The static air temperature is -48°C and the headwind component 52 Kt. At 1338 UTC the controller requests the pilot to cross the meridian of 030W at 1500 UTC. Given the distance to go is 570 NM, the reduced MACH No. should be:
0.80

309. On a given path, it is possible to chose between four flight levels (FL), each associated with a mandatory flight Mach Number (M). The flight conditions, static air temperature (SAT) and headwind component (HWC) are given below:
FL 370 - M = 0.80 Ts = -60°C HWC = -15 kt
FL 330 - M = 0.78 Ts = -60°C HWC= - 5 kt
FL 290 - M = 0.80 Ts = -55°C HWC = -15 kt
FL 270 - M = 0.76 Ts = -43°C HWC = 0
The flight level allowing the highest ground speed is:
FL270

310. A twin-jet aeroplane carries out the WASHINGTON-PARIS flight. When it reaches point K (35°N - 048°W) a non-mechanical event makes the Captain consider rerouting to one of the three following fields. The flight conditions are:

- from K to BERMUDAS (distance 847NM, headwind component=18 kt)
- from K to SANTA MARIA (distance 1112 NM, tailwind component=120 kt)
- from K to GANDER (distance 883 NM, wind component=0).

With an aeroplane true airspeed of 460 kt, the field selected will be that more rapidly reached:

BERMUDAS or GANDER, or SANTA MARIA

311. The Trip Fuel for a jet aeroplane to fly from the departure aerodrome to the destination aerodrome is 5 350 kg. Fuel consumption in holding mode is 6 000 kg/h. The quantity of fuel which is needed to carry out one go-around and land on the alternate airfield is 4 380 kg. The destination aerodrome has a single runway.
What is the minimum quantity of fuel which should be on board at take-off?

13 230 kg

TRIP = 5'350 kg
Cont = 500 kg (5 minutes @ 6'000 kg/h)
Altn = 4'380 kg
FR = 3'000 kg
MIN TO = 13'230 kg

312. For turbojet engine driven aeroplane, given:
Taxi fuel 600 kg
Fuel flow for cruise 10 000 kg/h
Fuel flow for holding 8 000 kg/h
Alternate fuel 10 200 kg
Planned flight time to destination 6 h
Forecast visibility at destination 2000 m
The minimum ramp fuel required is:

77 800 kg

Contingency fuel is always required. There are different cases possible with different methods to determine contingency fuel. If nothing is mentioned, use 5% of the planned trip fuel but (for a short flight) at least fuel to hold for 5 minutes at 1'500 ft above the destination

313. Following in-flight depressurisation, a turbine powered aeroplane is forced to divert to an en-route alternate airfield. If actual flight conditions are as forecast, the minimum quantity of fuel remaining on arrival at the airfield will be:

At least equivalent to 30 minutes flying time

314. (For this Question use Fuel Planning MRJT1)
Given : Distance C - D : 3200 NM
Long Range Cruise at FL 340
Temperature Deviation from ISA : +12°C
Tailwind component : 50 kt
Gross mass at C : 55 000 kg
The fuel required from C - D is :

14 500 kg

315. (For this Question use Fuel Planning MRJT1)
Given : Distance C - D : 680NM
Long Range Cruise at FL340
Temperature Deviation from ISA : 0° C
Headwind component : 60 kt
Gross mass at C : 44 700 kg
The fuel required from C - D is :
3700 kg
CAP 697, MRJT1 Fuel Planning, Figure 4.5.3.1 Long Range cruise at FL 340, page 54:
Column headings are kg gross weight of the aeroplane. The question states that the gross mass at "C" is 44'700 kg.
Read NAM for 44'700 kg in the line 44'000 kg and the column 700 and find 2150 NAM
Read TAS = 430 KT for 44'000 kg
Calculate Equivalent Still Air Distance: ESAD = Ground Distance/GS*TAS = 680/(430-60)*430 = 790 NAM
Read NAM in the table for 44'700 kg: 2150NAM
Calculate NAM at Point D: 2150-790 = 1360
Read the weight from the table for 1360 NAM: 41'000 kg
The difference between the two weights is the fuel burned between C and D Fuel required = 44'700 - 41'000 = 3'700 kg

316. (For this Question use Fuel Planning MRJT1)
Given : Brake release mass : 58 000 kg
Temperature : ISA + 15
The fuel required to climb from an aerodrome at elevation 4000 ft to FL300 is :
1250 kg
CAP 697, MRJT 1, Figure 4.5.1 En-Route Climb 280/.74, ISA +6°C TO +15°C, Page 43
1.) Read from table at the line 30'000 ft and the column 58'000 kg: Fuel = 1'350 kg
2.) Read at the bottom of the page: Fuel Adjustment for high elevation airports: Airport Elevation 4'000 ft : Fuel Adjustment -100 kg
3.) Calculate: 1'350 - 100 = 1'250 kg
Interpolating in the table for airport elevation like for a piston engine acft, gives the wrong answer, because the surplus fuel burn for acceleration from standstill to normal climb speed is not taken into account. When you do it that way, you calculate the fuel that the acft uses from passing 4'000 ft already with climb speed (and thrust setting and configuration) to reach the cruise level.

317. (For this Question use Fuel Planning MRJT1)
Given : Brake release mass : 62 000 kg
Temperature : ISA + 15°C
The fuel required for a climb from Sea Level to FL330 is :
1700 kg

318. (For this Question use Fuel Planning MRJT1)
Given : Distance B - C : 1200 NM
Cruise Mach 0.78 at FL300
Temperature Deviation from ISA : -14°C
Tailwind component : 40 kt
Gross mass at B : 50 200 kg
The fuel required from B - C is :
6150 kg
Use Integrated Range Tables, CAP 697, MRJT 1 Figure 4.5.3.3 Mach 0.78 cruise, pressure altitude 30'000 ft Page 76
Read TAS = 460 Kts
Read at the bottom of the page: Decrease TAS by 1 knot per degree C below ISA. So correct TAS = 460 - 14 = 446 KT.
Calculate Air Distance: NAM = GD/GS x TAS = 1200/(446+40) x 446 = 1101 NAM
Enter the table at 50'200 kg and read NAM: 2800
Calculate new NAM: 2800 - 1101 = 1699 Read weight at new NAM : 44'000 kg
Difference = fuel used = 50'200 - 44'000 = 6'200 kg Read at the bottom of the page: Decrease fuel required by .6 percent per 10 degrees C below ISA
Calculate 0.6 * 14/10 = 0.84% 0.84 % of 6'200 kg = 52 kg fuel required = 6'200 - 52 = 6'148 kg

319. (For this Question use Fuel Planning MRJT1)
Given : Distance C - D : 540 NM
Cruise 300 KIAS at FL 210
Temperature Deviation from ISA : +20°C
Headwind component : 50 kt
Gross mass at C : 60 000 kg
The fuel required from C to D is :
4242 kg

320. (For this Question use Fuel Planning MRJT1)
Given : Distance B - C : 350 NM
Cruise 300 KIAS at FL 210
Temperature : - 40°C
Tailwind component : 70 kt
Gross mass at B : 53 200 kg
The fuel required from B - C is :
1940 kg

321. (For this Question use Fuel Planning MRJT1)
HOLDING PLANNING
The fuel required for 30 minutes holding, in a racetrack pattern, at PA 1500 ft, mean gross mass 45 000 kg, is :
1090 kg

322. (For this Question use Fuel Planning MRJT1)
HOLDING PLANNING
The fuel required for 45 minutes holding, in a racetrack pattern,
at PA 5000 ft, mean gross mass 47 000 kg, is :
1635 kg

323. (For this Question use Fuel Planning MRJT1)
Given: Distance to Alternate 450 NM
Landing mass at Alternate : 45 000 kg
Tailwind component : 50 kt
The Alternate fuel required is :
2500 kg

324. (For this Question use Fuel Planning MRJT1)
Given : Distance to Alternate : 400 NM
Landing mass at Alternate : 50 000kg
Headwind component : 25 kt
The alternate fuel required is :
2800 kg

325. (For this Question use Fuel Planning MRJT1)
For a flight of 2800 ground nautical miles the following apply :
Head wind component: 15 kt
Temperature: ISA + 15°C
Cruise altitude: 35000 ft
Landing mass: 50000 kg
The (a) trip fuel and (b) trip time respectively are :
(a) 17600 kg (b) 6 hr 50 min
If nothing else is given, use LRC! (long range cruise)
Use CAP697, Fig 4.3.1C, Simplified Flight Planning, LONG RANGE CRUISE, page 30 Enter the graph at 2800 NM, move up to the REF line and follow the graph up and right to 15 kt headwind. Move straight up, interpolate the graph for 35'000 ft and move from there to the right, to the REF Line. From there follow parallel to the dashed line up and right to 50'000 kg landing mass and from there to the right and read the Trip Fuel = 17'600 kg
Start again at the bottom of the graph as before, but move straight up to the upper part of the graph to the location for 29'000 ft and above. From there move left to the REF line and then follow the graph left and down to ISA +15°C. Then move left and read the cruise time 6 h and ca 45 to 50 minutes.

326. (For this Question use Fuel Planning MRJT1)
For a flight of 2800 ground nautical miles the following apply :
Head wind component: 20 kt
Temperature: ISA + 15°C
Brake release mass: 64700 kg
The (a) trip fuel, and (b) trip time respectively are :
(a) 17000 kg (b) 6hr 45 min
Use CAP697, Figure 4.3.5 Stepped Climb Cruise, page 38
Enter the graph at 2800 nautical ground miles, move up straight to the ref line, move up and to the right parallel to the curves for 20 kt head wind component. From there move straight up to intersect an interpolated line for 64'700 kg brake release weight. From there go to the right and read Trip Fuel of 17'000 kg Move also straight up and then left, correct for ISA +15°C and read trip time 6 h 45 min

327. (For this Question use Fuel Planning MRJT1)
For a flight of 1900 ground nautical miles the following apply :
Head wind component 10 kt
Temperature ISA -5°C
Trip fuel available 15000 kg
Landing mass 50000kg
What is the minimum cruise level (pressure altitude) which may be planned?
17000 ft

328. (For this Question use Fuel Planning MRJT1)
Given the following :
Head wind component 50 kt
Temperature ISA + 10°C
Brake release mass 65000kg
Trip fuel available 18000kg
What is the maximum possible trip distance ?
2740 NM
Use CAP 697, Fig. 4.3.5 Simplified Flight Planning STEPPED CLIMB CRUISE, page 38
Enter the graph at 18'000 kg trip fuel, move to the left and intercept the line for 65'000 kg brake release mass. From there move down to 50 kt headwind. Then move parallel to the graphs down and left to the REF line. From there move down and read the ground distance = 2740 NM

329. (For this Question use Fuel Planning MRJT1)
For a flight of 2800 ground nautical miles the following apply :
Tail wind component 45kt
Temperature ISA - 10°C
Cruise altitude 29000ft
Landing mass 55000kg
The (a) trip fuel (b) trip time respectively are :
(a) 17100kg (b) 6hr 07 min

330. (For this Question use Fuel Planning MRJT1)
The following apply:
Temperature ISA +15°C
Brake release mass 62000kg
Trip time 5hr 20 min
What is the trip fuel ?
13500kg
Use CAP697, Figure 4.3.5 Stepped Climb Cruise, and page 15
Enter the graph at Trip Time 5 h 20 min. Move to the right to ISA +15°C and from there right and up, parallel to the curves to the REF LINE. From there move right and then down and intersect with an interpolated line for 62'000 kg brake release mass. From there move to the right and read Trip Fuel 13'500 kg

331. (For this Question use Fuel Planning MRJT1)
For a flight of 2400 ground nautical miles the following apply :
Temperature ISA -10°C
Cruise altitude 29000ft
Landing mass 45000kg
Trip fuel available 16000kg
What is the maximum headwind component which may be accepted?
35 kt

332. (For this Question use Fuel Planning MRJT1)
The following apply :
Tail wind component 10kt
Temperature ISA +10°C
Brake release mass 63000kg
Trip fuel available 20000kg
What is the maximum possible trip distance ?
3740 NM
Use CAP 697, Figure 4.3.5 Simplified Flight Planning STEPPED CLIMB CRUISE, page 38
Enter the graph at trip fuel 20'000 kg, move to the left, intersect the (interpolated) line for 63'000 kg brake release mass.
Move down to 10 kt tailwind. From there move up and to the right, parallel to the curves, until intersecting the REF line.
From there, move down and read the ground distance, ca 3'720 to 3'740 NM

333. (For this Question use Fuel Planning MRJT1)
For a flight of 2400 ground nautical miles the following apply :
Tail wind component 25 kt
Temperature ISA -10°C
Cruise altitude 31000ft
Landing mass 52000kg
The (a) trip fuel and (b) trip time respectively are :
(a) 14200kg (b) 5 hr 30 min
if nothing else is given or mentioned, use LRC (long range cruise). This might be deliberately omitted

334. The average magnetic course from C (62°N020°W) to B (58°N004°E) is
119°

335. The average true course from C (62°N020°W) to B (58°N004°E) is
109°

336. The initial magnetic course from C (62°N020°W) to B (58°N004°E) is
116°

337. The initial true course from C (62°N020°W) to B (58°N004°E) is
098°

338. The distance (NM) from A (64°N006°E) to C (62°N020°W) is
720

339. The average magnetic course from A (64°N006°E) to C (62°N020°W) is
271°
This is a plotting question
Use the appropriate chart from your Jeppesen Student Pilot Route Manual, plot the course between the two points, use the plotter to measure the average true course, determine the average variation from the chart and calculate the average magnetic course.

340. The average true course from A (64°N006°E) to C (62°N020°W) is
259°

341. The initial magnetic course from A (64°N006°E) to C (62°N020°W) is
275°

342. The initial true course from A (64°N006°E) to C (62°N020°W) is
271°

343. The distance (NM) from C (62°N020°W) to B (58°N004°E) is
760

344. An aircraft has a maximum certificated take-off mass of 137000 kg but is operating at take-off mass 135000 kg. In Item 9 of the ATS flight plan its wake turbulence category is :
heavy "H"

345. For the purposes of Item 9 (Wake turbulence category) of the ATS flight plan, an aircraft with a maximum certificated take-off mass of 62000 kg is :
medium "M"

346. For a repetitive flight plan (RPL) to be used, flights must take place on a regular basis on at least :
10 occasions

347. On airway PTS P from Vigra (62°334N 006°02'E), the initial great circle grid course is :
344

348. On a direct great circle course from Shannon (52°43' N 008°53'W) to Gander (48°54'N054°32'W), the
(a) average true course, and
(b) distance, are :
(a) 262° (b) 1720 NM
use the ATLANTIC ORIENTATION CHART AT (H/L) 1

349. The initial great circle true course from Keflavik (64°00'N 022°36' W) to Vigra (62°33'N 006°02'E) measures 084°. On a polar enroute chart where the grid is aligned with the 000° meridian the initial grid course will be :
106°

350. The initial great circle course from position A (80°00'N 170°00'E) to position B (75°00'N 011°E) is 177° (G). The final grid course at position B will be :
177° (G)

351. Refer to the extract of the OFP:
What is the total distance between VTSP and your destination?
5190 NM

FL	WIND/ISA	FF	DIS	ITT/FTT	LAT	RTE	TIME	ETA	FREM
MN	TAS/GS	BURN	DTG	IMT/FMT	LONG	WPT	ATIM	ATA	
						MTCA			
					N0806.6				
			5190		E09818.8	VTSP			
						3300			
CLM			158	318/317	N1000.0	SID	0025		72.2
		5.3	5032	318/318	E09633.0	TAVUN	0025		
						1000			
CLM			96	311/311		L759	0011		70.0
		7.5	4936	312/311		TOC	0036		
						1000			
340	16014P11	6.7	71	311/310	N1150.0	L759	0009		69.1
820	487/499	8.4	4865	312/311	E09425.0	MIPAK	0045		
						2300			
340	17013P11	6.7	31	315/315	N1212.0	L759	0004		68.7
820	487/498	8.8	4834	316/316	E09402.5	LADER	0049		
						3500			
360	19019P10	6.6	144	316/316	N1356.1	L759	0017		66.6
820	481/492	10.9	4690	317/317	E09219.8	NISUN	0106		
						1200			
360	21024P10	6.6	27	314/314	N1415.1	L759	0004		66.2
820	481/489	11.3	4663	315/315	E09159.8	LIBDI	0110		
						1000			

352. Refer to the extract of the OFP:
Overhead waypoint NISUN you may expect an outside temperature of:
-47°C

FL	WIND/ISA	FF	DIS	ITT/FTT	LAT	RTE	TIME	ETA	FREM
MN	TAS/GS	BURN	DTG	IMT/FMT	LONG	WPT	ATIM	ATA	
						MTCA			
					N0806.6				
			5190		E09818.8	VTSP			
						3300			
CLM			158	318/317	N1000.0	SID	0025		72.2
		5.3	5032	318/318	E09633.0	TAVUN	0025		
						1000			
CLM			96	311/311		L759	0011		70.0
		7.5	4936	312/311		TOC	0036		
						1000			
340	16014P11	6.7	71	311/310	N1150.0	L759	0009		69.1
820	487/499	8.4	4865	312/311	E09425.0	MIPAK	0045		
						2300			
340	17013P11	6.7	31	315/315	N1212.0	L759	0004		68.7
820	487/498	8.8	4834	316/316	E09402.5	LADER	0049		
						3500			
360	19019P10	6.6	144	316/316	N1356.1	L759	0017		66.6
820	481/492	10.9	4690	317/317	E09219.8	NISUN	0106		
						1200			
360	21024P10	6.6	27	314/314	N1415.1	L759	0004		66.2
820	481/489	11.3	4663	315/315	E09159.8	LIBDI	0110		
						1000			

353. Refer to the extract of the OFP:
Between waypoint LADER and NISUN your expected fuel burn will be:
2.1 tons

354. Refer to the extract of the OFP:
What is the time required to reach the top of climb (TOC)?
36 min

355. Refer to the extract of the OFP:
What is the fuel flow at FL 360?
6.6 t/h

356. Refer to the extract of the OFP:
What is the time required to reach waypoint LIBDI?
70 min

357. Refer to the extract of the OFP:
The distance between waypoints MIPAK and LADER is:
31 NM

358. Refer to the extract of the OFP:
What is the average fuel flow to reach the top of climb (TOC)?
12.5 t/h

359. (For this Question use Fuel Planning MRJT1 Fig. 4.2.1)
Find the OPTIMUM ALTITUDE for the twin jet aeroplane.
Given: Cruise mass=54000 kg, Long range cruise or .74 MACH
34500 ft

360. (For this Question use Fuel Planning MRJT1 Fig. 4.2.1)
Find the OPTIMUM ALTITUDE for the twin jet aeroplane.
Given: Cruise mass=50000 kg, .78 MACH
35500 ft

361. (For this Question use Fuel Planning MRJT1)
Find the FUEL MILEAGE PENALTY for the twin jet aeroplane with regard to the given FLIGHT LEVEL .
Given: Long range cruise, Cruise mass=53000 kg, FL 310
4 %

362. (For this Question use Fuel Planning MRJT1)
Planning an IFR-flight from Paris (Charles de Gaulle) to London (Heathrow) for the twin jet aeroplane.
Given: Estimated Take-off Mass (TOM) 52000 kg, Airport elevation 387 ft, FL 280, W/V 280°/40 kt, ISA Deviation -10°C, Average True Course 340°
Find: Time to the top of climb (TOC)
11 min

363. Planning an IFR-flight from Paris to London for the twin jet aeroplane.
Given: Estimated Landing Mass 49700 kg, FL 280, W/V 280°/40 kt, Average True Course 320°, Procedure for descent .74 M/250 KIAS
Determine the distance from the top of descent to London (elevation 80 ft).
76 NM

364. Planning an IFR-flight from Paris to London for the twin jet aeroplane.
Given: Estimated Landing Mass 49700 kg, FL 280, W/V 280°/40 kt, Average True Course 320°, Procedure for descent .74 M/250 KIAS
Determine the time from the top of descent to London (elevation 80 ft).
19 min

365. Planning an IFR-flight from Paris to London for the twin jet aeroplane.
Given: Estimated Landing Mass 49700 kg, FL 280, W/V 280°/40 kt, Average True Course 320°, Procedure for descent .74 M/250 KIAS
Determine the fuel consumption from the top of descent to London (elevation 80 ft).
273 kg

366. Of the following, the preferred airways routing from FRANKFURT FFM 114.2 (50°03' N008°38'E) to KOKSY (51°06'N 002°39'E) above FL245, on a Wednesday is :
UR10 NTM UB6 BUB ATS

367. Your aircraft is approved for MNPS and RVSM. What do you have to insert in item 10 of the ATC flight plan?
W, X

368. Which was the correct date of the implementation of the RVSM in the European Airspace?
24 January 2002

369. RVSM In-Flight procedure: Cross checks of the primary altimeters shall be made at intervals of approximately one hour. These primary altimeters shall agree within
200 ft

370. RVSM Pre-Flight procedure: The flight crew shall verfiy the altimetry accuracy by setting the QNH or QFE. The reading should then agree with the altitude of the apron or the zero height indication within
75 ft

371. Which flight level is not a RVSM level?
FL 280

372. Which equipment failure must not be reported to ATC on a RVSM level?
Main hydraulic-pump failure

373. Do you need TCAS/ACAS Version 7.0 to operate in EUR-RVSM airspace?
Yes, if the aircraft has more than 30 seats or the aircraft weight is over 15000kg

374. Your aircraft is not RVSM approved. Are you able to enter RVSM airspace?
Yes, but not as a civil operator

375. What does HMU mean?
Height monitoring unit

376. RVSM In-Flight procedure: When changing levels, the aircraft shall not overshoot or undershoot the cleared flight level by more than
150 ft

377. What is the proper phraseology if ATC wants to know if you are RVSM approved?
Affirm RVSM

378. Which equipment is not necessary to get a RVSM approval?
GPS with altitude reporting system

379. When approaching a cleared Flight level, the vertical speed should not exceed
1500 ft/min

380. Which document provides guidance for the approval of RVSM aircraft?
JAA TGL No. 6

381. RVSM was first implemented in which airspace?
NAT

382. Which transponder code is correct if you are 40 minutes before entering NAT airspace?
as requested by ATC

383. In case of an engine failure, unable to maintain altitude, how many miles do you have to fly offset of NAT track (new procedure) ?
15 NM left or right

384. What is the Polar Track System?
Fixed tracks between Europe over the North Pole to Alaska

385. You are entering the NAT. What is the tolerance of the boundary window?
3 minutes

386. What is the NAT Track Message?
The publication of the Organized Track Message (OTS)

387. You are flying from ZRH to JFK (EET 8h04'). The EOBT is 1800Z. Are you able to fly the following track?
A 54/15 55/20 55/30 53/40 51/50 CYMON
EAST LVLS NIL
WEST LVLS 310 330 340 350 360 370 390
EUR RTS VIA BABAN
NAR N144B N148B-
No

388. Your position is N50° W20°. Your altimeter shows FL263 descending. Which airspace is that?
A

389. Your HF radio is u/s. Are you able to cross the NAT?
Yes, but only on special routes

390. Before take off on an MNPS flight, one of your Long Range Navigation System fails. What is your action in case you have one system left?
File Special routes or fly above or below the MNPS

391. Day time OTS are valid between...
1130 Z until 1800 Z

392. On which VHF frequency can you obtain the NAT clearance from Shanwick?
127. 65 (if your aircraft is registered E of 30 W)

393. An aerodrome with weather reports indicating that the weather conditions are at or above operation minima from one hour prior to one hour after the anticipated arrival is defined as:
Suitable

394. On the ground in ZRH the APU on your B737-300 cannot be started. Can you accept the aircraft for an ETOPS flight?
No

395. What is the Extended Range Entry point (or ETOPS entry point)?
The point of the route which is 60 minutes flying time (with approved single engine cruise speed) from an alternate airport

396. What is general the “most critical fuel scenario” on the B737-300?
The two engine fuel scenario

397. (North Atlantic Plotting Chart, ETOPS) You are flying from Shannon (EINN) to Keflavik (BIKF). The wind component to BIKF is 10kts headwind and to Shannon you will have 20kts tailwind. The ETP from EINN to BIKF is?
416 NM from EINN

398. North Atlantic Plotting Chart, ETOPS) You are flying from Lajes (LPLA) to St. John’s (CYYT). The wind component to CYYT is 30kts headwind and to LPLA you will have 20kts tailwind. The ETP from TER to YYT is?
580 NM from YYT

399. (Critical fuel reserves long range cruise, CAP697) You have an engine failure and a decompression at the same time. Your data are:
Tailwind: 25 kts
Distance to diversion airport: 820 NM
ISA: +10°C
Weight: 55’000 kg
Icing conditions: YES
What is your diversion fuel?
8200 kg

400. (Critical fuel reserves long range cruise, CAP697) You have a decompression at your cruising altitude and following information:
Tailwind: 25 kts
Distance to diversion airport: 820 NM
ISA: +20°C
Weight: 55’000 kg
Icing conditions: No
What is your diversion fuel?
7270 kg

401. (Area of Operation, CAP 697) You have following information:
Weight: 57.5 t
Speed schedule: LRC
ETOPS approval: 180 min
What is your area of operation?
1100 NM

402. Who is able to perform an ETOPS pre-departure service check on an A330?
Only an ETOPS qualified maintenance person can do that

403. The frequency designated for VHF air to air communications when out of range of VHF ground stations in NAT region is:
123.45 MHz

404. In the Airspace where the MNPS is applicable, the vertical separation that can be applied between FL 290 and FL410 inclusive is:
1000 ft

405. Minimum Navigation Performance Specification (MNPS) airspace of the North Atlantic is defined within:
Flight levels 285 and 420 from the 27° North to the pole

406. ETOPS flight is a twin engine jet aeroplane flight conducted over a route, where no suitable airport is within an area of
60 minutes flying time in still air at the approved one engine out speed

407. Weather deviation procedure in NAT: Due to CB ahead of your routing on NAT track BRAVO or ZULU you have to deviate 5 NM left of track. Which is the correct procedure?
Deviate 5 NM and inform ATC

408. An aeroplane is flying at TAS 180 kt on a track of 090°.
The W/V is 045° / 50kt.
How far can the aeroplane fly out from its base and return in one hour?
85 NM
Refer to the Oxford textbook and study chapter "CP and PNR". Then try again to solve this question.
1. Apply the formula which you have to know by heart:
Time to PNR = Endurance x ground speed home / (ground speed out + ground speed home)
2. The given endurance is 1 hr, the ground speeds you must determine yourself using the wind side of your mechanical computer: GSO = 142 KT / GSH 212 KT.
3 Using above formula you calculate a time of 36 MIN to the PNR.
4. The distance to the PNR equals: time to PNR x GSO resulting in 85 NM

409. Mark the correct statement:
If a decision point procedure is applied for flight planning,
The trip fuel to the destination aerodrome is to be calculated via the decision point

410. For a distance of 1860 NM between Q and R, a ground speed "out" of 385 kt, a ground speed "back" of 465 kt and an endurance of 8 HR (excluding reserves) the distance from Q to the point of safe return (PSR) is:
1685 NM

411. Two points A and B are 1000 NM apart. TAS = 490 kt.
On the flight from A to B the wind component from the assumed Point of Equal Time (PET) to B is -20 kt (headwind), on the return flight from the assumed PET to A the wind component is +40 kt (tailwind).
What is the distance from A to the PET?
530 NM

412. Given:
AD = Air distance
GD = Ground distance
TAS = True Airspeed
GS = Groundspeed
Which of the following is the correct formula to calculate ground distance (GD) gone?
GD = (AD X GS)/TAS

413. An operator (turbojet engine) shall ensure that calculation up of usable fuel for a flight for which no destination alternate is required includes, taxi fuel, trip fuel, contingency fuel and fuel to fly for:
30 minutes at holding speed at 450 m above aerodrome elevation in standard conditions

414. Planning a flight from Paris (Charles de Gaulle) to London (Heathrow) for a twin - jet aeroplane.
Preplanning:
Maximum Take-off Mass: 62 800 kg
Maximum Zero Fuel Mass: 51 250 kg
Maximum Landing Mass: 54 900 kg
Maximum Taxi Mass: 63 050 kg
Assume the following preplanning results:
Trip fuel: 1 800 kg
Alternate fuel: 1 400 kg
Holding fuel (final reserve): 1 225 kg
Dry Operating Mass: 34 000 kg
Traffic Load: 13 000 kg
Catering: 750 kg
Baggage: 3 500 kg
Find the Take-off Mass (TOM):
51 515 kg
You might argue that CF has to be at least holding fuel for 5 minutes or 5% of the trip fuel whichever is higher. This is correct.
The most correct way to calculate is therefore: If FR is for 30 minutes, CF would then be 1225/6 = 204 kg. You have to calculate with a CF of 204 kg and not with 90 kg (the higher of the two). With 204 kg the solution is: TOM 51 629 kg. Since this answer is not available, the most correct (and closest) solution given is still 51 515 kg

415. The required time for final reserve fuel for turbojet aeroplane is:
30 min

416. The quantity of fuel which is calculated to be necessary for a jet aeroplane to fly IFR from departure aerodrome to the destination aerodrome is 5352 kg. Fuel consumption in holding mode is 6 000 kg/h. Alternate fuel is 4380 kg. Contingency should be 5% of trip fuel.
What is the minimum required quantity of fuel which should be on board at take-off?
13000 kg

417. The following fuel consumption figures are given for a jet aeroplane:
-standard taxi fuel: 600 kg.
-average cruise consumption: 10 000 kg/h.
-holding fuel consumption at 1500 ft above alternate airfield elevation: 8000 kg/h.
-flight time from departure to destination: 6 hours
-fuel for diversion to alternate: 10 200 kg.
The minimum ramp fuel load is:
77 800 kg

418. A jet aeroplane has a cruising fuel consumption of 4060 kg/h, and 3690 kg/h during holding. If the destination is an isolated airfield, the aeroplane must carry, in addition to contingency reserves, additional fuel of :
8120 kg

419. A jet aeroplane is to fly from A to B. The minimum final reserve fuel must allow for :
30 minutes hold at 1500 ft above destination aerodrome elevation, when no alternate is required

420. (For this question use Flight Planning Manual MRJT 1 Figure 4.3.1.B)
Given : estimated zero fuel mass 50 t; estimated landing mass at alternate 52 t; final reserve fuel 2 t; alternate fuel 1 t; flight to destination, distance 720 NM, true course (TC) 030, W/V 340/30; cruise: long range FL 330, outside air temperature -30 ° C.
Find : estimated trip fuel and time
4 800 kg; 01 : 45
Calculate Landing Mass at Destination: LM = 52 + 1 = 53 t Determine Headwind Component (Jeppesen Computer): HW = 20 KT Calculate ISA Deviation: ISA at FL330 = 15 - 33x2 = 15 - 66 = -51°C, OAT = -30°C = ISA +21 Enter the graph at 720 Nautical Ground Miles, move up to the REF Line, follow parallel to the curves right and up to 20 KT Headwind. From there, move straight up to intercept the line for 33'000 ft. Then move to the right to the REF Line and from there parallel to the dashed lines (interpolate the direction) up to 53 t landing mass. Then move to the right and read the fuel required about 4'900 kg.
To determine the trip time, start the same way, but when moving straight up, move up to the upper lines to the one for 29 & more thousand feet. From there to the left to the REF line. Then follow parallel to the curves down and to the left to ISA +21 and read the trip time = ca 1.85 h which is 1:51 h.
Choose the most correct answer

421. (For this question use Flight Planning Manual MRJT 1 Figure 4.3.6)
Given: estimated dry operation mass 35 500 kg; estimated load 14 500 kg; final reserve fuel 1200 kg; distance to alternate 95 NM; average true track 219°; head wind component 10 kt
Find : fuel and time to alternate.
1 100 kg; 25 min

422. (For this question use Flight Planning Manual MRJT 1 Figure 4.3.3C)
Given: ground distance to destination aerodrome 1 600 NM; headwind component 50 kt; FL 330; cruise 0.78 Mach; ISA + 20 ° C; estimated landing weight 55000 kg .
Find: simplified flight planning to determine estimated trip fuel and trip time.
12 400 kg. 03h 55 min

423. (For this question use Flight Planning Manual MRJT 1 Figure 4.4)
Given: dry operating mass 35 500 kg; estimated load 12 000 kg, contingency approach and landing fuel 2 500 kg; elevation at departure aerodrome 500 ft; elevation at alternate aerodrome 30 ft.
Find: final reserve fuel for a jet aeroplane (holding) and give the elevation which is relevant.
1 180 kg; alternate elevation

424. The purpose of the decision point procedure is ?
To reduce the minimum required fuel and therefore be able to increase the traffic load

425. When using decision point procedure, you reduce the
Contingency fuel by adding contingency only from the burnoff between decision point and destination

426. If CAS is 190 kts, Altitude 9000 ft. Temp. ISA - 10°C, True Course (TC) 350°, W/V 320/40, distance from departure to destination is 350 NM, endurance 3 hours, and actual time of departure is 1105 UTC. The Point of Equal Time (PET) is reached at :
1213 UTC

427. If CAS is 190 kts, Altitude 9000 ft. Temp. ISA - 10°C, True Course (TC) 350°, W/V 320/40, distance from departure to destination is 350 NM, endurance 3 hours and actual time of departure is 1105 UTC. The distance from departure to Point of Equal Time (PET) is :
203 NM

428. (For this Question use Fuel Planning MRJT1)
Find the SPECIFIC RANGE for the twin jet aeroplane flying below the optimum altitude (range loss = 6%) and using the following data.
Given: MACH .74 CRUISE, Flight level = 310, Gross mass = 50000 kg, ISA conditions
187 NAM/1000 kg

429. (For this Question use Fuel Planning MRJT1)
Find the FUEL FLOW for the twin jet aeroplane with regard to the following data.
Given: MACH .74 cruise, Flight level 310, Gross mass 50000 kg, ISA conditions
2300 kg/h
Use CAP 697 Flight Planning Manual, Figure 4.5.3.2, Mach 0.74 Cruise, 31'000 ft
Find TAS = 434 above the table
Read NAM at 50'100 kg = 3013
Read NAM at 49'900 kg = 2975
Difference = 3013 - 2975 = 38 NAM
Calculate time for 38 NAM: t = 38/434 = 0.0875576 h
Note that fuel consumption is 200 kg during this time (from 50'100 to 49'900 kg)
Calculate fuel flow: FF = 200 kg / 0.0875576 h = 2284 kg/h

430. Find the distance from waypoint 3 (WP 3) to the critical point.
Given: distance from WP 3 to WP 4 = 750 NM, TAS out 430 kt, TAS return 425 kt, Tailwind component out 30 kt, head wind component return 40 kt
342 NM

431. Find the time to the Point of Safe Return (PSR).
Given: Maximum useable fuel 15000 kg, Minimum reserve fuel 3500 kg, TAS out 425 kt, Head wind component out 30 kt, TAS return 430 kt, Tailwind component return 20 kt, Average fuel flow 2150 kg/h
2 h 51 min

432. Given :
Distance A to B 2050 NM
Mean groundspeed 'on' 440 kt
Mean groundspeed 'back' 540 kt
The distance to the point of equal time (PET) between A and B is :
1130 NM

433. Given :
Distance A to B 3060 NM
Mean groundspeed 'out' 440 kt
Mean groundspeed 'back' 540 kt
Safe Endurance 10 hours
The time to the Point of Safe Return (PSR) is:
5 hours 30 minutes

434. Which of the following statements is (are) correct with regard to the advantages of computer flight plans ?
1. The computer can file the ATC flight plan.
~~2. Wind data used by the computer is always more up-to-date than that available to the pilot.~~
Statement 1 only

435. Which of the following statements is (are) correct with regard to the operation of flight planning computers ?
1. The computer can file the ATC flight plan.
~~2. In the event of inflight re-routing the computer produces a new plan.~~
Statement 1 only
With advanced systems such as LIDO, in-flight amendments are delivered to the deck printer via ACARS. Therefore, with modern systems both statements are correct. However, it is unknown whether the question in the Central Question Bank has been amended or not. For the time being, it remains therefore unchanged.

436. Given:
Distance 'A' to 'B' 2484 NM
Groundspeed 'out' 420 kt
Groundspeed 'back' 500 kt
The time from 'A' to the Point of Equal Time (PET) between 'A' and 'B' is:
193 MIN

437. Given:
Distance 'A' to 'B' 2484 NM
Mean groundspeed 'out' 420 kt
Mean groundspeed 'back' 500 kt
Safe endurance 08 HR 30 MIN
The distance from 'A' to the Point of Safe Return (PSR) 'A' is:
1940 NM

438. Given:
Distance 'A' to 'B' 1973 NM
Groundspeed 'out' 430 kt
Groundspeed 'back' 385 kt
The time from 'A' to the Point of Equal Time (PET) between 'A' and 'B' is:
130 MIN

439. Given:
Distance 'A' to 'B' 1973 NM
Groundspeed 'out' 430 kt
Groundspeed 'back' 385 kt
Safe endurance 7 HR 20 MIN
The distance from 'A' to the Point of Safe Return (PSR) 'A' is:
1490 NM

440. Given:
Distance 'Q' to 'R' 1760 NM
Groundspeed 'out' 435 kt
Groundspeed 'back' 385 kt
The time from 'Q' to the Point of Equal Time (PET) between 'Q' and 'R' is:
114 MIN

441. Given:
Distance 'Q' to 'R' 1760 NM
Groundspeed 'out' 435 kt
Groundspeed 'back' 385 kt
Safe endurance 9 HR
The distance from 'Q' to the Point of Safe Return (PSR) between 'Q' and 'R' is:
1838 NM

442. Given:
Distance 'A' to 'B' 3623 NM
Groundspeed 'out' 370 kt
Groundspeed 'back' 300 kt
The time from 'A' to the Point of Equal Time (PET) between 'A' and 'B' is:
263 MIN

443. (For this Question use Fuel Planning MRJT1 Fig. 4.3.6)
In order to find ALTERNATE FUEL and TIME TO ALTERNATE, the AEROPLANE OPERATING MANUAL shall be entered with:
Distance in nautical miles (NM), wind component, landing mass at alternate

444. The final reserve fuel for aeroplanes with turbine engines is
Fuel to fly for 30 minutes at holding speed at 1500 ft (450 m) above aerodrome elevation in standard conditions

445. Which of the following statements is relevant for forming route portions in integrated range flight planning?
The distance from take-off up to the top of climb has to be known

446. (For this Question use Fuel Planning MRJT1, Figure 4.5.3.1)
Find: Final fuel consumption for this leg
Given: Long range cruise, Temperature -63°C, FL 330, Initial gross mass enroute 54100 kg, Leg flight time 29 min
1093 kg

CIVIL AVIATION AUTHORITY
FUEL PLANNING

DATA SHEET
MRJT 1

Figure 4.5.3.1 **Long Range Cruise**

All Engines Maximum Cruise Thrust Limits A/C Auto

PRESSURE ALTITUDE **33000 Ft.** ⟶ ISA ≙ -51°C // ISA -12°C

GROSS WT. KG.	TAS	0	100	200	300	400	500	600	700	800	900
		CRUISE DISTANCE NAUTICAL AIR MILES									
35000	400	0	23	46	69	92	115	138	161	184	207
36000	405	230	252	275	298	320	343	366	389	411	434
37000	408	457	479	502	524	547	569	591	614	636	659
38000	412	681	703	725	747	770	792	814	836	858	880
39000	415	902	924	946	968	990	1012	1034	1055	1077	1099
40000	419	1121	1143	1164	1186	1207	1229	1251	1272	1294	1315
41000	421	1337	1358	1380	1401	1422	1444	1465	1486	1508	1529
42000	424	1550	1571	1593	1614	1635	1656	1677	1698	1719	1740
43000	426	1761	1782	1803	1823	1844	1865	1886	1907	1928	1948
44000	428	1969	1990	2010	2031	2051	2072	2092	2113	2134	2154
45000	430	2175	2195	2215	2235	2256	2276	2296	2317	2337	2357
46000	432	2377	2397	2417	2437	2458	2478	2498	2518	2538	2558
47000	433	2578	2597	2617	2637	2657	2677	2696	2716	2736	2756
48000	433	2775	2795	2814	2834	2854	2873	2893	2912	2932	2951
49000	433	2971	2990	3009	3029	3048	3067	3087	3106	3125	3144
50000	433	3164	3183	3202	3221	3240	3259	3278	3297	3316	3335
51000	433	3354	3373	3392	3411	3429	3448	3467	3486	3505	3523
52000	433	3542	3561	3579	3598	3617	3635	3654	3672	3691	3709
53000	433	3728	3746	3765	3783	3801	3819	3838	3856	3874	3893
54000	433	3911	3929	3947	3965	3983	4001	4019	4038	4056	4074
55000	433	4092	4110	4127	4145	4163	4181	4199	4216	4234	4252
56000	433	4270	4287	4305	4323	4340	4358	4375	4393	4410	4428
57000	433	4445	4463	4480	4497	4515	4532	4549	4567	4584	4601
58000	433	4619	4636	4653	4670	4687	4704	4721	4738	4755	4772
59000	433	4789	4806	4823	4840	4856	4873	4890	4907	4924	4940
60000	433	4957	4974	4990	5007	5024	5040	5057	5073	5090	5106
61000	433	5123	5139	5155	5172	5188	5204	5221	5237	5253	5270
62000	433	5286	5302	5318	5334	5350	5366	5382	5398	5414	5430
63000	433	5446	5462	5478	5493	5509	5525	5541	5557	5572	5588
64000	433	5604	5619	5635	5650	5666	5681	5697	5712	5728	5743
65000	433	5759	5774	5789	5804	5820	5835	5850	5865	5880	5896
66000	433	5911	5926	5941	5956	5970	5985	6000	6015	6030	6045
67000	433	6060	6075	6089	6104	6118	6133	6148	6162	6177	6191

NOTE – OPTIMUM WEIGHT FOR PRESSURE ALTITUDE IS 58200 KG
THRUST LIMITED WEIGHT FOR ISA + 10 AND COLDER EXCEEDS STRUCTURAL LIMIT
THRUST LIMITED WEIGHT FOR ISA + 15 EXCEEDS STRUCTURAL LIMIT
THRUST LIMITED WEIGHT FOR ISA + 20 IS 66400 KG
ADJUSTMENTS FOR OPERATION AT NON-STANDARD TEMPERATURES---
INCREASE FUEL REQUIRED BY 0.6 PERCENT PER 10 DEGREES C ABOVE ISA
DECREASE FUEL REQUIRED BY 0.6 PERCENT PER 10 DEGREES C BELOW ISA → 0,72%
INCREASE TAS BY 1 KNOT PER DEGREE C ABOVE ISA
DECREASE TAS BY 1 KNOT PER DEGREE C BELOW ISA → TAS ≙ 421 kts

60 min → 421 NAM
29 min → 203,48 NAM

3929 - 203 = 3726

FUEL BURN 1100 kg (THIS VALUE HAS TO BE REDUCED BY 0,72%)

FUEL BURN CORRECTED: 1092 kg

447. (For this Question use Fuel Planning MRJT1)
Find: Air distance in Nautical Air Miles (NAM) for this leg and fuel consumption
Given: Flight time from top of climb at FL 280 to the enroute point is 48 minutes. Cruise procedure is long range cruise. Temperature is ISA -5°C. The take-off mass is 56000 kg and climb fuel 1100 kg.
345 NAM; 1994 kg

448. (For this Question use Fuel Planning MRJT1)
Given: Brake release mass 57500 kg, Initial FL 280, average temperature during climb ISA -10°C, average head wind component 18 kt
Find: Climb time for enroute climb 280/.74
13 min

449. (For this Question use Fuel Planning MRJT1)
Given: Brake release mass 57500 kg, Temperature ISA -10°C, Headwind component 16 kt, Initial FL 280
Find: Still air distance (NAM) and ground distance (NM) for the enroute climb 280/.74
62 NAM, 59 NM

450. (For this Question use Fuel Planning MRJT1)
Given: Brake release mass 57500 kg, Temperature ISA -10°C, Average headwind component 16 kt, Initial FL 280
Find: Climb fuel for enroute climb 280/.74
1138 kg

451. (For this Question use Fuel Planning MRJT1)
Given: Long range cruise, OAT -45°C at FL 350, Gross mass at the beginning of the leg 40000 kg, Gross mass at the end of the leg 39000 kg
Find: True air speed (TAS) and cruise distance (NAM) for a twin jet aeroplane
TAS 433 kt, 227 NAM

452. (For this Question use Fuel Planning MRJT1)
Given: Estimated take-off mass 57000 kg, Ground distance 150 NM, Temperature ISA -10°C, Cruise at .74 Mach
Find: Cruise altitude and expected true air speed
25000 ft, 435 kt

453. Given :
X = Distance A to point of equal time (PET) between A and B
E = Endurance
D = Distance A to B
O = Groundspeed 'on'
H = Groundspeed 'back'
The formula for calculating the distance X to point of equal time (PET) is:

$$X = \frac{D \times H}{O + H}$$

454. Given :
Course A to B 088° (T)
distance 1250 NM
Mean TAS 330 kt
Mean W/V 340°/60 kt
The time from A to the PET between A and B is :
1 hour 42 minutes

455. (For this Question use Fuel Planning MRJT1)
Given: twin jet aeroplane, FL 330, Long range cruise, Outside air temperature -63°C, Gross mass 50500 kg
Find: True air speed (TAS)
420 kt

456. Given :
Distance X to Y 2700 NM
Mach Number 0.75
Temperature -45°C
Mean wind component 'on' 10 kt tailwind
Mean wind compontent 'back' 35 kt tailwind
The distance from X to the point of equal time (PET) between X and Y is :
1386 NM

457. Which of the following statements is (are) correct with regard to computer flight plans
~~1. The computer takes account of bad weather on the route and adds extra fuel.~~
2. The computer calculates alternate fuel sufficient for a missed approach, climb, cruise, descent and approach and landing at the destination alternate.
Statement 2 only

458. Refer to the data sheet below.

The flight crew of a turbojet aeroplane prepares a flight using the following data:

- Flight level FL 370 at "Long Range" (LR) cruise regime
- Mass at brake release: 212 800 kg
- Flight leg ground distance: 2 500 NM
- Temperatures: ISA
- CG: 37%
- Headwind component: 30 kt
- "Total anti-ice" set on "ON" for the entire flight
- No requested climb and descent correction of the fuel consumption

The fuel consumption (from take-off to landing) is:

34 430 kg

DATA SHEET
LRJT 1

JAR - FCL	FLIGHT PLANNING INTERGRATED CRUISE	

INTEGRATED CRUISE

MAX. CRUISE THRUST LIMITS NORMAL AIR CONDITIONING ANTI-ICING OFF			ISA CG = 37.0%		DISTANCE (NM) TIME (MIN)		LR FL 370			
WEIGHT (1000KG)	**0**	**.2**	**.4**	**.6**	**.8**	**1.0**	**1.2**	**1.4**	**1.6**	**1.8**	**TAS (KT)**
174	4845 658	4863 660	4881 662	4899 665	4917 667	4936 670	4954 672	4972 674	4990 677	5008 879	463
176	5026 881	5044 684	5062 686	5080 688	5098 691	5116 693	5134 695	5152 698	5170 700	5188 702	464
178	5206 705	5224 707	5241 709	5259 711	5277 714	5295 716	5313 718	5331 721	5348 723	5366 725	465
180	5384 728	5402 730	5419 732	5437 734	5455 737	5473 739	5490 741	5508 743	5525 746	5543 748	465
182	5561 750	5578 753	5596 755	5613 757	5631 759	5649 762	5666 764	5684 766	5701 768	5719 771	466
184	5756 773	5753 775	5771 777	5788 780	5806 782	5823 784	5840 786	5858 789	5875 791	5892 793	466
186	6010 795	5927 797	5944 800	5962 802	5879 804	5996 806	6013 809	6031 811	6048 813	6065 815	466
188	6082 817	6099 820	6116 822	6133 824	6151 826	6168 828	6185 831	6202 833	6219 835	6236 837	467
190	6253 839	6270 842	6287 844	6304 846	6321 848	6338 850	6355 852	6372 855	6388 857	6405 859	467
192	6422 861	6439 863	6456 865	6473 869	6490 870	6506 872	6523 874	6540 876	6557 878	6573 881	467
194	6590 883	6607 885	6623 887	6640 889	6857 891	6673 893	6690 895	6707 898	6723 900	6740 902	468
196	6757 904	6773 906	6790 908	6806 910	6823 912	6839 915	6856 917	6872 919	6888 921	6905 923	468
198	6921 925	6930 927	6954 929	6070 931	6987 933	7003 936	1011 938	7035 940	7052 942	7068 944	468
200	7084 946	7100 948	7117 950	7133 952	7149 954	7165 956	7181 958	7197 960	7213 962	7219 964	469
202	7245 967	7261 969	7277 971	7293 973	7309 975	7325 977	7341 979	7357 981	7373 983	7389 985	470
204	7405 987	7420 989	7436 991	7452 993	7468 995	7484 997	7490 999	7515 1001	7531 1003	7546 1005	471
206	7562 1007	7578 1009	7593 1011	7609 1013	7624 1015	7640 1017	7656 1019	7671 1021	7687 1023	7702 1025	471
208	7718 1027	7733 1029	7749 1031	7764 1033	7779 1035	7795 1037	7810 1039	7825 1041	7841 1042	/856 1044	471
210	7871 1046	7887 1048	7902 1050	7917 1052	7932 1054	794S 1056	7963 1058	7978 1060	7993 1062	8008 1064	471
212	8023 1066	8038 1068	8053 1070	8068 1071	8083 1073	8098 1075	8113 1077	8128 1079	8143 1081	8158 1083	471
214	8173 1085	8188 1087	8203 1089	8217 1090	8232 1092	8747 1094	8262 1096	8271 1098	8291 1100	8306 1102	471
216	8321 1104	8335 1105	8350 1107	8365 1109	8379 1111						471
218											

PACK FlOW LO	PACK FLOW HI OR/ AND CARGO COOL ON	ENGINE ANTI ICE ON	TOTAL ANTI ICE ON
ΔFUEL = - 0.4 %	ΔFUEL= + 1 %	ΔFUEL = + 1.5%	ΔFUEL = + 6%

459. Given the following:
D = flight distance
X = distance to Point of Equal Time
GSo = groundspeed out
GSr = groundspeed return
The correct formula to find distance to Point of Equal Time is :
X = D x GSr / (GSo + GSr)

460. An aircraft takes-off from an airport 2 hours before sunset. The pilot flies a track of 090°(T), W/V 130°/ 20 kt, TAS 100 kt. In order to return to the point of departure before sunset, the furthest distance which may be travelled is:
97 NM

461. The flight time from the PET to either of the landing places is:
Inversely proportional to the sum of ground speed out and ground speed back

462. Given:
Distance A to B is 360 NM.
Wind component A - B is -15 kt,
Wind component B - A is +15 kt,
TAS is 180 kt.
What is the distance from the equal-time-point to B?
165 NM

463. (For this Question use Fuel Planning MRJT1)
Given:
Diversion distance 720NM
Tail wind component 25kt
Mass at point of diversion 55000kg
Temperature ISA
Diversion fuel available 4250kg
What is the OEI minimum pressure altitude at which the above conditions may be met ?
20000ft

464. (For this Question use Fuel Planning MRJT1)
Given:
Diversion distance 650 NM
Diversion pressure altitude 16 000 ft
Mass at point of diversion 57 000 kg
Head wind component 20 kt
Temperature ISA + 15°C
The diversion (a) fuel required and (b) time, are approximately :
(a) 4800kg
(b) 2h 03min

465. (For this Question use Fuel Planning MRJT1)
Given:
Distance to alternate 950 NM
Head wind component 20 kt
Mass at point of diversion 50000kg
Diversion fuel available 5800kg
The minimum pressure altitude at which the above conditions may be met is :
22000ft

466. (For this Question use Fuel Planning MRJT1)
A descent is planned at .74/250KIAS from 35000ft to 5000ft. How much fuel will be consumed during this descent?
150kg

467. You have calculated Point of No Return (PNR) on a flight, having all negative WCs in the flight plan. During the flight you experience that the W/V is stronger but coming from the same direction as in the flight plan. Consider the following statements:
A recalculated PNR will move toward the place of departure

468. Why do we normally overlook the descend phase when calculating Point of Equal Time (PET)?
Because the descend will have an equal effect, whatever destination we decide to proceed to

469. You fly from C to D, a distance of 450 NM. The WC C - D is +30, and the WC D - C is -40. TAS is 160 Kt and 1-engine out TAS is 130 Kt. The Fuel Flow is 165 kg/hr, and the Safe endurance when overhead C is 4 hours. Calculate PNR for return to C.
What is the distance from PNR to D?
155,5 NM
Refer to chapter “Critical Point and Point of No Return” of your OAT textbook. Study in the subchapter “Point of No Return” the 3 given examples.
The question 7112 represents example 3 with some amendments:
As in reality the tailwind component on the flight out is weaker than the headwind component on the flight back. The safe endurance is given. Therefore you will not need the indicated fuel flow. The PNR is calculated with normal all engine TAS, the flight out as well as the flight back. Therefore apply normal TAS.
Note: After an engine failure you would not continue to a PNR and burn all your fuel, but proceed to land. Therefore the 1-engine out TAS is not needed.
After calculating the time to the PNR continue to determine the corresponding distance from C to the PNR. Caution: The final question asks the distance from the PNR to D.

470. You fly from C to D, a distance of 450 NM. The WC C - D is +30, and the WC D - C is -40. TAS is 160 Kt and reduced TAS is 130 Kt. The Fuel Flow is 165 kg/hr, and the Safe endurance when overhead C is 4 hours. Calculate PET between C and D, based on reduced TAS for the flight from PET to C/D. What is the flying time from C to PET?
0:51

471. Given:
Distance from departure to destination: 210 NM
Safe endurance: 2,5 hrs
True Track: 035
W/V: 250/20
TAS: 105 KT
What is the distance of the PSR from the departure point?
127 NM

472. Given:
Distance from departure to destination 500 NM
True Track 090
W/V 090/20
TAS 150 kt
What is the distance and time of the PET from the departure point?
Distance 283 NM, time 131 min

473. Given:
Distance from departure to destination 270 NM
True Track 030
W/V 120/35
TAS 125 kt
What is the distance and time of the PET from the departure point?
Distance 135 NM, time 68 min

474. Given:
Distance from departure to destination 950 NM
GS Out 275 kt
GS Home 225 kt
What is the time of the PET from the departure point?
93 min

475. Given:
Distance from departure to destination 2500 NM
GS Out 540 kt
GS Home 470 kt
What is the time of the PET from the departure point?
129 min

476. Given:
Distance from departure to destination 1950 NM
GS Out 400 kt
GS Home 300 kt
What is the time of the PET from the departure point?
125 min

477. Given:
Distance from departure to destination 1345 NM
GS Out 480 kt
GS Home 360 kt
What is the time of the PET from the departure point?
72 min

478. Given:
Distance from departure to destination 875 NM
True Track 240
W/V 060/50
TAS 500 kt
What is the distance and time of the PET from the departure point?
Distance 394 NM, time 43 min

479. Given:
Distance from departure to destination 2200 NM
True Track 150
W/V 330/50
TAS 460 kt
What is the distance and time of the PET from the departure point?
Distance 980 NM, time 115 min

480. Given:
Distance from departure to destination 2800 NM
True Track 140
W/V 140/100
TAS 500 kt
What is the distance and time of the PET from the departure point?
Distance 1680 NM, time 252 min

481. Given:
Distance from departure to destination 180 NM
True Track 310
W/V 010/20
TAS 115 kt
What is the distance of the PET from the departure point?
98 NM

482. Given:
Distance from departure to destination 300 NM
Safe Endurance 4 h
TAS 110 kt
Ground Speed Out 120 kt
Ground Speed Home 100 kt
What is the distance of the PSR from the departure point?
218 NM

483. Given:
Distance from departure to destination 400 NM
Safe Endurance 2.5 h
TAS 115 kt
Ground Speed Out 130 kt
Ground Speed Home 105 kt
What is the distance of the PSR from the departure point?
145 NM

484. Given:
Distance from departure to destination 500 NM
Safe Endurance 4 h
TAS 140 kt
Ground Speed Out 150 kt
Ground Speed Home 130 kt
What is the distance and time of the PSR from the departure point?
Distance 279 NM, time 111 min

485. Given:
Distance from departure to destination 240 NM
Safe Endurance 3.5 h
TAS 125 kt
Ground Speed Out 110 kt
Ground Speed Home 140 kt
What is the distance and time of the PSR from the departure point?
Distance 216 NM, time 118 min

486. Given:
Distance from departure to destination 180 NM
Safe Endurance 2.8 h
True Track 065
W/V 245/25
TAS 100 kt
What is the distance of the PSR from the departure point?
131 NM

487. Given:
Distance from departure to destination 150 NM
Safe Endurance 3.2 h
TAS 90 kt
Ground Speed Out 100 kt
Ground Speed Home 80 kt
What is the distance and time of the PSR from the departure point?
Distance 142 NM, time 85 min

488. Given:
Distance from departure to destination 210 NM
Safe Endurance 3.5 h
True Track 310
W/V 270/30
TAS 120 kt
What is the distance of the PSR from the departure point?
200 NM

489. Given:
Distance from departure to destination 1000 NM
Safe Endurance 4 h
TAS 500 kt
Ground Speed Out 550 kt
Ground Speed Home 450 kt
What is the distance of the PSR from the departure point?
990 NM

490. Given:
Distance from departure to destination 5000 NM
Safe Endurance 10 h
TAS 450 kt
Ground Speed Out 500 kt
Ground Speed Home 400 kt
What is the distance of the PSR from the departure point?
2222 NM

491. Given:
Distance from departure to destination 3000 NM
Safe Endurance 8 h
TAS 520 kt
Ground Speed Out 600 kt
Ground Speed Home 440 kt
What is the time of the PSR from the departure point?
203 min

492. Given:
Distance from departure to destination 2450 NM
Safe Endurance 7.5 h
TAS 410 kt
Ground Speed Out 360 kt
Ground Speed Home 460 kt
What is the time of the PSR from the departure point?
252 min

493. Given:
Distance from departure to destination 3750 NM
Safe Endurance 9.5 h
True Track 360
W/V 360/50
TAS 480 kt
What is the distance of the PSR from the departure point?
2255 NM

494. Given:
Distance from departure to destination 6340 NM
Safe Endurance 15 h
True Track 090
W/V 270/100
TAS 520 kt
What is the distance of the PSR from the departure point?
3756 NM

495. Given:
Distance from departure to destination 950 NM
Safe Endurance 3.5 h
TAS 360 kt
Ground Speed Out 320 kt
Ground Speed Home 400 kt
What is the distance and time of the PSR from the departure point?
Distance 622 NM, time 117 min

496. Given:
Distance from departure to destination 4630 NM
Safe Endurance 12.4 h
True Track 240
W/V 060/80
TAS 530 kt
What is the distance of the PSR from the departure point?
3211 NM

497. Given:
Distance from departure to destination 550 NM
Safe Endurance 3.6 h
True Track 200
W/V 220/15
TAS 130 kt
What is the distance of the PSR from the departure point?
231 NM

498. Given:
Distance from departure to destination 150 NM
Safe Endurance 2.4 h
True Track 250
W/V 280/15
TAS 120 kt
What is the distance of the PSR from the departure point?
142 NM

499. Given:
Distance from departure to destination 330 NM
Safe Endurance 5 h
True Track 170
W/V 140/25
TAS 125 kt
What is the distance of the PSR from the departure point?
303 NM

500. Given:
Distance from departure to destination 480 NM
Safe Endurance 5 h
True Track 315
W/V 100/20
TAS 115 kt
What is the distance of the PSR from the departure point?
280 NM

501. Given:
Distance from departure to destination 210 NM
Safe Endurance 2.5 h
True Track 035
W/V 250/20
TAS 105 kt
What is the distance of the PSR from the departure point?
127 NM

502. Given:
Distance from departure to destination 190 NM
Safe Endurance 2.4 h
True Track 120
W/V 030/40
TAS 130 kt
What is the distance of the PSR from the departure point?
148 NM

503. Given:
Distance from departure to destination 215 NM
Safe Endurance 3.3 h
True Track 005
W/V 290/15
TAS 125 kt
What is the distance of the PSR from the departure point?
205 NM

504. Given:
Distance from departure to destination 360 NM
Safe Endurance 4.5 h
True Track 345
W/V 260/30
TAS 140 kt
What is the distance of the PSR from the departure point?
308 NM

505. Given:
Dry operating mass (DOM)= 33500 kg
Load= 7600 kg
Maximum allowable take-off mass= 66200 kg
Standard taxi fuel= 200 kg
Tank capacity= 16 100 kg
The maximum possible take-off fuel is:
15 900 kg

506. (For this question Flight Planning Manual MRJT 1 Figure 4.5.3.1)
Given: flight time from top of climb to the enroute point in FL280 is 48 min. Cruise procedure is long range cruise (LRC).
Temp. ISA -5° C
Take-off mass 56 000 kg
Climb fuel 1 100 kg
Find: distance in nautical air miles (NAM) for this leg and fuel consumption:
345 NAM; 2000 kg

507. (For this question use Flight Planning Manual MRJT 1 Figure 4.5.1)
Given: estimated take-off mass 57 500 kg;
initial cruise FL 280;
average temperature during climb ISA -10°C;
average head wind component 18 kt
Find: climb time
13 min

508. (For this question use Flight Planning Manual MRJT 1 Figure 4.5.1)
Given : brake release mass 57 500 kg
temperature ISA -10°C; head wind component 16 kt
initial FL 280
Find: still air distance (NAM) and ground distance (NM) for the climb
62 NAM; 59 NM

509. (For this question use Flight Planning Manual MRJT 1 Figure 4.5.1)
Given : mass at brake release 57 500 kg;
temperature ISA -10°C; average head wind component 16 kt
initial cruise FL 280
Find: climb fuel
1138 kg

510. (For this question Flight Planning Manual MRJT 1 Figure 4.5.3.1)
Given :FL 330; long range cruise; OAT -63°C; gross mass 50 500 kg.
Find: true airspeed (TAS)
420 kt

511. (For this question Flight Planning Manual MRJT 1 Figure 4.5.3.1)
Given: long range cruise; outside air temperature (OAT) -45 ° C in FL 350; mass at the beginning of the leg 40 000 kg; mass at the end of the leg 39 000 kg.
Find: true airspeed (TAS) at the end of the leg and the distance (NAM).
TAS 431 kt; 227 NAM

512. (For this question use Flight Planning Manual MRJT 1)
Given: estimated take-off mass 57 000 kg; still air distance 150 NAM; outside air temperature (OAT) ISA -10K; cruise at 0.74 Mach.
Find : cruise altitude and expected true airspeed
25 000 ft; 435 kt
Use CAP 697MRJT 1 Figure 4.2.2 Short Distance Cruise Altitude (page 25)
Enter the graph with 150 NAM, read cruise altitude for 57'000 kg brake release weight = 25'000 ft
Use figure 4.5.3.2 Mach 0.74 cruise, pressure altitude 25'000 ft (page 62) Read TAS = 445 KT At the bottom, read temperature correction for non ISA: -1 KT per degree below ISA. Correct TAS for ISA-10: 445 - 10 = 435 KT

513. (For this question use Flight Planning Manual MRJT 1 Figure 4.4)
Planning a flight from Paris Charles de Gaulle to London Heathrow for a twin - jet aeroplane.
Preplanning:
Dry Operating Mass (DOM): 34 000 kg
Traffic Load: 13 000 kg
The holding is planned at 1 500 ft above alternate elevation. The alternate elevation is 256 ft. The holding is planned for 30 minutes with no reductions.
Determine the Estimated Landing Mass at alternate Manchester.
48 125 kg

514. (For this question use Route Manual chart E(HI)4)
Planning a flight from Paris Charles de Gaulle (N49 00.9 E002 36.9) to London Heathrow (N51 29.2 W000 27.9) for a twin - jet aeroplane. The alternate airport is Manchester (N53 21.4 W002 15.7)
Preplanning:
The wind from London to Manchester is 250°/30 kt
The distance from London to Manchester is 160 NM.
Assume the Estimated Landing Mass at alternate is about 50 000 kg.
Find the alternate fuel and the according time.
1 450 kg and 32 minutes

515. (For this question use Route Manual chart E(HI)4)
Planning a flight from Paris Charles de Gaulle (N49 00.9 E002 36.9) to London Heathrow (N51 29.2 W000 27.9) for a twin - jet aeroplane.
Preplanning:
Powersetting: Mach= 0.74
Planned flight level FL 280
The Landing Mass in the fuel graph is 50 000 kg
The trip distance used for calculation is 200 NM
The wind from Paris to London is 280°/40 kt
Find the estimated trip fuel.
1 740 kg
Wind Component: ca -30 kt (average TT ca 320°) The question refers to a flight from Paris to Heathrow, means take off, climb, descent and landing, and not just cruise from one point to the other. It clearly says "Planning a flight from Paris Charles de Gaulle to London Heathrow".
CAP 697, Figure 4.3.2A SIMPLIFIED FLIGHT PLANNING, 0.74 MACH CRUISE Page 31
Enter the Graph at the bottom at 200 NM. Move straight up to the reference line. Follow the line right and up to 30 KT headwind.
Then move straight up to intersect the line for the cruising altitude
Interpolate the middle between 27'000 and 29'000 ft. From there move to the right to the ref line.
Interpolate the direction between 21 and 35 (for 28'000 ft) and move to the right and up to intersect the 50'000 kg landing weight.
From there move right to the Fuel Required and read ca 1'750 kg.

516. (For this question use Flight Planning Manual MRJT 1 Figure 4.3.6)
In order to get alternate fuel and time, the twin -jet aeroplane operations manual graph shall be entered with:
Distance (NM), wind component, landing mass at alternate

517. Finish the ENDURANCE/FUEL CALCULATION and determine ATC ENDURANCE for a twin jet aeroplane, with the help of the table provided. Contingency is 5% of the planned trip fuel and fuel flow for extra fuel is 2400 kg/h.
ATC ENDURANCE: 04:07

ENDURANCE/FUEL CALCULATION

	Fuel (kg)	Time (hh:mm)
Trip Fuel	5800	02:32
Contingency Fuel		
Alternate Fuel	1800	00:42
Final Reserve Fuel	1325	
Minimum T/O-Fuel		
Extra Fuel		
Actual T/O-Fuel		
Taxi FUEL	200	
Ramp Fuel	10000	

518. Find the distance to the POINT OF SAFE RETURN (PSR).
Given: maximum useable fuel 15000 kg, minimum reserve fuel 3500 kg, Outbound: TAS 425 kt, head wind component 30 kt, fuel flow 2150 kg/h, Return: TAS 430 kt, tailwind component 20 kt, fuel flow 2150 kg/h
1125 NM

519. (For this Question use Fuel Planning MRJT1)
The aeroplane gross mass at top of climb is 61500 kg. The distance to be flown is 385 NM at FL 350 and OAT -54.3 °C. The wind component is 40 kt tailwinds. Using long range cruise procedure what fuel is required?
2150 kg

520. (For this Question use Fuel Planning MRJT1)
Find: Time, Fuel, Still Air Distance and TAS for an enroute climb 280/.74 to FL 350.
Given: Brake release mass 64000 kg, ISA +10°C, airport elevation 3000 ft
26 min, 1975 kg, 157 Nautical Air Miles (NAM), 399 kt

521. "Integrated range" curves or tables are presented in the Aeroplane Operations Manuals. Their purpose is
To determine the fuel consumption for a certain still air distance considering the decreasing fuel flow with decreasing mass

522. For flight planning purposes the landing mass at alternate is taken as:
Zero Fuel Mass plus Final Reserve Fuel and Contingency Fuel

523. (For this Question use Fuel Planning MRJT1 Fig. 4.2.2)
Find the SHORT DISTANCE CRUISE ALTITUDE for the twin jet aeroplane.
Given: Brake release mass=45000 kg, Temperature=ISA + 20°C, Trip distance=50 Nautical Air Miles (NAM)
10000 ft

524. (For this Question use Fuel Planning MRJT1 Fig. 4.2.2)
Find the SHORT DISTANCE CRUISE ALTITUDE for the twin jet aeroplane.
Given: Brake release mass=40000 kg, Temperature=ISA + 20°C, Trip distance=150 Nautical Air Miles (NAM)
30000 ft

525. Given: Leg Moulins (N46 42.4 E003 38.0)/Dijon(N47 16.3 E005 05.9).
Find: Route designator and total distance
Direct route, 69 NM

526. Given: Maximum allowable take-off mass 64400 kg, Maximum landing mass 56200 kg, Maximum zero fuel mass 53000 kg, Dry operating mass 35500 kg, Traffic load 14500 kg, Trip fuel 4900 kg, Minimum Take-off Fuel 7400 kg
Find: Maximum allowable take-off fuel
11100 kg

527. Given: Maximum allowable take-off mass 64400 kg, Maximum landing mass 56200 kg, Maximum zero fuel mass 53000 kg, Dry operating mass 35500 kg, Traffic load 14500 kg, Trip fuel 4900 kg, Take-off fuel 7400 kg
Find: Maximum additional load
3000 kg

528. (For this Question use Fuel Planning MRJT1)
Given: Twin jet aeroplane, Ground distance to destination aerodrome is 1600 NM, Headwind component 50 kt, FL 330, Cruise .78 Mach, ISA Deviation +20°C and Landing mass 55000 kg
Find: Fuel required and trip time with simplified flight planning
12400 kg, 04 h 00 min

529. (For this Question use Fuel Planning MRJT1)
Given: twin jet aeroplane, Dry operating mass 35500 kg, Traffic load 14500 kg, Final reserve fuel 1200 kg, Distance to alternate 95 NM, Tailwind component 10 kt
Find: Fuel required and trip time to alternate with simplified flight planning (ALTERNATE PLANNING)
1000 kg, 24 min

530. (For this Question use Fuel Planning MRJT1)
Given: twin jet aeroplane, Estimated mass on arrival at the alternate 50000 kg, Estimated mass on arrival at the destination 52525 kg, Alternate elevation MSL, Destination elevation 1500 ft
Find: Final reserve fuel and corresponding time
1180 kg, 30 min

531. (For this Question use Fuel Planning MRJT1)
Given: twin jet aeroplane, Estimated mass on arrival at the alternate 50000 kg, Elevation at destination aerodrome 3500 ft, Elevation at alternate aerodrome 30 ft
Find: Final reserve fuel
1180 kg

532. (For this Question use Fuel Planning MRJT1)
Planning an IFR-flight from Paris to London for a twin jet aeroplane.
Given: Estimated Take-off Mass (TOM) 52000 kg, Airport elevation 387 ft, FL 280, W/V 280°/40 kt, ISA-Deviation -10°C, Average True Course 340°
Find: Ground distance to the top of climb (TOC)
50 NM

533. (For this Question use Fuel Planning MRJT1)
Planning an IFR-flight from Paris to London for the twin jet aeroplane.
Given: Estimated Take-off Mass (TOM) 52000 kg, Airport elevation 387 ft, FL 280, W/V 280°/40 kt, ISA Deviation -10°C, Average True Course 340°
Find: Fuel to the top of climb (TOC)
1000 kg

534. (For this Question use Fuel Planning MRJT1)
Planning an IFR-flight from Paris to London for the twin jet aeroplane.
Given: Gross mass 50000 kg, FL 280, ISA Deviation -10°C, Cruise procedure Mach 0.74
Determine the TAS
430 kt

535. The flight crew of a turbojet aeroplane prepares a flight using the following data:
Flight leg ground distance: 4 000 NM, Flight level FL 370; "Long range" flight regime
Effective wind at this level: head wind of 50 kt
Temperature: ISA, Centre of gravity (CG): 37 %, Pack flow : LOW (LO), Anti ice: OFF
Reference landing mass: 140 000 kg
Taxi fuel: 500 kg, Final reserve fuel: 2 400 kg
The fuel quantity which must be loaded on board the aircraft is:
51 860 kg

FLIGHT PLANNING FROM BREAKE RELEASE TO LANDING
CLIMB: 250KTS/300KTS/M.80 - LONG RANGE CRUISE - DESCENT: M.80/300KTS/250KTS
IMC PROCEDURE: 240 KG (6 MIN)

REF. LANDING WEIGHT = 140.000 KG; NORMAL AIR CONDITIONING; ANTI ICING OFF — ISA, CG = 37,0 % — FUEL CONSUMED (KG), TIME (H.MIN)

AIR DIS. (NM)	FLIGHT LEVEL 310	330	350	370	390	410	CORRECTION ON FUEL CONSUMPTION (KG/1.000 KG) FL310 FL330	FL350 FL370	FL390 FL410
2800	32826 7.37	31906 6.47	30946 6.38	30195 6.27	29491 6.18	28976 6.14	137	139	145
2900	34032 7.30	33058 7.00	32067 6.51	31285 6.40	30555 6.31	30024 6.27	141	142	151
3000	35244 7.44	34211 7.14	33245 7.04	32379 6.53	31624 6.44	31077 5.40	150	147	157
3100	36570 7.54	35370 7.29	34378 7.17	33478 7.06	32698 6.57	32135 6.63	155	149	154
3200	37607 8.07	36603 7.47	35517 7.30	34584 7.16	33778 7.10	33198 7.05	160	153	170
3300	39050 5.20	37728 7.55	36661 7.43	35694 7.32	34864 7.23	34269 7.18	159	158	177
3400	40300 8.33	38957 8.09	37810 7.67	36810 7.45	35956 7.35	35346 7.31	154	163	184
3500	41559 8.45	40142 8.22	38965 8.10	37931 7.58	37054 7.48	36430 7.44	158	167	191
3600	42921 5.58	41333 8.36	40125 8.23	39057 8.10	38157 8.01	37518 7.57	173	172	200
3700	44069 9.10	42528 8.49	41291 8.36	40189 8.23	39265 8.14	38613 8.09	178	177	208
3800	45322 9.23	43734 9.03	42464 8.49	41327 8.36	40380 8.27	39714 8.22	183	182	215
3900	46580 9.35	44946 9.16	43640 9.02	42471 8.49	41502 8.39	40823 8.35	187	187	223
4000	47844 9.48	46165 9.29	44820 9.15	43618 9.01	42629 8.52	41938 8.48	191	193	231
4100	49114 10.00	47389 9.42	46006 9.28	44764 9.14	43763 9.05	43090 9.00*	194	198	238
4200	50391 10.12	48620 9.55	47198 9.41	45915 9.27	44900 9.17	44238 9.13*	198	203	246
4300	51673 10.24	49857 10.08	48396 9.53	47021 9.40	46042 9.30	45391 9.26*	201	208	254
4400	52961 10.36	51100 10.22	49600 10.06	48233 9.53	47191 9.43	46550 9.39*	205	214	261
4500	54256 10.48	52349 10.35	50810 10.19	49401 10.05	48348 9.56	47715 9.52*	208	220	269
4600	55557 11.00	53604 10.47	52026 10.32	50574 10.18	49511 10.08	48886 10.05*	213	225	277
4700	56860 11.12	54867 11.00	53248 10.45	51752 10.31	50680 10.21	50063 10.18*	217	231	283
4800	58152 11.26	56135 11.13	54477 10.57	52936 10.43	51856 10.34	51245 10.31*	222	237	290
4900	59449 11.39	57407 11.26	55713 11.10	54126 10.56	53037 10.46	52432 10.44*	227	243	297
5000	60751 11.52	58682 11.39	56955 11.23	55323 11.09	54265 10.59	53626 10.56*	232	249	304
5100	62059 12.06	59963 11.52	58196 11.36	56525 11.21	55467 11.12	54826 11.09*	237	256	312
5200	63371 12.19	61250 12.05	59442 11.48	57736 11.34	56675 11.24	56033 11.22*	242	263	321
5300	64689 12.33	62544 12.17	60694 12.01	58962 11.47	57890 11.37	57245 11.35*	247	273	327

PACK FLOW LO	PACK FLOW HI OR/AND CARGO COOL ON	ENGINE ANTI ICE ON	TOTAL ANTI ICE ON
ΔFUEL = -0,4 %	ΔFUEL = +1 %	ΔFUEL = +1,5 %	ΔFUEL = +6 %

536. On an ATC flight plan, an aircraft indicated as "H" for "Heavy"
Is of the highest wake turbulence category

537. On a VFR flight plan, the total estimated time is:
The estimated time from take-off to overhead the destination airport

538. On an ATC flight plan, the letter "Y" is used to indicate that the flight is carried out under the following flight rules.
IFR followed by VFR

539. On an ATC flight plan, to indicate that you will overfly the way-point TANGO at 350 kts at flight level 280, you write:
TANGO / N0350 F280

540. When calculating the fuel required to carry out a given flight, one must take into account:
1 - the wind
2 - foreseeable airborne delays
3 - other weather forecasts
4 - any foreseeable conditions which may delay landing
The combination which provides the correct statement is:
1 - 2 - 3 - 4

541. On an ATC flight plan, to indicate that you will overfly the way-point ROMEO at 120 kt at flight level 085, you will write:
ROMEO / N0120 F085

542. The planned flight is over a distance of 440 NM. Based on the wind charts at altitude the following components are found: FL50: 30kt; FL100: 50kt; FL180: 70kt. Refer to the details of the aircraft's performance below. Which of the following flight levels (FL) gives the best range performance?
FL 180

Flight Level	40	80	120	160	200
TAS (knots)	190	198	204	212	220
Hourly fuel flow (l/hr)	210	202	182	170	156

543. Zurich ILS RWY 16:
The lowest published authorised RVR for an ILS approach, glide slope out, all other aids serviceable, aeroplane category A, is:
720 metres

544. EHAM ILS DME RWY 22:
The missed approach procedure is to climb to an altitude of (i).... on a track of (ii).....
(i) 2000 ft (ii) 160°

545. Zurich LSZH:
Select the correct coordinates for the Airport Reference Point from the appropriate chart:
N47.27.5/E008.32.9

546. The planned flight is over a distance of 400 NM. Based on the wind charts at altitude the following components are found: FL50: -30kt; FL70: -50kt; FL90: -50kt. Refer to the details of the aircraft's performance below. Which of the following flight levels (FL) gives the best range performance?

FL 090

Flight Level	40	80	120	160	200
TAS (knots)	190	198	204	212	220
Hourly fuel flow (l/hr)	210	202	182	170	156

547. (For this question use Route Manual chart E(LO)6)
Position NESLA at 49°48,6'N 002°44,4E is a:

Compulsory reporting point on G40 only

548. Which best describes the weather, if any, at LYON/SATOLAS at 1330 UTC?

Light rain associated with thunderstorms

METAR/TAF LIST

PARIS / CHARLES-DE-GAULLE

LFPG/CDG

SA1330 121330Z 27004KT 9999 SCT011 BKN050 09/08 Q1001 NOSIG=
FC1100r 120800Z 120918 30005KT 3500 BR BKN003 BECMG 0911 6000 SCT011 SCT050 BECMG 1113 9999 SCT020 BECMG TEMPO 1317 8000 -SHRA SCT025TCU BKN030 T08/12Z T09/15Z=
FT1000 121000Z 121812 27008KT 9999 BKN025 BECMG 1821 20005KT SCT030 BECMG 2124 6000 BECMG 0002 20008KT 2000 BR BKN005 TEMPO 0208 20004KT 0500 BCFG OVC001 BECMG 0810 18012KT 9999 SCT012 BECMG 1012 SCT020=

BORDEAUX / MERIGNAC

LFBD/BOD

SA1330 121330Z 21005KT 9000 FEW030TCU FEW033CB SCT040 BKN100 09/08 Q1005 TEMPO 25015G25KT 3000 TSRA SCT005 BKN015CB=
FC1100r 121100Z 121221 28010KT 9999 -RA SCT020 FEW025CB SCT040 TEMPO 1218 25015G25KT 6000 SHRA SCT008 SCT020CB BKN033 PROB30 TEMPO 1218 28020G30KT 3000 TSRA SCT005 BKN015CB BKN030 BECMG 1821 22004KT 8000 NSW FEW006 BKN030=
FT1000 121000Z 121812 30010KT 9999 SCT020 FEW025CB BKN040 BECMG 1822 22004KT 8000 FEW006 BKN030 BECMG 0306 24005KT 6000 SCT007 SCT015 BKN090 BECMG 1012 -RA=

LYON / SATOLAS

LPLL/LYS

SA1330 121330Z 14007KT 9000 -TSRA FEW020CB SCT033TCU BKN046 09/07 Q1003 NOSIG=
FC1100r 121100Z 121221 VRB03KT 9999 FEW010 SCT020 BKN040 BECMG 1821 33006KT TEMPO 1221 VRB15G20KT 4000 SHRA SCT008 BKN015=
FT1000 121000Z 121812 33004KT 9999 SCT025 BKN060 BECMG 2224 VRB02KT 8000 SCT010 SCT020 BECMG 0204 1500 BR BKN003 TEMPO 0407 0800 FG OVC002 BECMG 0810 33006KT 9999 SCT015 BKN030=

BASEL / MULHOUSE

LFSB/BSL

SA1330 121330Z 23008KT 9999 -RA FEW020 SCT030 BKN066 06/05 Q1001 NOSIG=
FC1100r 121100Z 121221 18005KT 9000 -RA FEW015 BKN030 BKN060 TEMPO 1216 NSW BECMG 1517 9999 FEW030 BKN040 BKN080 TEMPO 1621 -SHRA=

DUBAI

OMDB/DXB

FT1000 121212 33015KT 9999 SCT030 BKN090 TEMPO 1209 5000 SHRA PROB40 TEMPO 1224 VRB40KT 1000 TSSH SCT025CB BECMG 1618 05010KT BECMG 0608 33013G23KT=

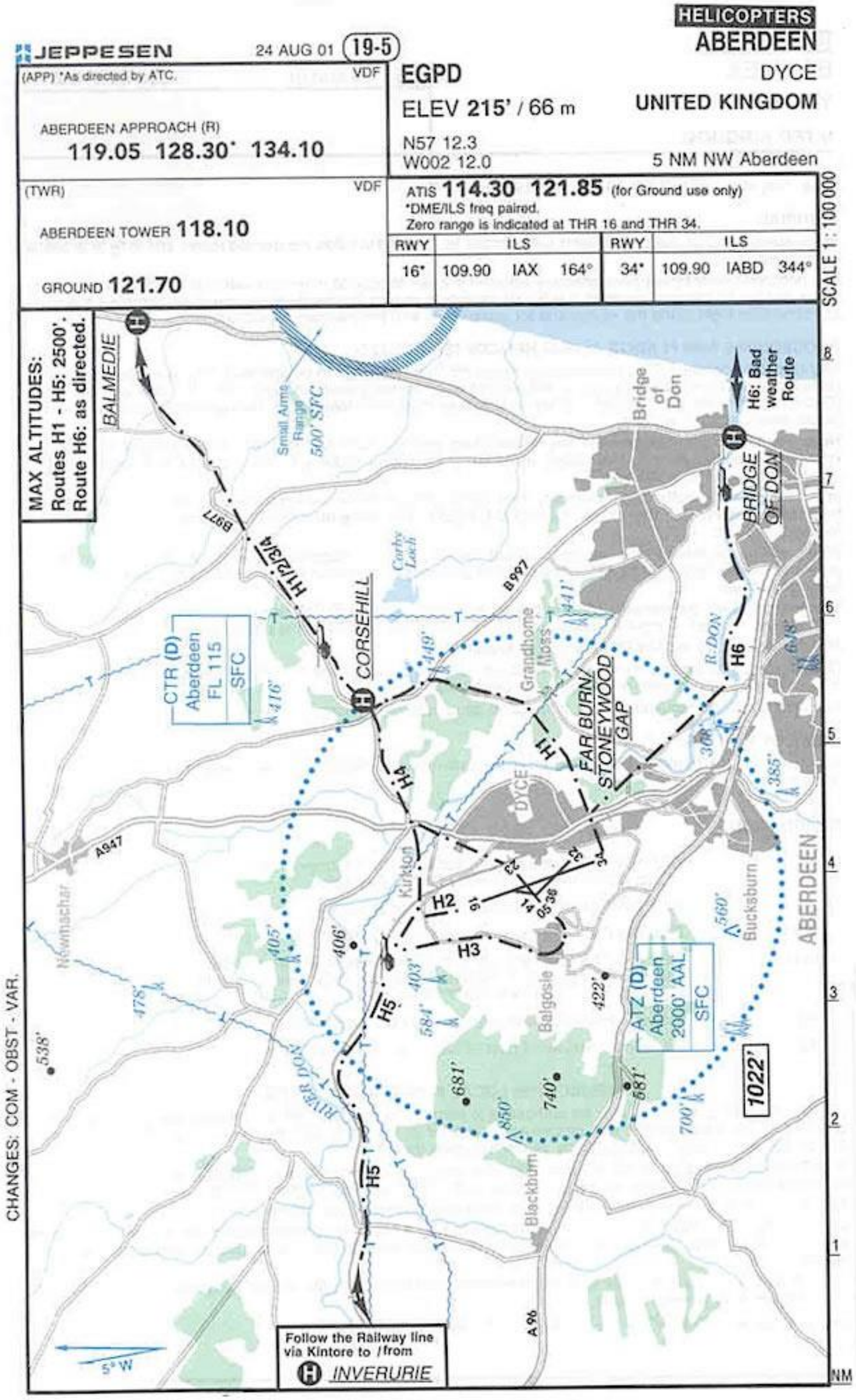
JOHANNESBURG / JAN SMUTS

FAJS/JNB

FT0900 120900Z 121212 36010KT 9999 FEW030CB FEW035 PROB40 TEMPO 1318 VRB15KT 3000 TSRA SCT030CB BKN080 FM2000 03005KT CAVOK BECMG 0204 SCT008 SCT100 PROB30 0305 3000 BCFG BKN004 FM0800 34012KT 9999 SCT025 T25/12Z T15/03Z T27/12Z

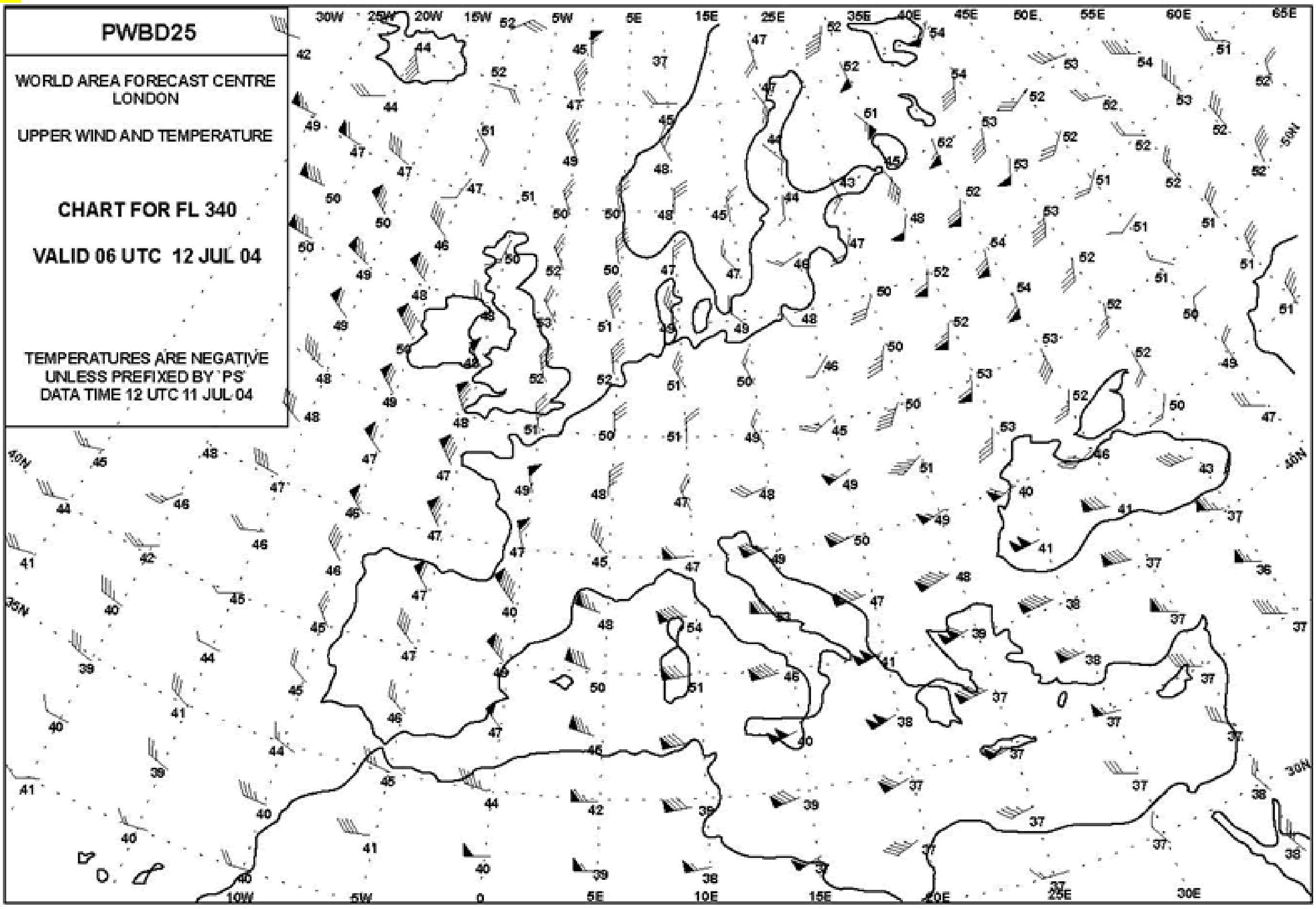
549. (For this question use Route Manual chart E(LO)1)
An appropriate flight level for flights on airway A2 from TALLA 113,8 TLA (55°30'N 003°21'W) to DEAN CROSS 155,2 DCS (54°43'N 003°20'W)is:
FL 90

550. Aberdeen (Dyce) Area Chart: What ATIS frequencie(s) is/are available when on the ground?
114.30 or 121.85



551. What is the temperature deviation (°C) from ISA over 50° N 010°E ?

+2



552. (For this Question use Flight Planning Manual SEP 1, Fig. 2.2 Table 2.2.3)
Using the Power Setting Table, for the single engine aeroplane, determine the cruise TAS and fuel flow (lbs/hr) with full throttle and cruise lean mixture in the following conditions given:
OAT 13° C
Pressure altitude 8000 ft
RPM 2300
160 kt and 69.3 lbs/hr

553. Aberdeen (Dyce) Area Chart: The elevation of the highest obstacle within the boundary of the Aberdeen Control Area is:
2105 ft

554. What is the position of the Aerodrome Reference Point at Esbjerg?

55°31.6'N 008°33.1'E

ESBJERG

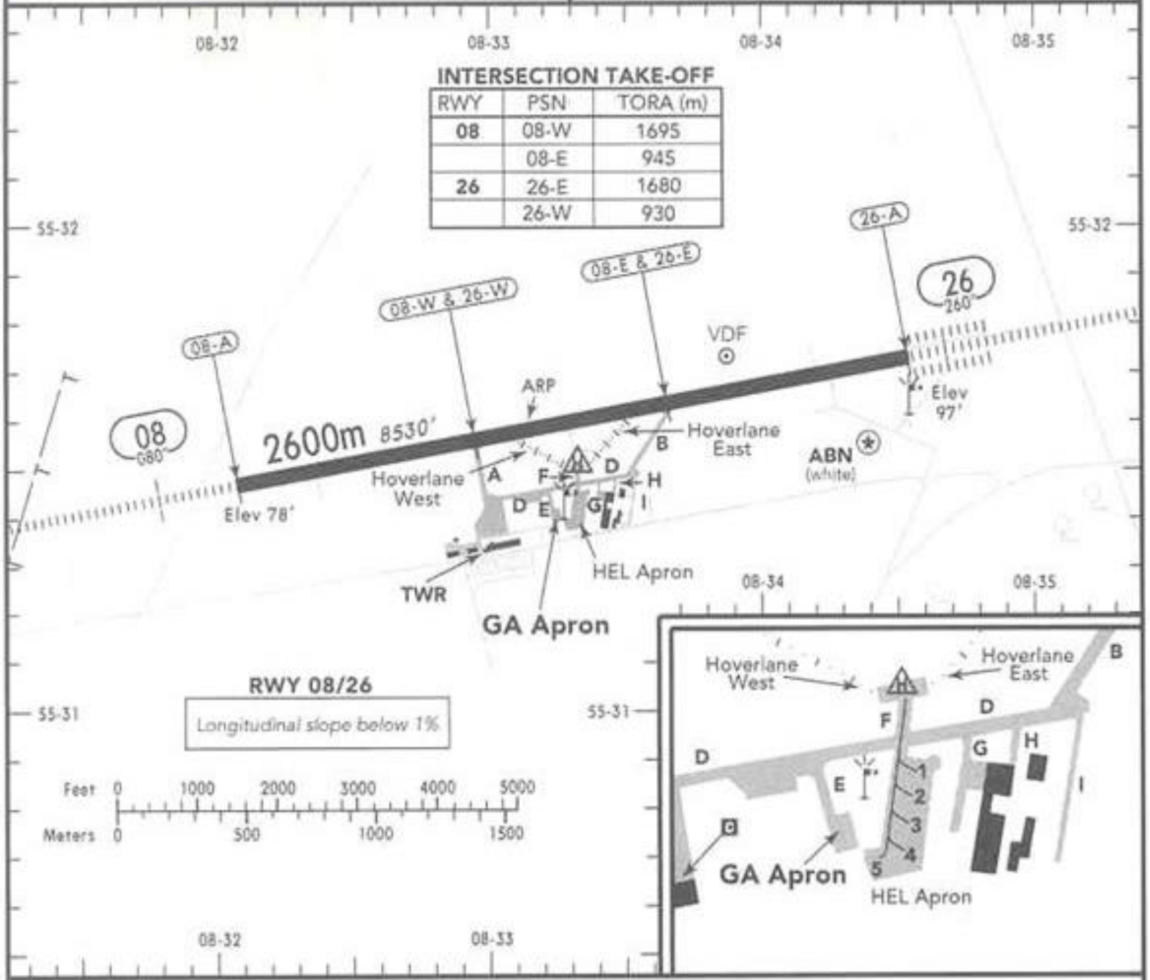
ESBJERG

DENMARK

19-2 4 MAY 01 JEPPESEN

(FIS)

BILLUND APPROACH **127.57**



TAXI

ABN - ALS - PAPI - THRL - RL - RCLL - TWYL A - WDI - OBSTL - Heliport & HEL hoverlanes.

RWY No	Dimension (m) - Surface	TORA (m)	LDA (m)	Strength	Lights
08 26	2600 x 45 Asphalt	2600 (08-A) 2600 (26-A)	2600 2600	PCN 60 F/A/W/T	

Caution: Various wind farms up to 300' SFC in closer & more distant vicinity of AD.
Birds in vicinity of airport.

Parachute jumping may take place. Glider activities may take place within the allocated area BI 8.

VFR flights may obtain information concerning the activity of a glider area by BILLUND APPROACH or BILLUND TOWER.

Holding position on TWY F and marking on HEL apron for type S-61.

School & training flights are permitted daily 0700-2200LT.

CHANGES: Editorial.

555. VFR Directory for Greece: What is the local time (LT) in Greece in (i) Winter and (ii) Summer?
(i) LT = UTC + 2 hours (ii) LT = UTC + 3 hours

WINTER (28 OCT 01-31 MAR 02) LT - 2 HOURS = UTC (Z) • SUMMER (31 MAR-27 OCT 02) LT - 3 HOURS = UTC (Z)

AGRINION
154' N38 36.8 E021 23.0
14/32 3937' CONC/ASPH. SIWL-50.
Apt hr: By Notam. Local Aeroclub.

AGRINION (AGRINION AB)
98' LGAG AGQ N38 36.2 E021 21.0
09/27 9607' CONCRETE. LCN 30. RL.
Apt hr: By operational requirements.
F-3. F-6. JP-4. Fire U.

AKTION see PREVEZA

ALEXANDRIA (ALEXANDRIA ARMY)
27' LGAX N40 39.3 E022 29.3
13/31 5906' ASPHALT. LCN 30.
Apt hr: Tue 0830LT - SS+4hr. CIV PPR.

ALEXANDROUPOLIS (DIMOKRITOS) Apt of Entry
24' LGAL AXD N40 51.4 E025 57.4
Apt Operator 0551089300, Fax 0551045255.
07/25 8530' ASPHALT. LCN 80. HIRL. ALS 25. HIALS 07.
Apt hr: By NOTAM. Customs: O/R 3hr.
Jet A-1 O/R. ABN. IBN. Fire 7.

ALMIROS see NEA ANCHIALOS

AMIGDHALEON see KAVALA

ANDRAVIDA (ANDRAVIDA AB) Apt of Entry
55' LGAD PYR N37 55.5 E021 17.5
Civ Ops 0623022117, Mil Ops 0623023341-4.
16/34 10171' ASPH/CONC. LCN 80. TORA 16 9843'. TORA 34 9843'. HIRL. HIALS.
Days. For all traffic Airport is only used as alternate AD for ATHINAI. Private flights not accepted. Customs: O/R 4hr.
Jet A-1. Oxygen O/R. ABN. IBN. Fire 7.

ARAXOS (ARAXOS AB)
46' LGRX GPA N38 09.0 E021 25.0
Apt Operator 0693023598.
18/36 9810' CONC/ASPH. LCN 45. RL. HIALS 36.
Apt hr: By NOTAM. AB avbl for INTL skd flts and for domestic non-skd/skd flts. Fuel for non-skd flts 24hrs PN by BP/EKO.
Jet A-1. F-6. JP-4. JASU. ABN. Fire 6.

ARISTOTELIS see KASTORIA

ARNISSA see EDDESSA

ASTYPALAIA
154' LGPL JTY N36 34.9 E026 22.6
Apt Operator 0243061410.
15/33 3215' ASPHALT.
Apt hr: By NOTAM.
Fire 3.

ATHINAI (ELEFTHERIOS VENIZELOS INTL) Apt of Entry
308' LGAV ATH N37 56.2 E023 56.7
Apt Operator 0103530000, Fax 0103532254.
03L/21R 12467' ASPHALT. PCN 64/F/B/W/T. LDA 03L 11483'. LDA 21R 11483'. HIRL. HIALS.
03R/21L 13123' ASPHALT. PCN 64/F/B/W/T. LDA 03R 12139'. LDA 21L 12139'. HIRL. HIALS.
H24. Customs.
F-3. Jet A-1. ABN. Fire 9.

ATHINAI (HELLINIKON) Apt of Entry
68' LGAT HEW N37 53.8 E023 43.7
Airport 0109694111, Fax 0109612822.
15L/33R 11483' ASPHALT. LCN 100. TORA 15L 10991'. TORA 33R 11155'. LDA 15L 9777'. LDA 33R 10991'. HIRL. HIALS 33R.
TORA 15L 11237' available for intercontinental flights, advise TWR. Rwy 15L/15R right hand circuit.
15R/33L 10335' ASPHALT. LCN 100. LDA 15R 8825'. LDA 33L 9875'. HIRL.
H24. Until 30 MAR 02: AD AVBL for domestic flights of General Aviation 0800LT - SS.
F-3. Jet A-1. Oil: W80, W100. Oxygen. ABN. Fire 7.

CHANIA (SOUDA AB) Apt of Entry
492' LGSA CHQ N35 31.9 E024 09.1
Airport 0821083800.
11/29 10991' ASPHALT. LCN 80. TORA 11 10663'. TORA 29 10663'. ASDA 11 10663'. ASDA 29 10663'. HIRL. HIALS 29. ALS 11.
Right hand circuit rwy 11.
CIV PPO. Apt hr: CIV by NOTAM, MIL H24.
PPR (at least 20 working days) for private flights.
Customs: O/R 4hr.
F-3. Jet A-1. JP-4. JASU. ABN. IBN. Fire 7.

CHIOS
18' LGHI JKH N38 20.7 E026 08.5
Airport 0271081400. TWR 0271081424, 0271081404, Apt Authority 0271081403. Fax 0271021237.
01/19 4921' ASPHALT. LCN 45. LDA 01 4528'. LDA 19 4659'. MIRL.
Right hand circuit rwy 01.
Apt hr: By NOTAM.
Jet A-1. ABN. IBN. Fire 6.

DEKELIA (TATOI AB)
785' LGTT N38 06.5 E023 46.0
03/21 4320' ASPHALT. LCN 45. RL.
CIV PPR. Days.
F-3. F-5. F-6. JP-4. JASU.

DIAGORAS see RODOS

DIMOKRITOS see ALEXANDROUPOLIS

DIONYSIOS SOLOMOS see ZAKINTHOS

EDDESSA (ARNISSA)
2120' N40 51.2 E021 49.7
08/26 2461' UNPAVED.
PPR.

ELEFSIS (ELEFSIS AB) Apt of Entry
143' LGEL N38 04.2 E023 33.3
Base Ops 0105546506, Apt 01055488-21, -22, -23.
18/36 8983' ASPHALT. LCN 45. LDA 36 8786'. HIRL. HIALS 18.
Rwy 18 no night landings. Rwy 36 extreme uphill gradient.
Days. Nights O/R 10min. PPR (at least 20 working days) for private flights. Customs: O/R 2hr.
F-3. Jet A-1. JP-4. Oil: 80, 100, 120, W100, W120, E80, E120. Oxygen. ABN. Fire 7.

ELEFTHERIOS VENIZELOS INTL see ATHINAI

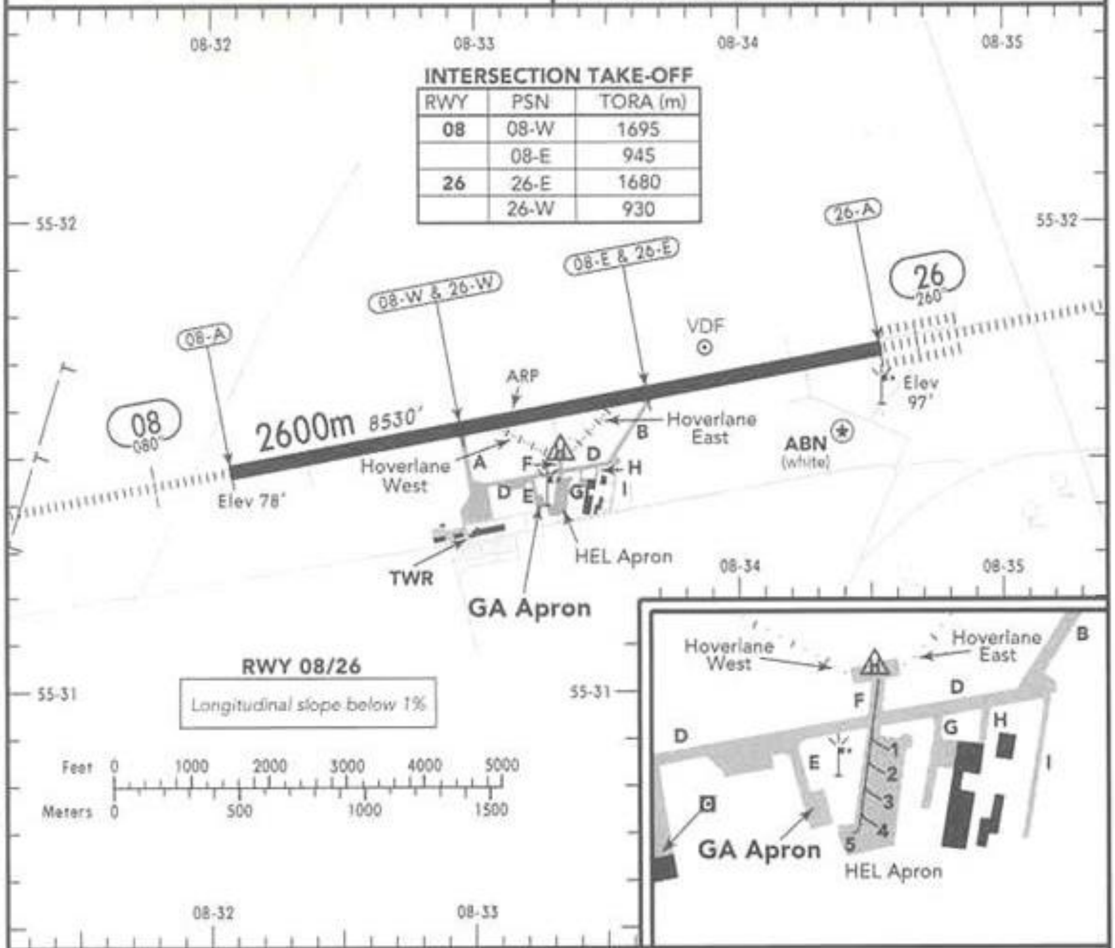
556. What are the dimensions of runway 08/26 at Esbjerg?

2600 m x 45 m

ESBJERG
ESBJERG
DENMARK

19-2 4 MAY 01 JEPPESEN

(FIS)
BILLUND APPROACH **127.57**



TAXI

ABN - ALS - PAPI - THRL - RL - RCLL - TWYL A - WDI - OBSTL - Heliport & HEL hoverlanes.

RWY No	Dimension (m) - Surface	TORA (m)	LDA (m)	Strength	Lights
08	2600 x 45 Asphalt	2600 (08-A)	2600	PCN 60 F/A/W/T	
26		2600 (26-A)	2600		

Caution: Various wind farms up to 300' SFC in closer & more distant vicinity of AD. Birds in vicinity of airport.

Parachute jumping may take place. Glider activities may take place within the allocated area BI 8.

VFR flights may obtain information concerning the activity of a glider area by BILLUND APPROACH or BILLUND TOWER.

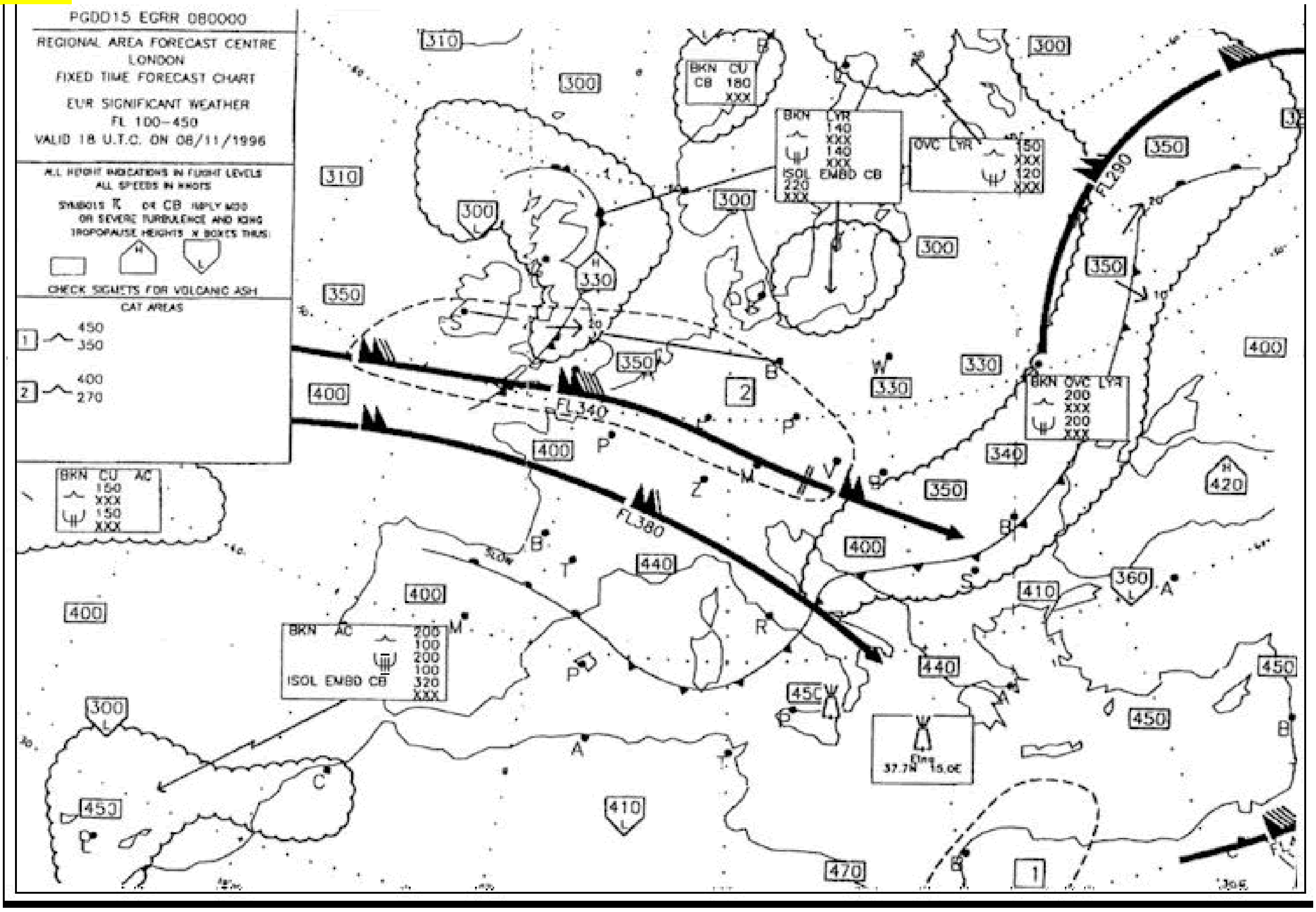
Holding position on TWY F and marking on HEL apron for type S-61.

School & training flights are permitted daily 0700-2200LT.

CHANGES: Editorial.

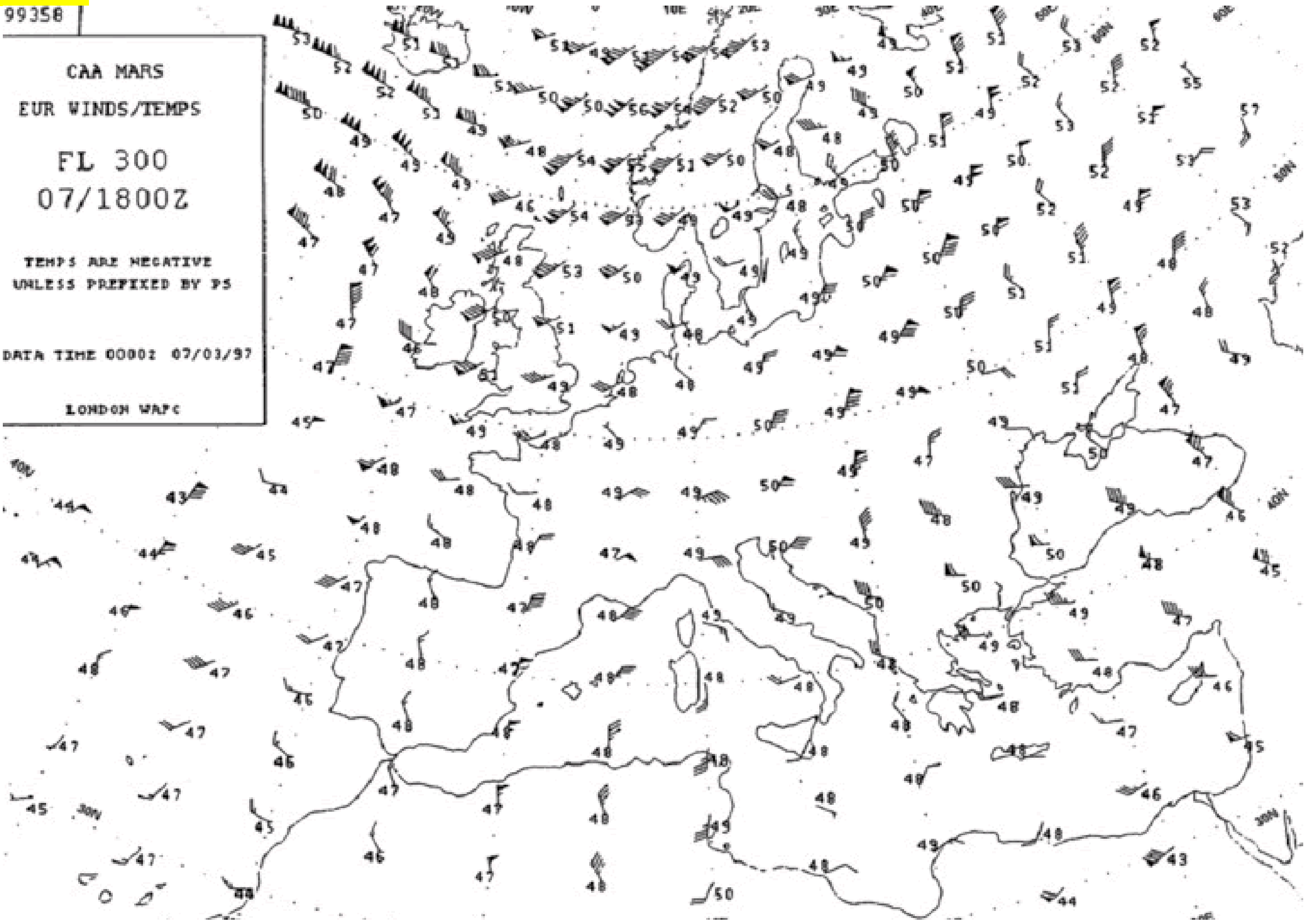
557. In the vicinity of PARIS (49°N 003°E) the tropopause is at about

FL400



558. The wind direction and velocity (°/kt) at 60°N 015°W is

290/155



559. Which of the following answers is correct for the attached NOTAM?

Temporary military TMA's are active at 1145LT. For details sea VFR Manual or ICAO-Chart.

LSAG/GENEVA AREA
LS1B0152 A) LSAG
98APR27 B) 98MAY0400530 C) 98MAY081505
D) 0530/1005 AND 1115/1505
E) SION TEMPO MIL TMA SECTOR 1 AND 2 ACT
F) REF RAC 3-1-10 OR ICAO CHART
G) FL 130

560. Planned and actual data as shown in the Flight Log excerpt.
Provided that flight conditions on the leg GAMMA to DELTA remain unchanged and fuel consumption remains unchanged, what fuel remaining should be expected at waypoint DELTA?
4640 kg

EXCERPT FROM FLIGHT LOG

Waypoint		ETA (h:min)	ATA (h:min)	Planned Remaining Fuel (kg)	Actual Remaining fuel (kg)
ALPHA		1:18	1:18	5690	5690
BETA		2:03	2:03	5330	5240
GAMMA		2:33	2:33	5090	4940
DELTA		3:03		4850	

ETA -	Estimated time of arrival
ATA -	Actual time of arrival

561. Aberdeen (Dyce) Information Page: What is the designated departure route when using Runway 23 in bad weather and/or low visibility?
H6

562. Aberdeen (Dyce) Information Page: What are the designated departure routes when using (i) RWY 34 and (ii) RWY 05?
(i) H2 (ii) H4

563. Aberdeen (Dyce) Information Page: According to the "Helicopter Local Flying Regulations", approaches to the Helistrip 23 aiming point should be on a heading of:
218°M

564. Aberdeen (Dyce) Information Page: What is the minimum flight visibility required when landing at Aberdeen (Dyce) Airport other than when using Route H6?
2 km

HELICOPTERS
ABERDEEN
DYCE
UNITED KINGDOM

19-6 24 AUG 01 JEPPESEN

Note: See also ABERDEEN 10-1V, 19-1/19-2 and 19-3.

GENERAL
In the Aberdeen CTR, helicopter flights will normally be required to follow the defined routes and to fly at or below a specified altitude.
The helicopter routes have been specially selected in order to provide maximum safety in avoiding most built-up areas and are as depicted overleaf. It is the pilot's duty to ensure that the performance of his aircraft is adequate to permit safe flight along the routes and for compliance with the relevant regulations.

PROCEDURES FOR FLIGHTS ALONG HELICOPTER ROUTES
Flights in the Aberdeen CTR, other than on Route **H6** (see Note), are to be operated only when Helicopters can remain in a flight visibility of at least 3 KM, except when routeing over, taking-off from, or landing at Aberdeen (Dyce) Airport, when the reported visibility at Aberdeen must be at least 2 KM. Helicopters must remain clear of clouds and in sight of surface.
Note: Route **H6** is the designated low visibility/bad weather route and will be used in accordance with the operators' operating minima. Helicopters using the route in poor visibility will be expected to fly over the river, unless otherwise instructed by ATC.
In periods of heavy traffic or poor visibility, helicopters joining from or leaving to the East on Routes **H1/H4** may be routed via River Don (**H6**) rather than via *BALMEDIE*. This route may also be used for helicopters routeing to/from the South.
Where a Route is defined by a line feature (road, railway, etc.), a helicopter shall keep the centre-line on its left, unless otherwise instructed by ATC for separation purposes. In this case ATC will pass traffic information to the traffic concerned.
Maximum altitudes are normally 1500' outbound and 2500' inbound. SVFR clearances will be issued in the form "**not above . . . feet**". These altitudes are for ATC separation purposes and procedures.
Altimeter setting will be ABERDEEN (Dyce) Airport QNH.
On all routes, in order to minimize noise nuisance, pilots should maintain the MAX altitude compatible with their ATC clearance and with the prevailing cloud conditions.
Helicopters may be required to hold at specified geographical locations.

TABLE OF ROUTES
Routes are listed in **departure** order. Arrival Routes are reversed except for those helicopters making ILS or radar approaches.

DESIGNATION	ROUTE	MAX ALT
H1	DEP RWY 16 - left turn out - Far Burn (N of Stoney Wood) - Grandhome Moss - Corsehill - B977 - Balmedie.	2500'
H2	DEP RWY 34 - straight ahead - Kirkton - Corsehill - B977 - Balmedie.	2500'
H3	DEP RWY 23 - right turn out - Kirkton - Corsehill - B977 - Balmedie.	2500'
H4	DEP RWY 05 - turn left onto a northerly heading as soon as possible - remain W of the A947 until intercepting the River Don - at the River Don turn right - Corsehill - B977 - Balmedie.	2500'
H5	Kirkton - Inverness/Aberdeen railway line - North West.	2500'
H6	Far Burn/Stoneywood Gap - River Don - Bridge of Don.	As directed

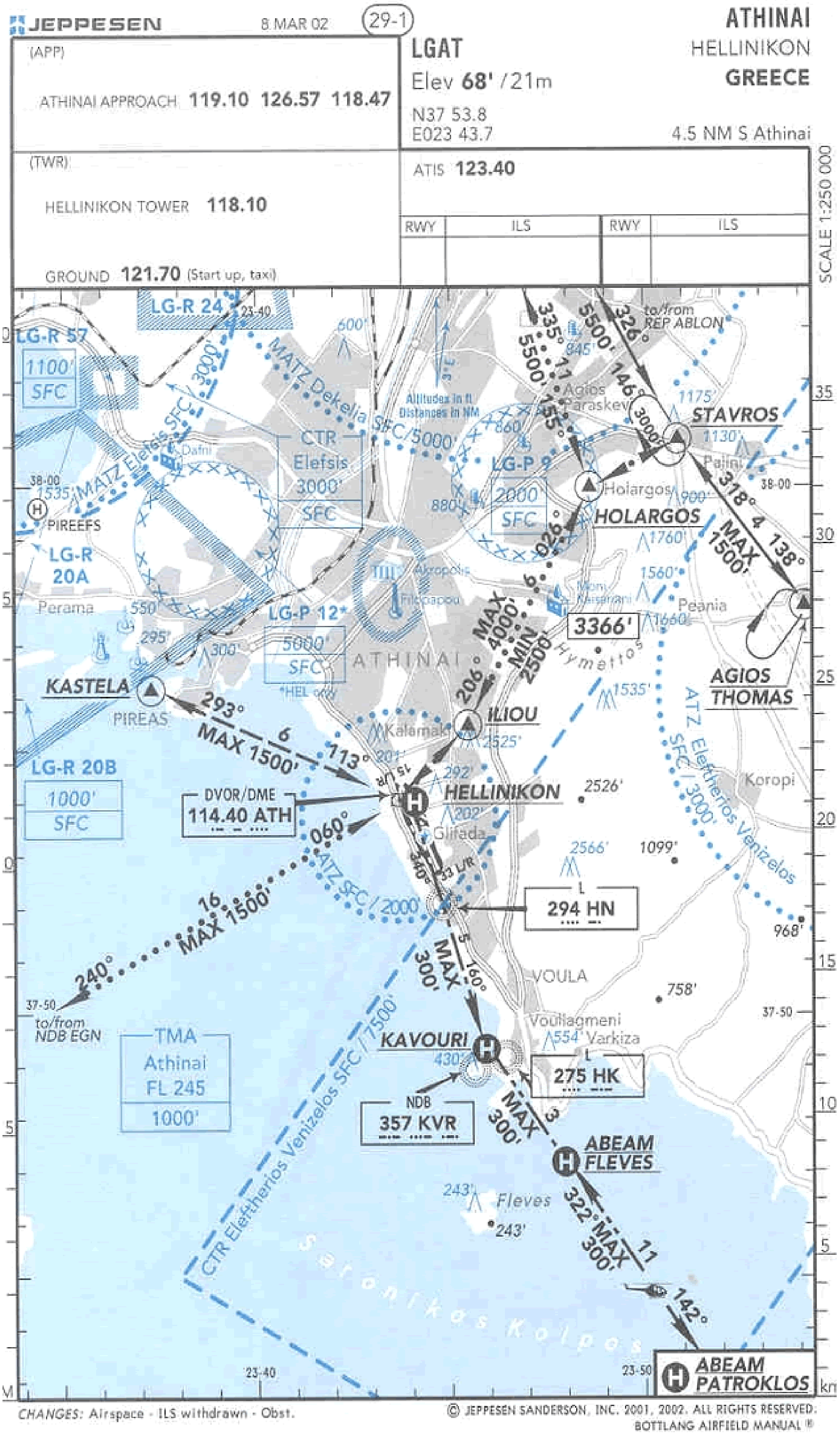
HELICOPTER LOCAL FLYING REGULATIONS
Locally based HEL operators may be authorized to carry out landings on RWY 23 independently of operations on RWY 16/34 in accordance with procedures approved by the CAA. LDA for these operations is reduced to 220 m, the end of which is indicated by yellow wig-wags (guard lights).
CAUTION RWY 23: Due to OBST in the approach area, night approaches and landings on this RWY are not permitted if the CHAPI (Compact Helicopter Approach Path Indicator) is unserviceable.
HEL must not descend below the CHAPI glide path before crossing the railway.
Pilots of HEL using RWY 05/23 as a TWY through Hold "D2" may be required to pass similar traffic moving in the opposite direction. Exercise caution since the TWY width through this area reduces to 46 m at its narrowest section.
HEL Northern Link TWY operates an inbound and outbound one way traffic pattern using Holds "C2, D1, A3" and "W3" subject to ATC requirements.
APCH to Helistrip 23 aiming point should be on a heading of 218° MAG.

565. Athinai (Hellinikon) Chart: What is the maximum permitted altitude if routing inbound from "Abeam Patroklos" to Hellinikon?

300 ft

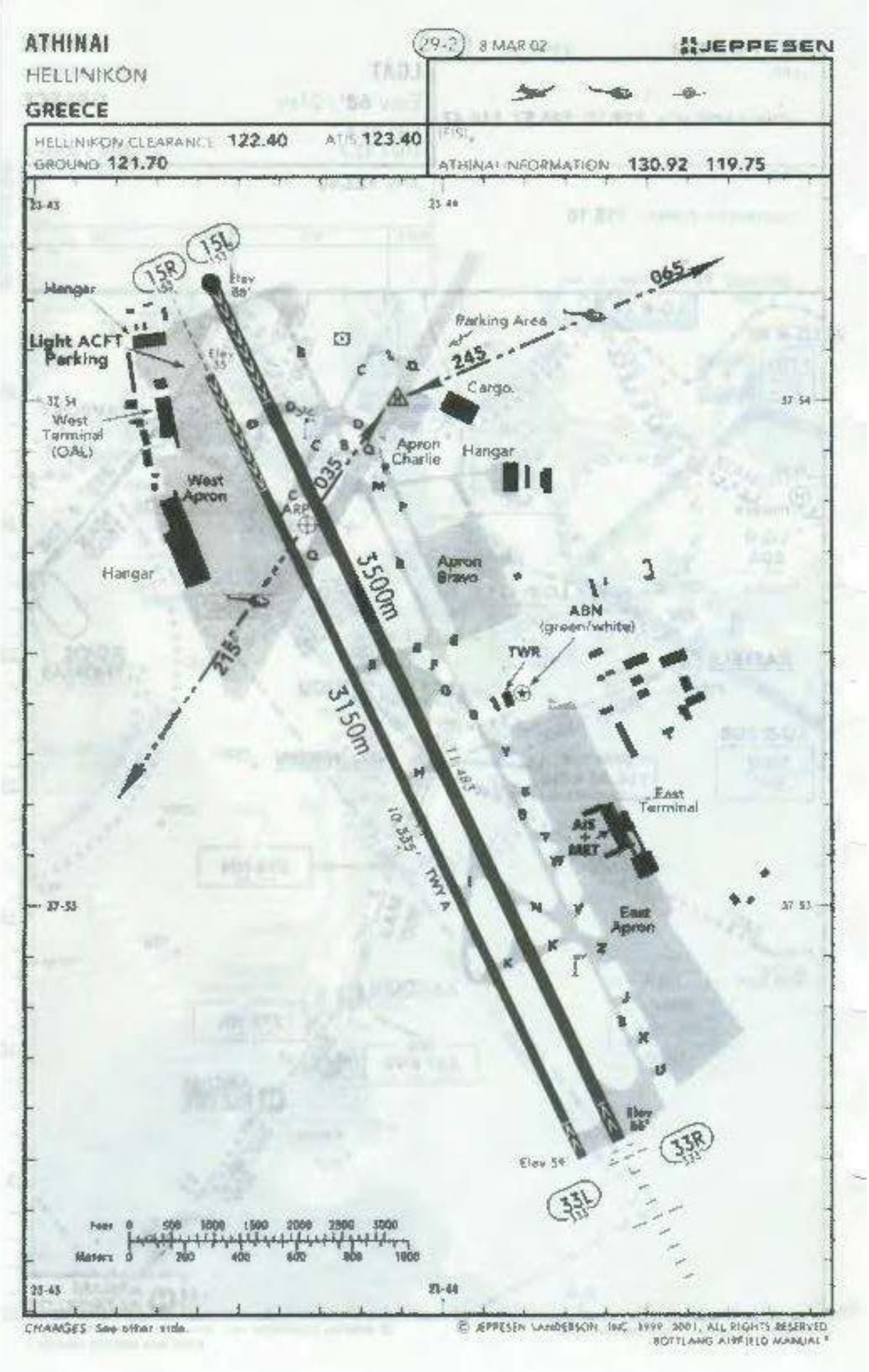
566. Athinai (Hellinikon) Chart: What is the total distance when following the VFR routing from "Abeam Patroklos" to Hellinikon?

19 NM



567. Athinai (Hellinikon) Chart: What are the available outbound tracks for helicopters from the helicopter landing point at approximately 37°54'N 23°44'E?

065° or 215°



568. Aberdeen (Dyce) Area Chart: The elevation of the highest obstacle within the boundary of the Aberdeen Control Area is:
2105 ft

569. Aberdeen (Dyce) Aera chart: What is the elevation of the highest ground within the boundary of Aberdeen Control Zone?
1733 ft

570. Aberdeen (Dyce) Aera Chart: Which of the following frequencies is listed as available for contact with Aberdeen ATSU?
135.17

571. Aberdeen (Dyce) Area Chart: What is the correct frequency to contact Scottish Information when overhead reporting point BANCHORY to the southwest of Aberdeen airport?
119.87

572. Aberdeen Information Page: The East Apron and Eastern TWY have restricted access. The maximum permitted wingspan:
Is 20 m

JEPPESEN 24 AUG 01 (19-3) **ABERDEEN**
DYCE
UNITED KINGDOM

Note: See also ABERDEEN 10-1V, 19-1/19-2 and 19-5/19-6

NORDO ACFT PPR by ATC.

▸Use of the AD for training purposes is PPR.

▸Pilots of training ACFT carrying out go-arounds are advised that for the purposes of terrain clearance, that portion of the flight will be treated as a departure.

WARNINGS

Except for light signals, ground signals are not displayed.

Intensive large HEL activity. Light aircraft should be aware of the possible effect of rotor downwash and wake vortices generated by large HEL operating to/from the AD.
HEL operations in support of North Sea oil rigs may take place outside AD op hrs.

PAPI 16 should not be used until the aircraft is established on the extended runway centre-line.

Locally based HEL operators may be authorized to carry out landings on RWY 23 approved by the CAA.

Grass areas adjoining RWYs and TWYs have a low bearing strength after rain.

▸Moderate/severe turbulence and windshear may be experienced on approaches to all RWYs when the 1000' wind exceeds 15 KT from the sector 200° through west to 320°.

NOISE ABATEMENT

Propeller driven ACFT with MAX 5.7t: Join the final approach to either RWY at MNM 1000' AAL (ACFT above 5.7t: MNM 1500' AAL).

Landing aircraft shall intercept the ILS glide path at MNM 1800' AAL and thereafter not fly below the glide path. Aircraft landing without ILS assistance shall follow a descent path of 3°.

Subject to ATC requirements & weather conditions:

Training circuits should be undertaken to the West of the AD. Fixed wing departures should be on RWY 34.

▸

GROUND MOVEMENT

Subject to ramp space, aircraft not departing within 2 hrs will be dispersed and parked on stand-off areas.

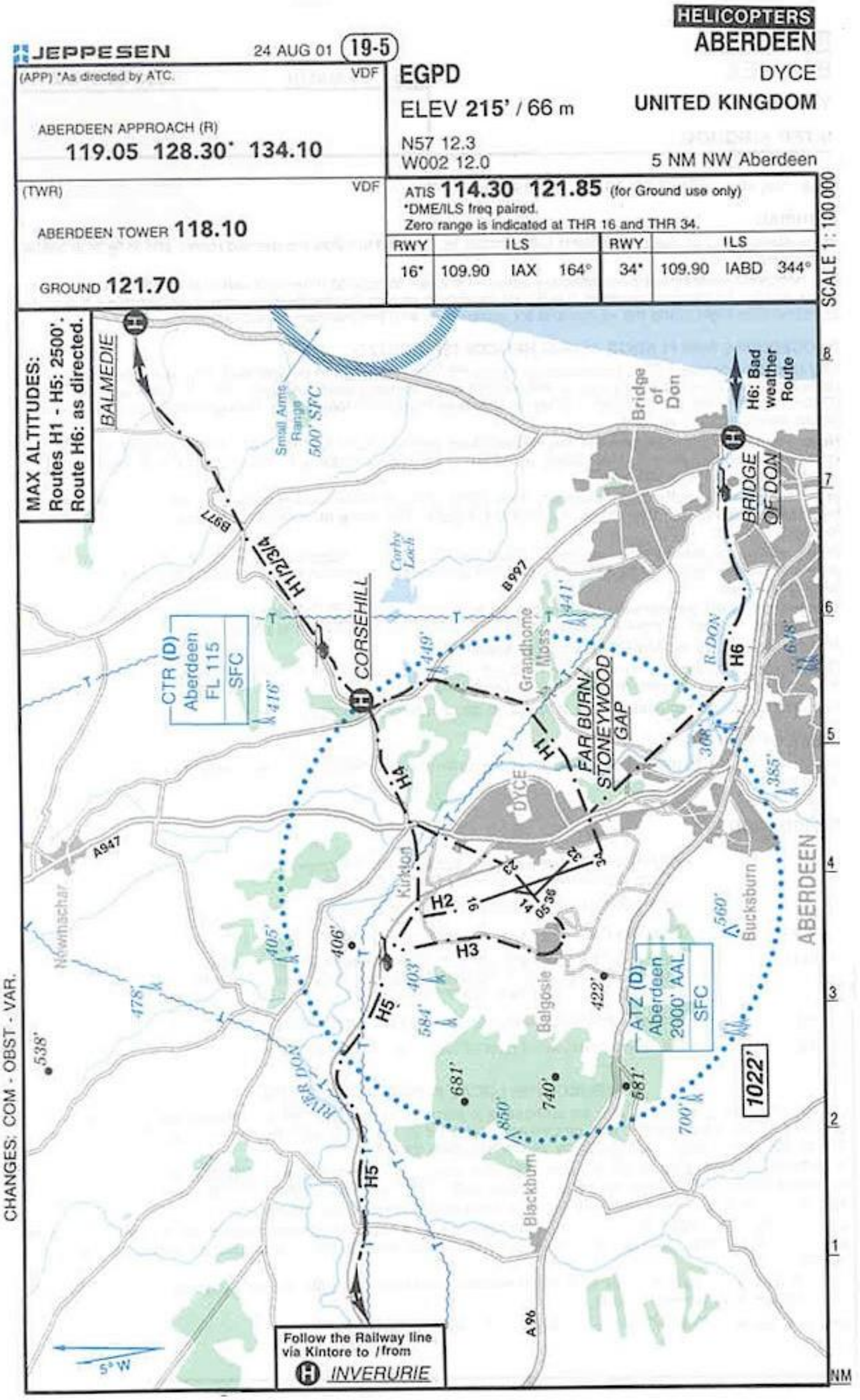
The East Apron and Eastern TWY is restricted to use by HEL & ACFT with wingspan up to 20 m (Beech 200). Aircraft of a greater wing span are to be escorted as TWY strip width clearances at the Southern end of the apron are less than standard.

Intensive HEL activity in the leased area adjacent to the TWY through the length of the East Apron.

BOTTLANG AIRFIELD MANUAL ®

573. Aberdeen (Dyce) Aera Chart: What ATIS frequencie(s) is/are available when on the ground?
114.30 or 121.85

574. Aberdeen (Dyce) Aera Chart: What is the ATIS frequency that may not be used when in flight?
121.85



575. VFR directory for the Netherlands: What is the local time (LT) in the Netherlands in (i) Winter and (ii) Summer?

(i) LT - 1 hour = UTC (ii) LT - 2 hours = UTC

JEPPESEN 6 APR 01 AERODROME DIRECTORY NETHERLANDS 7-3

SUMMER (25 MAR-28 OCT 01) LT- **2 HOURS** = UTC (Z) • WINTER (28 OCT 01-31 MAR 02) LT - **1 HOUR** = UTC (Z)

AMELAND
11' EHAL N53 27.1 E005 40.6
Apt Operator (0519) 555555, 555540, Fax 555590, 555599. Apt Ops 554030, Fax 554888. AIS: Amsterdam (Schiphol).
09/27 2625' GRASS. AUW-11.
01 APR-30 SEP: 0900-1800LT, 1hr PN to Ops. Other time period: Mon-Fri except Hol 0900-1200LT & 1400-1700LT, 2hr PN to Operator. Intl flights between EHAL and "Schengen Treaty States" permitted. The importation, exportation and transit of cargo is not allowed.
Fire 1.

AMSTERDAM (SCHIPHOL) Apt of Entry
-11' EHAM AMS N52 18.5 E004 45.9
Apt (020) 6019111, Fax 6041475. AIS/ARO 4062315, 4062316, Fax 6484417. MET see NETHERLANDS 3-1.
01L/19R 10827' ASPHALT. PCN 82/R/C/1.7/T. LDA 01L 9350'. TODA 01L 11024'. TODA 19R 11024'. HIRL. HIALS.
01R/19L 11155' ASPHALT. PCN 82/R/C/1.7/T. TORA 01R 9268'. LDA 01R 9268'. LDA 19L 9268'. TODA 01R 9465'. TODA 19L 11352'. ASDA 01R 9268'. HIRL. HIALS 01R.
04/22 6608' ASPHALT. PCN 39/F/D/W/T. TODA 04 6804'. TODA 22 6804'. MIRL. MIALS.
06/24 11483' ASPHALT. PCN 82/R/C/1.7/T. LDA 06 10663'. TODA 06 11811'. TODA 24 11680'. ASDA 06 11811'. HIRL. HIALS 06.
09/27 11329' ASPHALT. PCN 82 R/C/1.7/T. TODA 09 11526'. TODA 27 11526'. HIRL. HIALS 27.
Rwy 09/27 limited to acft with a load per strut less than 18,298lbs. Rwy 01L, 09, 19L, 24 normally used for T/O; Rwy 01R, 06, 19R and 27 normally used for landings. Daily 2300-0600LT rwy 09/27 closed for T/O.
H24. **SLOT Allocation:** Daily 0800-2200LT (Summer), 0800-1800LT (Winter): VFR flights to/from Schiphol have to obtain a slot time, not more than 24hr in advance, from Flight Information Office Schiphol Airport 4062315, 4062316. **Handling service (mandatory** by fee): For Schiphol East: KLM General Aviation 6488178, Fax 6488180 (2330-0630LT PN). For Schiphol Centre: Aero Groundservice B.V. 6032569, Fax 6032329, E-mail: aero.ops@aeroground.nl or Ogden Aviation B.V. 4466411, 4466412, Fax 6531714. Customs.
F-3 (only avbl at Schiphol East Apron). Jet A-1. Oil: All kinds. Oxygen. Fire 9.

ARNHEM (DEELEN AB)
158' EHDL N52 03.6 E005 52.3
Airport (026) 3531547, Fax 3531325.
02/20 9678' TARM/CONC. LCN 30. LDA 02 8783'. LDA 20 8779'. RL. HIALS 20.
AD closed except prearranged RNLAF HEL. Customs: 48hr PN.
JASU. Fire 4, O/R.

BUDEL see WEERT

DE KOOY
3' EHKD N52 55.5 E004 46.9
Airport MIL (0223) 658636, 658670, Fax 658759. CIV 635666, 677566, Fax 660892. CIV PPR (070) 3162017, Fax 3162013.
04/22 4183' CONCRETE. PCN 21/R/B/W/T. LDA 04 3379'. LDA 22 3379'.
Right hand circuit rwy 04.
CIV PPR. Mon-Thu 0700-2400LT, Fri 0700-2100LT, Sat Sun Hol 0700-1000LT, 1500-2000LT. Customs.
F-3 (limited). Jet A-1. Fire 4.

DEELEN see ARNHEM

DEVENTER (TEUGE) Apt of Entry
17' EHTE N52 14.7 E006 02.8
Apt Operator (055) 3238586, Fax 3232509. AIS: Amsterdam (Schiphol).
03/21 2297' GRASS. TODA 03 2395'. TODA 21 2493'. ASDA 03 2395'. ASDA 21 2493'.
09/27 2395' ASPH/CONC. PCN 5/F/B/Y/U. LDA 27 2231'. TORA 09 2231'. TODA 09 2329'.
Mon-Fri 0800-2000LT, Sat 0900-2000LT, Sun & Hol 1000-2000LT, outside mentioned hr and between SR and SS PN before 1900LT. Customs.
F-3. Jet A-1. Oil: 80, W80, 100, W100, 15W50.

DRACHTEN
14' EHDR N53 07.2 E006 07.8
Apt Ops (0512) 513245, 581234, 513511. AIS: Amsterdam (Schiphol).
08/26 3117' ASPH/CONC. AUW-13. TORA 08 2723'. LDA 26 2723'.
Mon-Fri 0800-1200LT & 1300-1630LT on 1 hr PN, O/T SR-SS PN before 1630LT. Customs: During apt hrs on 2hr PN, importation and exportation of merchandise, except travellers luggage, not allowed.

EELDE see GRONINGEN

EINDHOVEN (EINDHOVEN AB)
74' EHEH EIN N51 27.0 E005 22.5
Apt MIL (040) 2506911, Fax 2506466. CIV 2919823, Fax 2919833. ARO 2506806, Fax 2765087. MET 2506481.
04/22 9843' TARMAC. LCN 80. TORA 04 9022'. TORA 22 9022'. LDA 04 8202'. LDA 22 8202'. TODA 04 10039'. TODA 22 10039'. HIRL. HIALS.
Right hand circuit rwy 22.
Mon-Fri 0645-2245LT; Sat 0800-2000LT, Sun & Hol 1000-2000LT. CIV PPR (see NETHERLANDS 6-1/6-2). Customs.
Jet A-1+. F-3. Oil: 15W50. JASU. Fire 8.

EMMELOORD (NOORDOOSTPOLDER)
-12' EHNP N52 43.8 E005 44.8
Apt Operator (0527) 633328, Fax 617020. AIS: Amsterdam (Schiphol).
09/27 2575' GRASS. TORA 27 2477'. LDA 09 2477'. LDA 27 2477'. TODA 09 2674'. TODA 27 2674'. ASDA 09 2674'. ASDA 27 2674'.
2hr PN Mon-Fri except Hol SR-SS, O/T PN before 1600LT.

576. VFR Directory for Greece: What is the local time (LT) in Greece in (i) Winter and (ii) Summer?
(i) LT = UTC + 2 hours (ii) LT = UTC + 3 hours

JEPPESEN 8 MAR 02 **AERODROME DIRECTORY** **GREECE 7-3**

WINTER (28 OCT 01-31 MAR 02) LT - **2 HOURS** = UTC (Z) • SUMMER (31 MAR-27 OCT 02) LT - **3 HOURS** = UTC (Z)

AGRINION
154' N38 36.8 E021 23.0
14/32 3937' CONC/ASPH. SIWL-50.
Apt hr: By Notam. Local Aeroclub.

AGRINION (AGRINION AB)
98' LGAG AGQ N38 36.2 E021 21.0
09/27 9607' CONCRETE. LCN 30. RL.
Apt hr: By operational requirements.
F-3. F-6. JP-4. Fire U.

AKTION see PREVEZA

ALEXANDRIA (ALEXANDRIA ARMY)
27' LGAX N40 39.3 E022 29.3
13/31 5906' ASPHALT. LCN 30.
Apt hr: Tue 0830LT - SS+4hr. CIV PPR.

ALEXANDROUPOLIS (DIMOKRITOS) Apt of Entry
24' LGAL AXD N40 51.4 E025 57.4
Apt Operator 0551089300, Fax 0551045255.
07/25 8530' ASPHALT. LCN 80. HIRL. ALS 25. HIALS 07.
Apt hr: By NOTAM. Customs: O/R 3hr.
Jet A-1 O/R. ABN. IBN. Fire 7.

ALMIROS see NEA ANCHIALOS

AMIGDHALEON see KAVALA

ANDRAVIDA (ANDRAVIDA AB) Apt of Entry
55' LGAD PYR N37 55.5 E021 17.5
Civ Ops 0623022117, Mil Ops 0623023341-4.
16/34 10171' ASPH/CONC. LCN 80. TORA 16 9843'. TORA 34 9843'. HIRL. HIALS.
Days. For all traffic Airport is only used as alternate AD for ATHINAI. Private flights not accepted. Customs: O/R 4hr.
Jet A-1. Oxygen O/R. ABN. IBN. Fire 7.

ARAXOS (ARAXOS AB)
46' LGRX GPA N38 09.0 E021 25.0
Apt Operator 0693023598.
18/36 9810' CONC/ASPH. LCN 45. RL. HIALS 36.
Apt hr: By NOTAM. AB avbl for INTL skd flts and for domestic non-skd/skd flts. Fuel for non-skd flts 24hrs PN by BP/EKO.
Jet A-1. F-6. JP-4. JASU. ABN. Fire 6.

ARISTOTELIS see KASTORIA

ARNISSA see EDDESSA

ASTYPALAIA
154' LGPL JTY N36 34.9 E026 22.6
Apt Operator 0243061410.
15/33 3215' ASPHALT.
Apt hr: By NOTAM.
Fire 3.

ATHINAI (ELEFTHERIOS VENIZELOS INTL) Apt of Entry
308' LGAV ATH N37 56.2 E023 56.7
Apt Operator 0103530000, Fax 0103532254.
03L/21R 12467' ASPHALT. PCN 64/F/B/W/T. LDA 03L 11483'. LDA 21R 11483'. HIRL. HIALS.
03R/21L 13123' ASPHALT. PCN 64/F/B/W/T. LDA 03R 12139'. LDA 21L 12139'. HIRL. HIALS.
H24. Customs.
F-3. Jet A-1. ABN. Fire 9.

ATHINAI (HELLINIKON) Apt of Entry
68' LGAT HEW N37 53.8 E023 43.7
Airport 0109694111, Fax 0109612822.
15L/33R 11483' ASPHALT. LCN 100. TORA 15L 10991'. TORA 33R 11155'. LDA 15L 9777'. LDA 33R 10991'. HIRL. HIALS 33R.
TORA 15L 11237' available for intercontinental flights, advise TWR. Rwy 15L/15R right hand circuit.
15R/33L 10335' ASPHALT. LCN 100. LDA 15R 8825'. LDA 33L 9875'. HIRL.
H24. Until 30 MAR 02: AD AVBL for domestic flights of General Aviation 0800LT - SS.
F-3. Jet A-1. Oil: W80, W100. Oxygen. ABN. Fire 7.

CHANIA (SOUDA AB) Apt of Entry
492' LGSA CHQ N35 31.9 E024 09.1
Airport 0821083800.
11/29 10991' ASPHALT. LCN 80. TORA 11 10663'. TORA 29 10663'. ASDA 11 10663'. ASDA 29 10663'. HIRL. HIALS 29. ALS 11.
Right hand circuit rwy 11.
CIV PPO. Apt hr: CIV by NOTAM, MIL H24.
PPR (at least 20 working days) for private flights.
Customs: O/R 4hr.
F-3. Jet A-1. JP-4. JASU. ABN. IBN. Fire 7.

CHIOS
18' LGHI JKH N38 20.7 E026 08.5
Airport 0271081400. TWR 0271081424, 0271081404. Apt Authority 0271081403. Fax 0271021237.
01/19 4921' ASPHALT. LCN 45. LDA 01 4528'. LDA 19 4659'. MIRL.
Right hand circuit rwy 01.
Apt hr: By NOTAM.
Jet A-1. ABN. IBN. Fire 6.

DEKELIA (TATOI AB)
785' LGTT N38 06.5 E023 46.0
03/21 4320' ASPHALT. LCN 45. RL.
CIV PPR. Days.
F-3. F-5. F-6. JP-4. JASU.

DIAGORAS see RODOS

DIMOKRITOS see ALEXANDROUPOLIS

DIONYSIOS SOLOMOS see ZAKINTHOS

EDDESSA (ARNISSA)
2120' N40 51.2 E021 49.7
08/26 2461' UNPAVED.
PPR.

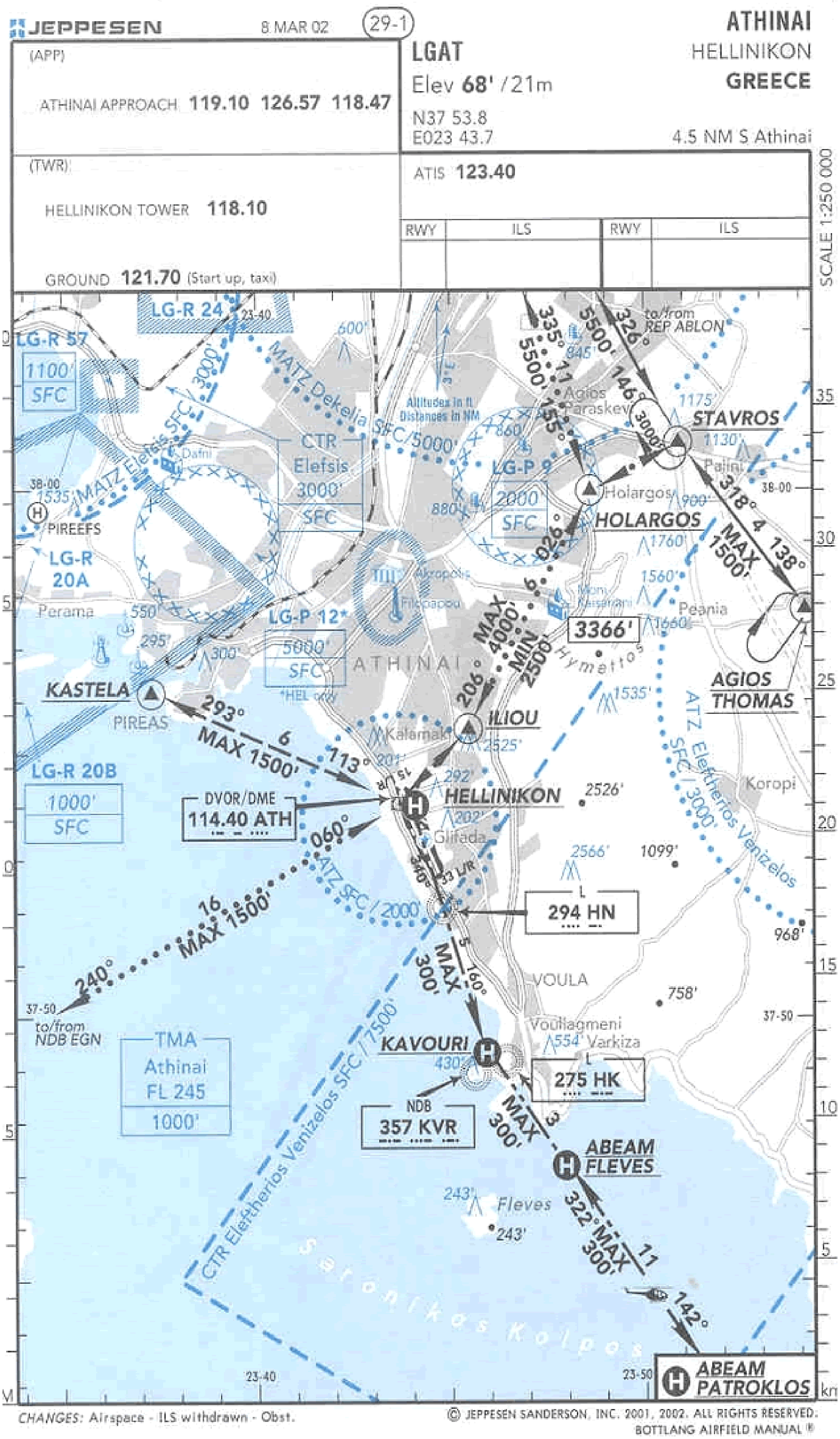
ELEFSIS (ELEFSIS AB) Apt of Entry
143' LGEL N38 04.2 E023 33.3
Base Ops 0105546506, Apt 01055488-21, -22, -23.
18/36 8983' ASPHALT. LCN 45. LDA 36 8786'. HIRL. HIALS 18.
Rwy 18 no night landings. Rwy 36 extreme uphill gradient.
Days. Nights O/R 10min. PPR (at least 20 working days) for private flights. Customs: O/R 2hr.
F-3. Jet A-1. JP-4. Oil: 80, 100, 120, W100, W120, E80, E120. Oxygen. ABN. Fire 7.

ELEFTHERIOS VENIZELOS INTL see ATHINAI

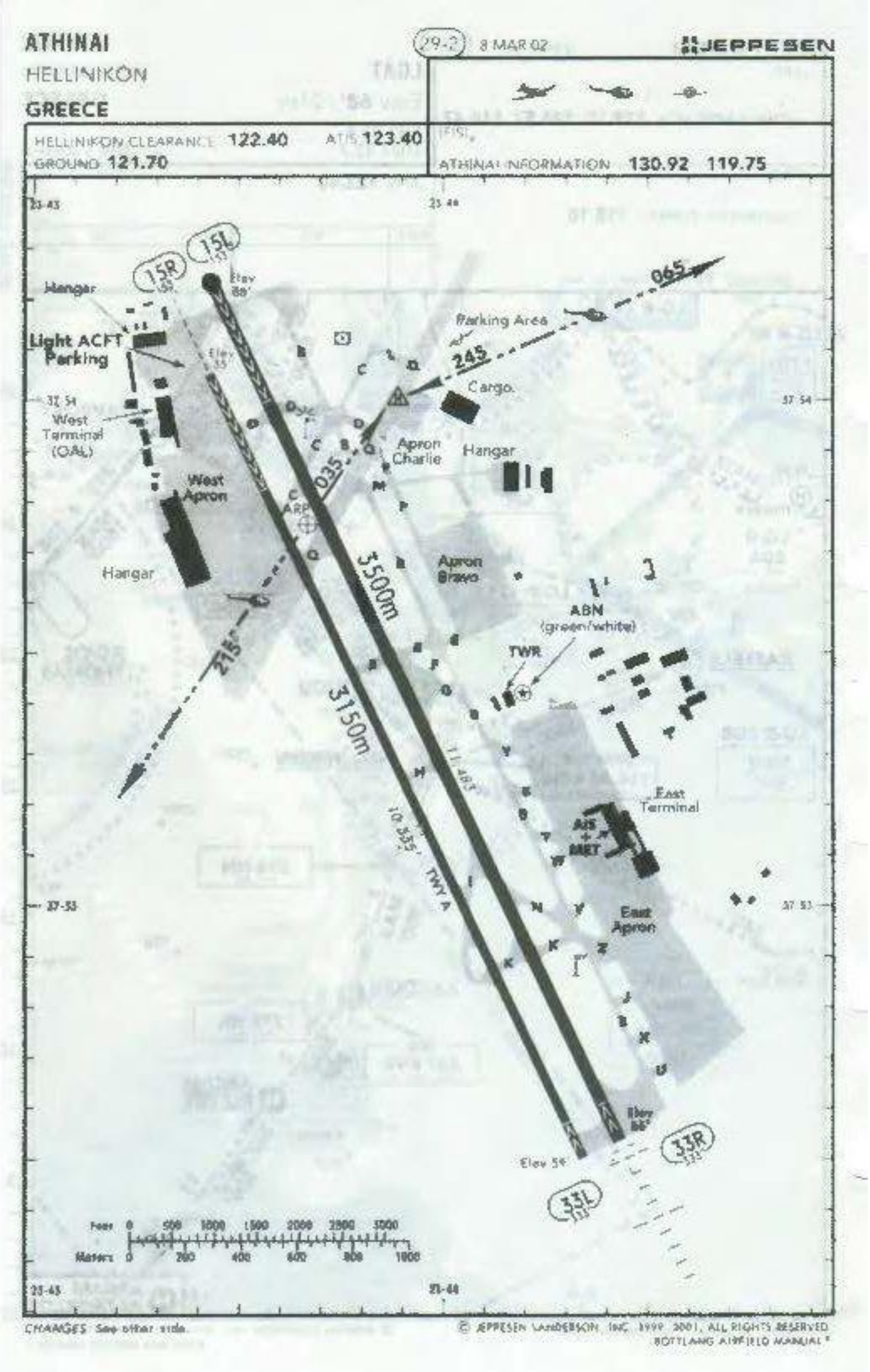
577. Athinai (Hellinikon) Approach Chart: The callsign and frequency to use to obtain start up clearance is:
Ground 121.70

578. Athinai (Hellenikon) Approach Chart: The frequency and ident of the DVOR/DME at the northern end of the runway at Hellinikon aerodrome is:
114.40 ATH

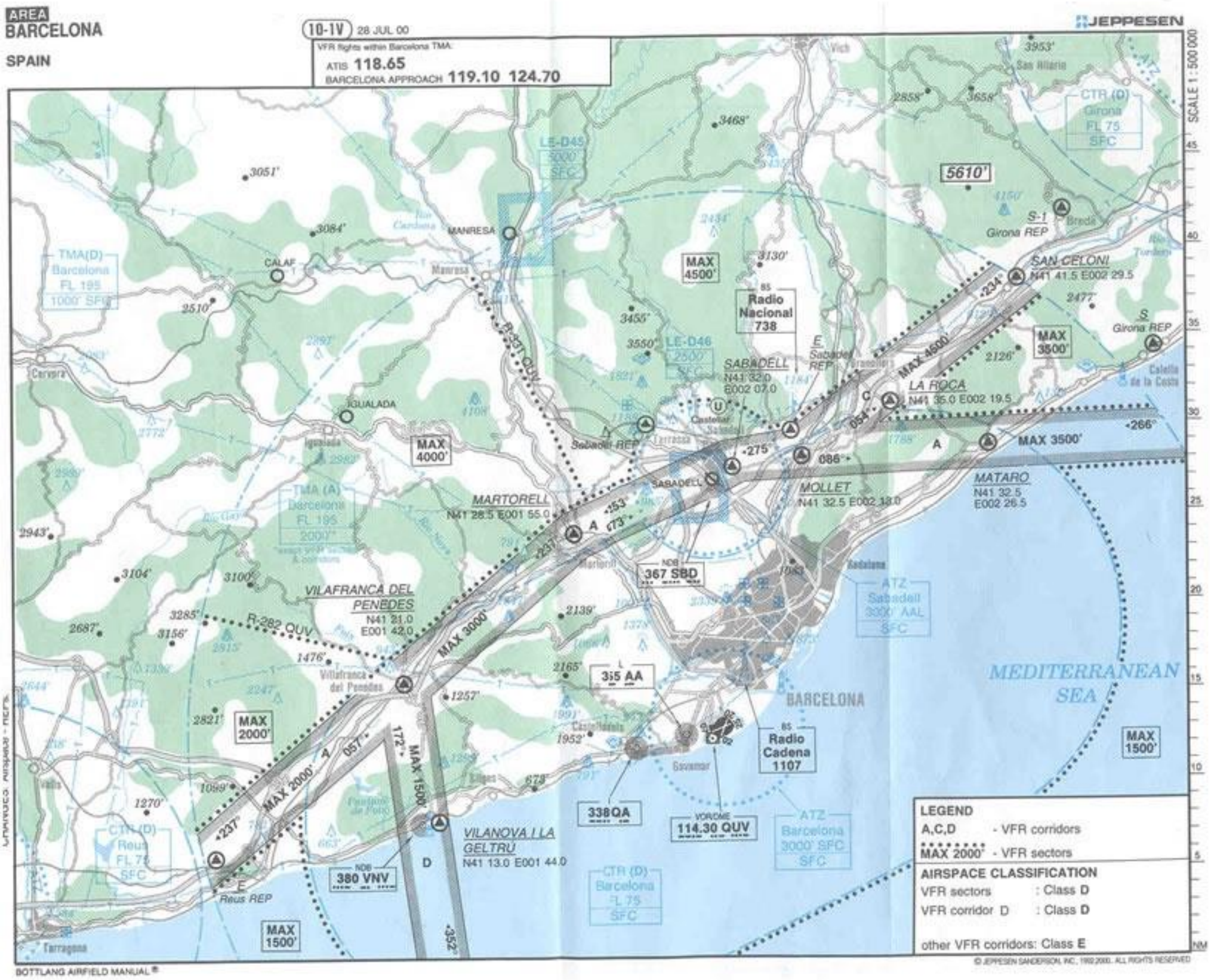
579. Athinai (Hellenikon) Approach Chart: What is the variation shown on the chart?
3°E



580. Athinai (Hellinikon) Landing Chart: What is the position of the Aerodrome Reference Point?
37°53.8'N 23°43.7'E

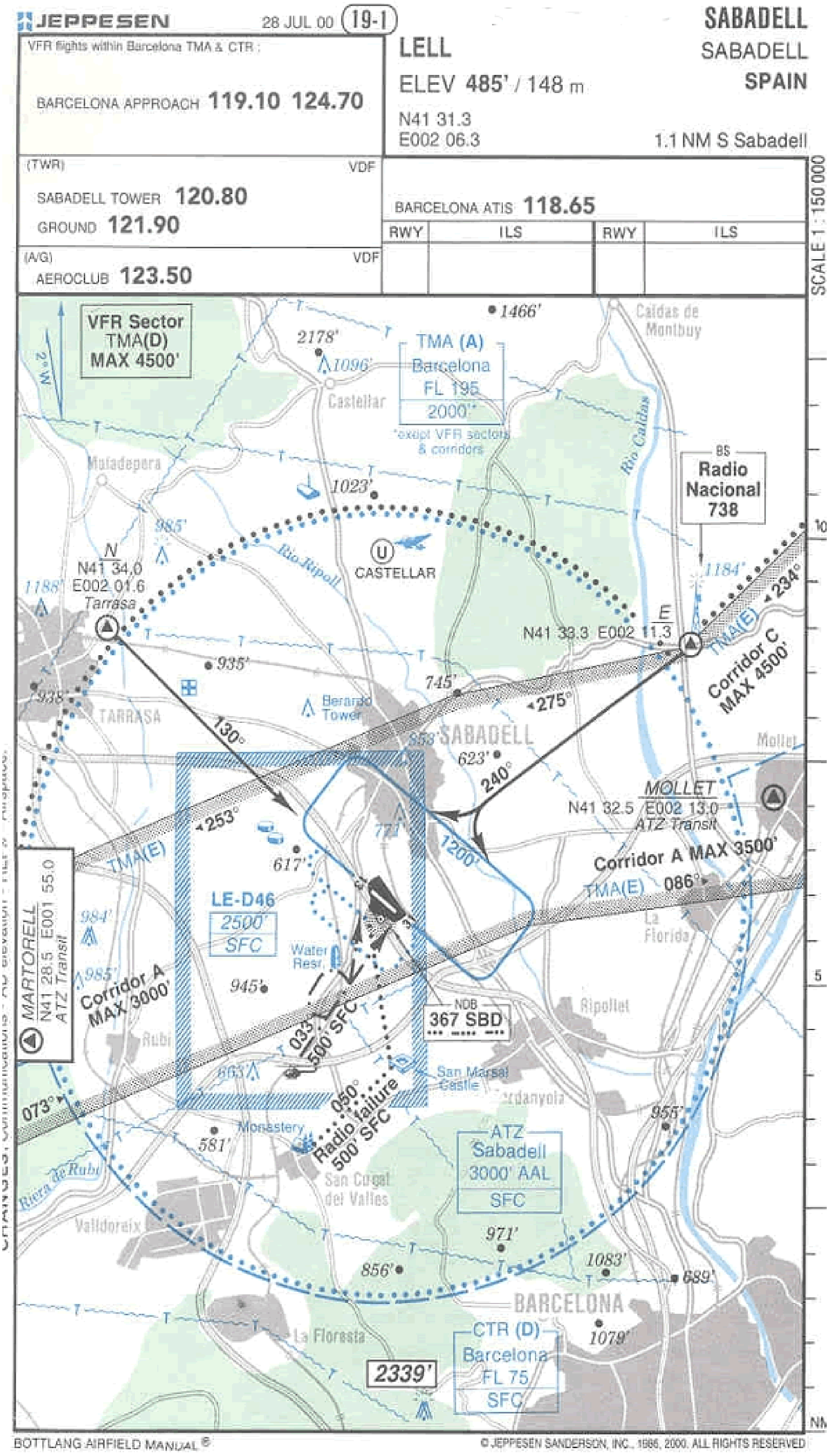


581. The maximum altitude that may be used to transit the whole VFR corridor from REUS to SAN CELONI is:
2000 ft



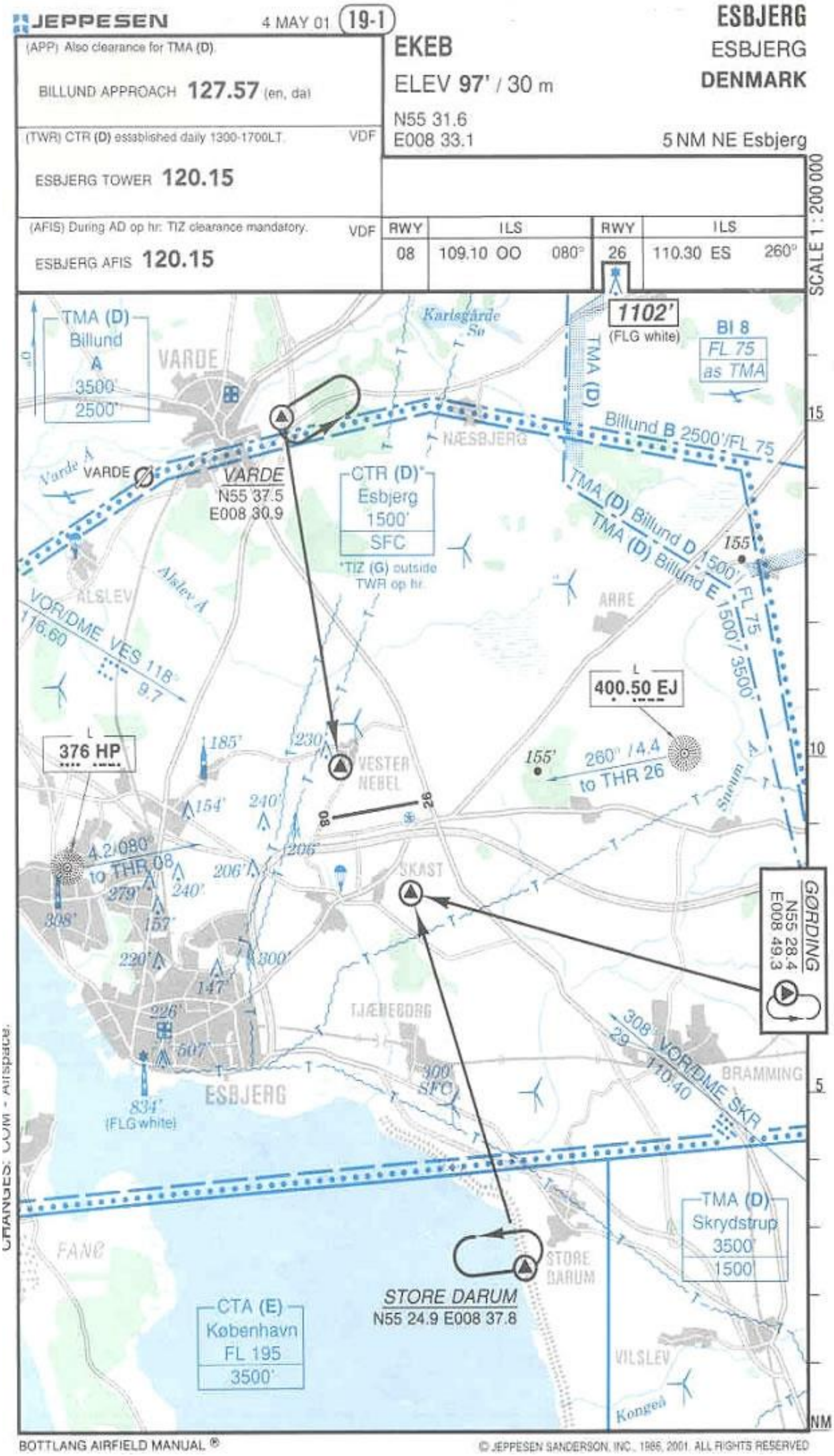
582. What is the published frequency for Barcelona ATIS?

118.65 MHz



583. What is the track and distance shown on the chart from VOR/DME SKR to overhead Esbjerg?
308°(M) / 29 NM

584. What is the course and distance from Locator HP to the threshold of Runway 08?
080°(M) / 4.2 NM



585. What are the dimensions of runway 08/26 at Esbjerg?
2600 m x 45 m

586. What is the position of the Aerodrome Reference Point at Esbjerg?
55°31.6'N 008°33.1'E

ESBJERG
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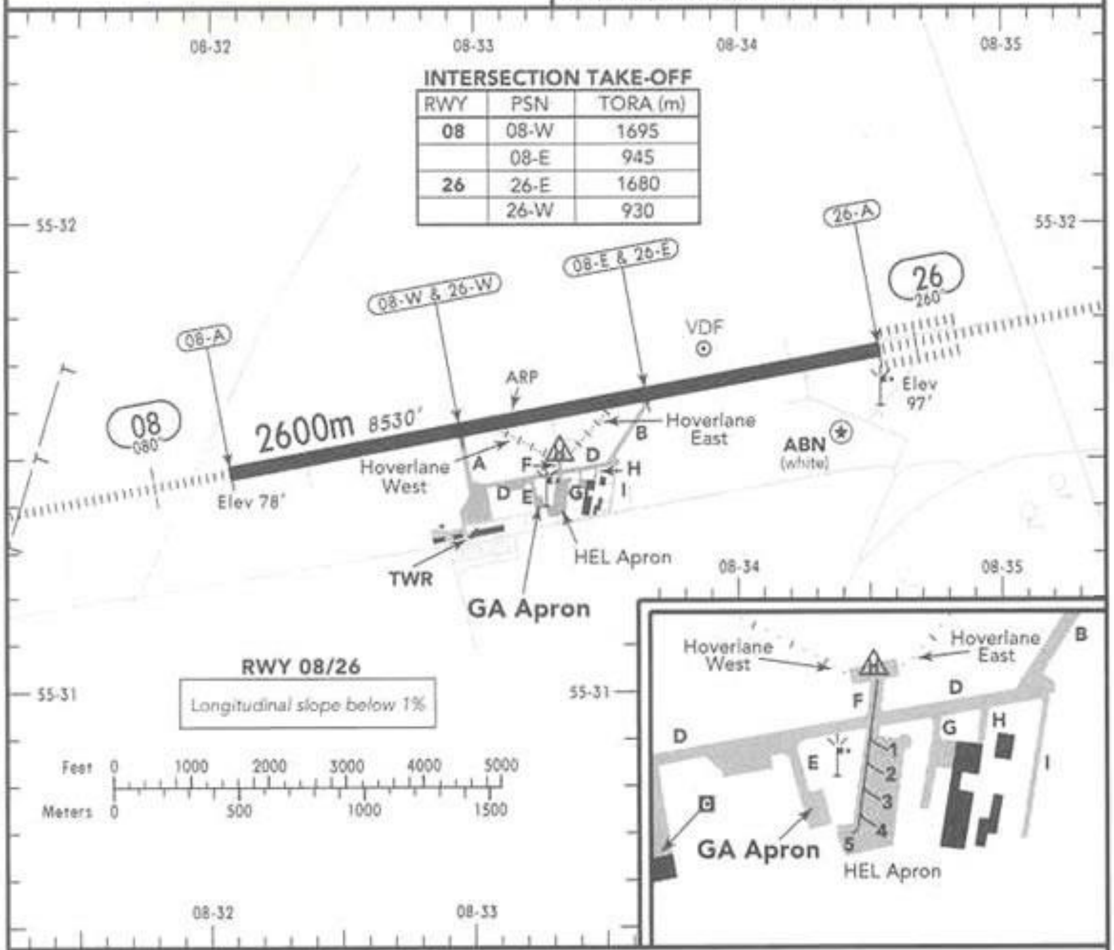
DENMARK

(19-2) 4 MAY 01 JEPPESEN

(FIS)
BILLUND APPROACH **127.57**



TAXI

ABN - ALS - PAPI - THRL - RL - RCLL - TWYL A - WDI - OBSTL - Heliport & HEL hoverlanes.

RWY No	Dimension (m) - Surface	TORA (m)	LDA (m)	Strength	Lights
08 26	2600 x 45 Asphalt	2600 (08-A) 2600 (26-A)	2600 2600	PCN 60 F/A/W/T	

Caution: Various wind farms up to 300' SFC in closer & more distant vicinity of AD.
Birds in vicinity of airport.

Parachute jumping may take place. Glider activities may take place within the allocated area BI 8.

VFR flights may obtain information concerning the activity of a glider area by BILLUND APPROACH or BILLUND TOWER.

Holding position on TWY F and marking on HEL apron for type S-61.

School & training flights are permitted daily 0700-2200LT.

CHANGES: Editorial.

587. (For this Question use Fuel Planning MRJT1 Figure 4.3.1C))
Given:
Diversion distance 2400 NM
Wind component 25 kt tailwind
Temperature ISA - 10°C
Cruise altitude 31000 ft
Landing mass 52000 kg
The approximate (a) trip fuel and (b) trip time are respectively:
(a) 14100kg
(b) 5h 28min

588. (For this Question use Flight Planning Manual SEP 1, Fig. 2.3 Table 2.3.1)
Using the Power Setting Table, for the single engine aeroplane, determine the cruise TAS and fuel flow (lbs/hr) with full throttle and cruise lean mixture in the following conditions given:
OAT 3° C
Pressure altitude 6000 ft
Power Full throttle/21,0 in/Hg/2100 RPM
134 kt and 55.7 lbs/hr

589. (For this Question use Flight Planning Manual SEP 1, Fig. 2.2 Table 2.2.3)
Using the Power Setting Table, for the single engine aeroplane, determine the cruise TAS and fuel flow (lbs/hr) with full throttle and cruise lean mixture in the following conditions given:
OAT 13° C
Pressure altitude 8000 ft
RPM 2300
160 kt and 69.3 lbs/hr

590. (For this Question use Flight Planning Manual SEP 1, Fig. 2.2 Table 2.2.3)
Using the Power Setting Table, for the single engine aeroplane, determine the manifold pressure and fuel flow (lbs/hr) with full throttle and cruise lean mixture in the following conditions given:
OAT 13° C
Pressure altitude 8000 ft
RPM 2300
22.4 in.Hg and 69.3 lbs/hr