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GET MET 2004

Aviation Services

*Including Belgium,
Denmark, France,
Germany, Holland,
Ireland, Jersey,
Norway and Sweden*

GLOBAL AEROSPACE



Flight planning

Flight planning involves other preparation also;

- UK & foreign NOTAM information is available from the only approved source of UK AIS information on the internet at www.ais.org.uk (AIC 54/2002, Yellow 85). Use of the site is subject to registration. It also offers access to the UK AIP, AIP supplements and AICs.
- UK information is also available by fax on 020-8557, followed by 0064 for London FIR brief, 0065 for Scottish FIR brief, 0051 for London FIR aerodromes, 0052 for Scottish FIR aerodromes.
- For abbreviated and updated information on certain UK airspace restrictions, call the AIS information line on **0500 354802** (not available from outside UK).

Pilot's pre-flight check

Designed for General Aviation pilots, but information applies to everyone. SafetySense leaflets are in LASORS and on the CAA website www.caa.co.uk through 'safety', 'general aviation' & 'information'.

Valid medical, type/class rating?	
90-day rule for passengers?	
Map/charts and information in date?	www.srg.caa.co.uk/dap/dap_home.asp
Frequencies changed?	<i>GASIL changes sheet/AIS web site</i>
Flight plan required?	<i>GET MET page 24 or AIS web site</i>
File CANP/PINS?	<i>Freephone 0800 515544, fax 0500 300120</i>
Mass/balance calculations?	<i>Flight manual, SafetySense leaflet 9</i>
Weather forecast — Route/area? TAFs/METARs?	<i>GET MET Pages 4-19</i>
NOTAMs and aeronautical information checked?	<i>AIS web site www.ais.org.uk</i>
Route planned? Fuel? Diversion? Safety altitude?	<i>SafetySense leaflet 5</i>
Take off/landing performance?	<i>Flight manual, SafetySense leaflet 7</i>
Temporary restricted airspace?	<i>AIS web site or freephone 0500 354 802</i>
Aircraft serviceable?	
Passengers briefed?	<i>SafetySense leaflet 2</i>

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Whilst every effort is made to ensure that contents are accurate at the time of going to print, readers should note that frequencies/reporting airfields, etc., may change during the year.

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Introduction

Common sense and the law require you to obtain all necessary weather information in order to plan and conduct your flight safely. Full information on meteorological services is in the UK AIP in the General Section at 3.5.

This booklet is intended to help you to obtain this information. If you have any suggestions for improving this booklet, or need further copies, please contact:

Met Office FitzRoy Road Exeter Devon EX1 3PB

Fax: **0870 900 5050**

E-mail: **aviation@metoffice.com**

If you are unable to use any of the services, the TAFs and METARs, or require clarification for F214, F215, F414 and F415, special forecasts and route forecasts please call:

0870 900 0100

For aircraft departing from Isle of Man and Channel Islands please call:

Isle of Man **01624 821641 (ATC Hours)**

Jersey **01534 745550 (ATC Hours)**

*Premium-rate telephone numbers are normally 'barred' from mobile phones. However, your Service Provider can arrange for this 'bar' to be lifted. Prices stated in *GET MET* are correct at the time of going to press. Other commercial meteorological services are also available.

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MetFAX forecasts and bulletins for pilots

MetFAX products give you the latest aviation weather information direct to your fax machine. An index of products is available for customers to download.

Using MetFAX:

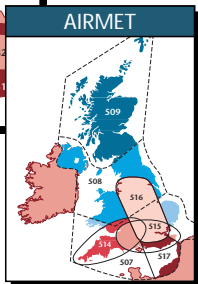
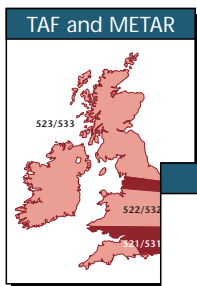
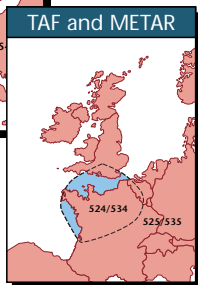
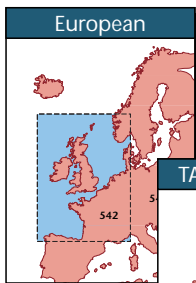
- either use a telephone handset; or
- switch to voice mode on your fax machine and use the fax keypad to navigate through the system.

For customers whose machines are barred from using premium-rate numbers or who wish to receive this information from abroad, our credit card payment system offers the ideal solution. See page 10 for details.

To receive products

- Make sure your fax machine is set to POLL RECEIVE
- Dial one of our product numbers.
- Press the START button after the tone. Some fax machines will automatically go into POLL/RECEIVE mode if you dial a product number from your fax machine keypad – you may need to press the HOOK or TEL/DIAL button before you can dial. The POLL facility is usually selected from a menu, mode, poll or function key.
- Otherwise dial MetFAX from a telephone in parallel with your fax modem and select manual RECEIVE when you hear the tone.

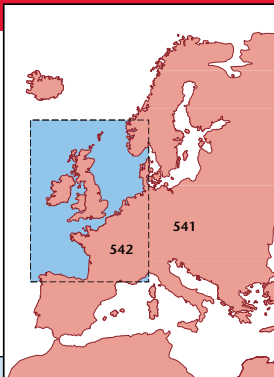
*This is a premium-rate telephone service.
09060 calls are charged at 75p per minute.*



Fax number	MetFAX product content and time							
09060-700-501	Index page As required							
Note: The index page contains latest details of the whole range of dial-up fax products available to the pilot								
	UT = Update time (all times UTC)				VT = Validity time			
	UT	VT	UT	VT	UT	VT	UT	VT
09060-700-502	Surface analysis chart							
	0400	0000	1000	0600	1540	1200	2130	1800
	Surface T+24 forecast (F/C) chart							
	0600	0000	1100	0600	1645	1200	2245	1800
09060-700-503	F215 UK low-level weather chart							
	0500	0900	1100	1500	1700	2100	2300	0300
	F214 UK spot-wind chart							
	0400	0900	1000	1500	1600	2100	2150	0300
09060-700-504	T+48, +72, +96, +120 Surface F/C chart							
	0800	0000	2000	1200				
	Three-day planning F/C (S England)							
	1200	1–3 DAYS						
09060-700-544	T+48, +72, +96, +120 Surface F/C chart							
	0800	0000	2000	1200				
	Three-day planning F/C (N England)							
	1200	1–3 DAYS						
09060-700-505	Explanatory notes for F215							
09060-700-506	Four tephigrams temp./height chart							
	0330	0000	1330	1200				

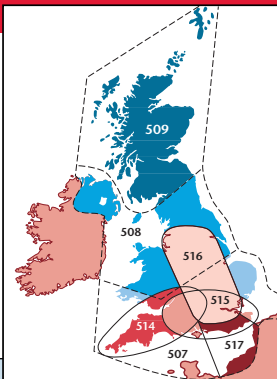
Satellite pictures									
09060-700-538		Guide to satellite images							
09060-700-537		Satellite picture (visible and infrared)							
		0730	0600	1030	0900	1330	1200	1630	1500 1930 1800
09060-700-539		Satellite picture (infrared)							
		0730	0600			1330	1200		
								1930	1800

European fax forecasts



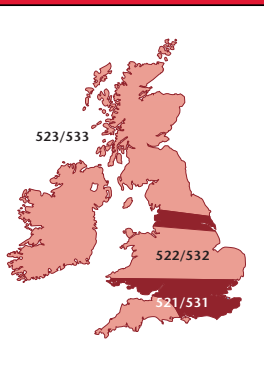
European								
	UT = Update time (all times UTC)						VT = Validity time	
	UT	VT	UT	VT	UT	VT	UT	VT
09060-700-541	WAFC European FL100-450 sig. weather chart							
	0215	1200	0800	1800	1500	0000	2115	0600
	F614 European med-high spot wind chart							
	0215	1200	0800	1800	1500	0000	2115	0600
09060-700-542	F415 European low-level weather chart							
	0500	0900	1100	1500				
	F414 European low-level spot-wind chart							
	0500	0900	1100	1500				

AIRMET fax forecasts



AIRMET								
09060-700-510	AIRMET index page As required							
	UT = Update time (all times UTC)				VT = Validity time			
	UT	VT	UT	VT	UT	VT	UT	VT
09060-700-507	Regional AIRMET South text							
	0430	05-13	1000	11-19	1600	17-01	2200	23-07
09060-700-508	Regional AIRMET North text							
	0430	05-13	1000	11-19	1600	17-01	2200	23-07
09060-700-509	Regional AIRMET Scottish text							
	0430	05-13	1000	11-19	1600	17-01	2200	23-07
09060-700-511	AIRMET UK weather text							
	0530	06-12	1130	12-18	1730	18-24	2330	00-06
09060-700-512	AIRMET UK upper winds text							
	0530	06-12	1130	12-18	1730	18-24	2330	00-06
09060-700-513	AIRMET UK update and outlook text							
	0830	09-15	1430	15-21	2030	21-03	0230	03-09
09060-700-514	AIRMET area South West England text							
	0730	08-17	1230	13-21	1630	17-01		
09060-700-515	AIRMET area South East England text							
	0730	08-17	1230	13-21	1630	17-01		
09060-700-516	AIRMET area Central England text							
	0730	08-17	1230	13-21	1630	17-01		
09060-700-517	AIRMET area Cross Channel text							
	0730	08-17	1230	13-21				

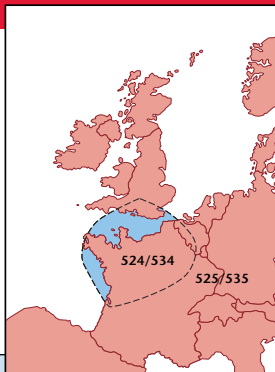
METAR bulletins



METAR bulletins		
09060-700-520	TAF and METAR index page	As required
09060-700-521	METAR 1 – S England, S Wales, Channel Islands	Bulletins compiled every 30 minutes
09060-700-522	METAR 2 – SE England, E Anglia, Midlands, Wales	Bulletins compiled every 30 minutes
09060-700-523	METAR 3 – N England, Scotland, Ireland	Bulletins compiled every 30 minutes
09060-700-524	METAR 4 – SE England, Channel Islands, France	Bulletins compiled every 30 minutes
09060-700-525	METAR 5 – Europe	Bulletins compiled every 30 minutes

Please note that dark red shaded areas show the overlap between each region.

TAF bulletins



TAF bulletins								
09060-700-530	TAF – 18-hr bulletin 0510 1110 1710 2310							
09060-700-531	TAF 1 – S England, S Wales, Channel Islands 0640 0940 1240 1540 1840 2140 0040 0340							
09060-700-532	TAF 2 – SE England, Midlands, E Anglia, Wales 0640 0940 1240 1540 1840 2140 0040 0340							
09060-700-533	TAF 3 – N England, Scotland, Ireland 0640 0940 1240 1540 1840 2140 0040 0340							
09060-700-534	TAF 4 – SE England, Channel Islands, France 0540 0840 1140 1440 1740 2040 2340 0240							
09060-700-535	TAF 5 – Europe 0640 0940 1240 1540 1840 2140 0040 0340							

Users are advised to check the index pages for latest details.

You receive this service subject to our Terms and Conditions, available on request.

09060 numbers charged at 75p per minute. Numbers transmitted at 9,600 baud.

Met Office FitzRoy Road Exeter Devon EX1 3PB

Tel: **0870 900 0100** Fax: **0870 900 5050**

E-mail: **aviation@metoffice.com** www.metoffice.com

Services via the telephone

Forecaster consultancy

If you need more than just clarification, or you cannot access charts or other information, speak directly to an aviation forecaster.

Tel: **+44 (0)8700 767 868**

With our aviation forecaster consultancy, you can:

- speak to one of our aviation forecasters about the weather as it affects you - for example planning return flights, weather windows;
- use it on its own, or as a natural accompaniment to our fax service;
- pay online by credit card – no forms to fill in! (Charged at £17 including VAT per call.)

Telephone and fax service: payment and help

We accept Visa, MasterCard, Switch and Delta cards. To receive a fax product or for a consultancy with one of our forecasters, you will be asked for your card details. Once verified, you will be able to proceed to the service of your choice. Your credit card will be debited £3 (incl. VAT) for each product you receive. You will only be charged once a successful connection has been made.

Fast-tracking for regular customers

You can fast-track through the menu systems to any service by:

- selecting the relevant option before the voice message has finished;
- then entering your credit card details.

For example, pressing '5' followed by '2' will take you to the forecaster consultancy service.

Helpline/Customer Services




Our helpline is staffed 24 hours a day throughout the year. Discuss any service in more detail or receive help on any technical difficulties.

Tel: **+44 (0)1392 885680**

Fax: **+44 (0)1392 885681**

AIRMET areas and boundaries

Simply telephone **09065 5004** plus the two-digit code on the map below, (available between 0500 and 1700 local. Outside these hours, call the appropriate number given on page 2).

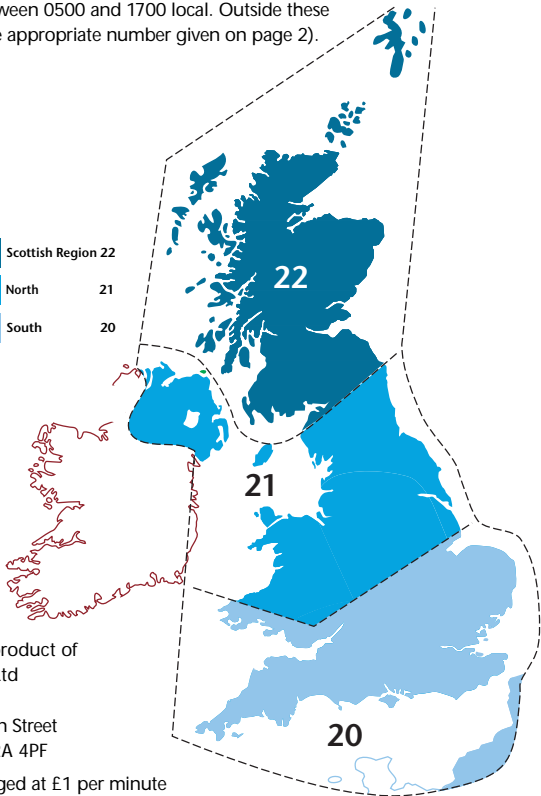
	Scottish Region 22	
	North	21
	South	20



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iTouch (UK) Ltd
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London EC2A 4PF

Calls are charged at £1 per minute
at all times. Updates and validity times
of the forecasts are as detailed on page 7.

If you have any problems please call the Weathercall Helpdesk on 0871 200 3985.



DIALMET

Automated METAR and TAF service

Tel: **09063 800 400**

- 1 Select the Quick access menu < * KEY > or the Aerodrome options menu < # KEY > as soon as the call is answered. Details of the options are listed below.

- 2 **Aerodrome weather message order**

- METAR
- 9-hr TAF (if provided)
- 18-hr TAF or 24-hr TAF (if provided)

- 3 **Quick access keys on telephone keypad**

Press < * KEY > plus the three-digit aerodrome code as soon as the call is answered (the aerodromes and codes are listed below).

Press < 0 KEY > to pause the current read-out; and press < 0 KEY > again to restart.

Press < 1 KEY > to stop the current read-out before selecting another aerodrome code.

Press < # KEY > to stop the current read-out and obtain further options as follows:

- Press < 1 KEY > to enter another aerodrome code
- Press < 2 KEY > to replay the message
- Press < 3 KEY > for Menu of aerodrome options
- Press < 4 KEY > to Exit

- 4 **Aerodrome selection menu** (if three-digit code list is not available)

Press < # KEY > as soon as the call is answered and press keys as instructed.

- 5 **Using the keypad**

- Press the keys positively.
- Leave about 1/2 sec between pressing keys.
- Pause briefly after pressing < 1 KEY > to check the read-out has stopped. If not then press < 1 KEY > again.
- Try again if your input is not accepted – not all telephones are fully compatible.

- 6 **Charges**

Calls are charged at 49p per minute (34p per minute off peak) including VAT.

- 7 **Information**

Times shown, in UTC, are those between which observations are made.

Aerodromes with 18-hr TAFs are underlined and 24-hr TAFs indicated individually. The two letters in brackets are the last two letters of the ICAO designator for the aerodrome.

2 = METARs not available on Saturday.

3 = METARs not available on Sunday.

- 8 **Problems**

Any problems with DIALMET service can be reported to the answering service on 020 8745 3162, or e-mailed to ccac_fi_co-ordinator@nats.co.uk

UK civil aerodromes and codes

18-hr TAFs are underlined

(PD)	Aberdeen	05-21	222
(JA)	Alderney	07-18	224
(AA)	<u>Belfast International</u>	H24	228
(AC)	Belfast City	05-21	232
(PL)	Benbecula 2 3	07-15	234
(KB)	Biggin Hill	07-19	236
(BB)	<u>Birmingham</u>	H24	238
(NH)	Blackpool	06-20	242
(HH)	Bournemouth	06-20	246
(GD)	<u>Bristol</u>	H24	252
(SC)	Cambridge	06-18	256
(EC)	Campbeltown 2 3	06-24	354
(FF)	<u>Cardiff</u>	H24	258
(NC)	Carlisle 2 3	08-16	262
(BE)	Coventry	H24	266
(TC)	Cranfield	07-17	268
(NX)	<u>East Midlands</u>	H24	274
(PH)	<u>Edinburgh</u>	H24	276
(TE)	Exeter	06-24	278
(LF)	Farnborough	06-18	282
(PF)	<u>Glasgow</u>	H24	286
(BJ)	Gloucestershire	08-17	288
(JB)	Guernsey	03-20	292
(NJ)	Humberside	05-20	296
(PE)	Inverness	06-20	298
(NS)	Isle of Man	H24	322
(JJ)	Jersey	03-20	324
(PA)	Kirkwall	05-17	328

(NM)	<u>Leeds/Bradford</u>	H24	334
(GP)	<u>Liverpool</u>	H24	342
(LC)	London City	06-19	344
(KK)	<u>London Gatwick</u>	H24	346
(LL)	<u>London Heathrow</u>	H24	348
(GW)	<u>London Luton</u>	H24	358
(SS)	<u>London Stansted</u>	H24	352
(AE)	Londonderry	05-19	354
(CC)	<u>Manchester</u>	H24	368
(MH)	Manston	06-21	372
(NT)	<u>Newcastle</u>	H24	376
(WU)	Northolt	05-23	377
(SH)	Norwich	05-01	378
(HD)	Plymouth	06-18	386
(PK)	<u>Prestwick</u>	H24	388
(PM)	Scatsta 2 3	07-17	394
(HE)	Scilly St Marys 3	07-16	396
(SY)	Sheffield City	06-20	410
(KA)	Shoreham	07-17	422
(HI)	Southampton	05-19	424
(MC)	Southend	H24	426
(PO)	Stornoway 3	06-15	428
(PB)	Sumburgh	05-21	432
(NV)	Teesside	06-21	436
(PU)	Tiree 3	09-13	438
(PC)	Wick 3	06-20	452

UK military aerodromes and codes

* (VN) - 24 hr TAF

(DM)	Boscombe Down	2 3	H24	244
(VN)	Brize Norton*		H24	254
(DR)	Culdrose		H24	272
(OK)	<u>Kinloss</u>		H24	326
(XE)	Leeming	2 3	H24	336
(QL)	<u>Leuchars</u>		H24	338
(QS)	<u>Lossiemouth</u>	2 3	H24	356
(DL)	<u>Lyneham</u>		H24	364
(YM)	Marham	2 3	H24	374

(VO)	Odiham	H24	382
(DG)	<u>St Mawgan</u>	H24	392
(OS)	Shawbury 2 3	H24	398
(OV)	Valley	H24	444
(XW)	<u>Waddington</u>	H24	446
(UW)	Wattisham 2 3	H24	448
(XT)	Wittering 2 3	H24	454
(DY)	Yeovilton	H24	456

Continental and Irish aerodromes and codes

(EHAM)	<u>Amsterdam</u>	522
(LFOB)	Beauvais	524
(LFRB)	<u>Brest</u>	526
(EBBR)	<u>Brussels</u>	528
(LFRK)	Caen	532
(LFRC)	Cherbourg	536
(EICK)	Cork	538
(LFRG)	Deauville	542
(LFRD)	Dinard	544

(EIDW)	<u>Dublin</u>	546
(LFRM)	Le Mans	548
(LFAT)	Le Touquet	552
(LFQQ)	<u>Lille</u>	554
(ELLX)	<u>Luxembourg</u>	556
(EBOS)	<u>Ostend</u>	562
(LFPG)	<u>Paris/Charles de Gaulle</u>	564
(LFPB)	<u>Paris/Le Bourget</u>	566

(LFPO)	<u>Paris/Orly</u>	568
(LFRN)	Rennes	572
(LFSR)	Reims	574
(EHRD)	<u>Rotterdam</u>	576
(EINN)	<u>Shannon</u>	578
(LFPN)	Toussus Le Noble	582

Aerodrome forecast – TAF decode

Code element	Example	Decode
1 Report type	TAF	'Terminal Aerodrome Forecast'
2 Location	EGSS	'London Stansted'
3 Date/Time of origin	130500Z	'For the 13th at oh, five, hundred, Zulu'
4 Validity time	130716	'Valid from oh, seven, hundred, to, sixteen,
5 Wind	31015G25KT	'Three one zero degrees, fifteen knots,
6 Prevailing visibility or CAVOK*	8000	'Eight kilometres'
7 Significant weather	-SHRA	'Light rain showers'
8 Cloud	FEW005 SCT010 SCT018CB BKN025	'Few at five hundred feet, scattered at one thousand feet, scattered cumulonimbus at one thousand eight hundred feet. Broken at two thousand
9 Significant changes		
<i>Probability</i>	PROB30	'30% probability'
<i>Time</i>	1416	'from fourteen hundred to sixteen
<i>Change indicator</i>	BECMG 1416 FM 1400	'becoming from fourteen hundred to 'from fourteen hundred' followed by
<i>Met. groups</i>	TSRA BKN010CB	broken cumulonimbus at one thousand

* Indicates a mandatory code element, CAVOK will replace visibility and cloud groups

Examples

1. 18-hr TAF

FTUK31 EGGY 102200

EGLL 110624 13010KT 9000 BKN010 BECMG 0608 SCT015 BKN020

PROB30 TEMPO 0816 17025G40KT 4000 TSRA SCT010 BKN015CB BECMG 1821 3000 BR SKC=

Decode

Eighteen-hour TAF issued at 2200 Zulu on the 10th. London Heathrow valid from oh six hundred to midnight the next day. Wind one three zero degrees ten knots. Nine kilometres visibility. Broken at one thousand feet. Becoming from oh six hundred to oh eight hundred, scattered at one thousand five hundred feet, broken at two thousand feet. 30% probability, temporarily oh eight hundred to sixteen hundred, wind one seven zero degrees twenty five knots, gusting to forty knots. Four thousand metres visibility. Thunderstorm with rain. Scattered at one thousand feet. Broken cumulonimbus at one thousand five hundred feet. Becoming from eighteen hundred to twenty one hundred, three thousand metres visibility, mist, sky clear.

	Notes
	Name for an aerodrome forecast
	Station four-letter ICAO indicator
	Usually omitted
hundred, on the 13th'	UTC (Greenwich Mean Time)
max twenty five knots'	VRB = Variable; 0000KT = calm
	9999 = 10 km or more; 0000 = less than 50 metres
	See present weather table on METAR (page 17) for details; NSW = No significant weather
five hundred feet'	SKC = sky clear; FEW = 1-2 oktas; SCT = 3-4 oktas; BKN = 5-7 oktas; OVC = 8 oktas; '///' = state of sky obscured (figures after '///' will give forecast vertical visibility in hundreds of feet) NSC = no significant cloud (none below 5,000 feet and no CB) CB will be the only cloud type specified
hundred,' or sixteen hundred' or 'Thunderstorm with rain, feet'	Normally only 30% or 40% probability will be used. Indicates beginning and end time of forecast period in Universal Time Co-ordinated (UTC) or Zulu time (Z) Also TEMPO = temporarily may be used Met. group follows indicating a change in some or all of the elements forecast in the first part of the TAF

2. 9-hr TAF

FCUK33 EGGY 300900

EGGW 301019 23010KT 9999 SCT010 BKN018 BECMG 1114 6000 -RA BKN012

TEMPO 1418 2000 DZ OVC004 FM1800 30020G30KT 9999 -SHRA BKN015CB=

Decode

Nine-hour TAF issued at 0900 Zulu on the 30th. Luton valid from ten hundred to nineteen hundred Zulu on the 30th. Wind two three zero degrees ten knots. Ten kilometres or more visibility. Scattered at one thousand feet. Broken at one thousand eight hundred feet. Becoming from eleven hundred to fourteen hundred, six kilometres, slight rain. Broken at one thousand two hundred feet. Temporarily fourteen hundred to eighteen hundred. Two thousand metres visibility. Moderate drizzle. Overcast four hundred feet. From eighteen hundred, three zero zero degrees twenty knots gusting to thirty knots. Ten kilometres or more visibility. Slight rain showers. Broken cumulonimbus at one thousand five hundred feet.

Aerodrome actual weather – METAR and SPECI decode

Code element	Example	Decode
1. Identification* <i>METAR or SPECI</i> <i>Location indicator</i> <i>Date/time</i>	METAR EGLL 291020Z	Meteorological Airfield Report London Heathrow 'ten twenty Zulu on the 29th'
2. Wind <i>Wind direction/speed</i> <i>Extreme direction variance</i>	31015G27KT 280V350	'three one zero degrees, fifteen knots, gusting twenty seven 'varying between two eight zero and three five zero degrees'
3. Visibility <i>Prevailing visibility</i> <i>Minimum visibility (in addition to the prevailing visibility if required)</i>	3200 1200SW	'three thousand two hundred metres' 'twelve hundred metres to the south-west'
4. RVR	R27R/1100	'RVR, runway two seven right, one thousand one hundred metres'
5. Present weather	+SHRA	'heavy rain showers'
6. Cloud	FEW005 SCT010CB BKN025	'few at five hundred feet, scattered cumulonimbus at one thousand feet, broken at two thousand five hundred feet'
7. CAVOK†	CAVOK	'cav-oh-kay'
8. Temp and dew point	10/03	'temperature ten degrees Celsius, dew point three degrees'
9. QNH*	Q0995	'nine nine five'
10. Recent weather	RETS	'recent thunderstorm'
11. Wind shear	WS RWY24	'wind shear runway two four'
12. Trend	BECMG FM1100 23035G50KT TEMPO 3000 SHRA	'becoming from 1100, 230 degrees 35 KT, max 50 KT, temporarily, 3000 metres, moderate rain showers'

*Indicates a mandatory code element †CAVOK will replace visibility and cloud groups

Example SAUK02 EGGY 301220 METAR
EGLY 24015KT 200V280 8000 -RA FEW010 BKN025 OVC080 18/15
Q0983 TEMPO 3000 RA BKN008 OVC020=

An example of the above METAR for 1220 UTC on the 30th of the month, in plain language:
EGLY: Surface wind: mean 240 deg true, 15 KT; varying between 200 and 280 deg; prevailing vis 8 km; light rain; cloud; 1-2 oktas base 1,000 ft, 5-7 oktas 2,500 ft, 8 oktas 8,000 ft; temperature +18 °C, dew point +15 °C; QNH 983 mb; Trend: temporarily 3,000 m in moderate rain with 5-7 oktas 800 ft, 8 oktas 2,000 ft.

	Notes
	METAR – aviation routine report, SPECI – selected special (not from UK civil aerodromes) Station four-letter indicator Usually omitted when METARs are presented in a bulletin
knots'	Max only given if 10 KT than mean. VRB = variable. 0000KT = calm. Variation given in clockwise direction, but only when mean speed is greater than 3 KT.
	0000 = 'less than 50 metres' 9999 = 'ten kilometres or more'. No direction is required. Also included when the visibility in one direction, which is not the prevailing visibility, < 1500 metres or < 50% of the prevailing visibility. Direction is added as one of the eight points of the compass.
	RVR tendency (U = increasing; D = decreasing; N = no change) may be added after figure e.g. R27R/1100D P1500 = more than 1,500 m; M0050 = less than 50 m. Significant variations – example: R24/0950V1100, i.e. varying between two values.
	+ = Heavy (well developed in the case of +FC and +PO); - = Light; no qualifier = Moderate. BC = Patches BL = Blowing BR = Mist DR = Drifting, DS = Duststorm DU = Dust DZ = Drizzle FC = Funnel cloud FG = Fog FU = Smoke FZ = Freezing GR = Hail (>5 mm), GS = Small hail or snow pellets HZ = Haze IC = Ice crystals MI = Shallow PL = Ice pellets PO = Dust devils PR = Banks RA = Rain SA = Sand SH = Showers SG = Snow grains SN = Snow SQ = Squalls SS = Sandstorm TS = Thunderstorm VA = Volcanic ash VC = In vicinity Up to three groups may be present, constructed by selecting and combining from the above. Group omitted if no weather to report.
	SKC = Sky clear (0 oktas), FEW = 'few' (1-2 oktas), SCT = 'Scattered' (3-4 oktas), BKN = 'Broken' (5-7 oktas), OVC = 'Overcast' There are only two cloud types reported; TCU = towering cumulus and CB = cumulonimbus. W/// = 'state of sky obscured' (cloud base not discernable): Figures in lieu of '///' give vertical visibility in hundreds of feet. Up to three, but occasionally more, cloud groups may be reported.
	Visibility greater or equal to 10 km, no cumulonimbus, no cloud below 5,000 ft or highest MSA (greater) and no weather significant to aviation.
Celsius'	If dew point is missing, example would be reported as 10///. M indicates a negative value.
	Q indicates millibars. If the letter A is used QNH is in inches and hundredths.
	RE = recent, weather codes given above. Up to three groups may be present.
	Will not be reported at present for UK aerodromes.
	A forecast of significant changes in conditions during the two hours after observation time. BECMG = Becoming TEMPO = Temporarily NOSIG = No sig change NSW = No sig weather AT = At FM = From TL = Until NSC = No sig cloud

Example SAUK02 EGGY 301220 METAR

EGPZ 30025G37KT 270V360 6000 1200NE +SHSN SCT005 BKN10CB
03/M01 Q0999 RETS BECMG AT1300 9999 NSW SCT015 BKN100=

An example of the above METAR for 1220 UTC on the 30th of the month, in plain language:

EGPZ: Surface wind: mean 300 deg true, 25 KT; maximum 37 KT, varying between 270 and 360 deg; minimum vis 1,200 m (to north-east), prevailing vis. is 6 km, minimum vis. 1200 m (to north-east); heavy shower of snow, Cloud; 3-4 oktas base 500 ft, 5-7 oktas CB base 1,000 ft; temperature +3 °C, dew point -1 °C; QNH 999 mb; Thunderstorm since the previous report; Trend; improving at 1300 Zulu to 10 km or more, nil significant weather, 3-4 oktas 1,500 ft, 5-7 oktas 10,000 ft.

Metform 216

Explanatory notes for Metform 215

Chart of forecast weather below 15,000 feet

Metform 215 provides a forecast of in-flight conditions from the surface to 15,00 feet covering much of the British Isles and very near continent for a six-hour period centred on a specified fixed time. It is designed for use as either an area forecast or a route forecast.

Information provided

(a) Charts

Charts show the forecast position, direction and speed of surface fronts and pressure centres at the fixed time shown in the chart's legend. All features are given identifying letters to enable their subsequent movements to be followed on the outlook chart.

Height of 0 °C isotherm (freezing level) is given in boxes at appropriate places on the chart.

Zones of distinct weather are enclosed by continuous scalloped lines, each zone being identified by a number within a circle. Where a zone is not linked to a front, the expected speed of movement of the boundary may be given.

The right-hand chart indicates the expected positions of the principal synoptic features and mean sea-level isobars at the end of the six-hour outlook period. *Weather zones are not given on the outlook chart.*

(b) Tabular forecast

For each zone (identified by its number on the left-hand chart), the text details the expected surface horizontal visibility, weather and cloud during the period of validity, including any spatial or temporal variants within the zone. This is followed by any relevant warnings and remarks.

The outlook that follows the main forecast text describes the principal weather changes expected during the six-hour period up to the time of the outlook chart.

Issue times

Times when Metform becomes available	Fixed forecast time	Period of validity	Outlook to
2300 UTC	0300 UTC	0000-0600 UTC	1200 UTC
0500 UTC	0900 UTC	0600-1200 UTC	1800 UTC
1100 UTC	1500 UTC	1200-1800 UTC	2400 UTC
1700 UTC	2100 UTC	1800-2400 UTC	0600 UTC

The date and time at which the forecast is issued by the Met Office are shown at the bottom of the Metform.

Amendments

An amended forecast is indicated by the word 'AMENDED' at the top and bottom left-hand corner of the form.

Tolerances

A single numerical value given for any element is to be regarded as the probable mean of an expected range of values, covering approximately $\pm 25\%$, or ± 500 m/ ± 500 ft in the case of visibility and cloud height respectively, whichever is the larger. Similarly, the position of a front, pressure centre or zone boundary is to be regarded as the most likely of a range of positions within ± 90 n mile.

Pressure centres and fronts

The surface positions of pressure centres is shown by 'X' for a depression and 'O' for an anticyclone. The letters 'L' (low) or 'H' (high), as appropriate, together with the central pressure in millibars, are entered adjacent to the position.

Example pressure centres and fronts with speed of movement



Warm front

L x → 10
992



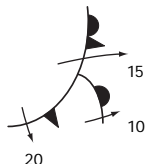
Cold front

1020

H o
slow



Occlusion



The arrows and adjacent figures indicate the expected direction and speed of movement (in knots) of centres and fronts. Usually a speed of movement less than 5 kt is indicated as **SLOW**. Trough and ridge axes are not shown

Abbreviations commonly used in tabular section (for complete list, see UK AIP, GEN 2.2)

GEN generally	EMBD embedded	COT at coast
LOC locally	FRQ frequent	LAN inland
OCNL occasionally	ISOL isolated	MON over mountains
BECMG becoming	WDSPR widespread	VAL in valleys

Points of the compass (**N**, **NE**, **E**, etc.) may be used to express direction, or to refer to part of a zone.

Surface horizontal visibility expressed in metres (**M**) or kilometres (**KM**) with change over at 5 km.

Weather

DZ drizzle	GR hail	FG fog	SH shower
RA rain	SN snow	FZ freezing	TS thunderstorm

Weather phenomena may also be written in full, or as a combination of abbreviations, e.g. **TSRASN** (thunderstorm with rain and snow), and precipitation may be qualified by **HVY** (heavy).

Cloud (CLD) The familiar abbreviations for cloud type will be used, together with the following

LYR layer	SFC surface	SKC sky clear
------------------	--------------------	----------------------

Amount (in oktas) and type will be followed by height of base and tops above mean sea-level (**AMSL**)

Warnings (WRNG)

BLW below	MOD moderate	SEV severe
ICE icing	TURB turbulence	MTW mountain waves
MAX maximum	VSP vertical speed	FPM feet per minute
INTSF intensifying	WKN weakening	STNR stationary

A forecast of **CB** or **TS** implies severe turbulence and icing. Hill fog is not used, but 'CLD covering hills' is thought to be more informative, and implies a surface visibility < 200 m.

Metform 214 complements Metform 215 by providing forecast spot upper winds and temperatures for the same fixed time covering a similar area.

Metform 414 (weather) and **415** (winds/temps) are charts prepared in a similar format (but with no outlook) for low-level flights further into Europe.

VHF Volmet

Call sign/ID	Frequency MHz	Operating hours	Stations	Contents	Remarks
1	2	3	4	5	6
LONDON VOLMET (MAIN)	135.375	H24 (continuous)	Amsterdam Brussels Dublin Glasgow London Gatwick London Heathrow London Stansted Manchester Paris/Charles de Gaulle	1. Half-hourly reports (METAR) 2. The elements of each report are broadcast in the following order: (a) Surface wind (b) Visibility* (c) RVR if applicable (d) Weather (e) Cloud* (f) Temperature (g) Dew point (h) QNH (i) Recent weather if applicable (j) Wind shear if applicable (k) TREND if applicable (l) Runway contamination warning if applicable * or CAVOK	The spoken word 'SNOCLO' will be added to the end of the aerodrome report when that aerodrome is unusable for take-offs and landings due to heavy snow on runways or runway snow clearance.
LONDON VOLMET (SOUTH)	128.600	H24 (continuous)	Birmingham Bournemouth Bristol Cardiff Jersey London Luton Norwich Southampton Southend		
LONDON VOLMET (NORTH)	126.600	H24 (continuous)	East Midlands Humberside Isle of Man Leeds Bradford Liverpool London Gatwick Manchester Newcastle Teesside	3. Non-essential words such as 'surface wind', 'visibility', etc. are not spoken	
SCOTTISH VOLMET	125.725	H24 (continuous)	Aberdeen/Dyce Belfast International Edinburgh Glasgow Inverness London Heathrow Prestwick Stornoway Sumburg	4. Except for 'SNOCLO' (see Column 6). The Runway State Group is not broadcast 5. All broadcasts are in English	

† Broadcast range extended to cover south-east England and English Channel

It is not normally possible to receive VHF Volmet while abroad. However, certain short-wave portable radios with an SSB function may be able to receive the regular HF transmissions of METAR and airfield information from the RAF on 5,450 kHz and 11,253 kHz. These cover major military aerodromes in the UK and abroad. TAFs and METARs for major civilian aerodromes are broadcast from Shannon on 3,413 kHz (night only), 5,505 kHz and 8,957 kHz (24 hours), and 13,264 kHz (day only).

VHF European VOLMET

VHF VOLMET is primarily designed for international commercial IFR operations. Each Broadcast should have a mean range of 200 NM at FL300. Coverage at low levels will be significantly less than this. In addition to London Main, North and South, as well as Scottish VOLMET, the following broadcasts may be received in some parts of the UK.

AMSTERDAM 126.200 MHz	BRUSSELS 127.800 MHz	DUBLIN 127.000 MHz	PARIS 126.000 MHz
Amsterdam Rotterdam Brussels Düsseldorf Paris/CDG London/Heathrow London/Gatwick Copenhagen Hamburg	Brussels Oostende London/Heathrow Luxembourg Amsterdam Paris/Orly Frankfurt Cologne-Bonn Düsseldorf	Dublin Shannon Cork Belfast Glasgow Prestwick Manchester London/Heathrow London/Gatwick	Paris/CDG Paris/Orly Lyon/Satolas Geneva Zurich London/Heathrow London/Gatwick Brussels Amsterdam

Aerodrome terminal information service (ATIS)

Certain aerodromes provide weather and/or aerodrome information by telephone, although not necessarily as a 24-hour service:

Birmingham ATIS	0121 780 0910
Coventry ATIS	024 7633 2668
East Midlands ATIS	0906 851 7567
Edinburgh ATIS	0131 339 2823
Edinburgh MET	0131 339 7950
Glasgow ATIS	0141 887 7449
Guernsey MET	01481 238957
Humberside MET	01652 682020
Inverness ATIS	01667 464255
Jersey MET	0907 155 7777
Kirkwall ATIS	01856 878476
London City ATIS	020 7646 0224
London Stansted ATIS	01279 669325
Manchester ATIS	0161 499 2324
Middle Wallop ATIS	01980 674142
Southampton MET	023 8062 7103
Stornoway ATIS	01851 707444
Wick ATIS	01955 607596

Important telephone numbers

- Accident reporting, AAIB (DETR)
Tel: 01252 512299 Fax: 01252 376999
- Emergency Alerting (Distress & Diversion) Cell, LATCC (NATS)
Tel: 01895 426150
- Airprox reporting, UKAB
Tel: 01895 815121/2/5/8 Fax: 01895 215124
- Occurrence reporting, Safety Data Dept (CAA)
Tel: 01293 573220 Fax: 01293 573972
- Confidential Human Factors Incident Reporting (CHIRP)
Tel: 0800 214645 (*UK only*)/01252 395013 Fax: 01252 394290

Other useful numbers

- Aircraft registration (CAA)
Tel: 020 7453 6666 Fax: 020 7453 6670
- C of A Permits to fly, Apps & Certs (CAA)
Tel: 01293 768374 Fax: 01293 573860
- Enforcement of regulations (CAA)
Tel: 020 7453 6193 Fax: 020 7453 6175
- Exemptions, permissions, etc., GAD (CAA)
Tel: 01293 573517 Fax: 01293 573973
- GA design certification (CAA)
Tel: 01293 573063 Fax: 01293 573976
- Library (CAA)
Tel: 01293 573725 Fax: 01293 573181
- Medical Division (CAA)
Tel: 01293 573700 Fax: 01293 573995
- NOTAMs and aeronautical information, AIS (NATS)
Tel: 020 8745 3450 Fax: 020 8745 3453
- Personnel licensing (CAA)
Tel: 01293 573700 Fax: 01293 573996
- Publications
Most are available on the CAA web site
www.caa.co.uk/publications
Printed copies available through Documedia Solutions, Cheltenham
Tel: 01242 235151 Fax: 01242 584139
CAA publications listed on documedia's website: www.documedia.co.uk
- Safety Promotion, GASIL, etc. GAD (CAA)
Tel: 01293 573225 Fax: 01293 573973

The SRG of the CAA has its own web site at www.caa.co.uk/srg, which includes safety promotion information including GASIL and all SafetySense leaflets at 'general aviation – information'.

CAA maintenance standards

For matters relating to aircraft maintenance, contact your regional office.

Aberdeen Tel: 01224 793530 Fax: 01224 724387	Heathrow Tel: 020 8260 2950 Fax: 020 8260 2951	Manchester Tel: 0161 499 3055 Fax: 0161 499 3048
East Midlands Tel: 01332 813400 Fax: 01332 850335	Irvine Tel: 01294 204840 Fax: 01294 312053	Stansted Tel: 01279 466747 Fax: 01279 466757
Gatwick Tel: 01293 828220 Fax: 01293 824014	Luton Tel: 01582 410304 Fax: 01582 457961	Weston-super-Mare Tel: 01934 529850 Fax: 01934 522068

SRG maintenance requirements and policy

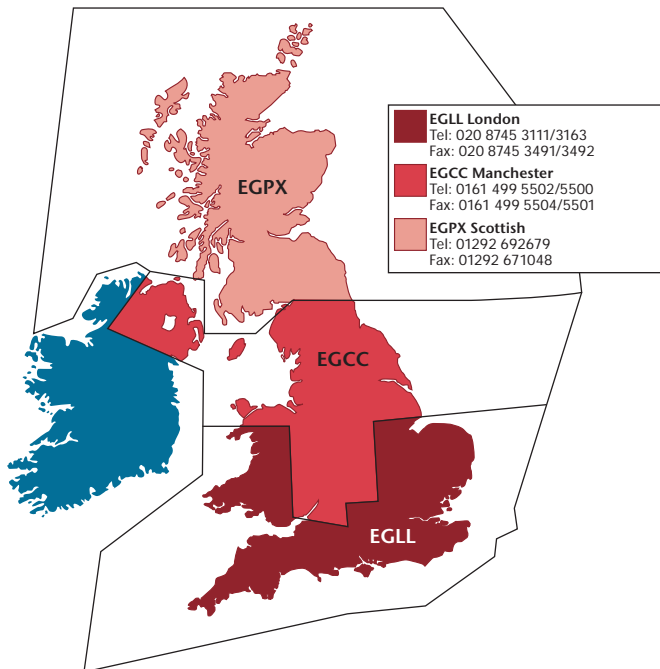
Tel: 01293 573368
 Fax: 01293 573984



Sending flight plans

Guidance for completing flight plans is contained in AIP at ENR 1.10.3 and SafetySense leaflet 20.

If your home aerodrome does not have an ATS unit, you may phone or fax your ICAO flight plan (form templates can be downloaded from the AIS web site www.ais.org.uk) to the master ATS unit, as listed below. The same numbers may be used to close a flight plan, or to cancel a state of emergency after landing if you have been unfortunate enough to need to declare one. They can also be used by the nominated 'responsible person' in the event of an aircraft not arriving at its destination.



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*UK only



METEO FRANCE

Voice server: 0 892 68 10 13 (or + 3 892 68 10 13 from outside France)

This telephone answering service provides you with forecasts (in French) for VFR flights. By dialling the number of the French administrative Département you're interested in, you will get complete information updated three or four times a day, depending on the season. The forecasts include:

- briefing of the general meteorological situation over the met. region in which the selected Département is located (France is divided into seven met. regions), hazardous phenomena, surface and upper winds, 0 °C level, turbulence if any;
- briefing on forecast tendency for the met. region;
- detailed forecasts on significant weather, visibility and height of clouds for the area in which the selected Département is located (France is divided into 14 areas, divided into 60 zones).



Call charges are €1.35 for access plus €0.34/minute.

Speak to a forecaster (24 hrs): 08 99 70 12 15

If you need clarification or more information about the weather (now casting or planning forecast), this number puts you in touch with an experienced aviation forecaster (French speaking) for the region you are calling.

Call charges are €1.35/minute for access, plus €0.34/minute.



METEO FRANCE

To use the following services, you need a personal access code. In order to obtain this free service, send your request, with a copy of your pilot's licence, to:

Météo-France – DP/SERVICES – codes aéronautiques – 42, Avenue Coriolis
F-31057 TOULOUSE Cedex FRANCE or by e-mail: serv-code@meteo.fr

Aerofax® – 05 61 07 84 85 (or + 33 5 61 07 84 85 from outside France)

Dial-up for forecasts and bulletins. Aerofax provides you with TAFs, METARs, SPECI, and SIGMETs for the EUR region, significant weather charts for EUROCC and France areas, and associated upper-wind and temperature charts. You need a fax able to go into 'manual receive'. By dialling the number, you will receive instantly the document required. On your first call, obtain the instructions using the following sequence:

- dial 05 61 07 84 85 on your fax/telephone;
- when answered, dial your personal access code followed by «#» key;
- dial «90» and «#» key;
- after the tone, put your fax on 'receive mode'.

Aeroweb® – www.meteo.fr/aeroweb

Via the internet, you can obtain continuously updated met information:

- complete flight documentation (Global OPMET, upper winds and significant weather charts, etc.) available for most of the ICAO regions;
- forecasts for VFR flights (GAFOR and low-level forecast charts);
- specific information for gliding.

3615 METAR

This Minitel service provides you with TAFs, METARs and VFR forecasts.

Call charges are €0.34/minute.

All charges are for calls made within France.

Météo-France publishes a booklet called 'Guide aviation de Météo-France' in which you will find a complete description of available services for VFR aviation.

Ask for it at any meteorological centre in France.



Swedish Met. Services

Provided as integrated AIS/MET services

Products available

- NSWC (Nordic significant weather chart) SFC-FL400
- TAF (FC/FT)
- LLF (Low-level forecast)

Information and menu available in English
 LLF is available on automatic telephone responder
 in Sweden **020 — 58 10 00**

Telephone services: **+46 8 797 63 40**

Internet services: **www.lfv.se**

The information is available under the 'C' or under the heading 'Air Traffic Control' and Flight Planning Centre. It can also be found under '5 shortcuts to Flight Information'.

Products available

- TAF (FC/FT)
- METARs and SIGMETs for Europe
- LLF (Low-level forecast)
- Upper winds
- NSWC
- NOTAMs for Sweden, Norway, Denmark and Finland



Swedish products available

TAFs and METARs

ESDB, ESDF, ESGG, ESGJ, ESGP, ESGT, ESKN, ESMK, ESMQ, ESMS, ESMT, ESMX, ESNG, ESNK, ESNN, ESNO, ESNQ, ESNS, ESNU, ESOE, ESOK, ESOW, ESPA, ESPC, ESSA, ESSB, ESSD, ESSL, ESSP, ESSV, ESTL

METARs only

ESSF, ESGR

Low-level forecasts are available for Sweden FIR.

The forecast is divided into three main areas: area A, B and C
(for extension, please consult Swedish AIP GEN 3-5-9).

Hours of validity (UTC)

When Swedish Summer Time is applied: 04-10, 07-13, 10-16, 13-19

Rest of the year: 05-11, 08-14, 11-17, 14-20

NSWC — Nordic significant weather chart

Hours of validity (UTC)

0500 (When Swedish Summer Time is applied, rest of the year 0600)

0900, 1200, 1500, 1800, 2100



Denmark and Faeroe Islands

General

The Danish Meteorological Institute (DMI) is responsible for the provision of meteorological services for civil aviation in Denmark, the Faeroe Islands and Greenland.

At all aerodromes, met. information (incl. flight documentation) can be obtained at the airport office, and at Copenhagen (København)/Kastrup (EKCH) at the AIS briefing office. Aerodrome met. offices are only established at military and combined civil/military aerodromes including Aalborg (EKYT), Karup (EKKA) and Vojens/Skrydstrup (EKSP). These met. offices are located at the military site of the aerodromes and the operating hours are limited to Mon-Fri except holidays (within hours given in AIP).

Briefing/consultation (H24) — Tel: +45 39 15 72 72

The central forecasting office (VTC) located at the DMI office, Copenhagen, provides met. services to flights operating from aerodromes in Denmark and the Faeroe Islands, where no aerodrome met. office is established and outside the operation hours of other aerodrome met. offices.

Self-briefing facilities — <http://opmet.dmi.dk>

Flight documentation (OPMET) is available via the internet. The information is updated continuously and consists of:

- data in alphanumeric form, i.e. TAFs, METARs, SIGMETs, upper winds, etc., which can be obtained as single messages, collected in lists or for specified routes;
- aeronautical meteorological charts for upper winds, upper-air temperatures and significant weather, etc. Most of the products are based on data distributed within the World Area Forecast System (WAFS) and are available for most of the ICAO regions.



Access to OPMET is restricted to aviation users for planning of flights operating from aerodromes within the Danish area of responsibility. Passwords can be obtained by application in writing to DMI, or by e-mail to: opmet@dm.dk

METARs and **TAFs** are available during aerodrome operational hours as follows:

Aerodrome	ICAO	METAR	TAF 9-hr	TAF 18/24-hr
Aalborg	EKYT	X (H24)	X	X
Aarhus	EKAH	X	X	
Billund	EKBI	X (H24)	X	X
Bornholm/Rønne	EKRN	X	X	
Esbjerg	EKEB	X	X	
Karup	EKKA	X (H24)	X	
Kolding/Vamdrup	EKVD	X		
København/Kastrup	EKCH	X (H24)	X	X
København/Roskilde	EKRK	X (H24)	X	
Lolland-Falster/Maribo	EKMB	X	X	
Odense	EKOD	X	X	
Sindal	EKSN	X	X	
Skive	EKSV	X	X	
Stauning	EKVJ	X	X	
Sønderborg	EKSB	X	X	
Thisted	EKTS	X	X	
Vagar/Faeroe Islands	EKVG	X	X	
Vojens/Skrydstrup	EKSP	X (H24)	X	

Danish Meteorological Institute Lyngbyvej 100 DK-2100 Copenhagen Ø
 Tel: +45 39 15 75 00 Fax: +45 39 27 10 80
 E-mail: dmi@dm.dk www.dmi.dk



In Belgium, the meteorological service of Belgocontrol is responsible for the provision of meteorological information for civil aviation.

Airports and products

Name	ICAO	telephone meteo briefing	briefing office ³	METAR/ SPECI	TREND	TAF (FC)	TAF (FT)
Brussels-National	EBBR	+32 (0)22 06 28 50 ¹ +32 (0)90 28 81 73 ²	X (1st floor)	X	X	X	X
Charleroi/Brussels-South	EBCI	+32 (0)71 25 12 24	X	X		X	
Liège	EBLG	+32 (0)42 34 85 73	X	X	X	X	X
Antwerp	EBAW	+32 (0)32 85 69 16	X	X		X	
Ostend	EBOS	+32 (0)59 55 14 52	X	X		X	X
Spa	EBSP			X ⁴			
St.-Hubert	EBSH			X ⁴			

¹ : meteo briefing + consultation for IATA users

² : meteo briefing + consultation for general aviation, ballooning, glider flying (appr. 1 Euro/min)

³ : the flight documentation for scheduled and routine flights consists of significant weather charts, forecast upper wind and temperature charts, TAFs, SIGMETs

⁴ : not during night-time

Other products

- **SIGMETs** are available for Brussels FIR whenever appropriate.
- **Low-Level Significant Weather Charts** are available for Brussels FIR at hours of validity (UTC) 0300 (only in summertime period), 0600, 0900, 1200, 1500 and 1800. Charts are available 4 hours before hour of validity.
- **Low-Level Forecasts** are available for Brussels FIR for validity periods (UTC) 03-09 (only in summertime period), 06-12, 12-18 and 15-21. Forecasts are available 30 minutes before beginning of validity period.
- **Glider Flying Bulletins** are available for the Belgian territory only on weekends, public holidays and during school holidays in summertime period. They are available from 0900 LT and are valid until sunset.
- **Ballooning Bulletins** are available for the Belgian territory for validity periods (UTC) 06-12 and 12-18* in wintertime period and 03-12 and 12-18* in summertime period (*: or sunset, the latest of the two is withheld) Bulletins are available 30 minutes before beginning of validity period.



Services

Polling fax is available for:

■ **General aviation +32 (0)22 06 28 57**

Contents: Low-Level Forecast, Low-Level Significant Weather Chart, Forecast Upper Wind and Temperature Charts for FL 050 and FL100, TAFs and SIGMETs
Availability: At 0400 (only in summertime period), 0700, 1000, 1300 and 1600 UTC

■ **Ballooning +32 (0)22 06 28 58**

Contents: Ballooning Bulletin, Low-Level Forecast, Low-Level Significant Weather Chart and TAFs
Availability: At 0200 and 1130 UTC in summertime period and at 1130 UTC in wintertime period

■ **Glider flying +32 (0)22 06 28 59**

Contents: Glider Flying Bulletin, Low-Level Forecast, Low-Level Significant Weather Chart and TAFs
Availability: On weekends, public holidays and during school holidays in summertime period from 0900 LT

The Belgocontrol internet site (www.belgocontrol.be) offers both flight briefing and meteorological information to professional as well as non-professional pilots, glider flyers and ballooners. The service is free of charge, but restricted to registered visitors.

The following products are disseminated via the internet:

- TAFs
- METARs
- SIGMETs
- Significant Weather Charts
- Low-level Significant Weather Charts
- Low-level Forecasts
- Upper Wind and Temperature Charts
- Glider Flying Bulletins
- Ballooning Bulletins

Brussels EUR OPMET Database can be interrogated via the AFTN network (AFTN address: EBBRYZYX). The database contains the latest METAR, SPECI, SIGMET and TAF messages for all the major airports/FIRs worldwide. For more information please consult the ICAO EUR OPMET Database catalogue, Part Brussels (<ftp://ftp.belgocontrol.be/meteo/europmetdb>).

Climatological information can be obtained from:

Belgocontrol Meteorological Service Brussels National Airport B-1930 Zaventem Belgium
or via: FAX: +32 (0)22 06 28 09.



Weather Professionals in the Channel Islands

0900 665 0033 for the Channel Islands Local Area Flight Forecast – calls cost £0.50p per minute

0907 155 7777 to speak to the Duty Forecaster – calls cost £1.50 per minute

0900 and 0907 numbers obtainable in the Channel Isles and UK only



Our new 'Weather to Go' Service obtainable from anywhere in Europe on 01534 492256 (number may change in 2004 – details not known at time of press)

£3.00 per fax or e-mail copy of the Local Area Flight Forecast and Channel Isles TAFs – (EGJJ, EGJB, EGJA).

£5.00 per call for unlimited consultancy with the Duty Forecaster.

Note: we will only handle enquires relating to flights departing from the Channel Isles or weather and TAFs in the Channel Islands area for flights terminating in the Channel Isles.

Local Area Flight Forecast and local Channel Isles TAFs are also available on our internet site:

<http://www.jerseymet.gov.je>



Norwegian Meteorological Institute (met.no) is the meteorological authority and responsible supplier of Norwegian weather services for aviation.

Meteorological service for aviation is an implemented tailor-made part of the area of responsibility covered by the **Norwegian Air Traffic and Airport Management**

met.no's weather services for aviation include:

- Meteorological observations (METAR/SPECI)
- Landing forecasts (TREND)
- Terminal Aerodrome Forecasts (TAF)
- Meteorological Watch Service
- Area forecasts (IGA-forecasts)
- Significant weather charts (SIGWX)
- Warnings (SIGMET, ICE-MESSAGE)
- Route forecasts for helicopter offshore flights
- Upper wind and temperature forecasts
- Information, briefing and consultation service
- Special forecasts according to need, if/when requested

Norwegian Meteorological Institute PO Box 43
Blindern N-0313 OSLO Norway
Tel: +47 22 96 30 00 Fax: +47 22 96 30 50
www.met.no

met.no's watch office	ICAO ID	Tel no	Telefax no
Bergen met. forecasting centre	ENVV	55 23 66 50	55 23 67 03
Oslo met. forecasting centre	ENMI	22 69 25 62	22 69 25 03
Tromsø met. forecasting centre	ENVN	77 68 40 44	77 68 90 03

Norwegian Meteorological Institute (met.no) Met. Office

Airport	ICAO ID	Tel no	Telefax no	E-mail address
Andøya	ENAN	76 14 27 41	76 14 23 63	andoya@met.no
Bardufoss	ENDU	77 83 02 04	77 83 02 01	bardufoss@met.no
Bodø	ENBO	75 54 27 60	75 54 27 59	bodo@met.no
Svalbard/Longyear	ENSB	79 02 38 21	79 02 16 85	svalbard@met.no
Ørland	ENOL	72 52 46 00	72 52 16 50	orland@met.no

Airports without met.no Met. Office TAF/METAR/SPECI (Limited opening hours)

Airport	ICAO ID		Airport	ICAO ID	
Alta	ENAT	●	Haugesund/Karmøy	ENHD	●
Bannak	ENNA	●	Honningsvåg/Valan	ENHV	X ●
Bergen/Flesland	ENBR		Kirkenes/Høybuktnmoen	ENKR	●
Berlevåg	ENBV	●	Kristiansand/Kjevik	ENCN	●
Brønnøysund/Brønnøy	ENBN	●	Kristiansund/Kvenberget	ENKB	●
Batsfjord	ENBS	X ●	Leknes	ENLK	X ●
Fagernes/Leirin	ENFG	●	Lista	ENLI	●
Florø	ENFL	●	Mehamn	ENMH	X ●
Førde/Bringeland	ENBL	●	Mo i Rana/Røssvoll	ENRA	●
Geilo/Dagali	ENDI	●	Molde/Arø	ENML	●
Hammerfest	ENHF	●	Mosjøen/Kjærstad	ENMS	X ●
Harstad/Narvik/Evenes	ENEV	●	Namsos	ENNM	X ●

E-mail address	Remarks
met.bergen@met.no	Watch Office for Stavanger (ENSV) FIR og Trondheim (ENTR) FIR
met.oslo@met.no	Watch Office for Oslo (ENOS) FIR
met.tromso@met.no	Watch Office for Bodø (ENBD) FIR og Bodø Oceanic FIR

METAR/SPECI	TAF	TREND
X	X	X
X	X	X
X	X	X
X	X	X
X	X	X

Offshore heliports	ICAO ID
Draugen	ENDR X
Ekofisk	ENEK
Frigg	ENFR X
Gullfaks C	ENGK
Heidrun	ENHE
Oseberg A	ENOA X
Statfjord A	ENSF X
X TAF not issued	

Airport	ICAO ID	Airport	ICAO ID
Narvik	ENNK X ●	Stord/Sørstokken	ENSO X ●
Oslo/Gardermoen	ENGM	Svolvær/Helle	ENSH ●
Røros	ENRO ●	Sørkjosen	ENSR X ●
Rørvik/Ryum	ENRM ●	Torp	ENTO ●
Røst	ENRS X ●	Tromsø/Langnes	ENTC
Rygge	ENRY	Trondheim/Værnes	ENVA
Sandane/Anda	ENSD X ●	Vadsø	ENVD X ●
Sannessjøen/Stokka	ENST X ●	Vardø/Svartnes	ENSS ●
Skien/Geiteryggen	ENSN X ●	Ørsta/Volda	ENOV ●
Sogndal/Haukasen	ENSG X ●	Alesund/Vigra	ENAL ●
Stavanger/Sola	ENZV	X TAF not issued ● TREND not issued	
Stokmarknes/Skagen	ENSK X ●		



Deutscher Wetterdienst

Deutscher Wetterdienst (DWD) is responsible for the provision of meteorological services for civil aviation in Germany.

Consultation

(H24) (German/English) — **Tel: 0190 0 77 22 0**

(Call charge: 2.05 per call and 0.12 per minute additionally)

Briefing

(H24) (German/English) — **Tel: 0190 0 88 33 3**

Information about METARs, TAFs, warnings, upper winds (no consultation)

(Call charge: 0.77 per call plus 0.12 per minute)

Briefing documents and/or information are available at briefing offices of international airports. Self-briefing terminals will be installed at most international airports during the next few years.

Self-briefing facilities

GAFOR (German)

Voice server

Northern area: **Tel: 0190 19 15 19**

Southern area: **Tel: 0190 19 16 19**

(Call charge: 0.62 per minute)

Use of general map for areas and rules of classification is necessary (see opposite)

0190 numbers are not accessible from outside Germany or from mobile phones.



FAX Service

IFR Fax: ask for list of contents: **Tel: +49 69 80 56 1**

IFR products are free of call charges

VFR Fax: ask for list of contents: **Tel: +49 69 80 56 00 02**

VFR products are not free of call charges

(Call charge: 0.77 per connection and 0.12 per minute additionally)

pc_met-Internetservice

DWD offers all the necessary information for preparing flights via the internet (members only). METARs for airports and weather stations, TAFs, warnings for a chosen route, radar and satellite pictures, wind and significant weather charts, GAFOR (graphics), etc.

Registration is via www.flugwetter.de "Anmeldung", price for 12 months: 87.00 (incl. VAT).

WAP Service

Pilots can ask for METARs and TAFs via WAP-enabled mobile phones.

The address is: wap.pcmnet.de

Calls to GAFOR are only possible for registered internet customers (see above).

DWD publishes a folder called *Unsere Dienste für die Luftfahrt* in which you will find a table of all available telephone numbers and a small general map for GAFOR. Ask for it at any met. office in Germany or at Luftfahrt@dwd.de



The Netherlands

General

The Royal Netherlands Meteorological Institute (KNMI) is responsible for the provision of meteorological services for civil aviation in the Netherlands (EHAA FIR).

The central forecasting office, and appointed Meteorological Watch Office (MWO EHDB) for Amsterdam FIR, is located at the KNMI office in De Bilt. The MWO provides meteorological services to flights operating from aerodromes in the Netherlands, where no aerodrome met. office is established, and outside the operating hours of other aerodrome met. offices.

Briefing/consultation (H24) by MWO, is only available by calling from within the Netherlands at a rate of approximately €0.50 per minute.

VFR tel: 0900-202 33 41

IFR tel: 0900-202 33 43

Self-briefing facilities

Meteorological self-briefing systems containing flight documentation are available at the met. offices at aerodromes EHAM, EHBK, EHEH, EHGG, EHLE and EHRD.

The information is updated continuously and consists of:

- data in alphanumeric form (OPMET), i.e. TAFs, METARs, SIGMETs which can be obtained as single messages, collected in lists or for specified routes;
- aeronautical meteorological charts for upper winds, upper-air temperatures and significant weather, Amsterdam FIR weather radar, satellite images, etc. Most of the products are based on data distributed within the World Area Forecast System (WAFS) and are available for most of the ICAO regions.

At all other airports meteorological information can be obtained at the airport office. Dutch users can obtain aeronautical information via the internet, www.aviationweather.nl. Access is restricted to aviation users planning flights operating from aerodromes within the Dutch area of responsibility.



Aerodrome	ICAO	METAR	TAF 9-hr	TAF 18/24-hr
Ameland	EHAL			
Amsterdam Airport Schiphol	EHAM	X (H24)	X	X
Budel	EHBD			
Den Helder Airport	EHKD	X (H24)	X	
Drachten	EHDR			
Eindhoven (military)	EHEH	X	X	
Groningen Airport Eelde	EHGG	X (H24)	X	
Hilversum	EHHV			
Hoogeveen	EHHO			
Lelystad Airport	EHLE	X	X	
Maastricht Aachen Airport	EBBK	X (H24)	X	X
Midden Zeeland	EHMZ			
Noordoostpolder	EHNP			
Rotterdam Airport	EHRD	X (H24)	X	X
Seppe	EHSE			
Teuge	EHTe			
Texel	EHTX			
Twenthe (military)	EHTW	X	X	

KNMI Aviation Department (LO&M) PO Box 201 3730 AE DE BILT

Tel: +31 30 22 06 721 Fax: + 31 30 22 11 371

E-mail: aviation@knmi.nl www.knmi.nl



Ireland

In Ireland the meteorological service, Met Éireann, is responsible for the provision of meteorological information for civil aviation. At all major aerodromes meteorological information can be obtained at the airport office/self-briefing units. The Central Aviation Office is located at Shannon airport.

Products available include:

Weatherdial Fax

Automated weather forecasts, updated regularly, available by fax. Includes METARs and TAFs for Ireland, UK and northern France. Local Area Forecasts (LAFs) for Irish regional airports.

To access Weatherdial Fax call **1570 131 838**, product code **0400** (aviation calls are charged at €1.27 per minute).

MetFax

MetFax allows customers to have customised aviation weather data faxed to a number of their choice either on a routine or non-routine basis. The service costs €2.50 per page plus a €2 service charge. To set up a MetFax account dial **+353 61 712950**.

OPMET data

Call **1570 20 21 22** for TAFs, METARs and SIGMETs. Calls are charged at €1.27 per minute.

Forecaster briefing

Call **1570 234 234** for direct contact with a forecaster for a briefing, or further clarification on any information supplied. Calls are charged at €1.27 per minute.

The above numbers are only accessible from the Republic of Ireland.

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For more information, contact the Met Office:

Tel: 0870 900 0100 Fax: 0870 900 5050

E-mail: aviation@metoffice.com www.metoffice.com/aviation



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