Flying VFR Outside the UK

What is different abroad?

- Clouds are the same ➔

- The hills are the same (or bigger) ➔

- The airplane flies the same way...

The differences are mainly planning / operational...

- Positives
  - Improves fun v. hassle ratio
  - More interesting places to fly to
    - a lot of spectacular scenery
  - Southern Europe is warmer
    - favours the use of the IMCR at the UK end
  - Southern Europe has better food ☺
  - Airspace is often more accessible
    - hardly any Class A
    - can fly much higher (Alps etc need oxygen)
    - can fly VMC on top over long distances
  - ATC is often more relaxed than UK, esp. on clearances
  - Many "big city" airports are cheap
  - Great utility value in GA travel, due to the Channel

The Swiss Alps, near Samedan, FL130

Spanish coast

Northern Spain

Right base to Corfu R35

Monte Christo Island, near Corsica

Food...

- **Negatives**
  - No UK GAR system ➔ <u>Customs</u> airport as the 1st & last stop
  - Some countries have extensive low level CAS
    - greater reliance than UK on transit clearances (but usually easy)
  - Speaking local language can help
    - especially in S. Europe
    - if comms can't be done by phone, it can take longer to sort things
  - More important to stick to correct procedures
    - unfamiliar territory needs better preparation
    - ATC tends to give less slack if they cannot speak fluently
  - Accuracy of publications can be variable
    - S. European AIPs poorly updated so Notams etc are vital
  - <u>Some</u> airports operate PNR/PPR absolutely rigidly
  - Avgas availability poor in some countries
 - No "night VFR" in some countries

Planning – same as UK

- Select airport(s)
- Obtain enroute charts, airport charts and airport data
- Route & navigation planning (GPS, VOR/DME, DR)
- Contact the airport(s) to confirm requirements
- Notams (enroute and airport)
- Get weather
- File flight plan, do PPR/PNR, GAR form
- Check documents to carry
- GO (or not ☺)

Airport Selection

- International flight ➔ <u>international</u> airports
- "International" = "Customs" in aviation terminology
- ATC at these must be capable of speaking English
  - no requirement for fluent (conversational) English
  - no requirement for English-speaking <u>ground</u> staff ☺
- "Customs" airport required for both <u>in</u> and <u>out</u> flights
  - exceptions are e.g. UK (uses the GAR system)
  - many airports have "exit" Customs only (Switzerland)
- "Customs" airport <u>not</u> required for flight
  - within a country (in Europe)
  - within the Schengen area

Schengen Area
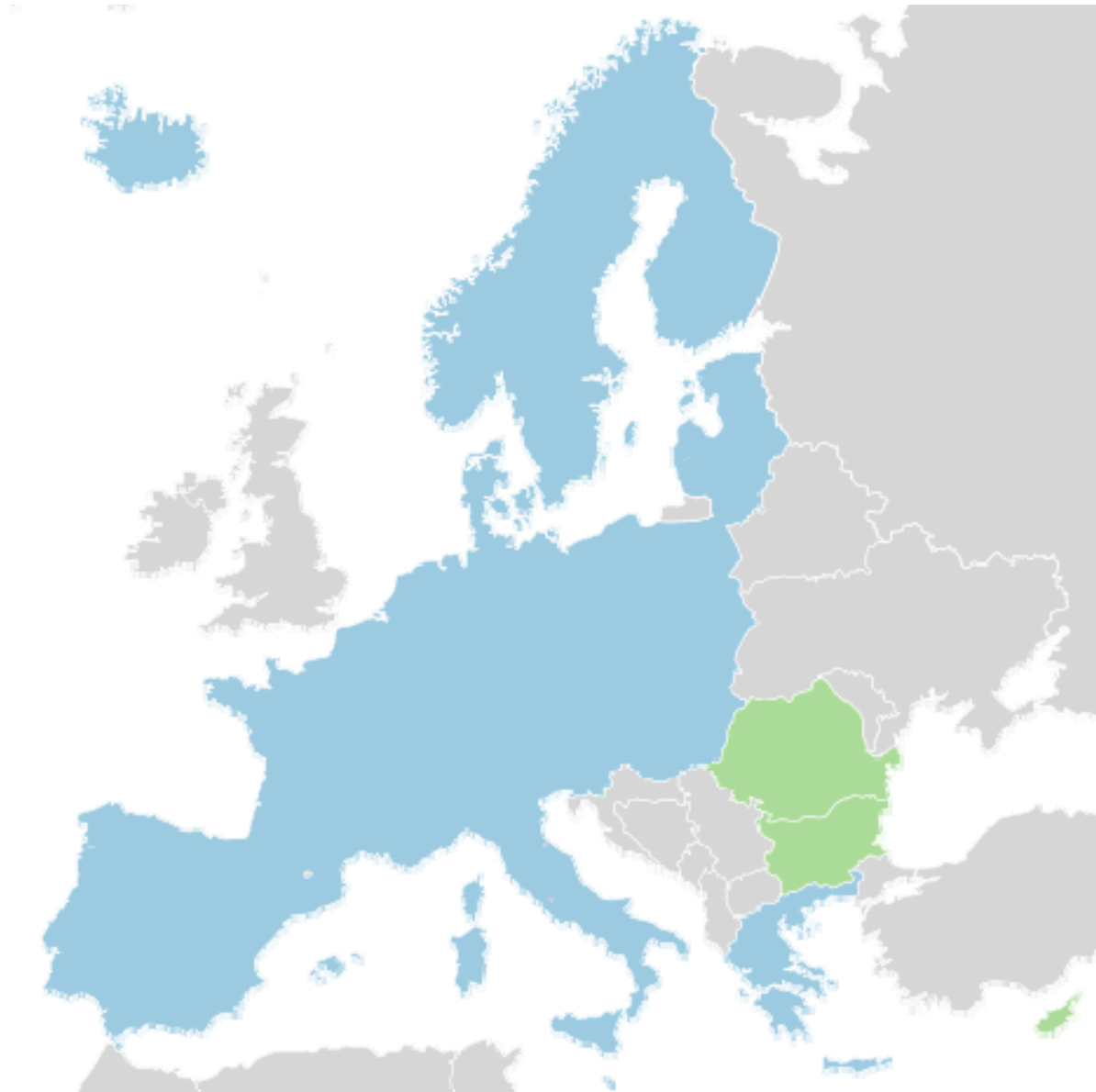
Blue: current members

Green: future members

- <u>Alternates</u> require Customs too (if non-Schengen)
  - Mayday scenario ➔ can land anywhere (but expect "interest" from police or military ☺)
  - debatable whether PNR needs to be done
    - automatic Mayday if landing clearance is refused
    - it is a "fuel below reserves" emergency (unless it isn't)
  - file a decent airport as the alternate, even if pricey
  - if you are instrument-capable, pick an airport with an IAP, preferably an ILS
  - preferably with avgas ☺
- Avgas 100LL also called "F-3" in Jeppesen guides
- Some French airports are TOTAL card only
  - mostly very small non-Customs airfields
  - may need "help" from an aeroclub member ☺
  - worth carrying enough € cash for a fill-up

- Flight <u>outside</u> Europe (except to USA)
  - not hard but there are extra logistical complications
  - permits (incl. overflight only) & visas usually required
    - airline visa waiver not available to GA flights
  - most people pay an "overflight agent" to do the lot
  - Customs airports may be required for flights <u>within</u> the country (e.g. Turkey)
  - Avgas good, sporadic .... nonexistent, and pricey
  - long range aircraft highly desirable
  - bribery necessary in most places (lots of U.S. $)
  - N-regs may not be popular (M-reg is the best ☺)
  - IFR much preferred to VFR
  - in Africa, might get eaten by cannibals ☺

VFR Enroute Charts

- NO legal requirement for a specific chart type, or even a <u>printed</u> chart
- Current <u>printed</u> charts preferred
- National "ICAO" charts (some countries)
  - beware inconsistent presentations (MSA or MEF?)
  - UK, France, Germany have good ones
  - some available in electronic form (for GPS moving maps)
- Jeppesen "VFR/GPS" charts (most of Europe)
  - best general choice (UK, France, Germany do better ones)
  - consistent across whole area, <u>MSA</u> shown
  - airspace labels sometimes ambiguous
  - poor options for GPS moving map use

German ICAO chart
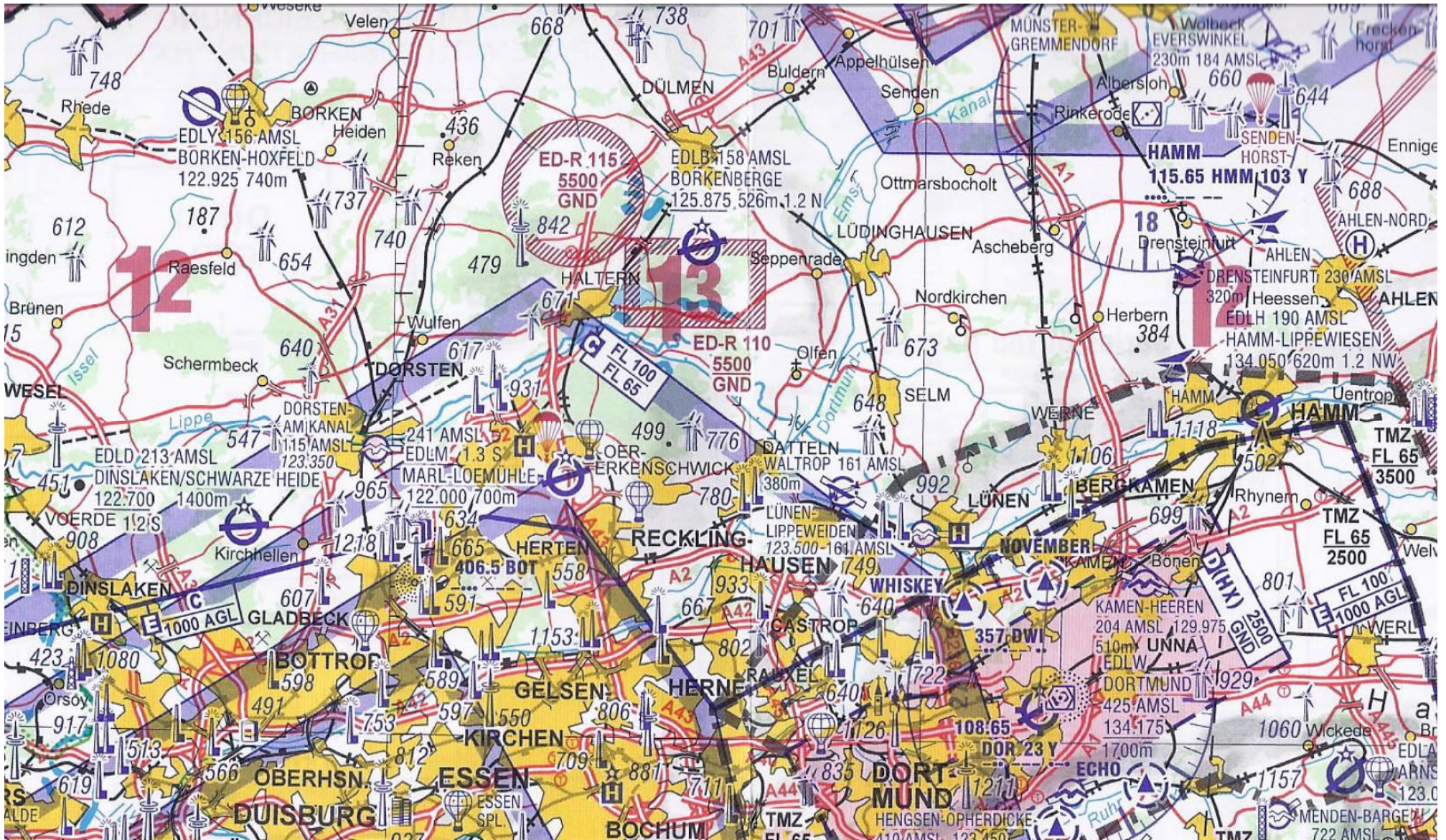
Jeppesen "VFR/GPS" chart
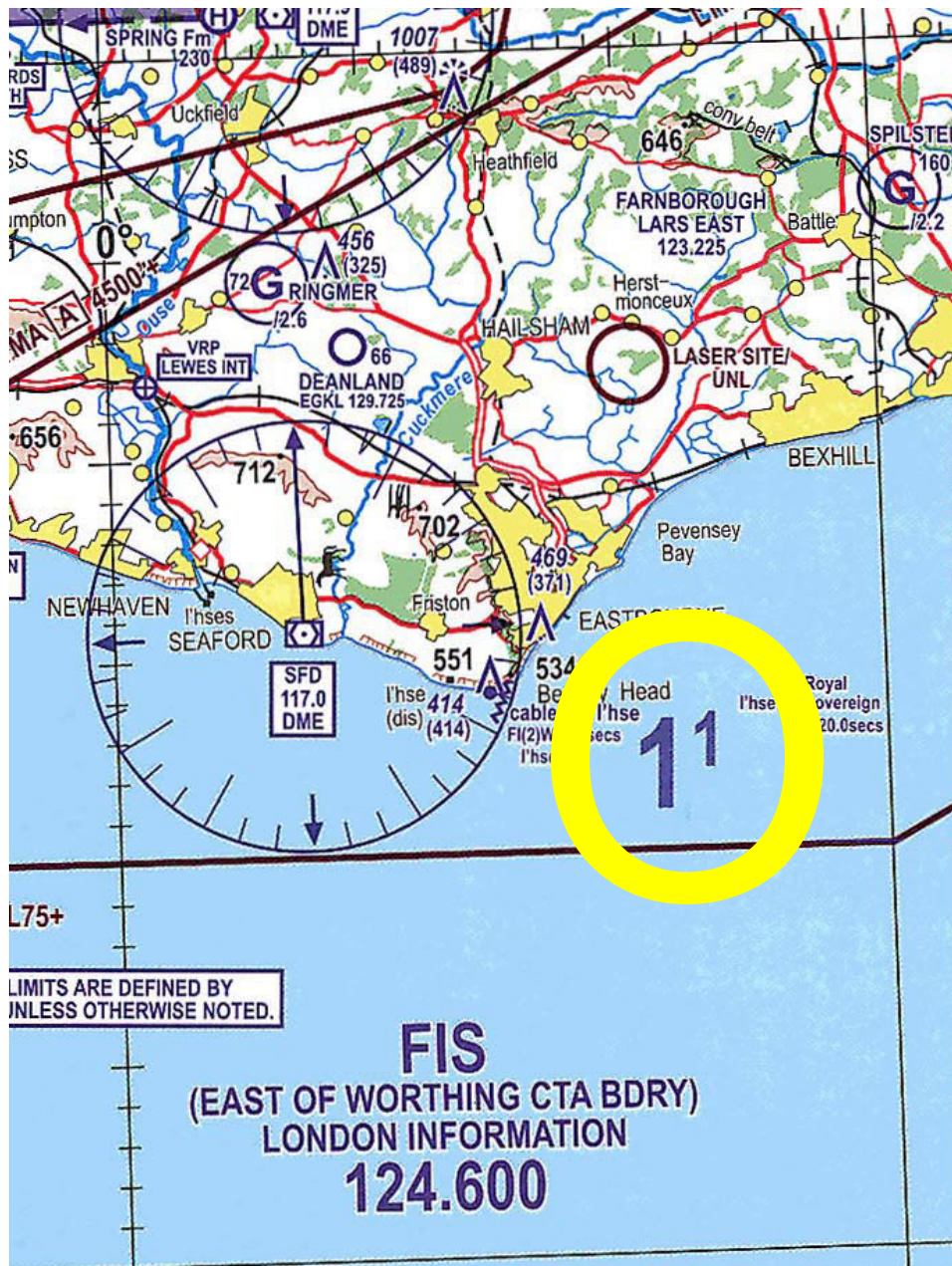
CAA Chart

Jeppesen Chart

- U.S. ONC/TPC charts
  - no longer published; last updated 1998
  - CAS not shown (can be marked-up from Jepp IFR charts)
  - danger areas shown but out of date
  - informally updated versions exist for Greece
  - believed to be copyright-free, available electronically for GPS moving map use (Oziexplorer)
- Avoid out of date charts sold in UK pilot shops

ONC Chart

VFR Taxi / Approach Charts & Data

- UK
  - AIP (free, official, high quality, online, few use it ☺)
  - Pooleys etc (convenient, available for Ipad)
  - Notam (persists until published in AIP)
  - always a good idea to call the airport re facilities, PPR, etc

- Rest of Europe
  - AIP (official but variable quality, nearly all online and free)
  - Jeppesen VFR charts (formerly Bottlang Guides) in Jeppview 4 / JeppTC on Ipad – preferred by many but £££
  - airport facilities (fuel, opening hours, PPR, etc) <u>verify with the airport directly with no exceptions</u>
  - Notam (persists until published in AIP, maybe... ☺)

AIP v. Jepp Charts

Left chart (AIP France)

AIP
FRANCE

AD2 LFAT ADC 01
03 MAY 12

CARTE D'AERODROME
Aerodrome chart
ALT AD : 20 (1 hPa)

Ouvert à la CAP
Public air traffic

LE TOUQUET PARIS PLAGE
50 30 53 N - 001 37 39 E

ATIS : LE TOUQUET 123.125 ☎ 03 21 06 62 84.
ATS : ETE / *SUM*: 0700-1800, HIV / *WIN* : 0800-1800
Extension possible pour vols comerciaux uniquement, de ETA - 30 à ETD + 30. PPR auprès de l'exploitant (SEMAT), PN 24HR avant la date prévue du vol.
Possible extension for commercial flights only, from ETA - 30 to ETD + 30. PPR from AD operator (SEMAT), PN 24HR before flight.
☎ 03 21 06 62 86 / 71 - FAX : 03 21 05 16 06
BRIA : LILLE (voir / *see* GEN).
AVT : 100LL -TR0. Lubrifiants / *Lubricants* : tous indices / *all grades* (CIV-MIL) HOR ATS.
Péril animalier / *Wildlife strike hazard* : Occasionnel / *Random.*

VAR
2°W
(05)

TYPE	LATITUDE	LONGITUDE
THR 14	50° 31' 26.32" N	001° 36' 44.90" E
THR 32	50° 30' 45.15" N	001° 37' 53.02" E
DTHR 32	50° 30' 48.43" N	001° 37' 47.58" E

ALT / HGT : ft
GUND : 143 ft
0 .... 500 m

RWY	BALISAGE/*Lighting*		TORA	TODA	ASDA	LDA	NATURE *Surface*	RESIST. *Strength*	MINIMUM TKOF (RVR : m)				
	APCH	RWY							CAT A	CAT B	CAT C	CAT D	
14	420 m LIH	LIH/LIL	1700	1760	1700	1700	Revêtue *Paved*	18 F/C/W/T	400 / 550 (1) *	400 / 550 (1) *	400 / 550 (1) *	-	
32	NIL	LIH/LIL	1850	1850	1850	1700			400 / 550 (1) *	400 / 550 (1) *	400 / 550 (1) *	-	

(1) Absence ATS   * HN : 800 m

BALISAGE / *LIGHTING* :

RWY 14 : THR - Extrémité HI/BI
RWY 32 : DTHR - Extrémité HI/BI
PCL

RWY 14 : THR - RWY end LIH/LIL
RWY 32 : DTHR - RWY end LIH/LIL
PCL

OBSERVATIONS / *REMARKS* :

AD réservé aux ACFT munis de radio.
Roulage au départ : RWY 14 : P2, P1 - RWY 32 : T3.
Si 400 m ≤ RVR < 550 m, sur instruction ATS, roulage unique et obligatoire :
- RWY 14 : alignement-décollage depuis point d'arrêt P1,
- RWY 32 : alignement-décollage depuis point d'arrêt T3.
L'attention des équipages est attirée sur la présence dans la bande d'une digue de 25 ft d'altitude moyenne en bordure nord de la piste et d'un hippodrome à l'ouest du THR 14.
PCL couplé au PAPI RWY 32 sur FREQ 118.450 MHz.

AD reserved for radio-equipped ACFT.
Taxiing for departure : RWY 14 : P2, P1 - RWY 32 : T3.
If 400 m ≤ RVR < 550 m, with ATC clearance, mandatory taxiing :
- RWY 14 line-up and takeoff from P1 holding point,
- RWY 32 : line-up and takeoff from T3 holding point.
Crews attention is drawn towards the presence within the strip of a 25 ft mean altitude dam on the north edge of RWY and hippodrome west of THR 14.
PCL linked with PAPI RWY 32 on FREQ 118.450 MHz.

Right chart (Jeppesen)

LE TOUQUET
PARIS-PLAGE
FRANCE

(19-2) 18 MAR 11   JEPPESEN

ATIS 123.12

(FIS)
LILLE INFORMATION 120.27

Feet 0 ... 1000 ... 2000 ... 3000 ... 4000
Meters 0 ... 200 400 600 800 1000 1200

Race course / Hippodrome
1850m
TWR
Terminal
ARP
Elev 16'
Elev 17'

ALS 14 - PAPI 32 - THRL - RL - LDI - WDI - OBSTL.

RWY No	Dimension (m) - Surface	TORA (m)	LDA (m)	Strength	Lights
14	1850 x 40 Paved	1700	1700	12t SIWL	
32		1850	1700	(12t - 32t SIWL: PPR)	

PCL available.
Possibility of sudden unexpected sea fog.

If wind speed less than 4 KT, use RWY 14.

RWY 14/32 restriction due to wind across:
Wet RWY: 20 KT, dry RWY: 25 KT.

RWY 32: PAPI compulsory by day and night.

Avoid overflying the private AD Le Portel Alprech (traffic circuit 700').

Southern DEP: avoid overflying Berck-sur-Mer AD.

Route N-NA-NB: avoid via the west the coastal towns of Boulogne, Hardelot and Sainte-Cécile.

SVFR Minima
Ceiling: ACFT: 800' QNH; HEL: 500' QNH.
VIS: 2000m.

PCL disponible.
AD susceptible d'être envahi en quelques minutes par la brume de mer.

Par vent inférieur à 4 KT, utiliser la piste 14.

Limitation vent traversier RWY 14/32:
Piste mouillée: 20 KT, piste sèche: 25 KT.

RWY 32: PAPI obligatoire de jour et de nuit.

Eviter survol AD privé Le Portel Alprech, dont le tour de piste est à 700'.

DEP vers le Sud: éviter survol AD de Berck-sur-Mer.

Itinéraire N-NA-NB: éviter des villes côtières de Boulogne, Hardelot et Sainte-Cécile par l'ouest.

Minimums SVFR
Plafond: ACFT: 800' QNH; HEL: 500' QNH.
VIS: 2000m.

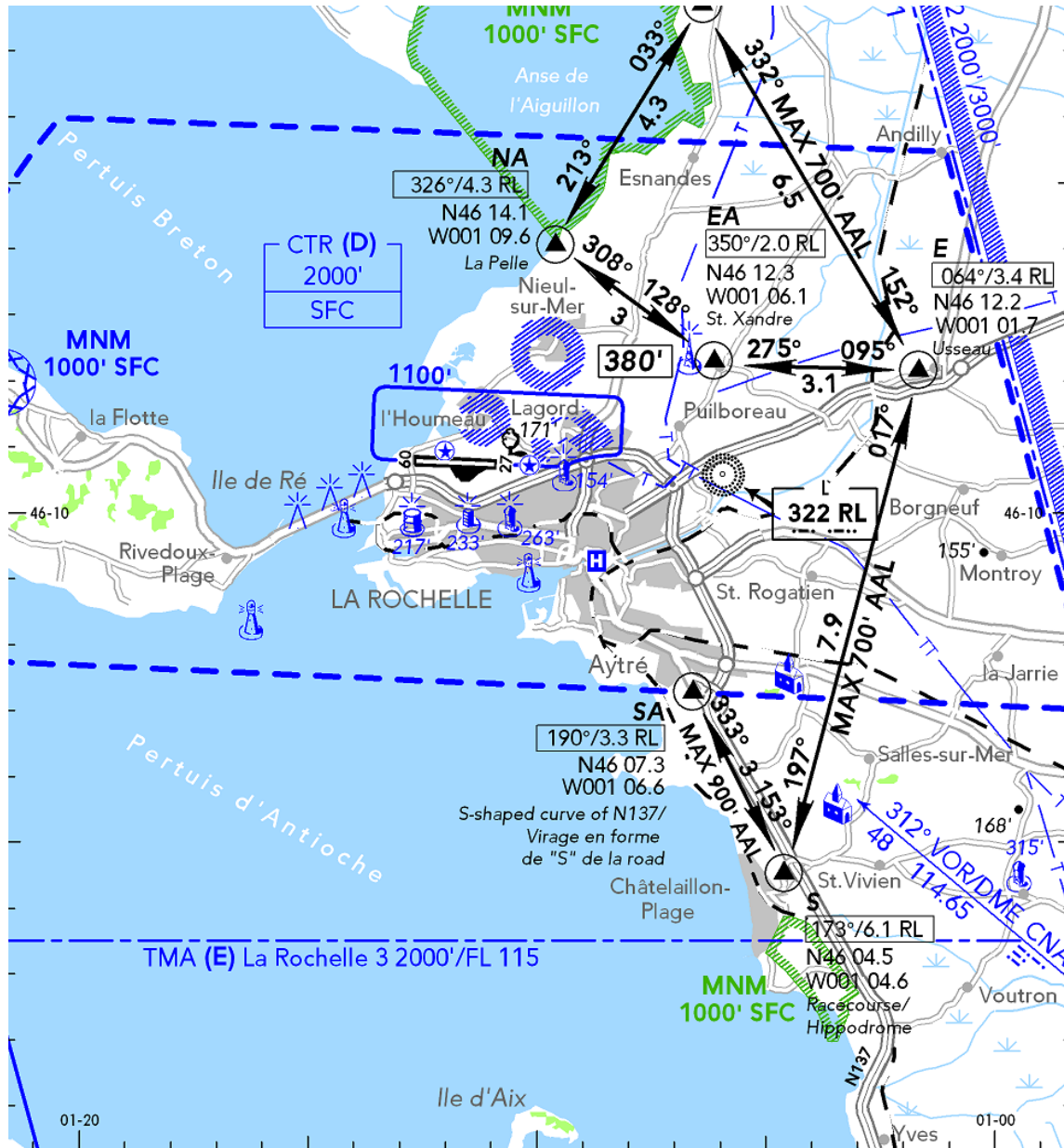# VFR Approach Chart – showing VRPs
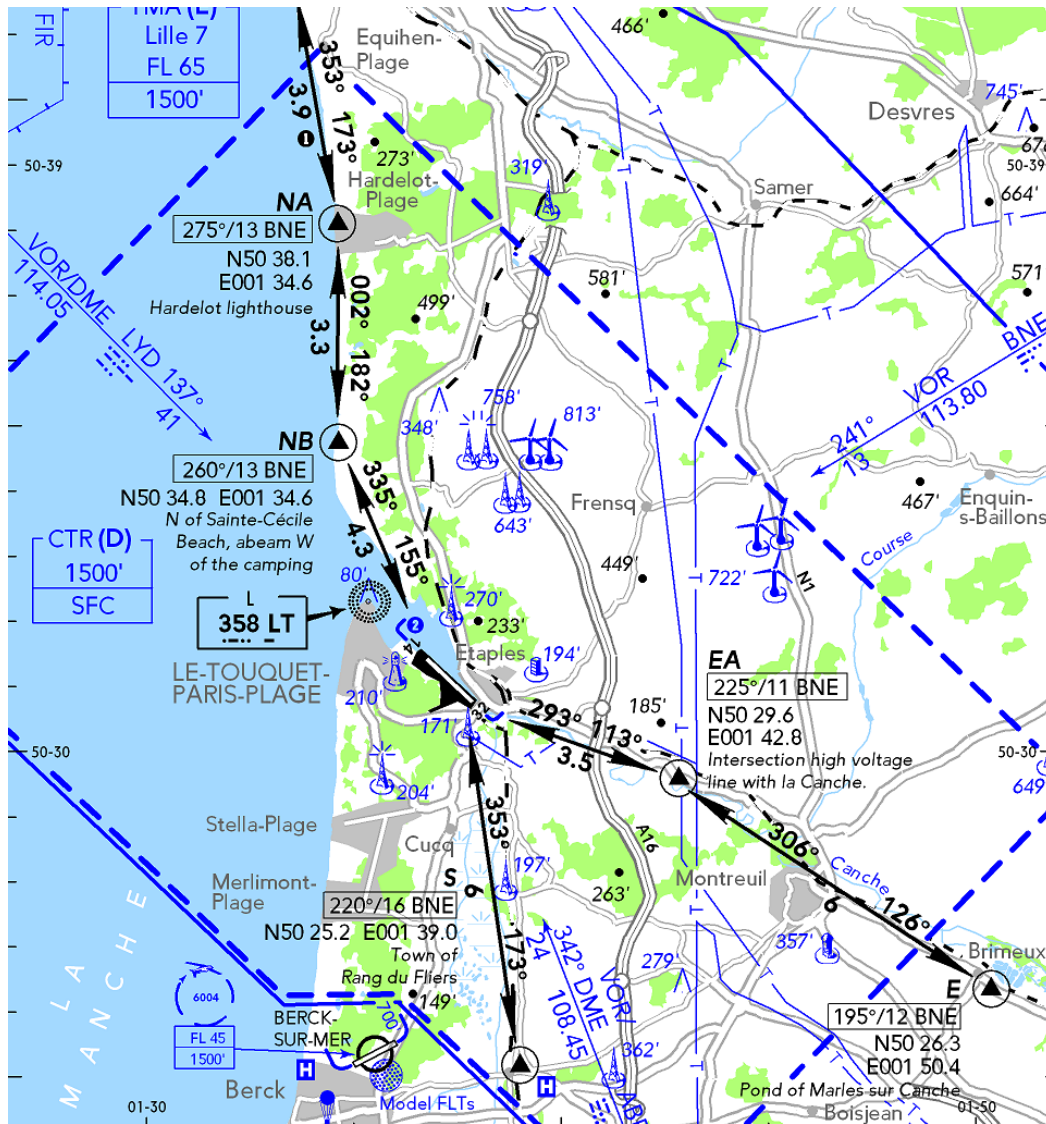
VFR traffic is generally assigned <u>VRPs</u> to report at (by ATC) - not IFR waypoints.

Applies to both arrival and departure.

Familiarise yourself with the VRPs and query an ATC-assigned VRP which is not readily found.

Having a GPS that shows VRPs can be a huge help.

MNM
1000' SFC

Anse de l'Aiguillon

033°

332° MAX 700' AAL

213°

4.3

Andilly

NA

326°/4.3 RL

N46 14.1
W001 09.6

La Pelle

Esnandes

EA

350°/2.0 RL

N46 12.3
W001 06.1

St. Xandre

6.5

152°

E

064°/3.4 RL

N46 12.2
W001 01.7

Usseau

CTR (D)
2000'
SFC

308°

128°

3

MNM
1000' SFC

la Flotte

Nieul-sur-Mer

1100'

380'

275°

095°

3.1

1171'

l'Houmeau

Lagord

Puilboreau

017°

Borgneuf

46-10

Ile de Ré

60

27

154'

L'

322 RL

155'

Montroy

46-10

217°

233°

263'

H

LA ROCHELLE

St. Rogatien

MAX 700' AAL

7.9

la Jarrie

Rivedoux-Plage

Aytré

SA

190°/3.3 RL

N46 07.3
W001 06.6

*S-shaped curve of N137/
Virage en forme
de "S" de la road*

MAX 900' AAL

333°

3

153°

197°

Salles-sur-Mer

312° VOR/DME CNA

48

114.65

168'

315'

Pertuis d'Antioche

Châtelaillon-Plage

St.Vivien

S

173°/6.1 RL

N46 04.5
W001 04.6

*Racecourse/
Hippodrome*

Voutron

N137

TMA (E) La Rochelle 3 2000'/FL 115

MNM
1000' SFC

Ile d'Aix

01-20

01-00

Yves

Route Planning

- Principle same as UK
- Plan A – OCAS route, no ATC clearance needed
- Plan B – desired route, may need ATC clearance

- **ICAO airspace rules apply**
  - Class A – <u>no VFR</u> unless it touches the ground (CTR)
    - hardly any Class A in Europe, outside UK and Italy
  - Class B,C,D – controlled airspace, needs ATC clearance
    - most N. European ATC is <u>more</u> relaxed than UK
    - some S. European ATC is "difficult"
  - Class E – uncontrolled airspace for VFR, controlled for IFR
    - no ATC clearance needed for VFR
  - Class F,G – uncontrolled airspace
    - no ATC clearance needed, and none possible

- **Use the available vertical airspace!**
  - weather permitting, don't confine yourself to < 2000ft ☺

- UK Quadrantal rule not used outside the UK
  - use semi-circular rule i.e.
    Track 0°—179°   FL 35, 55, 75, etc
    Track 180°—359° FL 45, 65, 85, etc

- VFR traffic entitled to <u>FIS</u> everywhere OCAS
  - outside the UK, FIS is the only service to VFR traffic

- Variable equipment carriage rules (AIP GEN 1.5)
  - Mode S (especially for CAS), ELT/PLB

- Good navigation important
  - plan route using <u>IFR waypoints</u>, not village names etc
    - some countries insist on airway routes even for VFR (Greece)
  - request CAS clearances confidently, giving next few waypoints
  - N. European ATC – usually good English, competent
  - former Iron Curtain countries – usually likewise
  - S. European ATC – often poor English, avoid "chat"
  - ATC with poor English pretend they cannot hear you
  - use GPS if possible (not illegal!)
  - NO law on <u>how</u> to navigate (in private flying)
  - NO credit for a bust done using "traditional" navigation
  - respect the MSA ➔

- Flight Planning Software – Brief Summary
  - Navbox
    - established > 10 years, ~10000 users, little recent development
    - covers all of Europe, monthly database updates
    - good airfield data; great for contacting airports
    - accurate but bare map data (needs the printed charts for CAS, MSA, etc)
    - Windows, Windows Mobile
    - http://www.navbox.nl
    - £113 including 1 year's updates
  - SkyDemon
    - new, new features added continuously (weather, Notams, FP filing)
    - covers N Europe and a few other countries (not Greece)
    - poor airfield data
    - good map data (arguably sufficient for flight planning)
    - Windows, Windows CE, Ipad, www (browser) version
    - http://www.skydemon.aero
    - £119 basic / £179 with GPS moving map function

- Jeppesen Flitestar VFR – for enroute planning
  - long established but little used for VFR; VFR charts don't show some Class A!
  - worldwide coverage (£££)
  - basic airfield data (in "text pages")
  - various enroute chart formats
  - optional extra "Raster Charts" for most of Europe ~ £300
    - same as the Jepp "VFR/GPS" 1:500k charts (show CAS correctly)
  - online weather and notams
  - Windows, online-database version (JIFP)
  - http://www.jeppesen.com
  - £210 including 1 year's updates
- Jeppesen Jeppview 4 – for airport charts
  - airport charts ("Europe VFR" replaces Bottlang Guides) & enroute charts
  - long established
  - can buy coverage down to a single country or trip kits
  - primitive flight planning facilities (no plog)
  - FliteDeck (included) does GPS moving map
- The two integrate if installed together

- PocketFMS
  - long established
  - covers all of Europe
  - optional ICAO charts
  - Windows, Windows CE, IPad, Android
  - online weather and notams
  - http://www.pocketfms.com/
  - €150 including 1 year's updates
- Air Nav Pro
  - Ipad, Android
  - £35
- etc

France

- Lots of low level military airspace
  - generally inactive on weekends
- Nuclear power station etc zones ➔
- Low level (below-cloud) flight easy; mostly Class G
- Higher level flight FL065-FL115; mostly Class E
  - the best way to do "distances" in France
  - simplified route planning as most military stuff is avoided
  - if VMC on top, need to be able to descend while VMC
  - may need oxygen at the higher end
- FL120-FL195 Class D ... VFR not generally allowed
- http://flyinfrance.free.fr/ http://www.flying-in-france.com/

34

- France offers 3 national chart options
  - 1:1M SIA charts ("official" but involve a booklet)
    - buy online http://www.sia.aviation-civile.gouv.fr/default_uk.htm
  - 1:1M Cartabossy charts (very clear but have update issues)
    - buy online http://www.editerra.fr/produit.php
  - 1:500k IGN charts (good for low level only, below ~5000ft)
    - available electronically via PocketFMS
  - France is also covered by Jeppesen "VFR/GPS" charts

Cartabossy chart
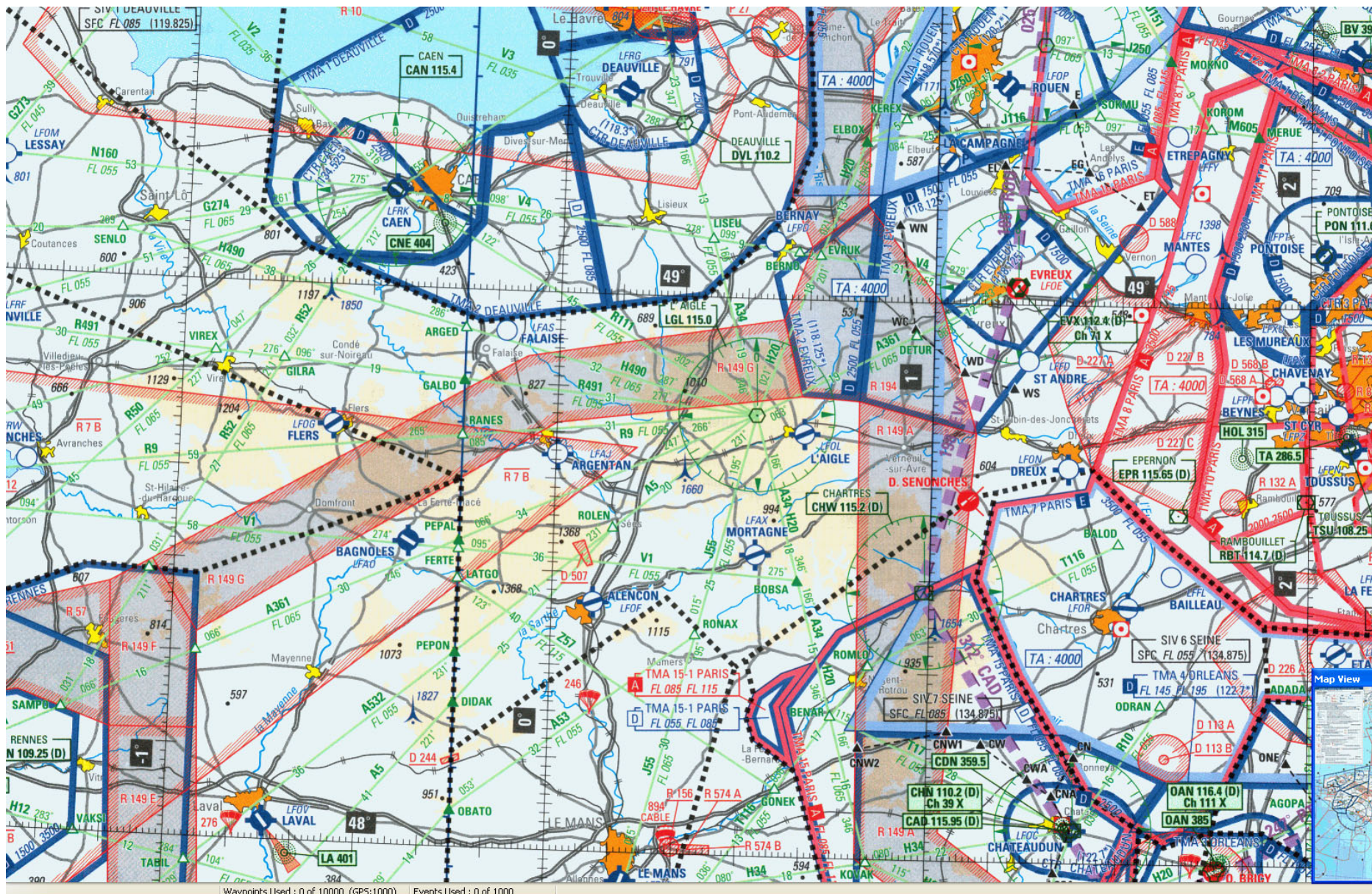
French airports
losing Customs

Conflicting info e.g:

http://tinyurl.com/cfvvq4n

Contacting Airports

- Why?
  - no airport guide can be relied on completely
  - airport could be affected by an incident, etc, not yet notamed
- Contact the airport with your full details and ask
  - PNR, PPR required?
  - opening hours?
  - avgas available, and (in Italy) can they sell it to visitors?
  - cost?
  - hard parking available?
- "No-Contact No-Fly" policy is a good idea
  - would you fly to an airport if nobody answered the phone?

- **Where to find contact details?**
  - Google for the airport website ☺
  - AIP is "official" - usually better in N. Europe than S. Europe
  - WWW airport guides e.g.
    - http://www.handbook.aero - free; best for contact numbers & emails
    - http://www.acukwik.com - not free but CD version can run offline
  - some flight planning software
    - Navbox: click on airport to see contact details ➔
- **How to contact?**
  - phone the OPS/OPR #
  - phone a handling agent
  - email and fax (may need several attempts)

LFOP Airfield with ILS, France, LFFF Paris FIR

ROUEN - VALLEE DE SEINE
◇ Airfield (ILS), 512 ft MSL (-19 hpa), ARP 49°23.45'N 001°11.03'E, var 1°W   Edit data

Comm's	ROUEN APP 118.57
	ROUEN TWR 120.20
	ATIS 120.72
	STAP 120.72
	FIS PARIS NORTH INF 125.70
Runways	04-22 1700m ILSDME22 RN 110.50 *L
	05-23 900m/gr
General	OPS +33-235-794122 FAX 794122 (HNDL)
	OPR +33-235-794100 / 794118 FAX 794129 MOB 674695769
	ATIS +33-235-794100
	CUST 6 HR PNR +33-235-794103 FAX 804867
	100LL JETA1
	AEROBATICS - IDENT 6225 - 2500MSL(1990SFC)-4500MSL
Daylight	04:01-19:43 UTC 23 MAY 2012

More...   Start   Cancel   Help

Notams

- ## Notams <u>are</u> VITAL
  - AIP is ICAO standard but updated every 28 days (maybe..)
  - Notams used to fill in, and for short term stuff (e.g. military activity & RAs enroute)

- ## Airport Notams <u>especially vital</u>
  - in countries where the AIP is "less good", Notams are used to publish <u>current</u> airport info <u>continuously</u>

- ## UK NATS site <u>http://www.nats-uk.ead-it.com</u> is good for <u>whole world</u>
  - internal French airport info no longer witheld
  - use Narrow Route Briefing to minimise garbage

- Q) EDXX/QAFXX/IV/NBO/E/000/999/5110N01027E245
- B) FROM: 12/03/28 13:54C) TO: 12/06/26 13:54 EST
- E) THE FEDERAL MINISTRY OF TRANSPORT, BUILDING AND URBAN DEVELOPMENT OF GERMANY DECIDED THAT FLIGHTS CARRYING AIR CARGO AND MAIL DEPARTING AT AN AIRPORT WITHIN THE REPUBLIC OF YEMEN AND FLIGHTS CARRYING AIR CARGO AND MAIL ORIGINATING FROM THE REPUBLIC OF YEMEN ARE NOT ALLOWED TO ENTER GERMAN AIRSPACE NEITHER FOR OVERFLIGHTS NOR FOR LANDINGS. FLIGHTS DEPARTING AT AN AIRPORT WITHIN THE REPUBLIC OF YEMEN CARRYING ONLY PASSENGERS AND CORRESPONDING LUGGAGE BUT NO AIR CARGO AND MAIL ARE ALLOWED TO ENTER GERMAN AIRSPACE EITHER FOR OVERFLIGHTS OR FOR LANDINGS.

- Q) LIXX/QXXXX/IV/NBO/E/000/195/4339N01139E546
- B) FROM: 12/05/04 09:03C) TO: 12/08/01 23:59 EST
- E) 1. ULTRALIGHT MACHINES ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE ITALIAN LAW 'DPR 133/2010'. ULTRALIGHT MACHINES FLIGHTS MAY ONLY BE CONDUCTED BY DAY IN ACCORDANCE WITH VISUAL FLIGHT RULES. 2. ADVANCED ULTRALIGHT MACHINES FLOWN BY A SPECIALLY QUALIFIED PILOT MAY: - BE USERS OF ALL AIR NAVIGATION SERVICES - OPERATE IN ALL AIRSPACES OPEN TO VFR. IN ALL AIR-GROUND COMMUNICATIONS WITH ATS, BOTH IN ITALIAN AND ENGLISH LANGUAGE, SPECIALLY QUALIFIED PILOTS FLYING AN ADVANCED ULTRALIGHT MACHINE SHALL INCLUDE, IMMEDIATELY BEFORE THEIR CALL SIGN, THE EXPRESSION 'ULTRALIGHT'. THE CALL SIGN MAY NEVER BE ABBREVIATED. 3. WHEN FILING A FLIGHT PLAN, SPECIALLY QUALIFIED PILOTS FLYING AN ADVANCED ULTRALIGHT MACHINE, SHALL INSERT: - IN ITEM 9, THE APPROPRIATE AIRCRAFT TYPE DESIGNATOR: ULAC/GYRO/UHEL. - IN ITEM 18, AS APPROPRIATE, THE EXPRESSION 'RMK/ ULAC ADVANCED' OR 'RMK/GYRO ADVANCED' OR 'RMK/ UHEL ADVANCED' 4. THOSE INTENDING TO OPERATE ULTRALIGHT FLIGHTS OVER THE ITALIAN TERRITORY SHALL GET PREVIOUSLY ACQUAINTED WITH THE PROVISIONS INCLUDED IN 'DPR 133/2010', AS WELL AS WITH ALL NECESSARY INFORMATIONS AND APPLICABLE RESTRICTIONS FOR THE PROPER CONDUCT OF FLIGHTS. INFORMATION MAY ALSO BE ACQUIRED AT THE WEBSITE WWW.AECI.IT. REF AIP ENR 1.1

For speed reading, read the E) lines

Weather

- Obviously important
- NO law on <u>where</u> to brief from
- F215 ➔ F415 for near Europe
- F214 ➔ F414 for winds, Europe N of the Alps
- MSLP + TAFs/METARs is more useful generally
  - covers all of Europe and more
  - MSLP goes 120 hours ahead
- GFS provides more info, further ahead
  - http://ready.arl.noaa.gov/READYcmet.php
  - nearly all free weather websites get data from GFS

Forecast chart (T+24) valid 12 UTC TUE 31 AUG 2010

GEOSTROPHIC WIND SCALE
IN KNOTS FOR ISOBARS AT 4 MB INTERVALS
POLAR STEREOGRAPHIC PROJECTION

H x
1022

L x
1004

L
1003

L
x 998

L
1000

L
999

L
999

H x
1026

L x
989

L
993

H x
1017

L
988

L x
1005

L x
1005

Met Office
metoffice.gov.uk
© Crown copyright

GFS METEOROGRAM
Latitude: 51.15 Longitude: -0.18

DATA INITIAL TIME: 02 JUN 2012 00Z

NOAA AIR RESOURCES LABORATORY
READY Web Server

CALCULATION STARTED AT: 02 JUN 2012 00Z
CALCULATION ENDED AT: 10 JUN 2012 00Z

10 M WIND SPEED — KNTS

10 M WIND FLAGS — DEG/KTS

AVG TTL CLD CVR — PCT

PRECIPITATION
TOTAL PRECIPITATION: 47.5 MM — MM

2M TEMPERATURE   2M DEW POINT — DEGC

MSL PRESSURE — HPA

SAT 02JUN   SUN 03JUN   MON 04JUN   TUE 05JUN   WED 06JUN   THU 07JUN   FRI 08JUN   SAT 09JUN

NOAA (ARL)

45
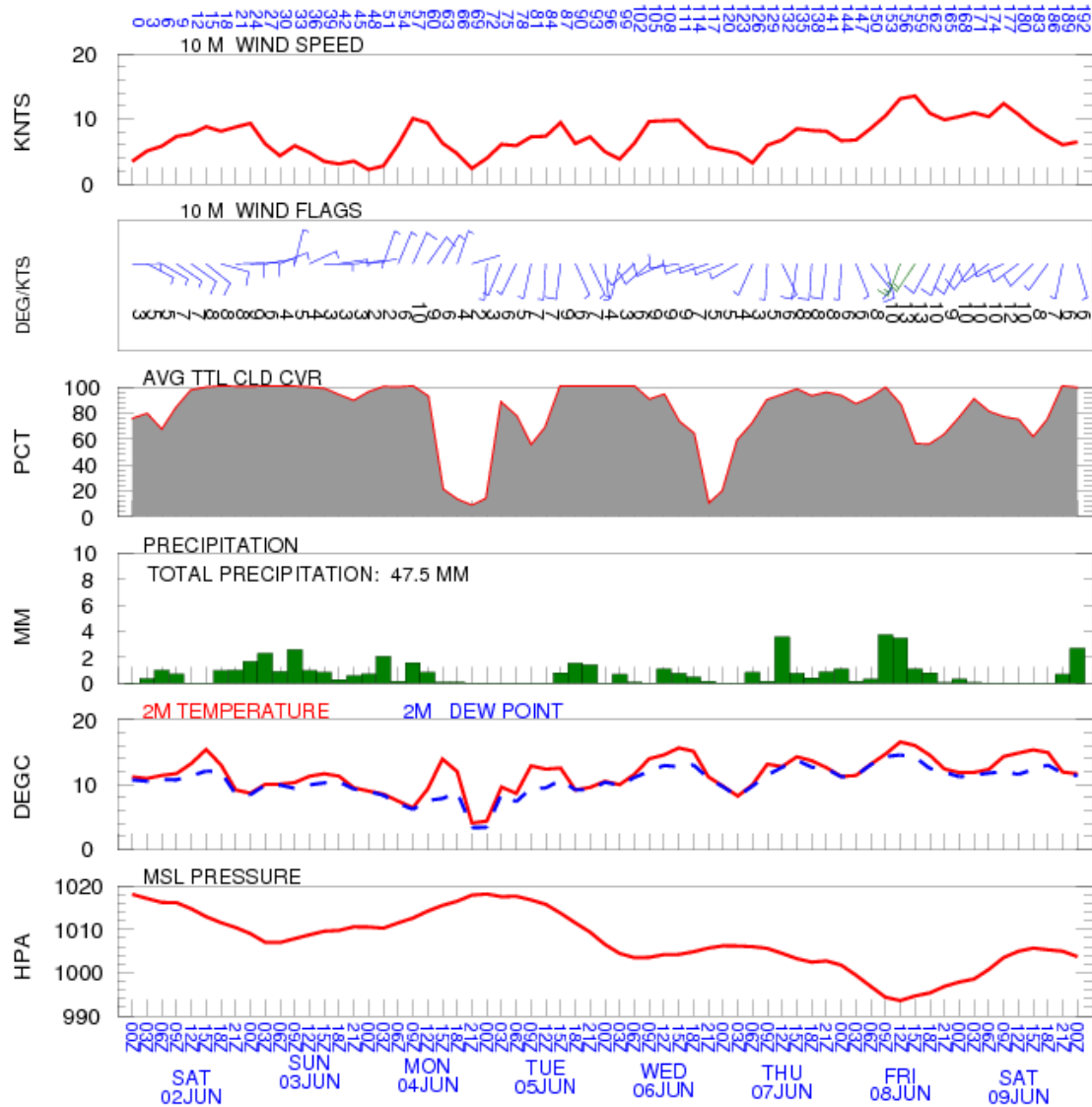
- Most VFR flight done <u>below</u> cloud
  - use TAFs & METARs for cloudbase & visibility enroute
  - don't skip MSA planning
  - if flying above, be sure you can get back down VMC
    - obviously requires radio navigation (GPS/VOR/DME)
  - <u>VFR</u> requires <u>VMC</u> i.e. not flying in clouds ☺
    - "in sight of surface" requirement (applicable to <u>UK issued</u> PPLs in <u>all</u> airspace) ended April 2012 for <u>JAA</u> PPLs
    - in Class G, if below 3000ft amsl and in sight of surface, if flying at 140KIAS or less, "VMC" is: clear of cloud and minimum in-flight visibility > <u>1500m</u> (was > 3000m)
    - local airspace regs may be more strict
- Don't cancel a flight until the morning of the flight
- Make Go/No-Go decision on <u>technical data</u>, not feel
  - avoids gradual loss of confidence

Flight Plan Filing

- Useful reference: CAA CAP694
- Hand in the handwritten FP
  - at Ops office / Tower / handling agent
  - works at all proper airports; an ICAO obligation
  - unpredictable delay (has to be typed in, etc)
  - can be a huge waste of your time, at the worst time
- Internet filing
  - get a laptop (or Ipad) with mobile internet access
  - need one for weather, notams, etc anyway
  - can be done from hotel or internet cafe
  - might have to pick up a printed version to get airside!

- **Internet flight plan filing options:**
  - AFPEx
    - needs a Windows laptop (basically – needs Java support)
    - straightforward - if you ignore the other 99% of features
    - VFR flight plan addressing is messy for long legs
    - a good backup for better methods below ☺
    - has a 24 hour helpdesk
    - free text message feature (looks great but almost nobody replies ☺)
  - EuroFPL
    - a normal website; works on all devices
    - free; paid-for version supports SMS functionality
  - RocketRoute
    - a normal website; works on all devices
    - free for basic functionality
  - Homebriefing (etc...)
  - some flight planning software can file flight plans

- What does a VFR flight plan actually do?
  - <u>legal requirement for flying to a foreign country</u>
  - <u>non-arrival triggers search & rescue</u>
  - handling agents can usually see them (put the coffee on ☺)
  - almost never does PNR/PPR or any permission request
  - VFR FP is almost never refused/rejected
  - sometimes required <u>within</u> a country (Spain, CAS)
- Avoid using DOF/ on <u>VFR</u> flight plans
  - it isn't implemented by the system; relies on "nail in wall"
  - many flight plans with DOF/ mysteriously "disappear"
- On day trips, file both flight plans back home
  - quicker to delay or cancel a flight plan, than to file one
- Can depart up to 60 minutes late (VFR)

PNR/PPR

- Flight plan does not constitute PNR or PPR request!
- In S. Europe, transmit PNR/PPR <u>in writing</u>
  - email or fax
  - get a written reply and have it handy in the cockpit
- PNR is really PPR (how do you know they got it?)
- Landing clearance will be refused in some countries
  - Italy, Spain, Greece
  - have to fly to the alternate
- Most H24 airports (non UK) don't need PNR/PPR
- Handling agent can often organise this efficiently

GAR Form

- Goes to Customs / Immigration / Police (Sp. Branch)
  - notification requirement varies according to airport category
- Contact numbers vary according to area
  - Official site with contact numbers etc: http://tinyurl.com/d77bvyg
  - ncu@hmrc.gsi.gov.uk does both C & I (no fax needed)
- Police notification required for CTA only
  - Ireland (N & S), IOM, Channel Islands
  - sidestepped by flying via an airport designated under the Terrorism Act, or via e.g. France (Cherbourg ☺)
- Before departure, do GAR for both out & return flights
  - easy to forget the return one, which normally does matter
- Keep evidence of transmission

General Aviation Report

Aircraft Details

Registration (no spaces/hyphens)		Type		Usual base	
Owner/Operator (Not Pilot)				Crew Contact telephone no.	
Is the aircraft less than 8000Kgs MTOW ?	Yes	If 'YES' has UK VAT been paid?	No	Is the aircraft in 'Free Circulation' in E.U?	Yes

Flight Details

Departure from UK				Arrival in UK			
From		To		From		To	
Date:		Time: (UTC)		UK County			
Date:		Time: (UTC)		UK County			

Reason for visit to the EU (Based, Short Term visit, Maintenance, Permanent Import)	Based

Crew /Passenger details

C / P	Surname	Forenames	Birth Date	Place of Birth	Nationality	Passport No.	Home Address or address visiting in UK	Out	In
C								Y	Y

WARNING-THERE ARE HEAVY PENALTIES FOR KNOWINGLY MAKING FALSE DECLARATIONS
Data Protection Act 1984 - Information supplied on this form may be held on computer

GAR Mar09 V3.1(BH090722)

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GAR Requirements for Shoreham

Advance Notification of flights from Sussex

	Common Travel Area	European Union	Outside EU
Police	√	X	X
Customs	X	√	√
Immigration	X	X	X

Advance Notification of flights to Sussex

	Common Travel Area	European Union	Outside EU
Police	√	X	X
Customs	X	√	√
Immigration	X	√	√

NB. The Common Travel Area (CTA) consists of Great Britain, the Irish Republic, the Channel Islands and the Isle of Man.

No "harm" in sending the GAR to both Customs &
Immigration for every foreign flight, both out and return

Documents

- All Aircraft – ICAO Article 29 to get started, also EASA
  - noise certificate (Germany, Switzerland)
    - doesn't usually matter but might get charged more...
    - G-reg http://tinyurl.com/bwu76xx   N-reg http://tinyurl.com/c6bn2xw
- G-reg
  - Certificate of airworthiness
  - Certificate of registration
  - Insurance certificate
  - Pilot's License
    - showing appropriate privileges for the aircraft and flight rules used
    - English Language Proficiency statement
  - Interception procedures
  - Aircraft radio licence
  - POH

- ## N-reg
  - Certificate of Registration
  - Certificate of Airworthiness
  - Radio station authorisation (for any N-reg <u>aircraft</u> outside the USA)
  - FCC Restricted Radiotelephony Operator Permit (for each pilot)
  - POH (known in the USA as the "Flight Manual")
  - Weight and Balance schedule
  - Pilot Identification (a **passport** is the only legal option for non-Americans and must be carried <u>on all flights incl. domestic</u> - ref: FAR 61.3 (a) (2) & FAA legal seminar UK 2010)
  - Insurance Certificate
  - Pilot's License
    - showing appropriate privileges for the aircraft and flight rules used
    - English Language Proficiency statement
  - Pilot's medical certificate
  - Interception procedures
  - Certificate of Free Circulation for VAT! try: http://www.forestaviation.co.uk

- Non EU citizens may need visas
  - <u>UK</u> visa is usually no good for rest of Europe
    - need a Schengen visa, or a country-specific visa, as well
  - many non-European FTO students cannot leave UK!
  - big penalties on the "operator" (i.e. you)
  - list of countries: http://tinyurl.com/y9z6abg
  - wiki page on European visa policy: http://tinyurl.com/37h49x5
- Cost Sharing
  - G-reg - <u>believed to be</u> generally legal around Europe
    - virtually impossible to verify; there may be an EASA regulation on it
  - N-reg - illegal in UK airspace (ANO Article 225) and probably elsewhere; complicated FAA rules: http://tinyurl.com/79ynksu
  - must avoid any possibility of a "paying passengers" scenario
    ➔ passenger liability (post crash) or cabotage

Flying

- Flying is just the same ☺
- Have a list of FIS frequencies along the route

After Landing

- Always refuel immediately
  - request fuel while still active on ground/tower frequency
  - airside personnel are on the ball (not at lunchtime in France ☺) and have an incentive to get you off airside
  - refuse to leave aircraft until refuelled
- Not all handling agents are evil moneygrabbers
  - some airports regard aviation as something best avoided
  - the handler is commercially motivated; good English
  - they answer emails & refill paper in their fax machine ☺
  - PNR/PPR may be sorted instantly
  - may be able to negotiate cost (<u>before</u> flying there ☺)

- Note procedure for getting back out (to airside) later
  - some airports are deserted at times (even big ones)
- Be diligent in paying for landings etc
  - avoids bank transfer fees later
  - airports use various means to trace "non-payers" (v. slow)
  - N-reg owners usually untraceable (Trustee gets the bill ☺)
  - always leave your contact details with Admin
- Keep all receipts for 1 year+
  - many airports have badly organised accounts (UK too)
- At unmanned/non-ATC airports: close flight plan
  - a phone call (France: 0810 437 837 (0810 IFR VFR)) or can use last ATC frequency one was in contact with
  - get a big S&R bill otherwise...

Departure

- At bigger airports, allow extra time to get to airside
- Study airport diagram before startup
- Request departure clearance (Delivery/Gnd/Twr)
  - unless definitely not required
- Request startup clearance (Gnd/Twr)
  - unless definitely not required
- Taxiing is confusing for everybody, even airline pilots
  - getting lost is completely normal – request taxi instructions if in any doubt whatever

Misc Tips

- Get a laptop or Ipad with 3G internet access
  - get the 3G adaptor <u>unlocked</u> (Ipad-3G's one already is)
    - enables the use of locally bought "data" SIMs
  - can also use a 3G <u>phone</u> as a "modem", connected to computer via bluetooth or (preferably) via WIFI; also see E585 and (for Nokia phones) Joikuspot

- Plan stops at "nice" places only (avoids pressure, etc)

- Passengers...
  - make it clear that delays are possible & who is responsible
    - trips with some passengers not possible unless weather is "perfect"

- Don't fly to/via Jersey with near-empty tanks
  - claim the duty drawback on the full tanks, instead

- Long range aircraft better than a bit more speed
  - avoiding fuel-only stops is highly desirable
  - learn to use the mixture control to set up peak-EGT
    - 20-30% more range than flying full-rich
    - use in cruise, or descent, only
- Lightweight reflective cockpit cover for hot places
  - http://www.aircraftcovers.com/ or http://www.cambraicovers.com/
- A basic toolkit and a few spares
- Cleaning, deicing, spare oil, etc
- Batteries charged / chargers
- Assume any electronic device will pack up ☺
- Do a "leaving home" checklist (passport, etc)

- Get yourself an IR ☺
  - aircraft performance (v. weather) the only limiting factors
  - easy automated Eurocontrol route generation
  - no more looking for VRPs (if airport is IFR capable)
  - fly high, for safety over water and mountains
  - IFR in CAS does require good aircraft performance
  - £15000+ for JAA SE IR (no credit for IMC Rating)
  - better options may arrive 2014/2015

- **Email2fax and Fax2email**
  - desirable for serious S. European touring
  - fax more likely to work than email for initial contact
  - PPR confirmations most easily returned by fax
  - fax2email potentially free but maybe not with a usable fax#
  - useful for cost saving in business generally
    - much cheaper & more convenient than a dedicated fax line
    - incoming faxes can be delivered to multiple email addresses
  - the cost can be shared among a club or group
  - http://www.interfax.net/en
  - http://www.edgetelecom.co.uk/fax-to-email

Portable Oxygen

- Needed above ~ 10,000ft (day) ~ 5000ft (night)
  - regulatory requirements are less strict

- Get a <u>large</u> cylinder
  - "variable" refilling options back home (mostly scuba shops)
  - virtually nonexistent refilling options when travelling

- Mountain High is the best system
  - large but lightweight composite cylinder
  - O2D2 electronic demand regulator
  - simple (lowest cost) cannulas
  - longest trip possible without a refill

- NO regulatory approvals needed for portable kits

1st stage regulator (4 outlets)

plain cannula

"48 cu. ft." composite cylinder "540" thread

O2D2 electronic demand regulator (2 persons)

Duty Drawback

- Claim on <u>entire fuel tank content</u> that was exported
  - not just the fuel that was used on the foreign trip!
  - can claim only <u>once</u> for any given fuel (requires admin)
- A lot safer than flying to Jersey with near-empty tanks
- Causes political problems in syndicates
  - one member doing lots of short trips abroad and pocketing the entire drawback each time ☺
  - may need rules e.g. drawback goes to the syndicate
- Can claim up to 2 years back
- Drawback rate is approx £0.40 per litre
  - http://www.hmrc.gov.uk/budget2011/tiin6330.pdf

Safety / Legal

- Life raft for flying over the Channel
  - wear life jackets but they are not a realistic life saver alone, due to hypothermia
  - passenger briefing essential
  - try to ditch near a <u>small</u> ship/boat
  - Survival Products rafts ~7kg/£1000 ➔

- Fly high over water; just below CAS
- Know your aircraft range / fuel burn
  - verify it with 2 flights / 2 refuels
- Always <u>physically</u> verify fuel on board
  - never rely on school/club "flying log" records (G-OMAR)
  - standard fuel gauges are usually rubbish

- **Fuel Reserve Rules**
  - standard for IFR: destination – alternate – 45 mins cruise
  - under old CAA regime, <u>no</u> reserve requirements for <u>VFR</u> !
  - under EASA OPS (Part-NCO), aligned with FAA (ICAO) rules
    - Not law yet
  - N-reg (IFR): destination – alternate – 45 mins
    - alternate not always required ("1-2-3 rule")
    - FAR 91.167
  - N-reg (VFR): destination – 30 mins (day); 45 mins (night)
    - FAR 91.151
  - above regs can be unsafe!
    - picking a nearby alternate may meet the regs but is likely to be useless as much bad weather is widespread
    - 30/45 mins' reserve meaningless given the usual crap fuel gauges
    - plan a "weather" alternate and a "crash" alternate

- Don't be afraid to declare a Mayday (clearly)
  - ATC often cannot do "conversational English"
- Keep decision-making <u>in the cockpit</u>
  - draw clear lines on fuel etc and declare a Mayday if crossed
- If not VMC, maintain <u>your own</u> obstacle awareness
  - ATC responsible for obstacle clearance <u>only when vectoring</u>
    - reported cases of vectoring into terrain
- Low time PPL fatal accident stats no worse than high time instrument pilots
  - but most IR holders get killed doing dodgy VFR, not flying "classical IFR" procedures
- ICAO member States enforce busts etc for each other
  - UK CAA will go after you on their behalf

- **IMC Rating outside UK airspace**
  - IFR privileges of the IMCR are not valid
  - cannot request or accept an "IFR clearance"
  - does legalise "VMC On Top" for UK (<u>non-JAA</u>) PPL
    - removes requirement for "sight of surface"
    - "sight of surface" requirement gone for <u>JAA</u> PPLs from 4/2012

- **IMC Rating appears "safe" till 2014 at least**

Resources

- MSLP charts http://www.mwis.org.uk/synoptic.php
  - watch chart dates!
  - otherwise use http://www.avbrief.com/briefingservices.html
- TAFs/METARs http://www.avbrief.com/pda/opmet.html
  - especially for phones http://yaws.mobi/
- Radar http://www.meteox.com
  - especially for phones http://pda.meteox.co.uk/
- Lightning http://www.blitzortung.org/Webpages/index.php
  - real time lightning data for all of Europe
- European AIPs: http://tinyurl.com/d75ha2x or http://tinyurl.com/bp9bbjx
  - direct links to national AIPs

- **Eurocontrol AIP collection:** http://tinyurl.com/d7yjr9a
  - all European AIPs in one place
  - needs registration (free)
- **Route Notams** https://www.ippc.no/ippc/narrowroutebriefingchoice.jsp
  - doesn't need a login

Thank You

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- http://www.peter2000.co.uk/aviation
- European GA forum: www.euroga.org

Disclaimer: Nothing here replaces official information.
Charts shown here are mostly out of date.

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