

GEN 2.3 — CHART SYMBOLS

AERONAUTICAL CHART SYMBOLOGY

Aerodrome - Civil	
Aerodrome - Civil, limited or no facilities	
Helicopter - Civil	
Aerodrome - Government, available for Civil use	
Aerodrome - Government	
Helicopter - Government	
Aerodrome - Disused or Abandoned	
Aerodrome Traffic Zone	
Regulated Airspace from the surface to 2000ft above the level of the aerodrome within a circle centred on the notified mid-point of the longest runway, radius 2NM (RW<1850m) or 2.5NM (RW>1850m).	
Aerodrome Elevation	250
Numerals adjacent to aerodrome indicate elevation of aerodrome in feet Above Mean Sea Level	
Customs Aerodromes	<u>MANCHESTER</u>
Distinguished by a pecked line around the aerodrome name	
Glider Launching Site	
Primary activity at locations	cables
Additional activity at locations	cables
cables indicate winch launch	
Winch Launch Activity (Hang Gliding & Parascending Parachute)	
Primary activity at locations	cables
Additional activity at locations	cables
cables indicate winch launch	
Foot Launch Site	
Microlight Flying Site	
Free Fall Parachuting Site with DZ circle	
Aeronautical Ground Light	
Marine Light	
Lightship	
VHF Omnidirectional Radio Range	VOR
Distance Measuring Equipment	DME
Co-located VOR and DME	VOR/DME
UHF Tactical Air Navigational Aid	TACAN
Non-directional Radio Beacon	NDB and NDB(L)
Radio Marker Beacon or other Navigational Aid	
VOR with compass Rose Orientated on Magnetic North	

A	B3 A FL45+
D	CTR D SFC-2000'ALT CTA D 2500'-3500'ALT
E	TMA E 2000'-6000'ALT
F	N571D F FL55-FL235
G	All airspace not covered by classes A-F.....
Low Level Corridor or Special Route	750'-2500'ALT
Radar Advisory Service Zone or Area	
Air Traffic Services Unit (ATSU) Area	
Altimeter Setting Region Boundary (ASR)	++ ++ ++ ++
Military Aerodrome Traffic Zone (MATZ)	
Reporting Point	
Special Access Lane Entry/Exit	E/E LIVERPOOL
Instrument Approach Procedure (IAP) outside Regulated Airspace	
Visual Reference Point (VRP) Notified in UK AIP	VRP SANDBACH
Airspace Restrictions	
Prohibited - 'P', Restricted - 'R' and Danger Area - 'D'. Danger Areas activated by NOTAM are shown with broken boundary line	
High Intensity Radio Transmission Area (HIRTA)	
Bird Sanctuary or GVS	
Area of Intense Air Activity (AIAA) and Aerial Tactics Area (ATA)	
Exceptionally High Obstacle (Lighted) 1000' AGL or more	1978 (1031) 2297 (1050)
Single Obstacle (Unlighted)	825 (350)
Multiple Obstacle (Lighted)	1614 (505)
Numerals in italics indicate elevation of top of obstacle Above Mean Sea Level. Numerals in brackets indicate height of top of obstacle above local Ground Level	
Cable Joining obstacles	
Spot Elevation	• 1525
Highest Elevation on chart	• 2595
Isogonic Line or Isogonal	6.5°W

17.1.00

GEN 2.3 — CHART SYMBOLS

ADDITIONAL SYMBOLS FOR THE ICAO 1:500,000 & 1:250,000 TOPOGRAPHICAL AIR CHARTS

A	
C	
D	
E	
Aerodrome Traffic Zone (ATZ)	
High Intensity Radio Transmission Area (HIRTA)	
Gas Venting Sites (GVS)	
Custom Aerodromes Distinguished by a pecked line around the aerodrome name and elevation	
Exceptionally High Obstacle (Lighted) 1000' AGL or more	
Aerodromes with Instrument Approach Procedures (IAP) outside controlled airspace	
Visual Reference Point	VRP ASHFORD
Cable joining obstacles, height AGL	
Air Traffic Services Unit (ATSU) Area	
Area of Intense Aerial Activity (AIAA) and Aerial Tactics Area (ATA)	
Military Aerodrome Traffic Zone (MATZ)	
VOR Compass Rose Oriented on Magnetic North	

ADDITIONAL SYMBOLS FOR THE 1:250,000 TOPOGRAPHICAL AIR CHARTS

Aerodrome - Field limits with hard runway pattern	
Aerodrome - Field limits with runway pattern unknown or not portrayable	
Name/Elevation	Howes/168
Aerodrome - Disused or Abandoned	
Power Transmission Line	
Power Transmission Line (over 200ft AGL)	

ADDITIONAL SYMBOLS FOR AERODROME AND AIRCRAFT PARKING/DOCKING CHARTS - ICAO

Wind Direction Indicator	
Illuminated Wind Direction Indicator	
Aerodrome Reference Point	
Runway Visual Range	
Taxi Holding Position Closest to the Runway	
Other Taxi Holding Position	
Helicopter Approach Aiming Point	
Obstacle Light	
Approach Lighting, simple approach - 2 bar	
Approach Lighting	
Supplementary Lighting ...	

ADDITIONAL SYMBOLS FOR INSTRUMENT APPROACH CHARTS - ICAO













Basic Procedure	
Missed Approach Procedure	
Alternative Procedure	
Direct Arrival	
Holding Pattern	
Alternative Holding Pattern	
Lowest Holding Altitude	LHA
Initial Approach Fix	
Intermediate Fix	
Final Approach Fix	
Missed Approach Point (MAPt)	M
Step Down Fix (Plan)	
Step Down Fix (Profile)	SDF MSA
Minimum Sector Altitude	
Radio Marker Beacon	
ILS Reference Datum Height	ILS RDH 54
Procedure Aerodrome	
Aerodrome influencing traffic patterns of Procedure Aerodrome or of landmark value	
Procedure Not Below heights	2000 (1800)













17.1.00

GEN 2.3 — CHART SYMBOLS

Meteorological Charts-Explanatory Notes

1 Symbols for significant Weather, Tropopause and Freezing Level etc

	Thunderstorm
	Tropical cyclone
	Severe squall line
	Hail
	Moderate turbulence
	Severe turbulence
	Marked mountain waves
	Light aircraft icing
	Moderate aircraft icing
	Severe aircraft icing
	Freezing precipitation
	Drizzle

	Rain
	Snow
	Widespread blowing snow
	Shower
	Severe sand or dust haze
	Widespread sandstorm or duststorm
	Widespread haze
	Widespread mist
	Widespread fog
	Freezing fog
	Widespread smoke
	Volcanic eruption

Note: Altitudes between which phenomena and any associated cloud are expected are indicated by flight levels, top over base or top followed by base. 'XXX' means the phenomenon is expected to continue above and/or below the vertical coverage of the chart. Phenomena of relatively lesser significance, for example light aircraft icing or drizzle, are not usually shown on charts even when the phenomenon is expected. The thunderstorm symbol implies hail, moderate or severe icing and/or turbulence.

400

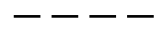
Tropopause spot altitude (eg FL400)



Boundary of area of significant weather

**H
440**

High point or maximum in tropopause topography (eg FL440)



Boundary of area of clear air turbulence. The CAT area may be marked by a numeral inside a square and a legend describing the numbered CAT area may be entered in the margin

**340
L**

Low point or minimum in tropopause topography (eg FL340)

10

State of sea (wave height in metres)





0°:100

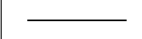
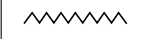
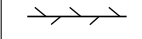

Freezing level

18

Sea surface temperature (°C)

2 Fronts and Convergence Zones

	Cold front at the surface
	Warm front at the surface
	Occluded front at the surface
	Quasi-stationary front at the surface

	Axis of trough
	Axis of ridge
	Convergence line
	Inter-tropical convergence zone

Note: An arrow with associated figures indicates the direction and the speed of the movement of the front (knots). Dots inserted at intervals along the line of a front indicate it is a developing feature (frontogenesis), while bars indicate it is a weakening feature (frontolysis).

GEN 2.3 — CHART SYMBOLS

3 Cloud Abbreviations

3.1 Type

- CI = Cirrus
- CC = Cirrocumulus
- CS = Cirrostratus
- AC = Altocumulus
- AS = Altostratus
- NS = Nimbostratus
- SC = Stratocumulus
- ST = Stratus
- CU = Cumulus
- CB = Cumulonimbus (its insertion implies hail moderate or severe icing and/or turbulence)
- LYR = Layer or layered (instead of the cloud type)

3.2 Amount

- Clouds except CB
- SKC = clear (0 okta)
- FEW = few (1/8 or 2/8)
- SCT = scattered (3/8 or 4/8)
- BKN = broken (5/8 to 7/8)
- OVC = overcast (8/8)
- CB only
- ISOL = individual CB's (isolated)
- OCNL = well separated CB's (occasional)
- FRQ = CB's with little or no separation (frequent)
- EMBD = thunderstorm clouds contained in layers of other clouds (embedded).

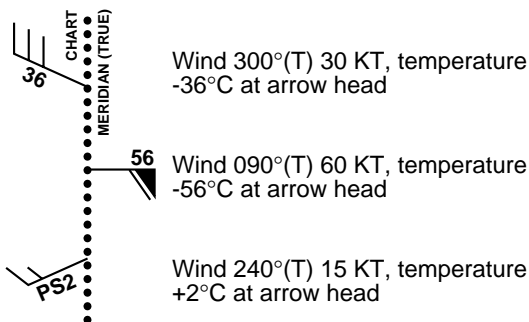
4 Example Weather Abbreviations

- RA = rain
- DZ = drizzle
- SN = snow
- SH = showers
- FZ = freezing
- TS = thunderstorms

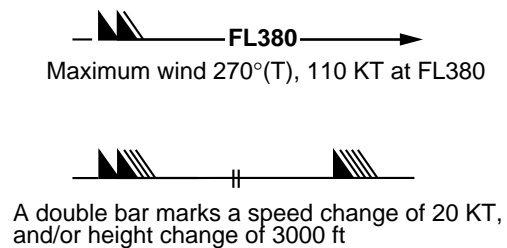
Other phenomena may be expressed as a combination of abbreviations or written in full. TS implies severe turbulence and icing.

5 Wind Symbols

5.1 Wind/Temperature Chart



5.2 Significant Weather/Tropopause/Maximum Wind Chart

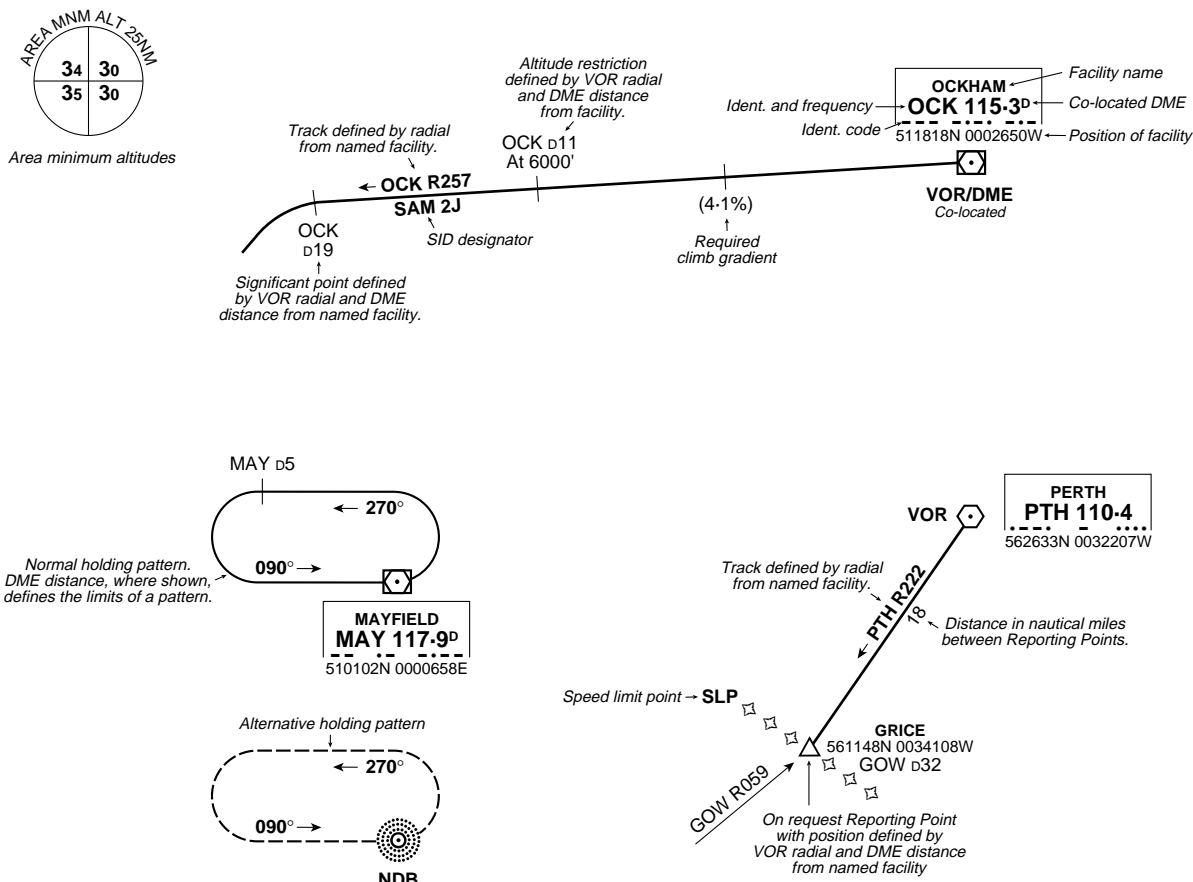


GEN 2.3 — CHART SYMBOLS

STANDARD INSTRUMENT DEPARTURE (SID) AND ARRIVAL ROUTES (STAR)

- 1 SID procedure charts are located in AD 2.
They consist of a textual description of the procedure, a graphical illustration and explanatory notes. Only aeronautical information pertinent to the procedure is shown and these charts should therefore be used together with a suitable En-route chart which gives details of Airspace Reservations, Controlled Airspace and ATS routes.
- 2 SID charts are arranged by Main Exit Points: the various runway directions which can be used to the relevant Main Exit Point will be found in one chart.
- 3 The procedure charts ARE NOT DRAWN TO SCALE.
Unless otherwise indicated:-
(a) Distances are in nautical miles;
(b) Headings, Bearings, Tracks and Radials are in degrees magnetic;
(c) Heights/Altitudes where stated are based on QFE/QNH;
(d) Horizontal datum WGS 84 (CO-ORDS in DEG MIN SEC).
- 4 Area Minimum Altitude.
The lowest altitude which will provide a minimum obstacle clearance of 1000 feet in a sector of a circle of 25NM (46KM) radius centred on the departure Aerodrome Reference Point. For all SID procedures within the United Kingdom FIRs, Area Minimum Altitudes will be shown for each quadrant of a circle of radius 25NM (46KM) centred on the departure Aerodrome Reference Point, with True North as the quadrant datum. Area Minimum Altitude is given in hundreds of feet AMSL. E.G. 23 = 2300'.
- 5 Net Climb Gradient.
The climb gradient, expressed as a percentage, that the aircraft is required to achieve to meet standard (ICAO PANS-OPS) obstacle clearance requirements, will be detailed in the textual description of the SID procedure when the required gradient is greater than 3.3% to be achieved. Procedure design gradients are annotated on charts as necessary. A table for conversion of percentage climb gradients to rates of climb for various speeds is given in the GEN 2.8 section.
- 6 Arrival Charts.
STARs or established inbound routes are shown in a similar fashion to SIDs. Tracks terminate at the main inbound holding point from which the Instrument Approach commences.

LEGEND



CHANGE NEW FORMAT

3.7.97

INTENTIONALLY BLANK