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# Air Navigation Race (ANR) Introduction

# AGENDA



## BASIC IDEA

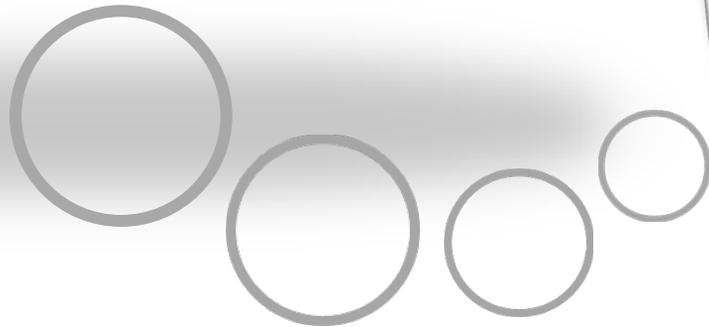
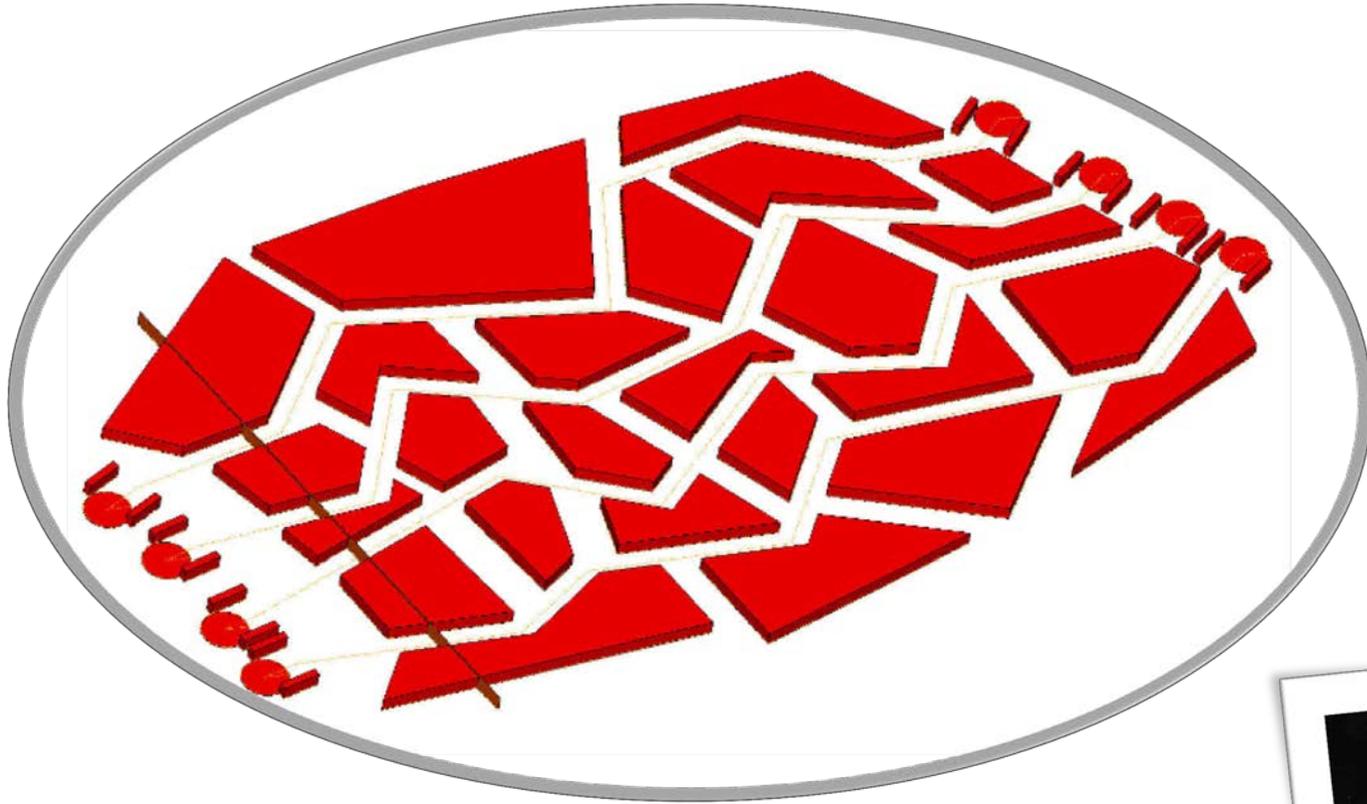
**ANR Rules & Regulations (a short introduction)**

**ANR Live**

**Flight Planning**

**ANR Movie**

# BASIC IDEA



# BASIC IDEA



-  **Fun** for pilots / navigators and friends
-  **Motivation** for pilots / navigators and colleagues to participate a competition
-  **Real race atmosphere** including GPS transmission on a large screen
-  **Qualifications** – 1/8 finals - 1/4 finals - 1/2 finals - final
-  **The best** competing against the best!
-  Media attention means **sponsoring possibilities**
-  **Simple rules & regulations**, easy entrance for young pilots
-  **No solo flights**. Pilot plus navigator obligatory (for safety reasons)
-  **Low costs** allowing extra financial resources for local entertainments

# BASIC IDEA

## *Improving of fundamental flying skills*



 Emphasizing the ability to follow a precise track whilst adhering closely to a time schedule, a given corridor and a groundspeed.

 Emphasizing the ability to land an aircraft in short and narrow places with the simulation of trees or other obstacles on the approach, thereby fully demonstrating a pilot's ability to handle an aircraft both accurately and safely.

# AGENDA



## BASIC IDEA

## ANR Rules & Regulations (a short introduction)

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# ANR Rules & Regulations (a short introduction)

## *Conditions*



## Introduction

-  The competition will consist of the following two groups of tests:
1. NAVIGATION TEST (Qualifikation,  $\frac{1}{8}$  final,  $\frac{1}{4}$  final,  $\frac{1}{2}$  final, final)
  2. LANDING TEST (two landings)



# **ANR Rules & Regulations** (a short introduction)

## *Air Navigation Race Test*



### **Flight Planning**

 The competitors may enter the flight planning room at the assigned time to be ready in time to receive:

1. a set of instructions
2. two competition maps
3. departure and arrival charts
4. detailed maps of the start and finish points

 The competitors are required to calculate the flight plan for the designated route of the Air Navigation Race test.

# **ANR Rules & Regulations** (a short introduction)

## *Air Navigation Race Test*



### **Flight Planning**

 For flight planning and map preparation, 30 minutes are allowed. Map preparation will take place in the flight planning room.

 From the time when the competitor is scheduled to leave the flight planning room, he shall be allowed 15 minutes to go to his aircraft, prepare it for flight and taxi to the take-off position.

# **ANR Rules & Regulations** (a short introduction)

## *Air Navigation Race Test*



### **Air Navigation Race Tests**

-  Times will be checked on passing Take off line - overhead start- and finish point.
-  The aircraft must be established on the correct track of the first leg when crossing the start point. Circling after passing the start point is not allowed.
-  During the navigation tests the recommended flying altitude is 1000 feet AGL. The organizer has the right to declare a different altitude for safety reasons. The minimum altitude to be flown is 500 feet AGL or the state limits, whichever is higher. If the state limit is higher than 500 feet AGL, it must be published in the local regulations.

# **ANR Rules & Regulations** (a short introduction)

## *Air Navigation Race Test*



### **Air Navigation Race Tests**

-  The competition management will define the race speed. Normally airplanes must be able to fly 80 kts GS irrespective of wind conditions.
-  Departure and return flight via prescribed route is mandatory.
-  All corridors must be passed by the Competitor inside. The competition management will define the corridor width.

# **ANR Rules & Regulations** (a short introduction)

## *Air Navigation Race Test*



### **Air Navigation Race Tests**

-  At SP / FP the gate has an extended “gate line”, being a distance of 0.3 NM right and left of the SP / FP (Total: 0.6NM).
-  Crossing opposite to the direction of flight this “extended SP-gate line” any time gives penalties for circling.
-  Timing at the SP takes place when the aircraft is the first time passing the “gate line” (within this 0.6NM).

# ANR Rules & Regulations (a short introduction)

## *Titles*



 The competition is an individual competitor ( Pilot/Navigator) competition. Titles are awarded for the following categories:

 **Air Navigation Race**

 **Landing**

 **TOP Air Navigation Race (Air Navigation Race and Landing)**

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## ANR Movie

# ANR Live



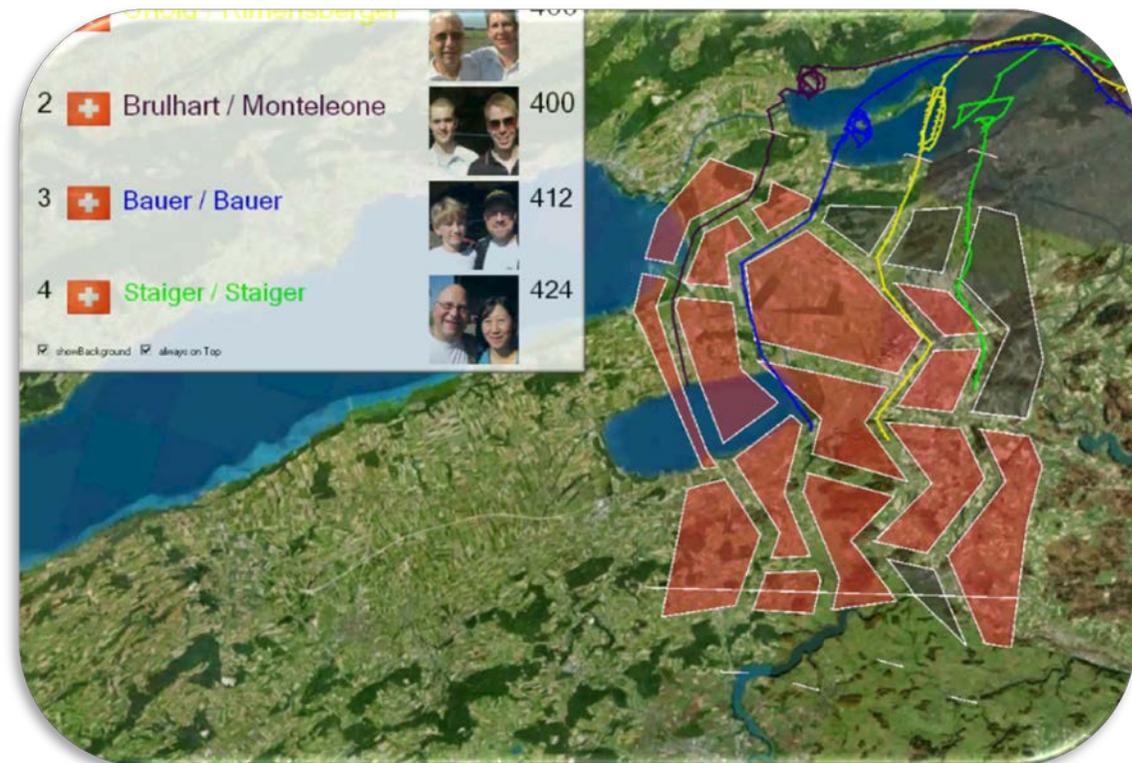
Media attraction -> Sponsoring!



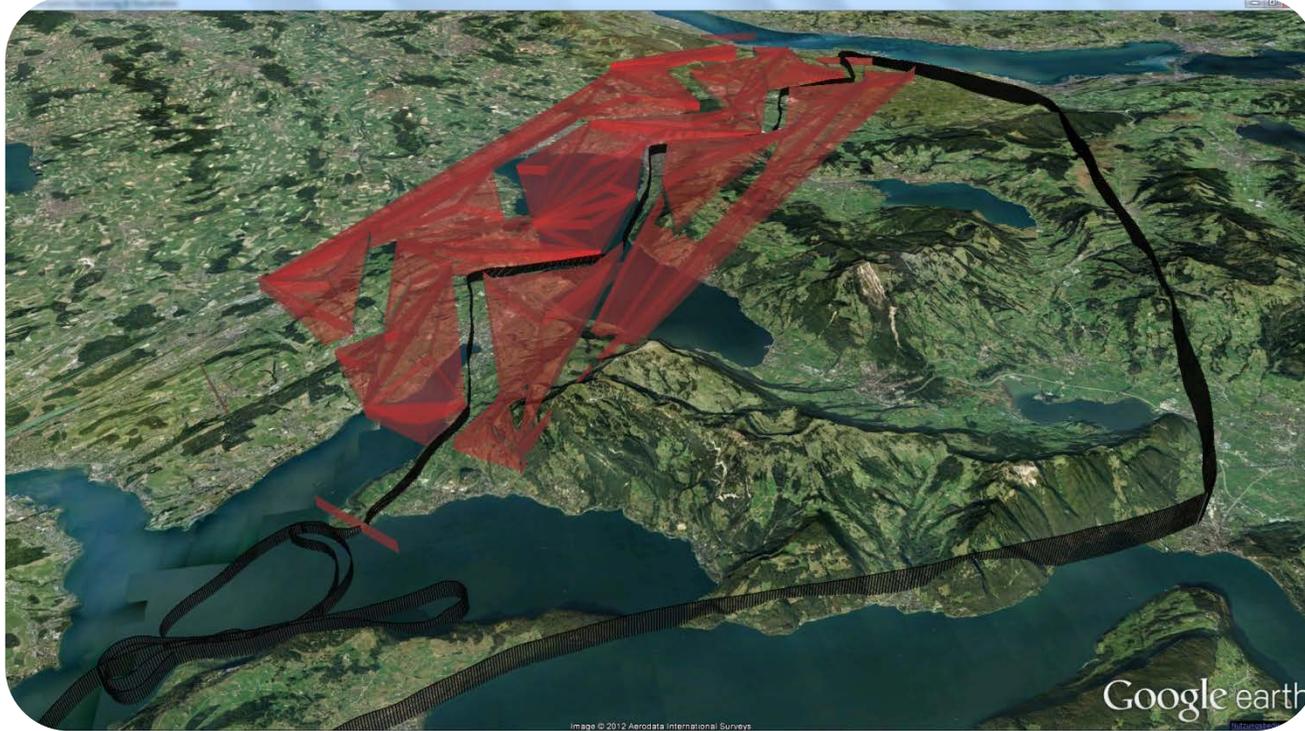
Real race atmosphere for your families & friends!



ANR Live will include an online ranking.



# ANR Live



GSM/GPS Logger not longer in use. New development with satellite tracker has started. Roll out in 2014.

# AGENDA



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## ANR Rules & Regulations (a short introduction)

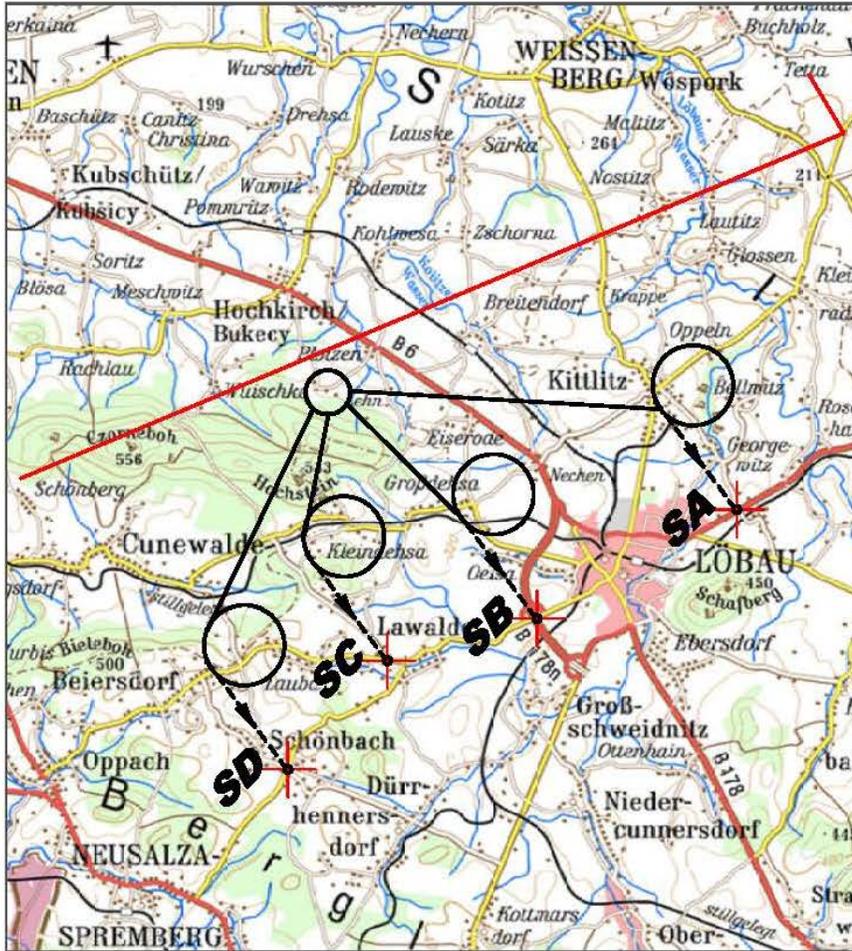
## ANR Live

## Flight Planning

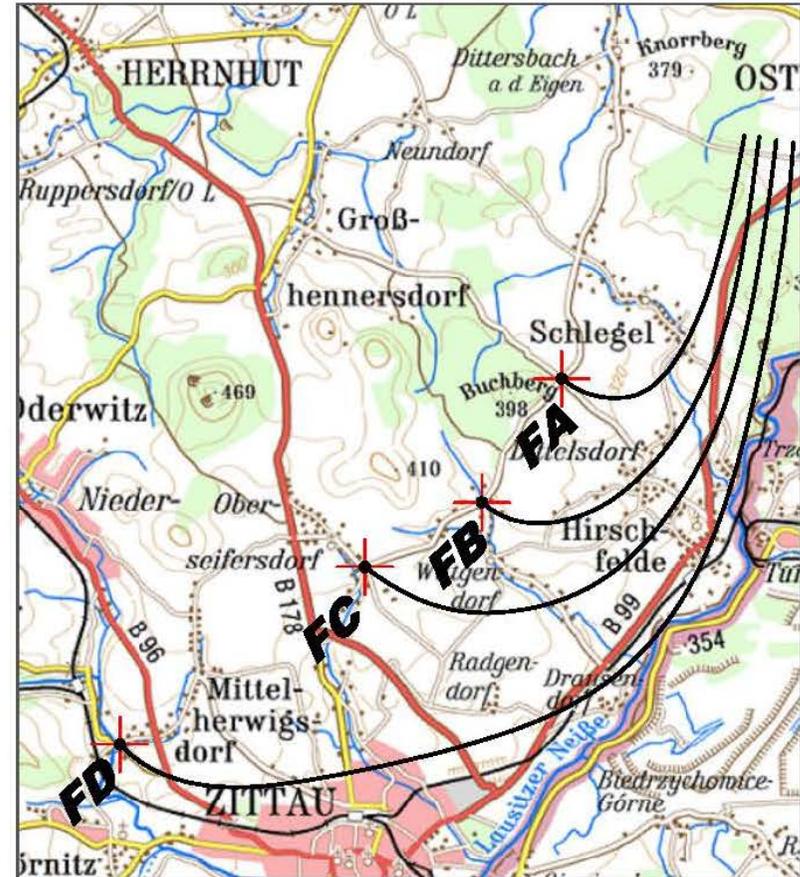
## ANR Movie

# Flight Planning

## APP / DEP Routes



Approach Routes



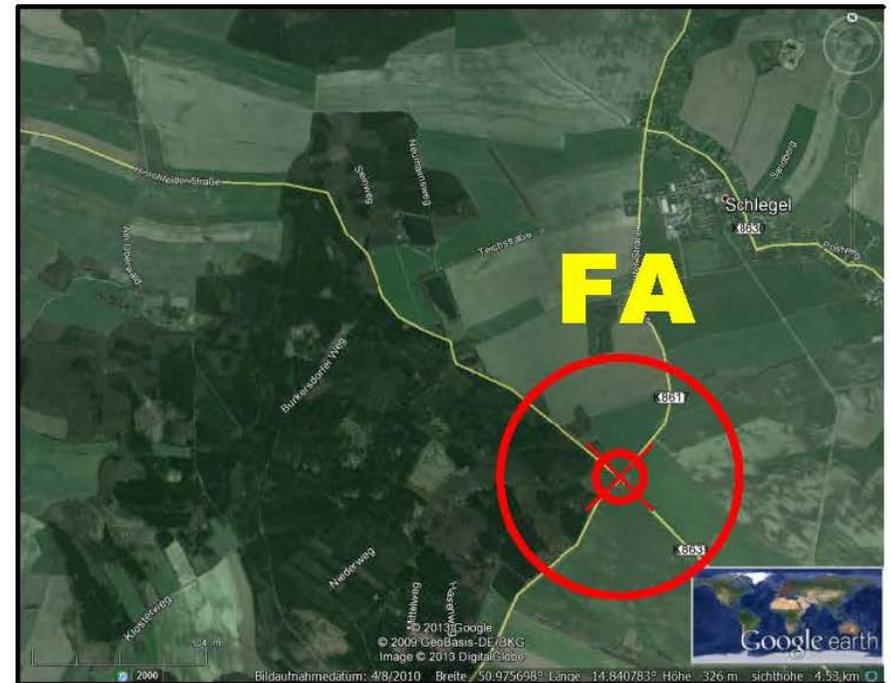
Departure Routes

# Flight Planning

*Detailed maps of the start and finish points*



START-Point A



FINISH-Point A

# Flight Planning

## 1 Trainingsparcours, Track A

Competition: 2013 ANR Bautzen

Parcour: 1 Trainingsparcours

Copy from the startlist (in red)

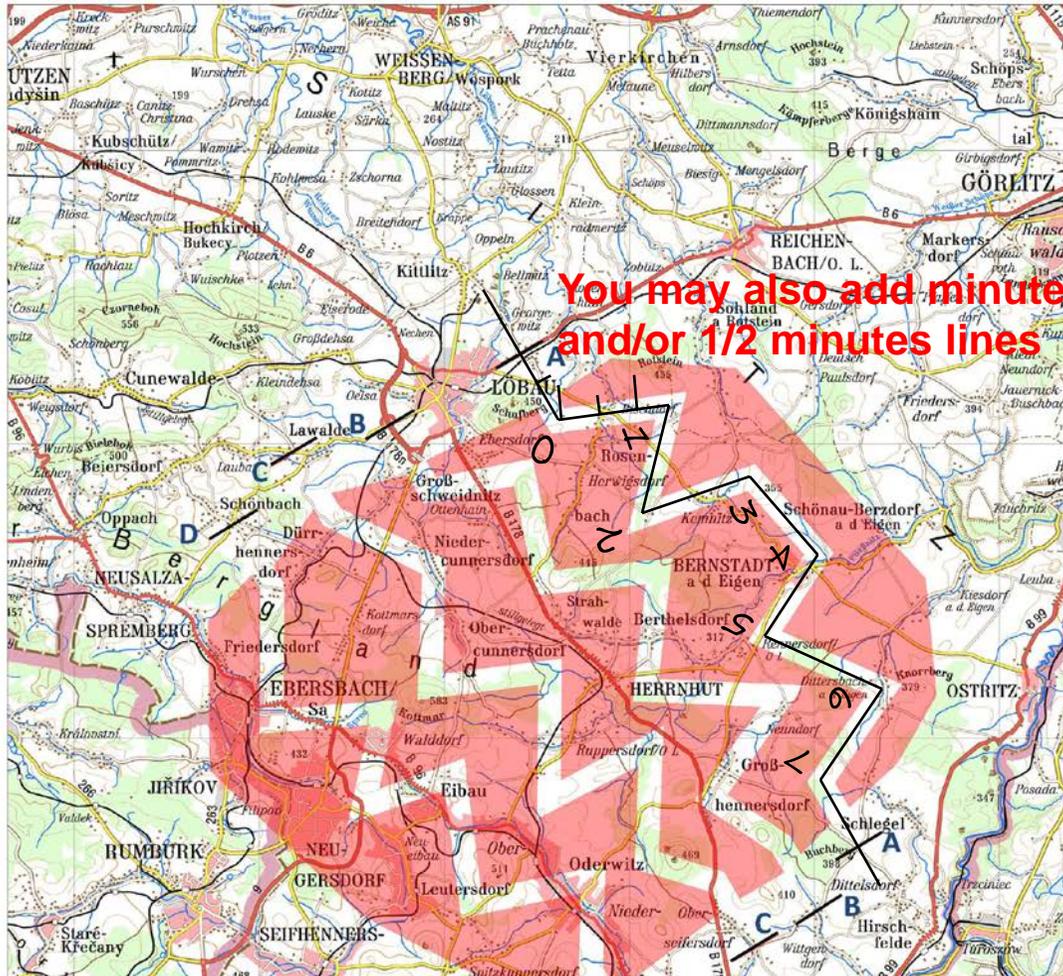


Corridor width = 0,4 NM

SP to FP length = 16 NM

SP to FP time @ 80 kts = 12 min

Scale: 1:200'000



Comp. Nr:	1	Track:	A
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	Dist.	TT	EET	ETO
T/O				11:30:00
SP				11:45:00
TP0	1.3	150	00:59	45:59
TP1	2.0	082	01:30	47:29
TP2	1.9	195	01:25	48:54
TP3	1.9	085	01:25	50:19
TP4	1.7	139	01:17	51:36
TP5	1.7	213	01:17	52:53
TP6	2.2	114	01:39	54:32
TP7	1.9	215	01:25	55:57
TP8				
TP9				
FP	1.4	153	01:03	11:57:00
Σ	16.0		12:00	

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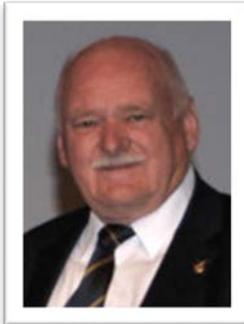
This short, five minute training film was commissioned by the FAI to introduce ANR flying to an international audience of pilots, navigators and sponsors interested in this brand-new air sport. Filmed during the World Precision Flying Championships 2013 held in Bautzen, Germany.

# ANR Contacts



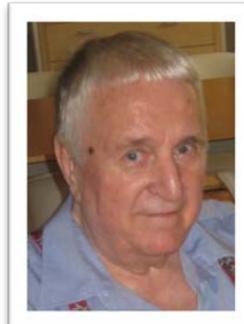
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**Heinrich Schawalder**  
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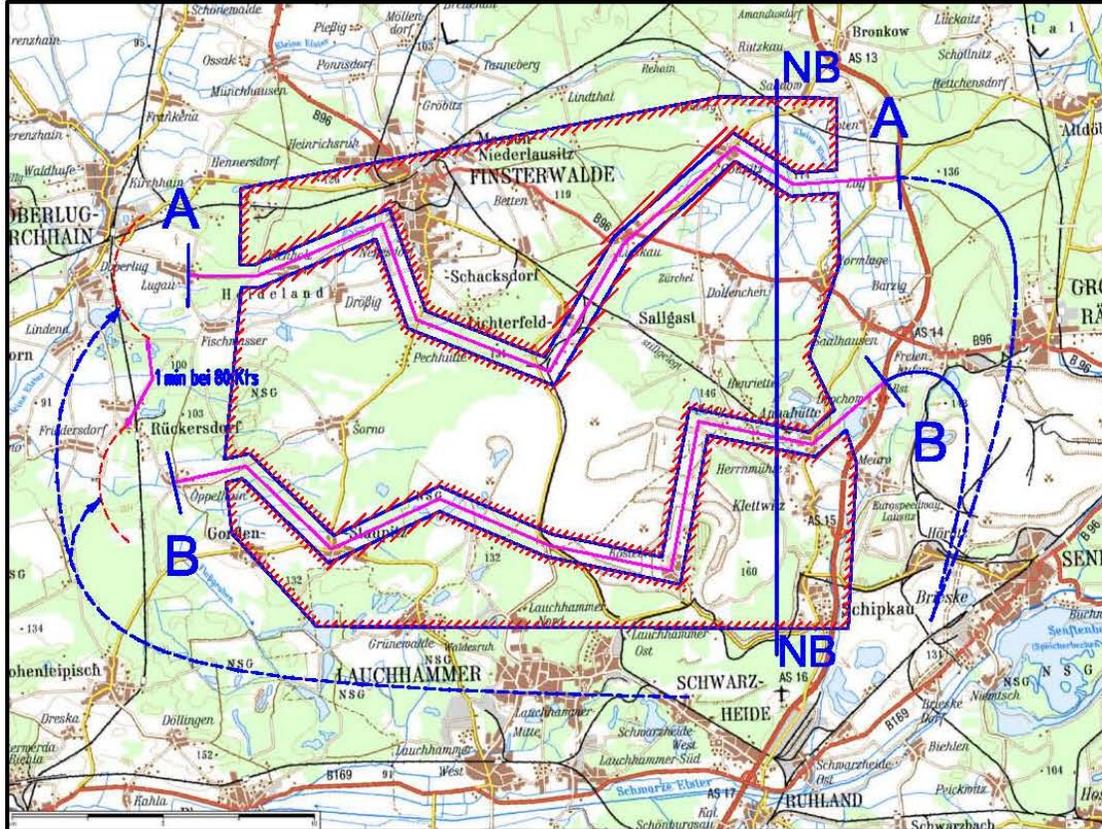
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**John Ducret**  
ANR Parcours Planner (National & International)

[john.ducret@gmail.com](mailto:john.ducret@gmail.com)

# Questions / Discussion



	Dist.	TT	EET	ETO
TO				
SP				
TP1				
TP2				
TP3				
TP4				
TP5				
TP6				
TP7				
TP8				
TP9				
FP				
=				

Airways = 0.4 NM  
 Time = 12' / 80 Kts  
 Dist. = 16 NM



2011  
 Test-Parcour  
 Schipkau

Scale 1:200'000	Name	John DUCRET
	Date	September 2011
	Visum	Maurice DUCRET
<b>SCHIPKAU</b>		