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Romania, Baltic States, ...

Flying in Eastern Europe

Flights in Eastern Europe – Theory and Practice



Definition "Eastern Europe"

- **Geographical** definition ... "up to Ural"
- **Historic** definition ... "including all countries of orthodox influence"
- **Political** definition ... "formerly under communist influence"



Countries of Eastern Europe - political



- Flight into a Non-ICAO country => Permission by the German Federal Ministry of Transportation 5 days in advance
- Flight into Russian military controlled airspace => Permission 2 days in advance
- Flight Plan with entry point "SEAGUL" (south of Sweden) in the middle of the Baltic Sea
- Custom clearance in Barth
- Further flights permitted in control zone Barth:
 - ▶ Minimum altitude only 50 m
 - ▶ Service by Interflug personnel for Scenic Flights with local population
 - ▶ Advertising by flying over the villages
 - ▶ Compensation in "Ostmark"
 - ▶ No landing fees, but pilot (crop duster) instruction: VOR, NDB usage



Country Information

- ▶ Auswärtiges Amt
- ▶ <http://www.auswaertiges-amt.de/diplo/de/LaenderReiseinformationen.jsp>

Flight Information

- Aeronautical Information Publication (AIP)
- VFR Charts (en route)
- Approach Charts
- Aerodrome Information
- NOTAM
- Deutsche Flugsicherung (DFS), Aeronautical Information Service (AIS)
- Other CAAs
- Jeppesen
- WWW



- Aeronautical Information Publication (AIP)

Volume 1 IFR

- * GEN General Information
- * ENR General Rules and Procedures
- * SUP Supplements

Volume 2 IFR

- * Aerodromes

Volume VFR

- * SUP (Supplements)
- * GEN (Generals)
- * ENR (Enroute)
- * AD (Aerodromes)
- * VFR-Bulletin
- * VFR charts (enroute charts for lower airspace)



- Volume VFR

- * SUP - Supplements

- * GEN - General

- o GEN 1 - National Rules and Requirements

- o GEN 2 - Tables and Abbreviations

- o GEN 3 - Services

- o GEN 4 - Fees for Aerodromes and Air Traffic Control

- * ENR - Enroute

- o ENR 1 - General Rules and Procedures

- o ENR 2 - ATS-Airspace

- o ENR 3 - ATS-Routes

- o ENR 4 - Air Navigation Systems

- o ENR 5 - Navigation Warnings

- o ENR 6 - Enroute Charts

- * AD - Aerodromes

- o AD 1 - Aerodromes - Introduction

- o AD 2 - Aerodromes

- o AD 3 - Helicopter Landing Sites

- o AD 4 - Visual Approach Charts (with frequencies, VFR reporting points, ...)



- **AIP** (of all Countries in the World)
 - ▶ Aeronautical Information Service (AIS) of the Deutsche Flugsicherung (DFS): <http://www.dfs-ais.de>
 - ▶ Request by phone, receive via e-mail or fax, fees apply for longer tasks
- **Jeppesen** (AIP-like Info, Approach Charts, VFR Enroute Charts)
 - ▶ <http://www.jeppesen.com>
 - ▶ At HFB-MFG: All material is provided (PDF or hardcopy)
- **Civil Aviation Authorities** (AIP, Enroute Charts):
 - ▶ Romania, Baltic States, Czech Republic, Slovakia, Slovenia, Hungary, ...
- **Pilot Stores:**
 - ▶ <http://www.eisenschmidt.de>
 - ▶ <https://www.siebert.aero>
 - ▶ <http://www.friebe.aero>
- Moving Map, GPS, Aeronautical Journals, Aviation Forums, Personal Conversations





- The European AIS Database (EAD) different levels: Basic, Pro, My
- EAD Basic offers standard aeronautical data reports, Pre-flight Information Bulletins (**PIBs**) and Aeronautical Information Publications (**eAIP**) and is available via the web for **free** with **registration**
- Albania, Czech Republic, Estonia, Hungary, Latvia, Macedonia, Moldova, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovakia, Slovenia
- <http://www.eurocontrol.int/ead>

eAIP



VFR Manual

List of 29 Countries available in the Jeppesen VFR Manual



For Enroute information refer to Jeppesen VFR+GPS Charts

Austria, Belgium/Luxembourg, Bosnia-Herzegovina, Croatia, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Macedonia (FYR), Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom.

Weekly Chart Change Notices on www.jeppesen.com/vfr-flying

JEPPESEN



Austria
Belgium/Luxemburg
Bosnia and Herzegovina
Croatia
Czech
Denmark
Estonia **Montenegro**
Finland Netherlands
France Norway
Germany **Poland**
Greece Portugal
Hungary **Serbia**
Ireland **Slovakia**
Italy **Slovenia**
Latvia Spain
Lithuania Sweden
Macedonia Switzerland
Malta United Kingdom

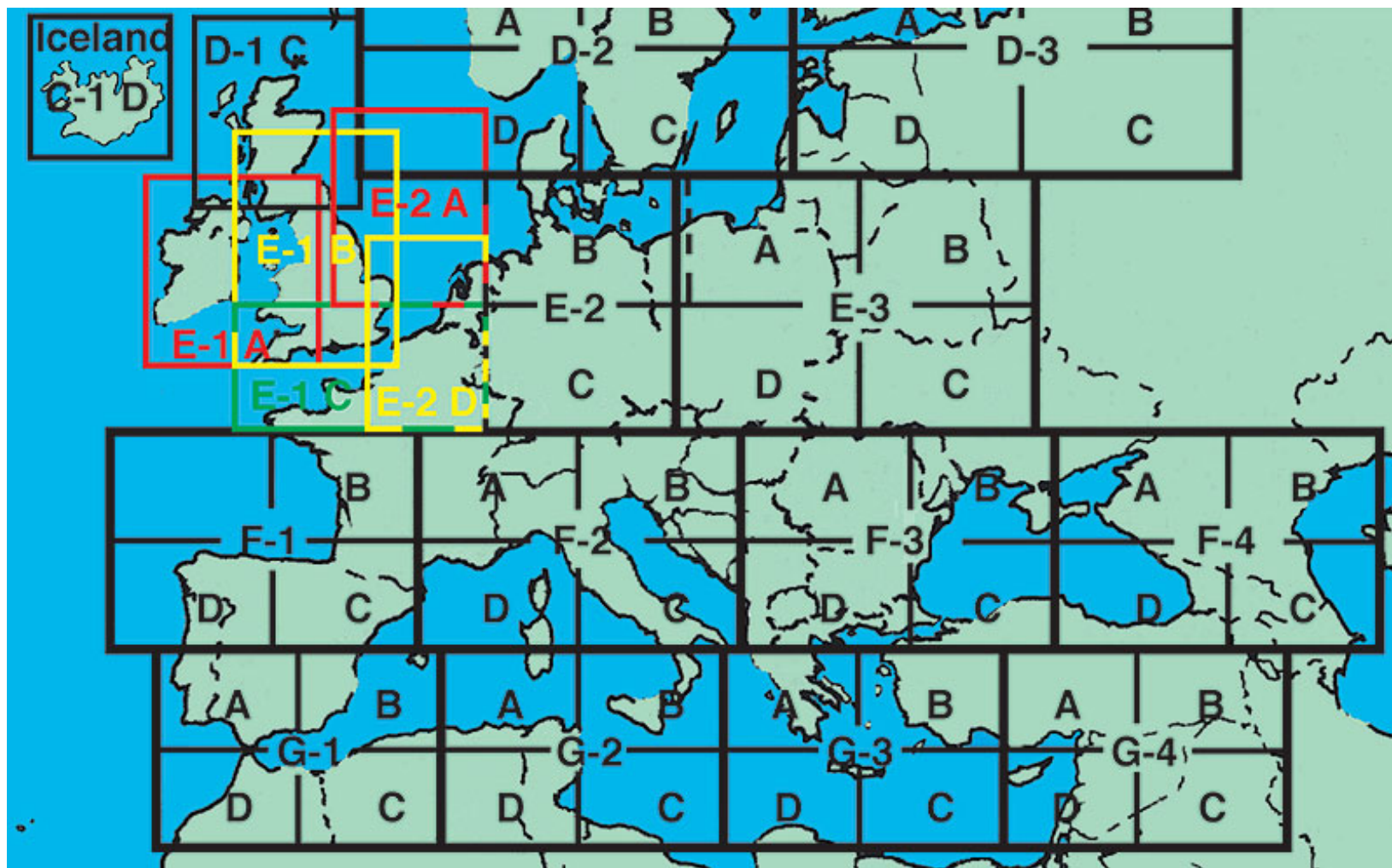
Not included:

- Russ. Enclave: Kaliningrad
- Belarus
- Ukraine
- Romania
- Moldavia
- Bulgaria
- Albania



- US-DoD (US-Verteidigungsministerium):
 - 1.) Tactical Pilotage Charts (TPC), Maßstab 1:500.000
 - 2.) Operational Navigation Charts (ONC), Maßstab 1:1.000.000
- Kegelp Projektion nach Lambert
- Für ganz Europa und Nordafrika
- Jedes Blatt im Format 146 x 107 cm
- Flugsicherungsaufdruck:
 - ▶ Flugplätze
 - ▶ Funknavigationsanlagen ohne Frequenzen,
 - ▶ Sperrgebiete,
 - ▶ Beschränkungs- und Gefahrengebiete.
- Achtung! Der Verkauf von ONC- und TPC-Karten bestimmter Gebiete/Länder wurde vom US-DoD (US-Verteidigungsministerium) eingestellt. Dies betrifft in Europa z. B. Griechenland, Rumänien, weiter sämtliche Gebiete im Nahen und Mittleren Osten sowie andere Krisengebiete.





Flying in Eastern Europe - An Overview of the Regulations

| Country | Code | PPR | COM at entry | VFR | VFR regul. | Special | FLP in/out | Pt X-ing | 1. LD | FLP intern |
|--------------------|------|-------------------|--------------|--------------------------|--------------------------|------------------------|------------|----------|-----------------------------|-------------|
| Poland | POL | no | | | SR-SS | ADIZ: FLP | yes | defined | | |
| Lithuania | LTU | no | | | ICAO | | yes | | Int. AD | |
| Latvia | LVA | no | | | | | yes | | Int. AD | yes |
| Estonia | EST | no | | | FL above 3000 ft | 2,7 NM border zone | yes | | CUST AD | yes |
| Kaliningrad | | ----- | ----- | no | ----- | ----- | ----- | ----- | ----- | ----- |
| Belarus | | yes ^{iv} | ----- | no | ----- | ----- | ----- | ----- | ----- | ----- |
| Ukraine | | yes ^{iv} | | only Int. AD | SR-SS | altitude in meters | yes | defined | Int. AD | yes |
| Czech | CZE | no | 3 min prior | | ICAO | ADIZ: report 30' prior | yes | defined | | yes |
| Slovakia | SVK | no | | ATS routes ⁱ | ICAO | ADIZ: report 30' prior | yes | defined | | yes for CTR |
| Hungary | HUN | no | 10 min prior | | | ADIZ: FLP | | | | |
| Romania | | yes | | | see presentation | | yes | defined | Int. AD | yes |
| Moldavia | | no | | | | | yes | | Int. AD | yes |
| Bulgaria | | yes | | | | altitude in meters | yes | | | yes |
| Slovenia | SVN | no | | | | | yes | | Int./Pub. ⁱⁱⁱ AD | yes |
| Croatia | | no | | | | | yes | | Int. AD | no |
| Bosnia/Herzegovina | | ----- | ----- | no | ----- | ----- | ----- | ----- | ----- | ----- |
| Serbia/Montenegro | SCG | no | | ATS routes | | | yes | | Int. AD | yes |
| Albania | | yes | | ATS routes ⁱⁱ | | | yes | | | yes |
| Macedonia | MKD | no | | yes | ICAO FL above 3000 ft | fly ATS routes | yes | | Int. AD | |

Notes:

| Pt X-ing | defined | specify in FLP: location in time - accuracy up to 10 min |
|----------|---------|--|
| VFR | i | ATS routes: above 5000ft |
| | ii | info from Alexander Weisser |
| 1. LD | iii | for Schengen members |
| PPR | iv | with expensive navigator |

ADIZ Air Defense Identification Zone (Flugüberwachungszone)



4. Private flights

4.1 General

4.1.1 If an operator intends to perform private flights in transit across or making non-traffic stops in the territory of Romania, the applications must be transmitted so that they will be received by the public authorities concerned at least twenty four (24) hours before the departure time.

4.1.2 If an operator intends to perform private flights into Romania for the purpose of taking on or discharging passengers and/or cargo, the applications must be submitted at least three (3) days in advance before the date of flight.

4.1.3 The first landing and the last take-off must be carried out at a previously designated international aerodrome.

4.1.4 The applications for private flights into Romania shall contain the following information:

- a) applicant name, nationality and address;
- b) aircraft type, registration marks and maximum take-off weight;
- c) flight general itinerary, route to be followed over the territory of Romania, landing/ take-off points and estimated times;
- d) purpose of flight, number of passengers and/or cargo nature and amount, if applicable;
- e) receiving party in Romania;
- f) FL and if IFR or VFR

4.2 Documentary requirements for clearance of aircraft

4.2.1 Same requirements as for SCHEDULED FLIGHTS.

Send your application to:
sris@caa.ro



From Romanian AIP:

6. Flights of civil aircraft registered in another state performed entirely or partially outside the published ATS routes

6.4 The above-mentioned application shall contain the following:

- e) **copy of the document with the advice of the local public administration** authority, in case the flight activity is performed on other fields than the authorized aerodromes;
This does not work in practice!!!
- f) copy of the **insurance certificate** for passengers and third parties liabilities, concluded in compliance with the legal provisions in force.
- 6.5 RCAA reserves itself the right to request any other documents, which are deemed relevant in granting the approval.
- 6.7 The operator of the aircraft is compelled to **provide a copy of the flight approval to the aerodromes of origin and/or destination** as the case may be.

This does not work in practice!!!



In addition I have to mention that the Romanian Aeronautical Authority is not entitled to give the flight approval, unless it is for landings/take-offs on/from the airfields authorised by the authority. Their list is published in the AIP.

Mihaela Rotariu
Şef serviciu relații
internaționale și survol
AACR

**Autoritatea
Aeronautică
Civilă
Română**

**Romanian
Civil
Aeronautical
Authority**

Tel:+4021 208.15.30
Fax:+4021 208.15.83

@: mihaela.rotariu@caa.ro<mailto:mihaela.rotariu@caa.ro>

SITA: BUHTOYA

- In the application, specify your flight through Romania as if you do not plan to go to local airfields and receive your permit number.
- Once in Romania call the Romanian Aero Club to take responsibility for you and clear you to an airfield not under the control of the RCAA.



4 Types of Flights in Romania

1. International AD to International AD
2. International AD to Aero Club Airfield
3. Aero Club Airfield to Aero Club Airfield
4. Aero Club Airfield to International AD

For 1.) File flight plan with number of permit

For 2.) File flight plan with number of permit

Aero Club Airfield: Check for PPR

Romanian Aero Club: <http://www.aeroclubulromaniei.ro>

B-dul Lascar Catargiu nr. 54, Sector 1, Bucuresti, Romania

Phone: +40.21-312.36.19 and +40.21-317.38.61 Fax: +40.21-312.36.19

E-Mail: andreearebegea@yahoo.co

For 3. and 4.) Flight organized by Commander of Aero Club



- Romanian AIP can be ordered via RCAA but:
 - ▶ no Volume VFR
- Romanian AIP: not online, but:
 - ▶ General: <http://worldaerodata.com>
 - ▶ Airports: <http://worldaerodata.com/countries/Romania.php>
 - ▶ Nav-Aids: <http://worldaerodata.com/nav/Romania.php>
- **New:** VFR Charts for Romania from RCAA:
 - ▶ 3 maps 1:500.000 for 27 €
 - ▶ Air Navigation & Aeronautical Information Services Department
 - ▶ Tel: +40.21.208.15.12; Fax: +40.21.208.15.64; E-mail: ais@caa.ro
- VFR Enroute Charts are not available for all countries!
- Solution: Combine TPC and IFR Chart (fly with two maps)



Gov. and Mil. Airports in Romania

| Name | ICAO ID | City |
|--|---------|-------------|
| ARAD | LRAR | |
| AUREL VLAICU | LRBS | Bucuresti |
| BACAU | LRBC | |
| BOBOC | | |
| CAMPIA TURZII | LRCT | |
| CARANSEBES | LRCS | |
| CATALOI | LRTC | Tulcea |
| CLUJ NAPOCA | LRCL | |
| CRAIOVA | LRCV | |
| DEVESELU | | |
| FETESTI | | |
| HENRI COANDA | LROP | Bucuresti |
| IANCA | | |
| IASI | LRIA | |
| MIHAIL KOGALNICEANU | LRCK | |
| ORADEA | LR0D | |
| SATU MARE | LRSM | |
| SIBIU | LRSB | |
| STEFAN CEL MARE | LRSV | Suceava |
| TAUTII MAGHERAUS | LRBM | Baia Mare |
| TRAIAN VUIA | LRTR | Timisoara |
| TRANSILVANIA TARGU MURES | LRTM | Targu Mures |

<http://worldaerodata.com>



- Always take the **weather** with you ... <http://flugwetter.ProfScholz.de>
Long term weather forecasts are important!
- **NOTAM** and **Flight Plan**: <http://www.dfs-ais.de>

The screenshot shows the DFS AIS-Portal website. At the top, there is a navigation bar with links for 'home', 'contact', 'impressum', and 'english'. The main header includes the DFS logo and the text 'DFS Deutsche Flugsicherung' and 'AIS-Portal'. A dark blue banner at the top right displays 'dfs.de'. On the left side, a vertical menu lists various services: 'AIS-Portal Home', 'Flugplanaufgabe', 'FPL-Folgemeldungen', 'NOTAM-Briefing', 'VFRbulletin', 'Persönliche Daten', 'Logout', 'Aeronautical Information Service', 'Call your personal AIS', 'Aviation Shop', and 'Luftsport und Freizeit'. A red arrow points to the 'Flugberatung (NOTAM)' section. The main content area features a search form with fields for 'LFZ-KENNUNG' (containing 'DEAIN'), 'FLUGREGELN' (with radio buttons for 'IFR' and 'VFR'), and 'HIGHLIGHTS' (with a dropdown menu showing 'PRD'). To the right of the form is a map of Europe with a compass rose. Below the map is a 'location indicator' button. At the bottom, there is a section for 'FLUGINFORMATIONSGEBIETE (FIR)' with a dropdown menu showing 'LRBB'.

check
for fuel at
destination



- Canister
- Funnel with filter
- Engine oil



Flying in Eastern Europe



- For Romania necessary:
An aircraft that can take two sorts of fuel:
 - AVGAS
 - Mogas



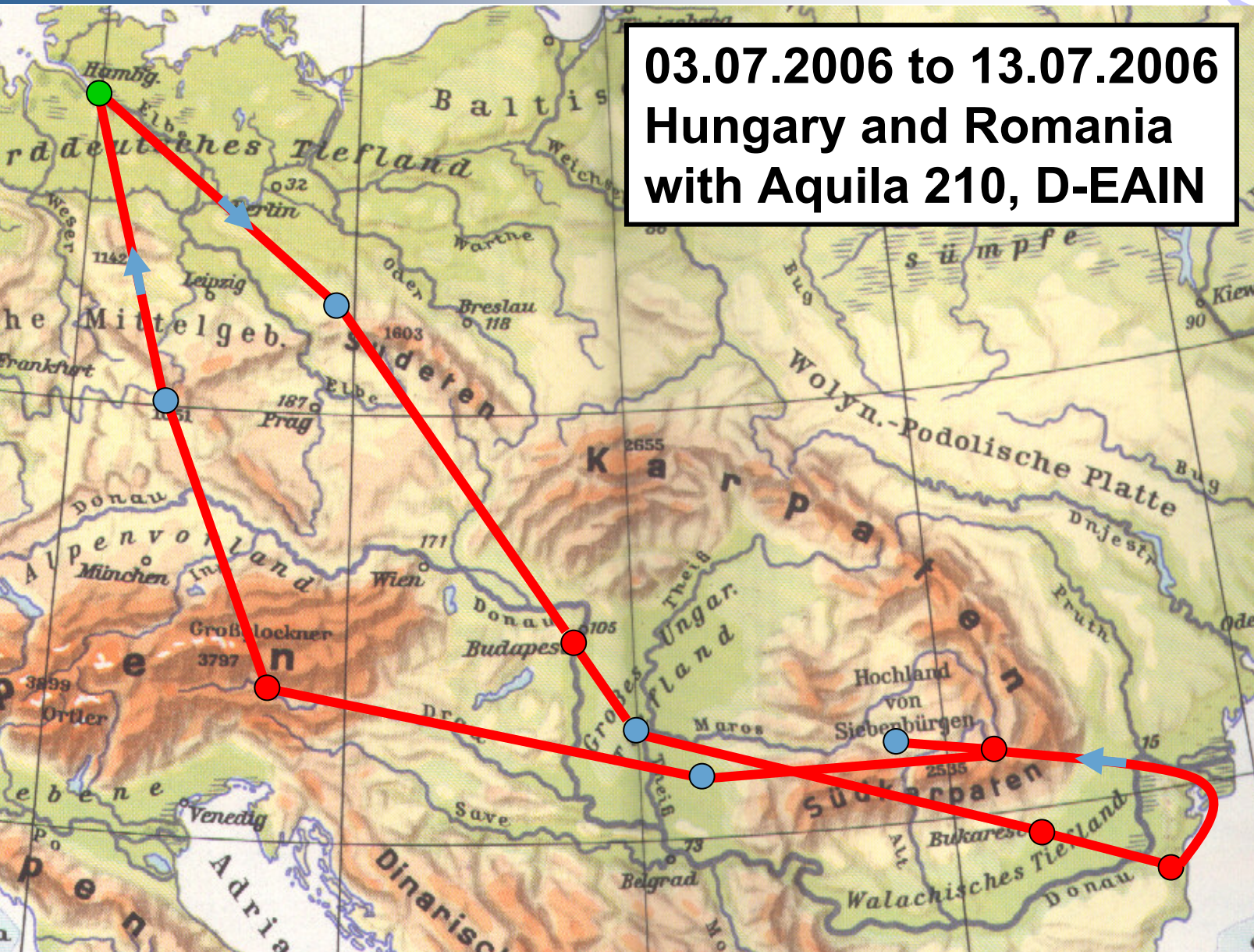
Flights in Eastern Europe – Some Pictures







**03.07.2006 to 13.07.2006
Hungary and Romania
with Aquila 210, D-EAIN**



● Start / Finish

● Night Stop

● Visit / Refueling







Szeged, Hungary Custom Clearance for Romania



The Romanian Carpathians







The Danube & Danube Delta, on the Way to Constanța







On the way to Sibiu



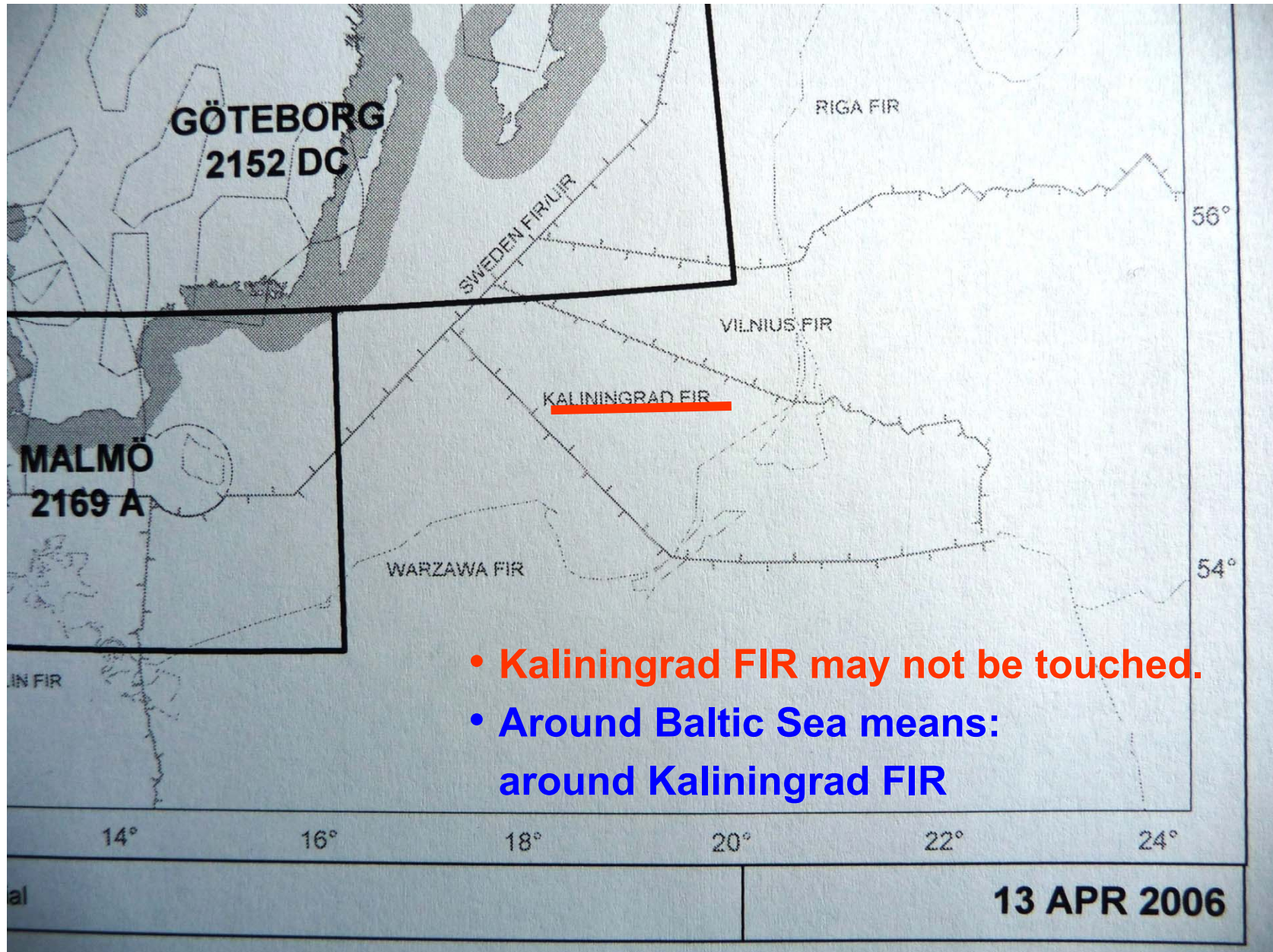
Departing from Timișoara and Romania







Kaliningrad FIR (Russian Enclave)









Curved sand
dune spit
that
separates
the Curonian
Lagoon from
the Baltic
See





- Maintenance of AN-2
- No radio
- No landing fees







Landing in Riga





Waiting for Take-Off Clearance in Riga





Estonian Border Rain above Estonia







Rep. Moldova

Chişinău International Airport

Tu-134



Where We Did Not Fly Yet ... Transnistria



Transnistria (Приднестрoвье)

Tiraspol Airport

"not under the control of Moldova"



Gagauziya

No airfield in capital city Comrat



The Crew (Curonian Spit, Lithuania)



The End



Fliegen in Osteuropa

aus der Seminarreihe der HFB Motorfluggruppe



Vortrag Mai 2009

Rumänien, Baltikum, ...

Fliegen in Osteuropa



Zeit Montag, den 11. Mai 2009, 17:30 - 19:00

Ort Hamburg-Finkenwerder, Haus 25, 1. Etage, Raum: Guppy

Referenten Dieter Scholz und Mihaela Niță (Airbus HFB Motorfluggruppe und Hochschule für Angewandte Wissenschaften Hamburg)

Gäste Nicht-Mitglieder oder Nicht-Airbus-Mitarbeiter sind herzlich willkommen!
Nach vorheriger Anmeldung ist der Treffpunkt für Gäste 17 Uhr am
Airbus Osttor, Kreetstag 10, 21129 Hamburg.

Die Teilnahme ist kostenlos. Dieser Vortrag findet im Rahmen der Seminarreihe der Airbus HFB Motorfluggruppe statt, jeweils den zweiten Montag im Monat, 17:30 - 19:30 Uhr auf dem Airbus Gelände Finkenwerder im Haus 25. Weitere Informationen und Präsentationen stehen für Mitglieder im Flightconsult bereit.
Ansprechpartner: Martin Sieben (martin.sieben@airbus.com) und Werner Tesch (werner.tesch@gmx.de)

