AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group

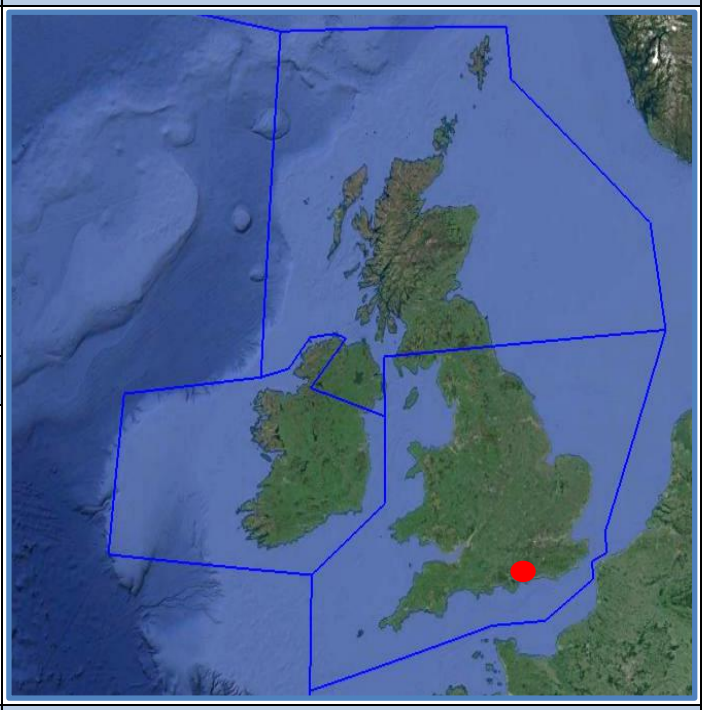
Civil Aviation Authority

ACN Reference:	Version:	Date:	Date of Original
AR-2024-2135	1.0	22/04/2024	11/04/2024

NAVAID Calibration Southampton VOR/DME FCSL

NDS

Subject to NOTAM: No

Date(s) of activity/Validity:	Times
1 Jun 24 – 31 Dec 24	0800-1700z
Vertical Limits:	**Allocated Mode 3A (SSR):**
2000ft – 4000ft	0024
Aircraft Details:	**NDS Approved:**
Type: DA62 Callsign: FlightCal 02	Yes – See Section 2
Event Sponsor(s):	**Aircraft Operator(s):**
Nicola Gunn NATS CTC 4000 Parkway, Whiteley, Fareham, PO15 7FL Nicola.gunn@nats.co.uk	Chris Tutt Flight Calibration Services Calibration House 17-19 Cecil Pashley Way Shoreham Airport Shoreham-by-Sea West Sussex BN43 5FF 01243 538245 operations@flight-cal.com
ATS Units/ Controlling Agencies:	**Geographical Limits:**
Southampton 023 8062 5875 London Terminal Control 02380 401110	
Airspace Reservations:	
Nil	
Departure/Destination Aerodrome(s)	**ACN Issued by:**
EGKA	AU3

SECTION 1: CO-ORDINATION ARRANGEMENTS (GENERAL)

1. The pilot/operator is requested to telephone the ATC authorities on the cover prior to departure in order to notify or update the sortie details including area(s) of operation and planned levels (quoting the ACN Reference). A minimum of 24 hours' notice should be given unless specified in Section 2.

2. There may be other aircraft and/or activities outside Controlled/Regulated Airspace unknown to ATC.

3. The carriage and operation of a serviceable transponder (including Mode 'C') has been specified.

4. The pilot will be responsible for obtaining all necessary ATC clearances and for maintaining R/T contact with appropriate ATC authorities.

5. The pilot/operator will be responsible for obtaining prior clearances to enter any UK Danger Areas affected by the flight profile from the appropriate Range Control Authority unless this is specifically detailed in Section 2.

6. Other Unusual Aerial Activities (UAAs) may be notified to the CAA Safety and Airspace Regulation Group (SARG) and may take place within the airspace encompassed by this flight. The pilot/operator is to ensure that UK Daily NOTAM Nav Warnings are consulted prior to each flight.

7. All flights within Controlled Airspace are subject to the requirements of a Flight Plan in accordance with UK AIP ENR1.10. The ACN Reference should be entered into Field 18 of the Flight Plan together with any relevant 'special handling' codes.

8. Flight prioritisation and Non-Deviating Status is in accordance with the information specified on the ACN Cover. Such status may be afforded to part or all of the flight – see Section 2.

9. Availability of an ATS from Plymouth Military, Swanwick Military (78 Sqn) or Western Radar is subject to unit capacity, priorities and limitations of radar and radio coverage. Minimum pre-flight notification as per UK AIP ENR 1.6 unless otherwise specified in Section 2 of this ACN.

10. The CAA actively encourages the use of Moving map technology in the planning and flying phases of flights to reduce the risk of airspace infringements.

PUBLICATIONS AND CHANGES

11. The activity area may lie within Controlled and Uncontrolled Airspace as well as airspace reserved for military use. Aircrew are to thoroughly familiarise themselves with UK airspace structures and procedures, in particular those laid down within the UK Aeronautical Information Publication (UK AIP), ENR 1.1 and be fully conversant with UK Flight Information Services in accordance with UK CAP 493 (MATS Pt 1).

12. The CAA VFR 1:500,000 and 1:250,000 charts and the UK AIP ENR 5 depict some, but not all aviation activity sites and amendments should also be checked. Please refer to http://www.nats-uk.ead-it.com

13. This ACN details specific coordination essential to the activity taking place and does not remove the need for aircraft operators to comply with national flight planning and notification procedures. Pilots and ANSPs are required to ensure that all related aviation sites are aware of this planned activity and of subsequent changes not captured within this document.

14. The Sponsor or Event Organiser should co-ordinate any changes to this ACN with SARG quoting the ACN Reference at the top of the page.

Airspace Regulation (Utilisation) – AU3
Email: AROps@caa.co.uk
Tel: 01293 983880

SECTION 2: CO-ORDINATION ARRANGEMENTS (SPECIFIC)

15. This ACN details flight profiles to complete VOR DME Calibration at Southampton.

16. **The sponsor is responsible for obtaining any required permits to fly within UK airspace; this ACN does not constitute approval to fly in UK airspace, but only outlines the coordination process/contacts to facilitate the flight.**

17. **Notification of Calibration Flight.** The sponsor is to notify the agencies listed on page one of this ACN at least 1 week prior to the planned calibration. In addition, the pilot is to contact the appropriate agencies at least 24 hours prior to confirm that the flight will still take place and again at least 1 hours prior to departure to provide final details, agree a start time and confirm availability of an Air Traffic Service (ATS).

18. **Priority.** This flight has been afforded Non-Deviating Status (NDS) whilst established on a measured run only and within Controlled Airspace (CAS), (*UK AIP ENR 1.1 (4.2) & CAP 493 – Section 1, Ch4, Para 17 refers*). Outside CAS and in between runs, the aircraft is categorised as CAT Z, (CAP 493 – Section 1, Ch4, Para 10c refers) and attracts no priority. In order to reduce the impact to other airspace users, the controlling authority may request that the pilot hold, or accept radar vectors in order to make best use of the airspace, or to reduce overall delays.

19. Measured runs will require careful management around airport movements as NDS is difficult to negotiate at such low levels. If this presents an issue the orbits may need to be conducted at 4000ft.

20. **Flight Profiles:**

Serial No	Description	Altitude/FL	Notes
A1	Position 10NM from SAM VOR/DME to commence 10NM anti-clockwise Orbit	2,000ft AMSL	2 x 360º Orbits
A2	R092 from SAM 15D to 25D	2,000ft AMSL	
A3	VOR/DME Instrument Approach Procedure for Southampton Rwy 02 as per AIP AD 2.EGHI-8-2	2,300ft AMSL	Full procedure required
A4	VOR/DME Instrument Approach Procedure for Southampton Rwy 20 as per AIP AD 2.EGHI-8-8 and 8-10	2,300ft AMSL	Full procedure required
A5	Gatwick 3P/3W SAM SID; R066 to 33D	4,000ft AMSL	Full procedure required

21. **ATS Provision – Controlled Airspace (CAS).** Access to controlled airspace is subject to the prevailing traffic situation and controller workload. The pilot is responsible for obtaining a clearance to enter controlled airspace prior to penetration.

22. **ATS Provision – Outside CAS.** The survey area is within the coverage of the following units:

a. Southampton On Request

23. Availability of an ATS from a unit is not guaranteed, is subject to controller availability, unit workload and possible reduced hours of operations. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.1, AD2 or UK Military AIP, shall be notified via NOTAM.

24. **ATS Provision above FL100.** This service is available to all aircraft flying outside Controlled Airspace in the UK FIRs between FL 100 and FL 190, and within active TRAs and is subject to Unit capacity. The Units providing this service together with their boundaries are depicted within the UK AIP on the chart ENR 6-12. ENR 1.6 (4.2) lists their hours of operation, the RTF operating frequency on which this service is normally provided and a telephone number for pre-flight contact. A FPL should be filed and include the following addresses:

a. EGZYOATT Swanwick Mil (78 Sqn)

b. EGTTZFZC Western Radar

25. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.2, shall be notified via NOTAM.

26. Between the hours of 18:00 to 08:00 (local time) on a weekday, at any time on a weekend or during a UK public holiday, Swanwick Mil (78 Sqn) require at least two weeks prior notice in order to obtain an ATS in support of this task.

27. **Air-to-Air Refuelling Areas (AARAs).** For details of the AARAs see the UK AIP – ENR 5.2. Activation is by NOTAM, and when active, information can be obtained from Swanwick Mil.

28. **Danger Areas (DAs).** Access to any DA is subject to range requirements and access is not guaranteed. The sponsor is to engage with the DA Authority at the earliest opportunity to coordinate access, noting that access may only be possible outside notified operating hours.

29. **Non-SSR Gliding Areas.** The sponsor should exercise caution when operating in these areas, as gliders without transponders may be encountered up to FL195. For info see the UK AIP: *ENR 1.1 (Para 1.12), ENR 5.2 (NSGA) and ENR6-63.*

30. **Temporary Reserved Areas (TRA).** The sponsor is responsible for complying with the requirements for access to any TRA iaw the UK AIP – ENR 1.1 (Para 5.1.5).

SECTION 3

Area of Operation

31. Charts highlighting the area of operation are shown below. These are for illustrative purposes only and not for operational planning.

Chart 1 – Serial A1 – 10nm Orbit

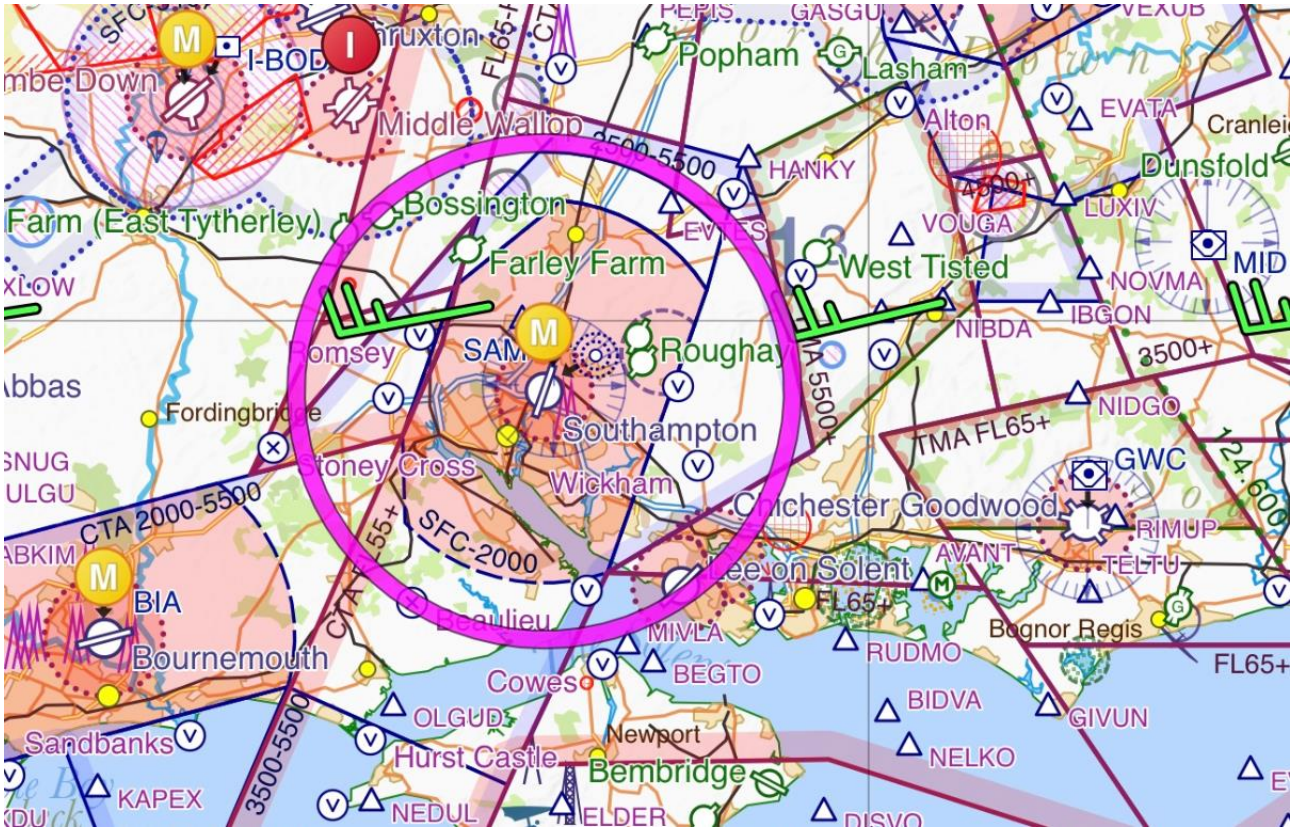


Chart 2 – Serial A2 – R092 SAM 15D to 25

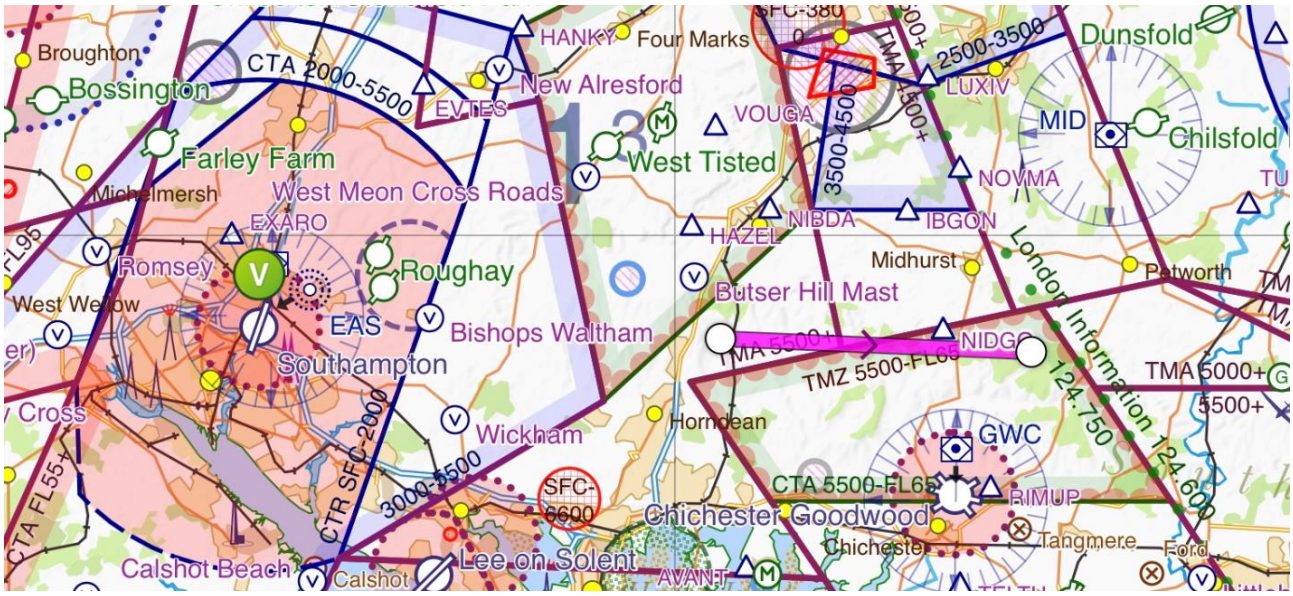


Chart 3

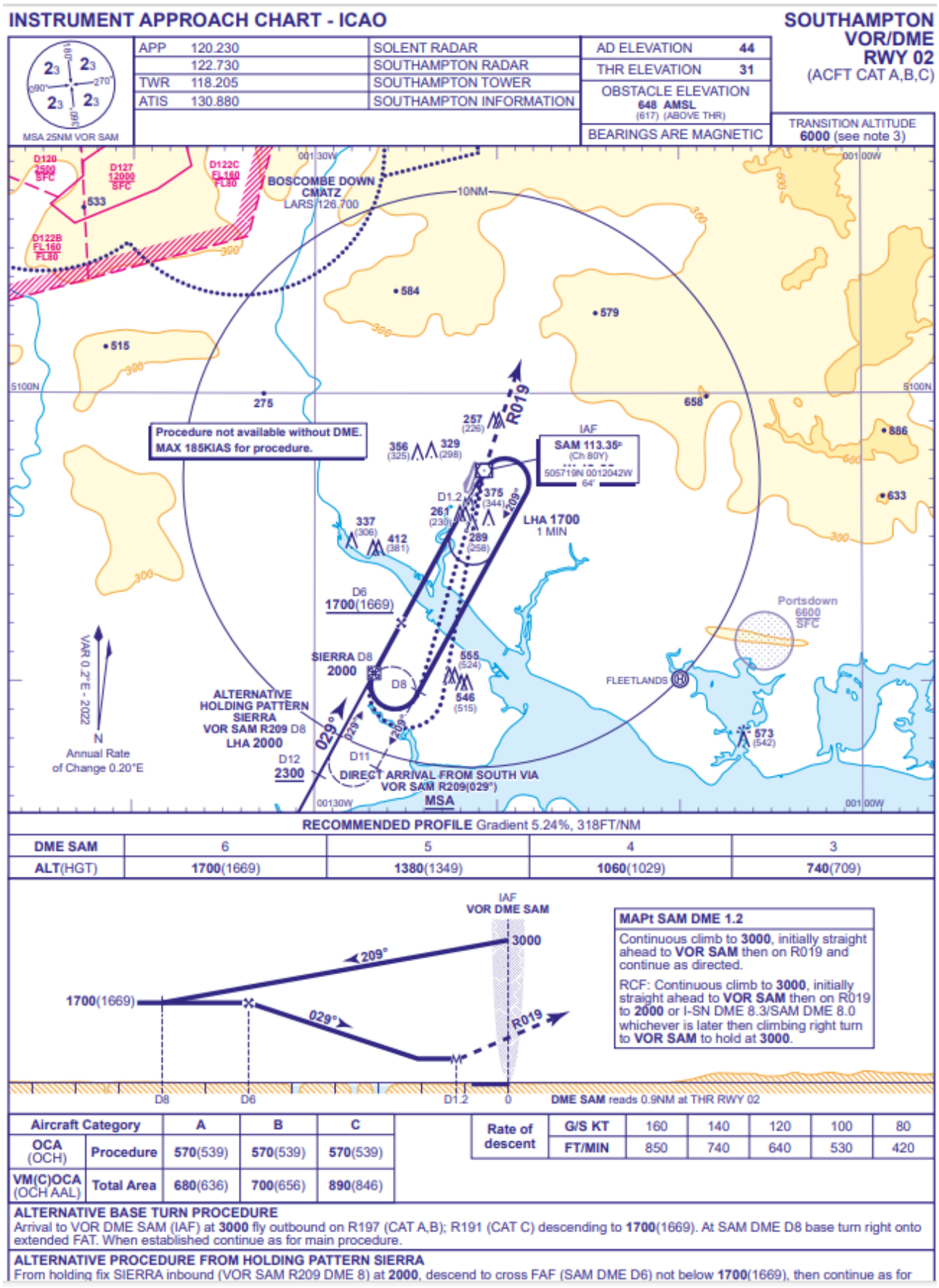

INSTRUMENT APPROACH CHART - ICAO
SOUTHAMPTON
VOR/DME
RWY 02
(ACFT CAT A,B,C)
MSA 25NM VOR SAM
APP 120.230 SOLENT RADAR
122.730 SOUTHAMPTON RADAR
TWR 118.205 SOUTHAMPTON TOWER
ATIS 130.880 SOUTHAMPTON INFORMATION
AD ELEVATION 44
THR ELEVATION 31
OBSTACLE ELEVATION
648 AMSL
(617) (ABOVE THR)
BEARINGS ARE MAGNETIC
TRANSITION ALTITUDE
6000 (see note 3)
BOSCOMBE DOWN
CMATZ
LARS 126.700
10NM
Procedure not available without DME.
MAX 185KIAS for procedure.
IAF
SAM 113.35
(Ch 80Y)
505719N 0012042W
64°
LHA 1700
1 MIN
D6
1700(1669)
SIERRA D8
2000
ALTERNATIVE
HOLDING PATTERN
SIERRA
VOR SAM R209 D8
LHA 2000
D12
2300
D11
DIRECT ARRIVAL FROM SOUTH VIA
VOR SAM R209(029°)
MSA
VAR 0.2°E - 2022
N
Annual Rate
of Change 0.20°E
FLEETLANDS
Portsdown
6600
SFC
RECOMMENDED PROFILE Gradient 5.24%, 318FT/NM
DME SAM | 6 | 5 | 4 | 3
ALT(HGT) | 1700(1669) | 1380(1349) | 1060(1029) | 740(709)
IAF
VOR DME SAM
3000
209°
029°
R019
1700(1669)
D8
D6
D1.2
0
DME SAM reads 0.9NM at THR RWY 02
MAPt SAM DME 1.2
Continuous climb to 3000, initially straight ahead to VOR SAM then on R019 and continue as directed.
RCF: Continuous climb to 3000, initially straight ahead to VOR SAM then on R019 to 2000 or I-SN DME 8.3/SAM DME 8.0 whichever is later then climbing right turn to VOR SAM to hold at 3000.
Aircraft Category | A | B | C
OCA (OCH) Procedure | 570(539) | 570(539) | 570(539)
VM(C)OCA (OCH AAL) Total Area | 680(636) | 700(656) | 890(846)
Rate of descent | G/S KT | 160 | 140 | 120 | 100 | 80
FT/MIN | 850 | 740 | 640 | 530 | 420
ALTERNATIVE BASE TURN PROCEDURE
Arrival to VOR DME SAM (IAF) at 3000 fly outbound on R197 (CAT A,B); R191 (CAT C) descending to 1700(1669). At SAM DME D8 base turn right onto extended FAT. When established continue as for main procedure.
ALTERNATIVE PROCEDURE FROM HOLDING PATTERN SIERRA
From holding fix SIERRA inbound (VOR SAM R209 DME 8) at 2000, descend to cross FAF (SAM DME D6) not below 1700(1669), then continue as for

Chart 4

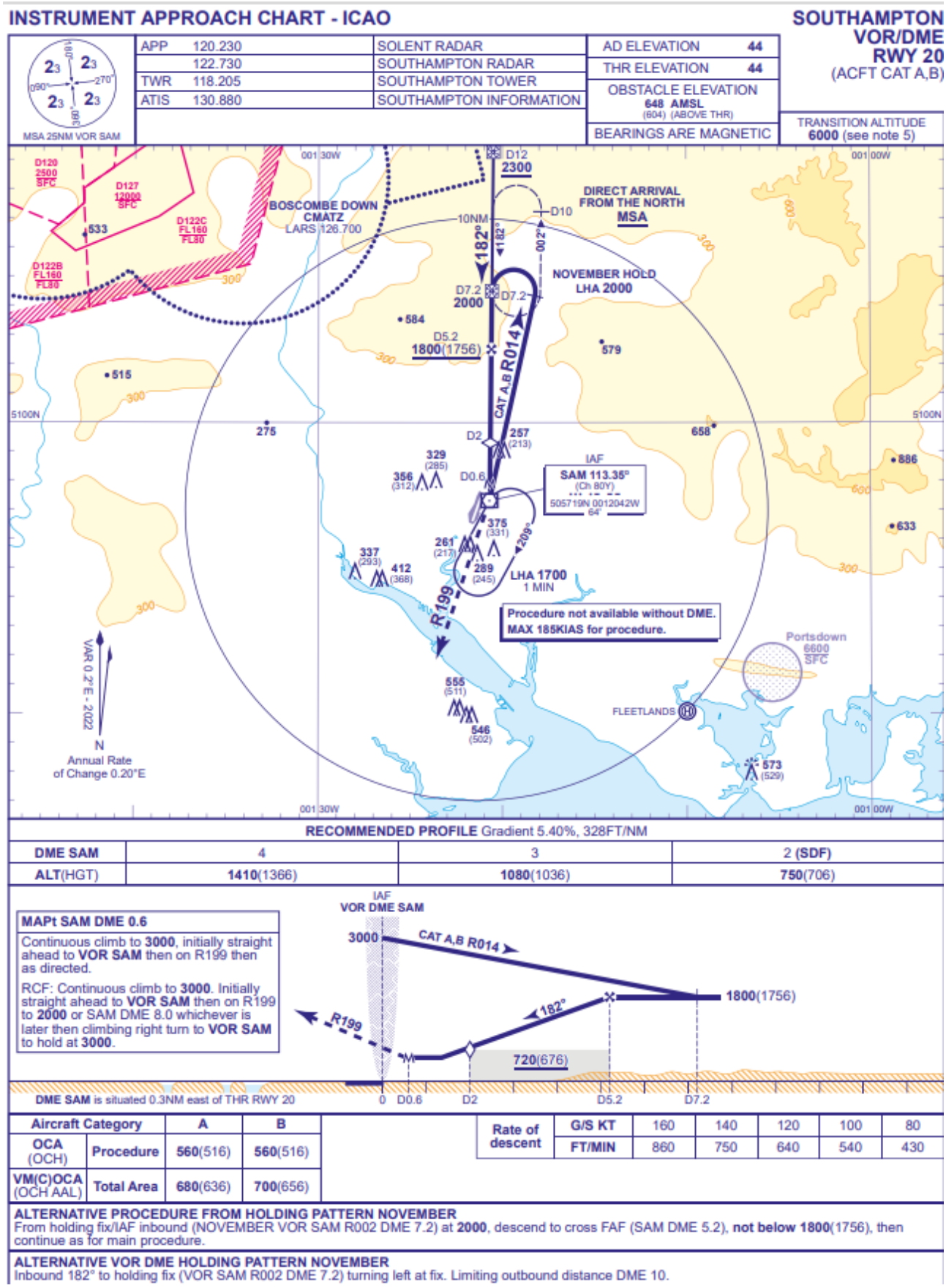
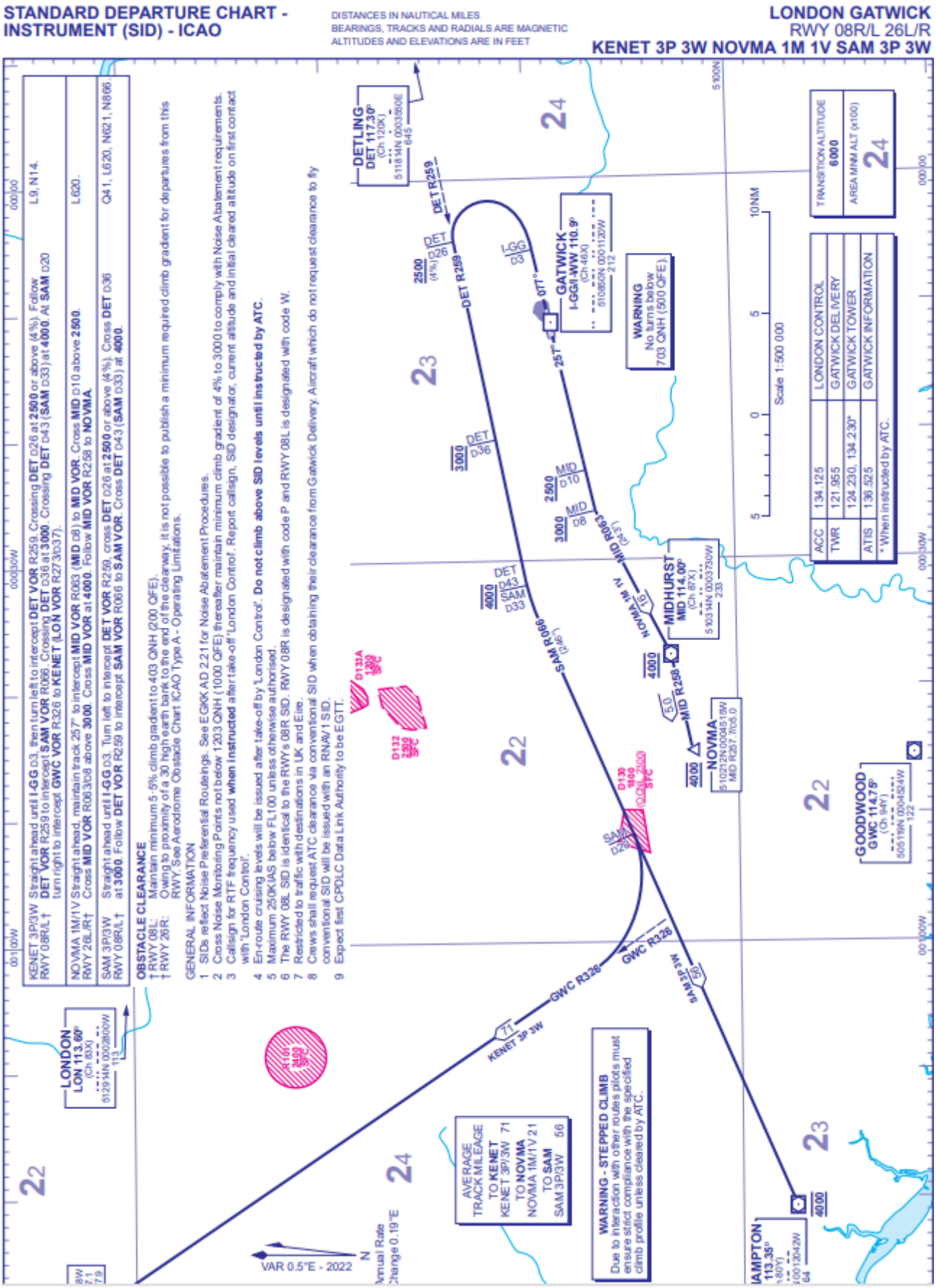

INSTRUMENT APPROACH CHART - ICAO
SOUTHAMPTON
VOR/DME
RWY 20
(ACFT CAT A,B)
APP 120.230 SOLENT RADAR
122.730 SOUTHAMPTON RADAR
TWR 118.205 SOUTHAMPTON TOWER
ATIS 130.880 SOUTHAMPTON INFORMATION
AD ELEVATION 44
THR ELEVATION 44
OBSTACLE ELEVATION
648 AMSL
(604) (ABOVE THR)
BEARINGS ARE MAGNETIC
TRANSITION ALTITUDE
6000 (see note 5)
MSA 25NM VOR SAM
BOSCOMBE DOWN
CMATZ
LARS 126.700
DIRECT ARRIVAL
FROM THE NORTH
MSA
NOVEMBER HOLD
LHA 2000
IAF
SAM 113.35°
(Ch 80Y)
LHA 1700
1 MIN
Procedure not available without DME.
MAX 185KIAS for procedure.
Portsdown
6600
SFC
FLEETLANDS
VAR 0.2°E - 2022
Annual Rate
of Change 0.20°E
RECOMMENDED PROFILE Gradient 5.40%, 328FT/NM
DME SAM 4 3 2 (SDF)
ALT(HGT) 1410(1366) 1080(1036) 750(706)
MAPt SAM DME 0.6
Continuous climb to 3000, initially straight ahead to VOR SAM then on R199 then as directed.
RCF: Continuous climb to 3000. Initially straight ahead to VOR SAM then on R199 to 2000 or SAM DME 8.0 whichever is later then climbing right turn to VOR SAM to hold at 3000.
IAF
VOR DME SAM
3000
CAT A,B R014
1800(1756)
R199
182°
720(676)
DME SAM is situated 0.3NM east of THR RWY 20
0 D0.6 D2 D5.2 D7.2
Aircraft Category A B
OCA (OCH) Procedure 560(516) 560(516)
VM(C)OCA (OCH AAL) Total Area 680(636) 700(656)
Rate of descent
G/S KT 160 140 120 100 80
FT/MIN 860 750 640 540 430
ALTERNATIVE PROCEDURE FROM HOLDING PATTERN NOVEMBER
From holding fix/IAF inbound (NOVEMBER VOR SAM R002 DME 7.2) at 2000, descend to cross FAF (SAM DME 5.2), not below 1800(1756), then continue as for main procedure.
ALTERNATIVE VOR DME HOLDING PATTERN NOVEMBER
Inbound 182° to holding fix (VOR SAM R002 DME 7.2) turning left at fix. Limiting outbound distance DME 10.

Chart 5


STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO
DISTANCES IN NAUTICAL MILES
BEARINGS, TRACKS AND RADIALS ARE MAGNETIC
ALTITUDES AND ELEVATIONS ARE IN FEET
LONDON GATWICK
RWY 08R/L 26L/R
KENET 3P 3W NOVMA 1M 1V SAM 3P 3W
OBSTACLE CLEARANCE
GENERAL INFORMATION
DETLING
GATWICK
I-GGW 110.9°
MIDHURST
MID 114.00°
NOVMA
GOODWOOD
LONDON
LON 113.60°
WARNING - STEPPED CLIMB
AVERAGE TRACK MILEAGE
VAR 0.5°E - 2022
LONDON CONTROL
GATWICK DELIVERY
GATWICK TOWER
GATWICK INFORMATION
TRANSITION ALTITUDE 6000