

A/P



AIR NAVIGATION RACE



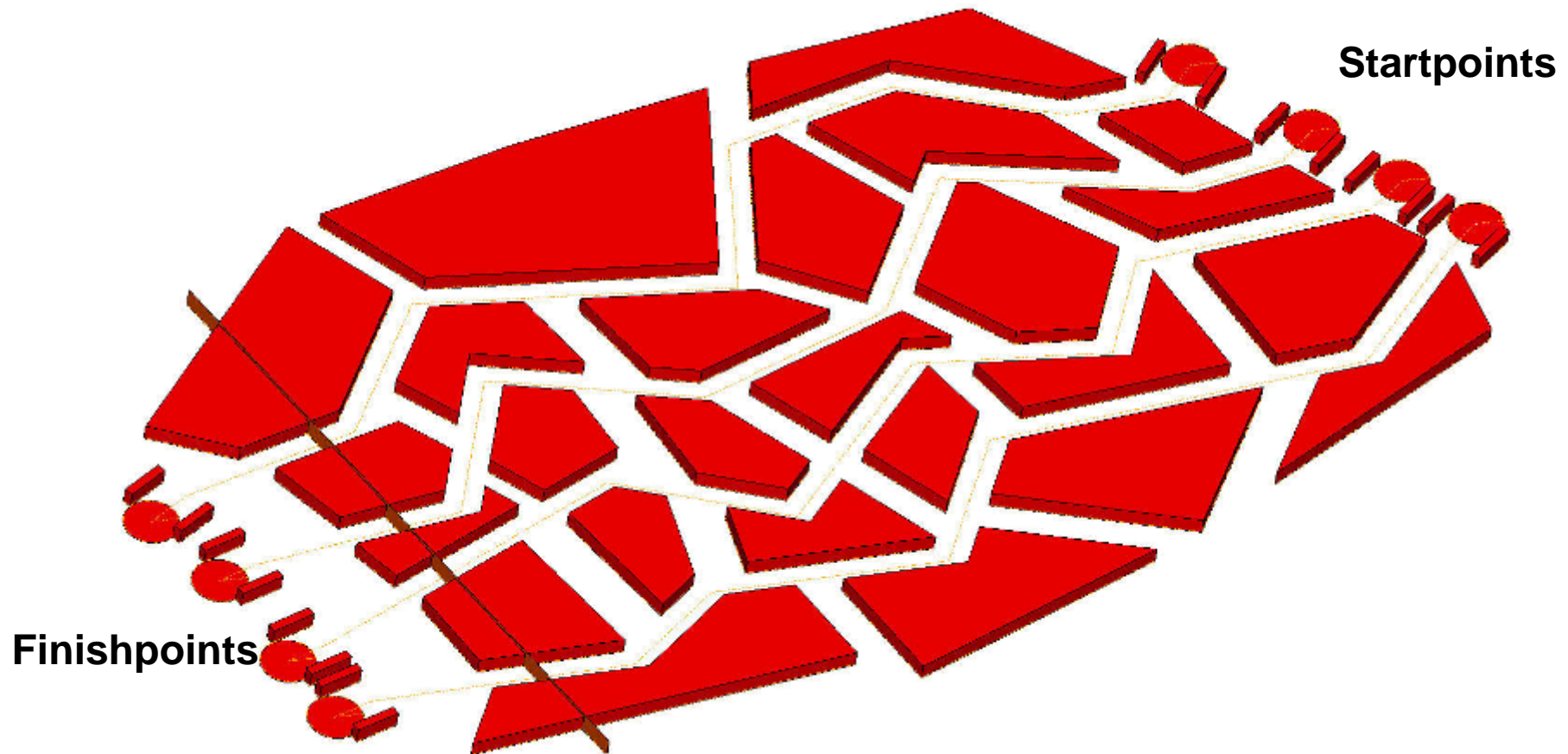
Air Navigation Race

BASIC IDEA

- ✓ **Fun** for pilots / navigators and friends
- ✓ **Real race atmosphere** including **live** GPS transmission on large screen.
- ✓ **Qualifications** – $\frac{1}{8}$ finals - $\frac{1}{4}$ finals - $\frac{1}{2}$ finals - final.
- ✓ **The best competing against the best!**
- ✓ **Media attention means sponsoring possibilities**
- ✓ **Simple regulations.** Easy entrance for young pilots.
- ✓ **No solo flights.** Pilot plus navigator obligatory (for safety reasons). No airplane sharing.
- ✓ **Up to 160 participants possible !**

Air Navigation Race

BASIC IDEA





Air Navigation Race

STARTLIST

| Teamnr. | Startnr. | AC | Pilot | Navigator | T.Off UTC | Startpoint UTC |
|---------|----------|--------|------------|-----------|--------------|-------------------|
| 12 | A | HB-CGH | Mercier | Jaquet | 1400 | 1413 |
| 9 | B | HB-CDU | Müller | Huber | 1401 | 1413 |
| 2 | C | HB-PLY | Duperret | Hansen | 1402 | 1413 |
| 10 | D | HB-SCL | Van Duisen | Remont | 1403 | 1413 |

Take-off time: Limit minus 0 / plus 60 seconds

Startpoint time: Limit minus or plus 1 second



Air Navigation Race

FLIGHT PLANNING

A.1.1.1 The competitor may enter the flight planning room at the assigned time to be ready in time to receive (1) an envelope, (2) two competition map, (3) a set of instructions, (4) departure and arrival charts, (5) Start point and finish point.

The assigned time is 45 minutes before take-off time

A.1.1.3 Wind direction and speed over the competition airport will be given.

A.1.1.4 For flight planning and map preparation, the competitor is **allowed 30 minutes**. 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.

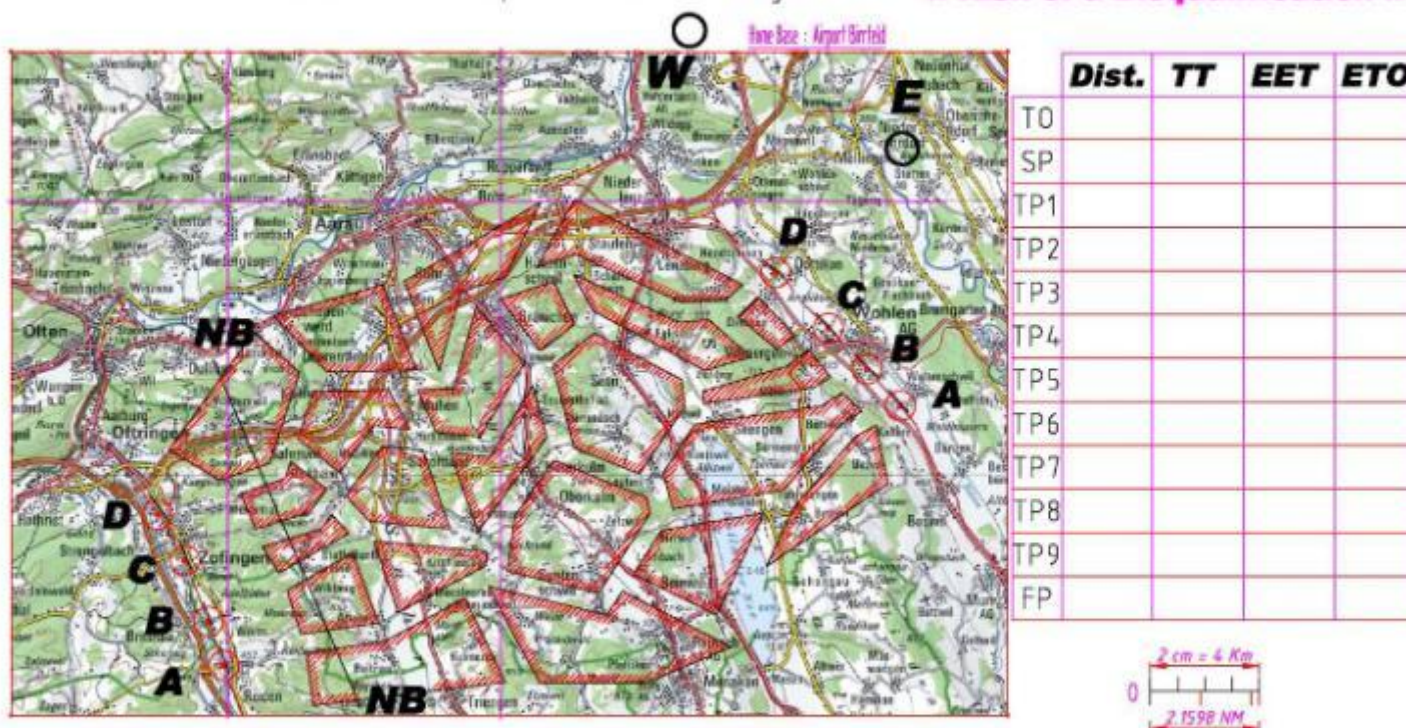
Air Navigation Race

MAP FOR TEAM

| AC | | Group | | Startnr | |
|----|--|-------|--|---------|--|
|----|--|-------|--|---------|--|

Important : This paper must after landing immediately delivered to the competition management.

It is forbidden to make copies or notes of this flight order. **!! Risk of a Disqualification !!**



Airways ≥ 0.4 NM

Fly-Time 12' / 80 Kts

ϕ -Dist. = 28.6945 Km = 15.4937 NM

ϕ -Dist.-Tol. = -0.4% / +0.4%



Air Navigation Race

CALCULATION

| | Dist. | TT | EET | ETO |
|-----|-------|-----|-------|----------|
| TO | | | | 14.00.00 |
| SP | | 242 | 13.00 | 14.13.00 |
| TP1 | | 242 | 0.45 | 14.13.45 |
| TP2 | | 224 | 1.37 | 14.15.22 |
| TP3 | | 262 | 1.58 | 14.17.20 |
| TP4 | | 215 | 1.30 | 14.18.50 |
| TP5 | | 284 | 1.48 | 14.20.38 |
| TP6 | | 241 | 1.45 | 14.22.23 |
| TP7 | | 261 | 1.49 | 14.24.12 |
| TP8 | | | | |
| TP9 | | | | |
| FP | | 249 | 0.48 | 14.25.00 |

**Check: 12.00 minutes
(see Team – map)**

**TAS = GS
80Kts !!
Flight time =
+/- 45 minutes**

**Failure to leave flight
planning room after 30
minutes =
100 Penalties**



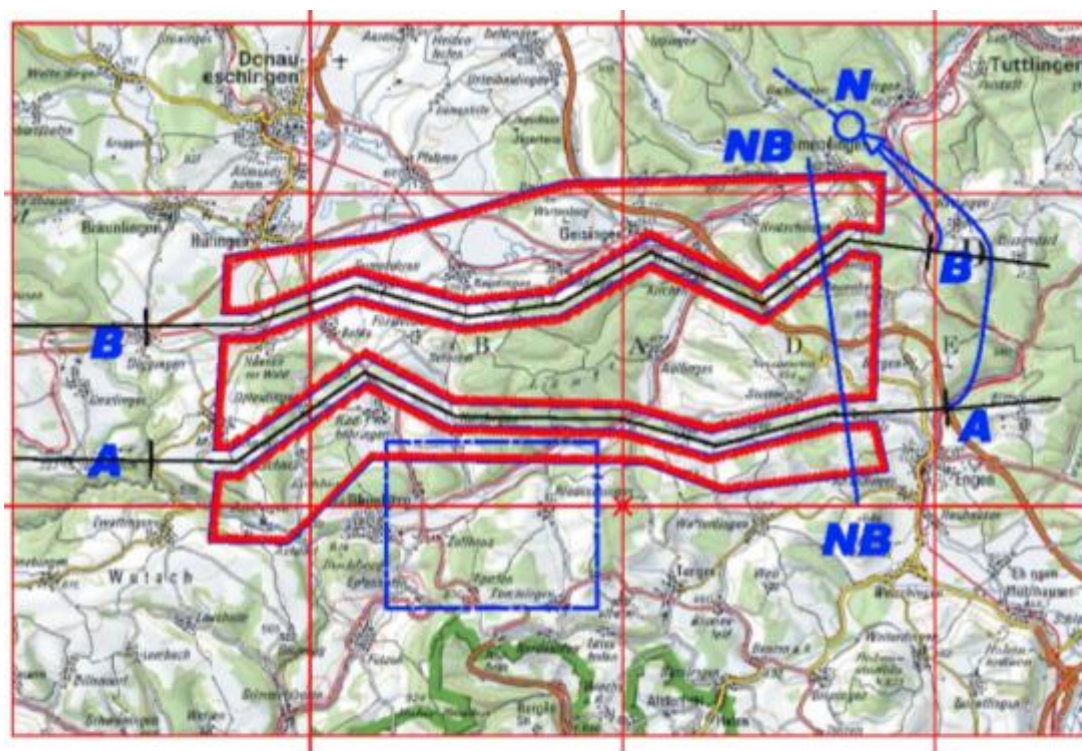
Air Navigation Race

FLIGHT PLANNING

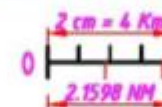


Air Navigation Race

FLIGHT PLANNING 1st STEP



| | Dist. | TT | EET | ETO |
|-----|--------------|-----------|------------|------------|
| T0 | | | | |
| SP | | 090 | | |
| TP1 | 1.8 | 089 | | |
| TP2 | 2.0 | 070 | | |
| TP3 | 2.0 | 105 | | |
| TP4 | 1.6 | 084 | | |
| TP5 | 1.9 | 060 | | |
| TP6 | 2.2 | 115 | | |
| TP7 | 1.9 | 054 | | |
| TP8 | ---- | ---- | | |
| TP9 | ---- | ---- | | |
| FP | 1.5 | 099 | | |

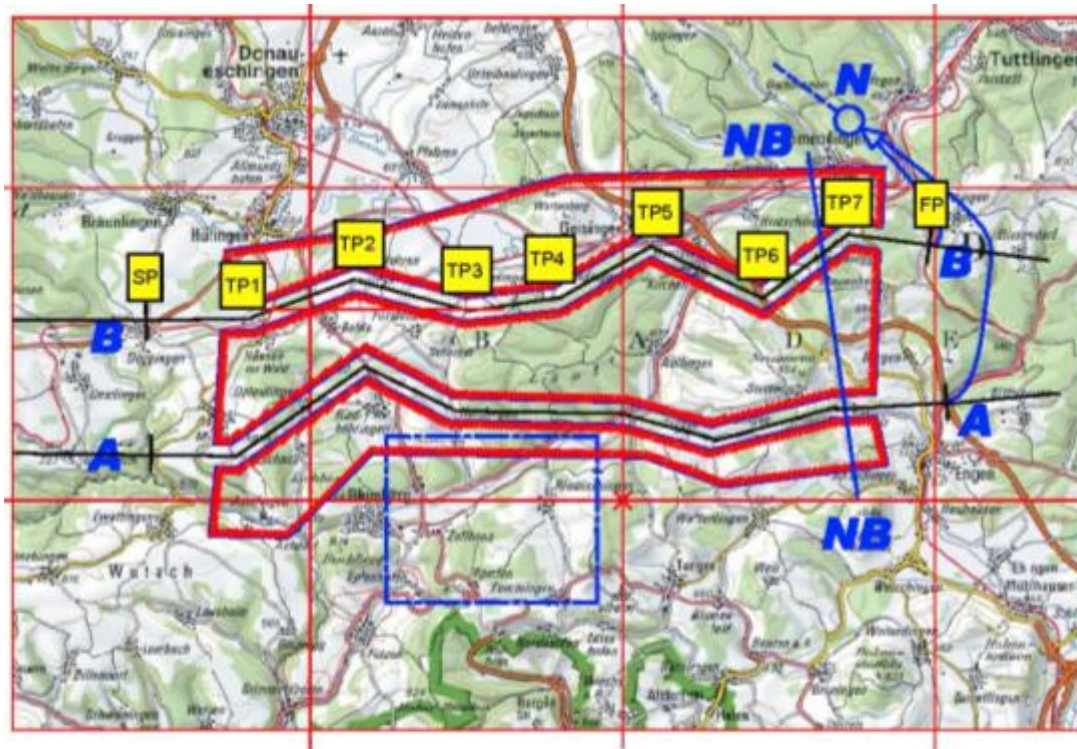


Airways ≥ 0.4 NM
Fly-Time 11' / 80 Kts
 ϕ -Dist. = 27 Km = 14.6 NM
 ϕ -Dist.-Tol. = +0.02% / -0.02%

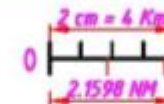
| | | | | | | | | | | | | | |
|---|--|---|-------------------------------------|---|-------|------|----------------|-----------|------|------------|--|-------|--------------|
|  |  |  | 2010 T-Parcour DonauEschingen | <table border="1"> <tr> <td>Scale</td> <td>Name</td> <td>J. & M. Ducret</td> </tr> <tr> <td>1:200'000</td> <td>Date</td> <td>April 2010</td> </tr> <tr> <td></td> <td>Visum</td> <td>H. Schwalder</td> </tr> </table> | Scale | Name | J. & M. Ducret | 1:200'000 | Date | April 2010 | | Visum | H. Schwalder |
| Scale | Name | J. & M. Ducret | | | | | | | | | | | |
| 1:200'000 | Date | April 2010 | | | | | | | | | | | |
| | Visum | H. Schwalder | | | | | | | | | | | |
| | | | | DE-TP | | | | | | | | | |

Air Navigation Race

FLIGHT PLANNING 2st STEP



| | Dist. | TT | EET | ETO |
|-----|--------------|-----------|------------|------------|
| T0 | | | | |
| SP | | 090 | | |
| TP1 | 1.8 | 089 | | |
| TP2 | 2.0 | 070 | | |
| TP3 | 2.0 | 105 | | |
| TP4 | 1.6 | 084 | | |
| TP5 | 1.9 | 060 | | |
| TP6 | 2.2 | 115 | | |
| TP7 | 1.9 | 054 | | |
| TP8 | --- | --- | | |
| TP9 | --- | --- | | |
| FP | 1.5 | 099 | | |

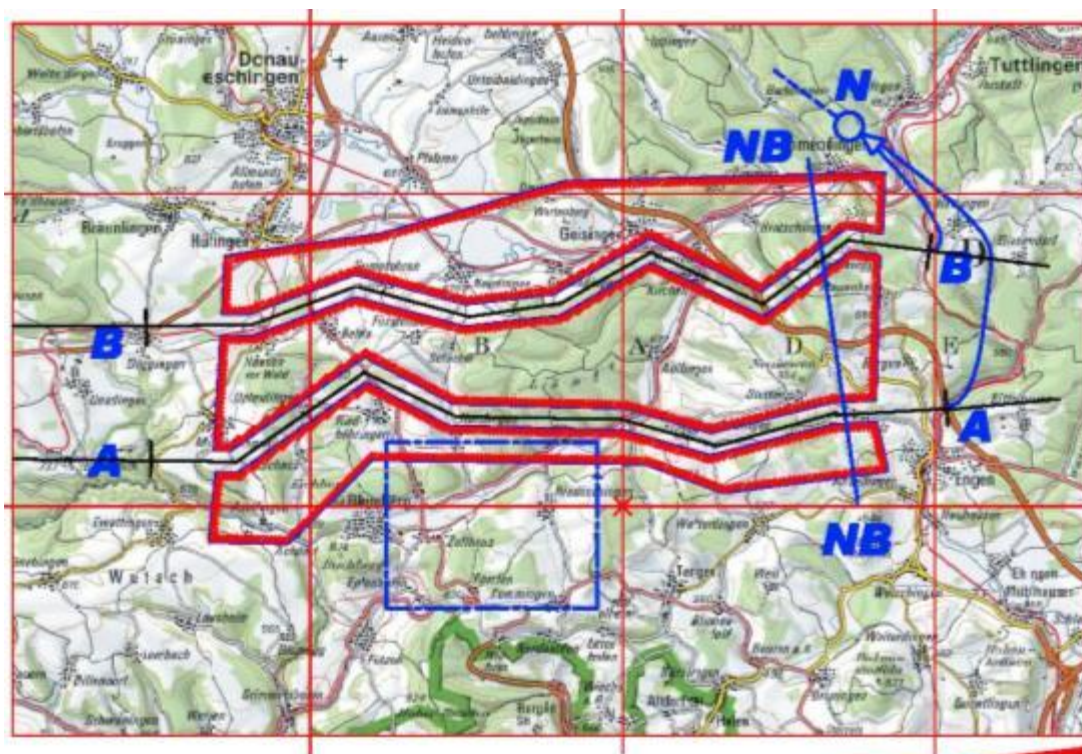


Airways ≥ 0.4 NM
Fly-Time 11' / 80 Kts
 ϕ -Dist. = 27 Km = 14.6 NM
 ϕ -Dist.-Tol. = +0.02% / -0.02%

| | | | | |
|---|--|---|--------------------------------------|---|
|  |  |  | 2010 T-Parcour Donau-Eschingen | Scale 1:200'000 Name J. & M. Ducret Date April 2010 Visum H. Schwalder |
| | | | | DE-TP |

Air Navigation Race

FLIGHT PLANNING 3rd STEP



| | Dist. | TT | EET | ETO |
|-----|-------|-----|-------|-----|
| T0 | | | | |
| SP | | 090 | 13:00 | |
| TP1 | 1.8 | 089 | 1:21 | |
| TP2 | 2.0 | 070 | 1:30 | |
| TP3 | 2.0 | 105 | 1:30 | |
| TP4 | 1.6 | 084 | 1:12 | |
| TP5 | 1.9 | 060 | 1:25 | |
| TP6 | 2.2 | 115 | 1:39 | |
| TP7 | 1.9 | 054 | 1:25 | |
| TP8 | --- | --- | | |
| TP9 | --- | --- | | |
| FP | 1.5 | 099 | 0:58 | |



Airways ≥ 0.4 NM

Flv-Time 11' / 80 Kts

ϕ -Dist. = 27 Km = 14.6 NM

ϕ -Dist.-Tol. = +0.02% / -0.02%



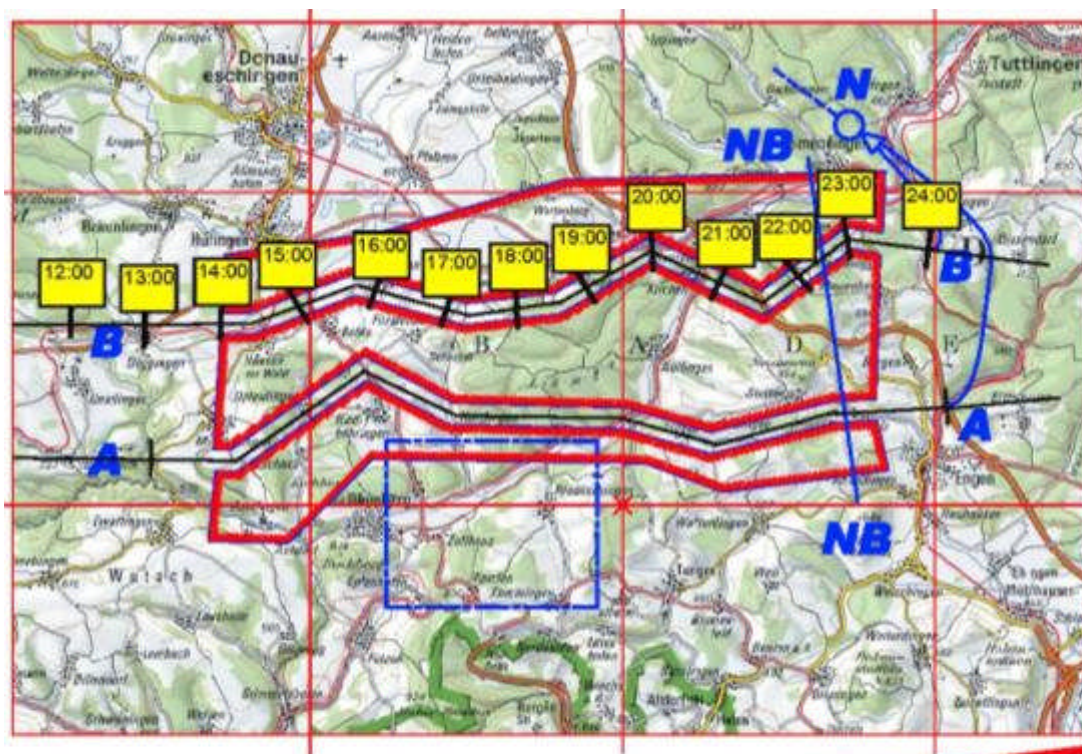
2010
T-Parcour
Donau-Eschingen

| | | |
|-----------|-------|----------------|
| Scale | Name | J. & M. Ducret |
| 1:200'000 | Date | April 2010 |
| | Visum | H. Schawald |

DE-TP

Air Navigation Race

FLIGHT PLANNING 4th STEP



| | Dist. | TT | EET | ETO |
|-----|-------|-----|-------|----------|
| T0 | | | | 11:00:00 |
| SP | | 090 | 13:00 | 11:13:00 |
| TP1 | 1.8 | 089 | 1:21 | 11:14:21 |
| TP2 | 2.0 | 070 | 1:30 | 11:15:51 |
| TP3 | 2.0 | 105 | 1:30 | 11:17:21 |
| TP4 | 1.6 | 084 | 1:12 | 11:18:33 |
| TP5 | 1.9 | 060 | 1:25 | 11:19:58 |
| TP6 | 2.2 | 115 | 1:39 | 11:21:37 |
| TP7 | 1.9 | 054 | 1:25 | 11:23:02 |
| TP8 | --- | --- | | |
| TP9 | --- | --- | | |
| FP | 1.5 | 099 | 0:58 | 11:24:00 |

Airways ≥ 0.4 NM

Flv-Time 11' / 80 Kts

ϕ -Dist. = 27 Km = 14.6 NM

ϕ -Dist.-Tol. = +0.02% / -0.02%

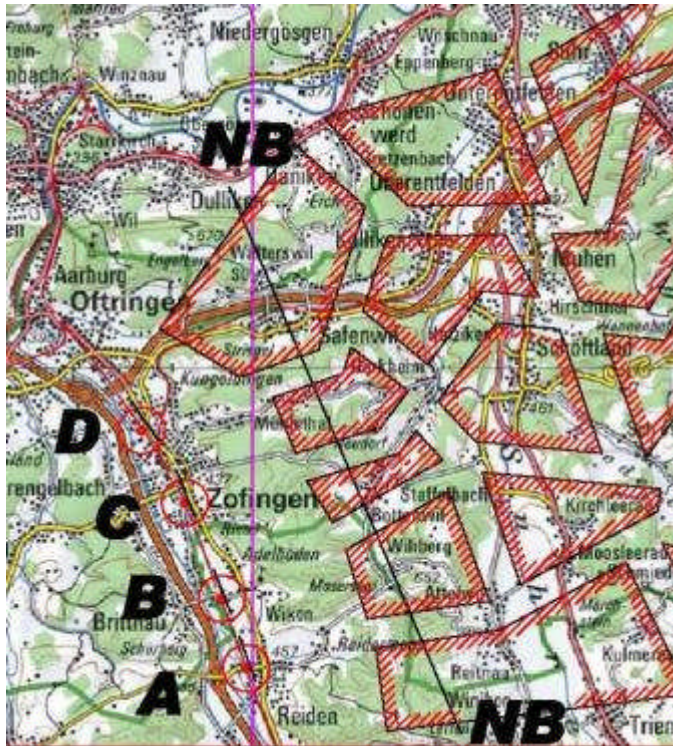


2010
T-Parcour
Donau-Eschingen

| | | |
|-----------|--------|----------------|
| Scale | Name | J. & M. Ducret |
| 1:200'000 | Date | April 2010 |
| | Vision | H. Schwalder |
| DE-TP | | |

Air Navigation Race

NB LINE ?

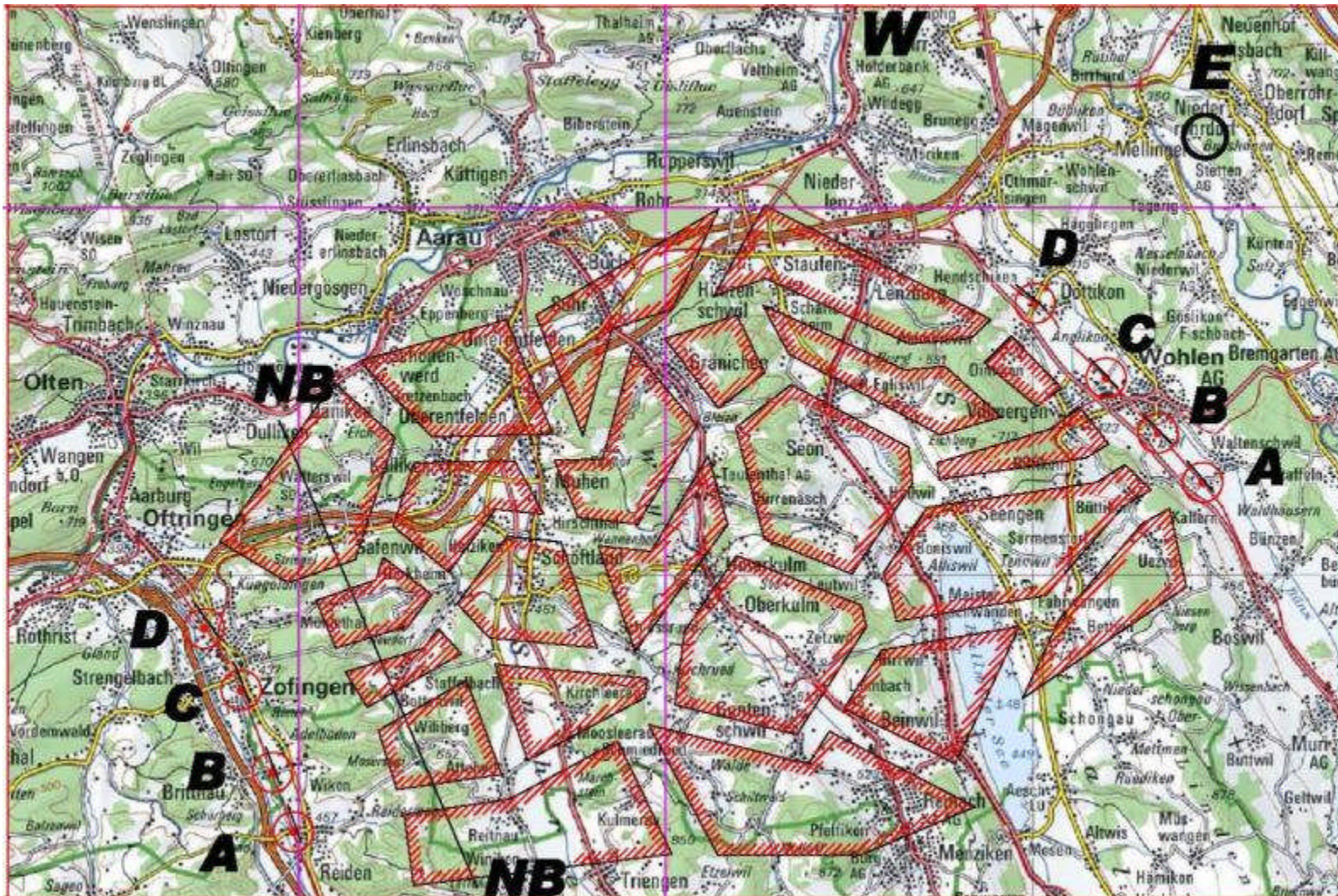


A.1.2.7 There is a **NB line (no back track line)** 2 NM (+1/-0.5 NM) before the finishing line. After crossing the NB line, no change of course exceeding 90° max be executed before crossing the finishing line. The finishing line must be approached at an angle of 90°.

A.1.2.8 Penalties for a turn of more than 90° on the leg after passing the NB line are only given, when the FR-recording shows this deviation for more than 5 seconds in sequence.

Air Navigation Race

MAP





Air Navigation Race

CORRIDOR



A.1.2.6

All corridors must be passed by the Competitor inside. The competition management will define the corridor width.

Air Navigation Race

CORRIDOR



A.8.1.6

Entering restricted areas will result in the following penalties each time:

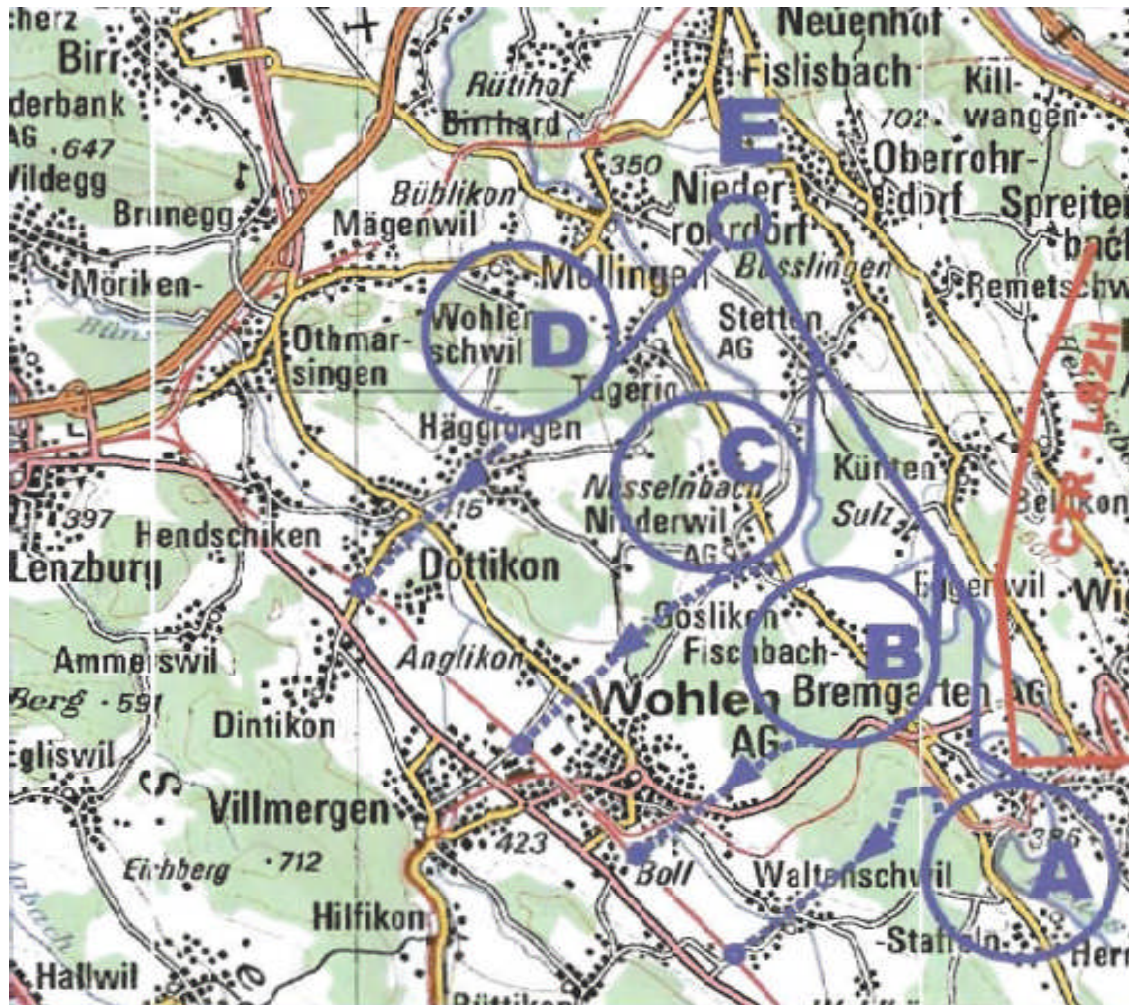
0 – 5 sec. = 0 P.

Additional error per full second:

3 P. max.300

Air Navigation Race

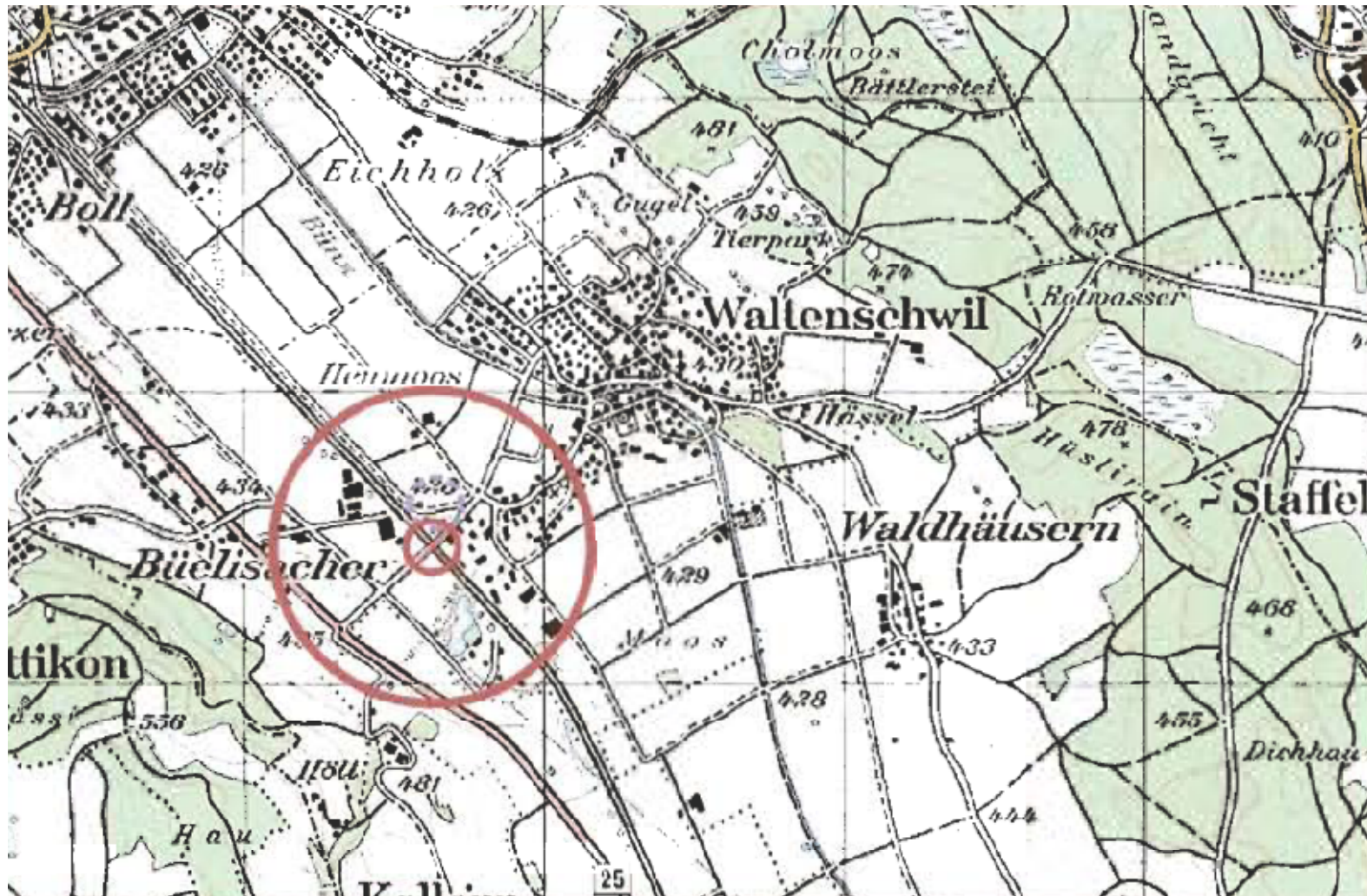
MANDATORY DEP. ROUTES



Not following described
arrival/departure routes
and/or procedure.
(each time)
200 Penalties

Air Navigation Race

START POINT: A





Air Navigation Race

ANR LIVE





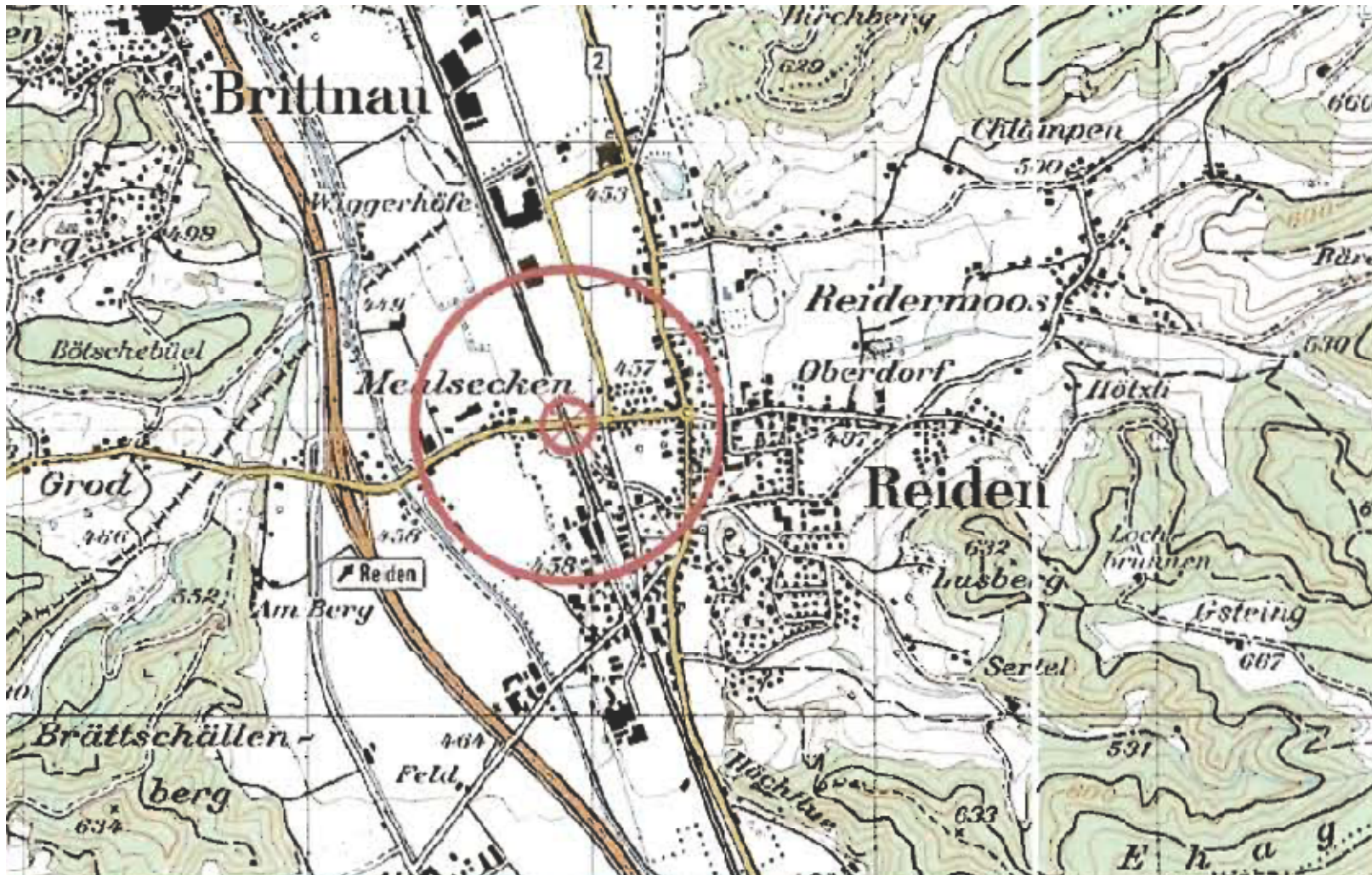
Air Navigation Race

ANR LIVE



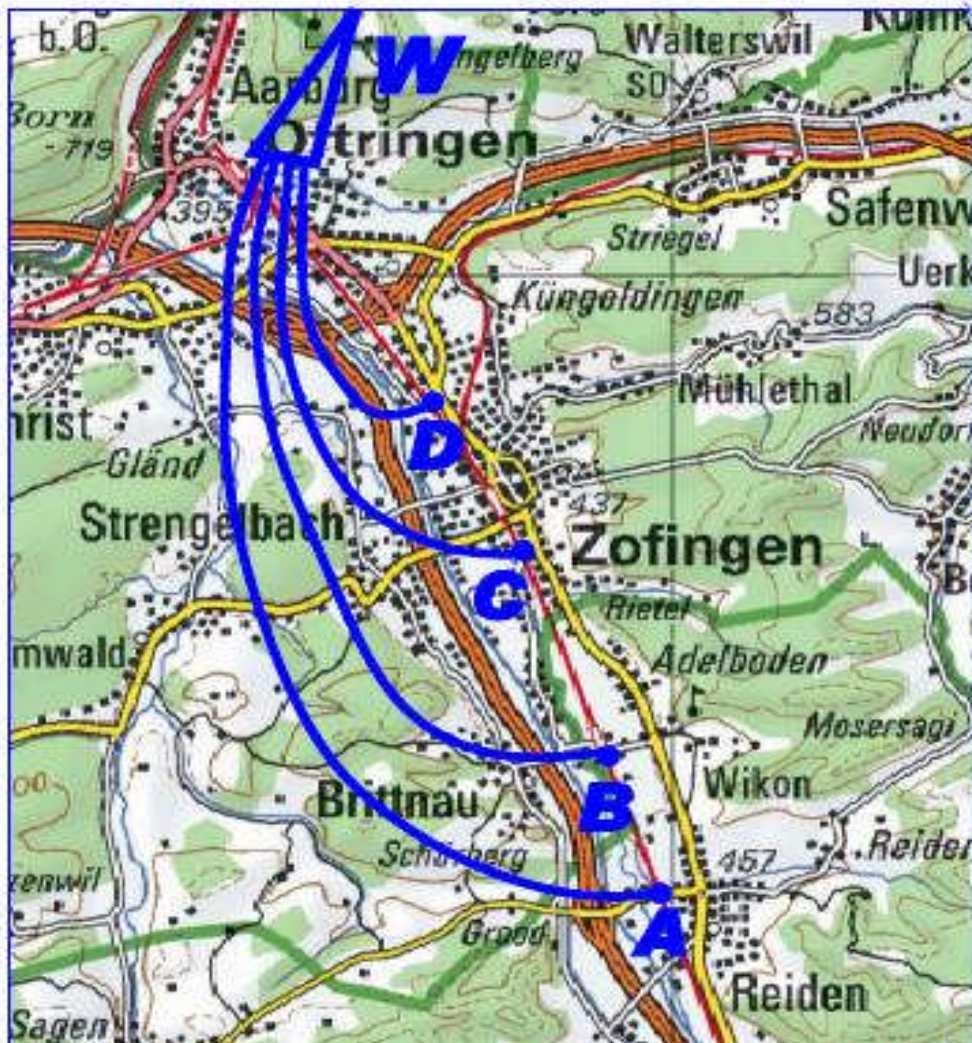
Air Navigation Race

FINISH POINT: A



Air Navigation Race

MANDATORY FINAL ROUTES



Not following described
arrival/departure routes
and/or procedure.
(each time)
200 Penalties



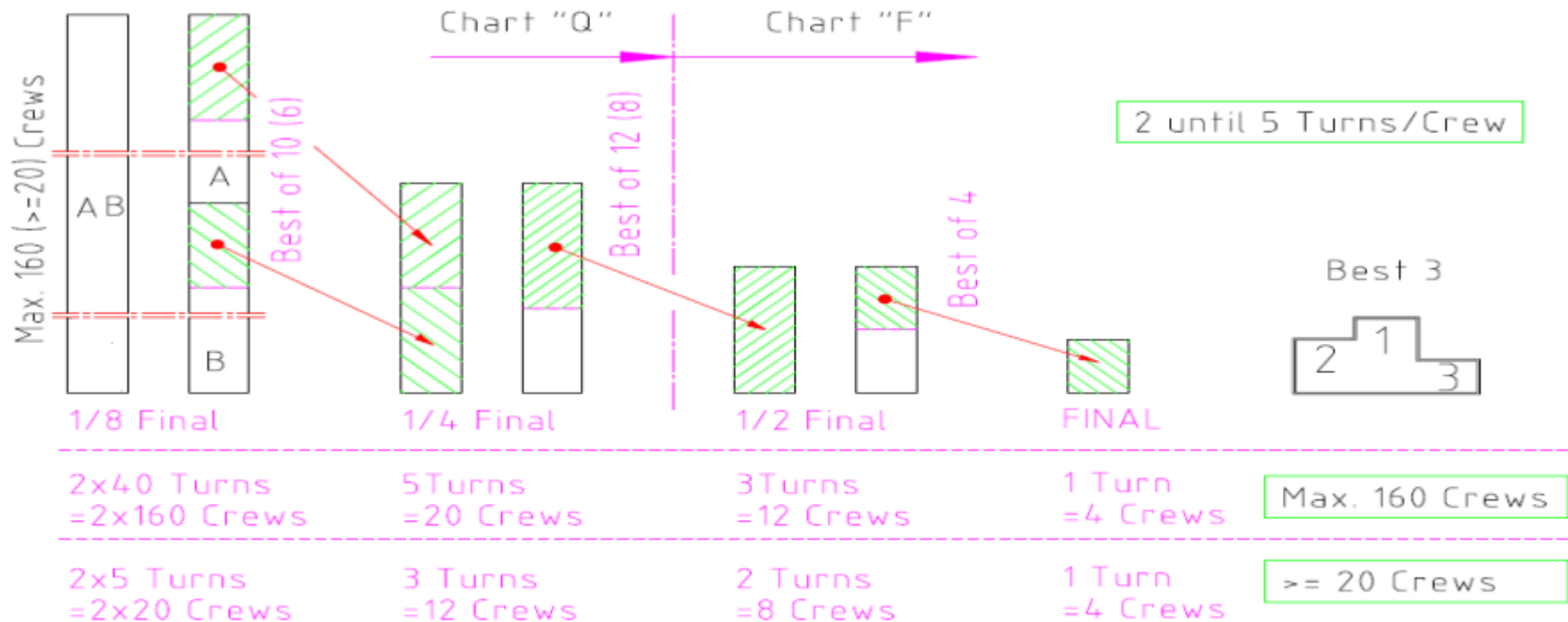
Air Navigation Race

ANR LIVE



Air Navigation Race

RANKINGS





Air Navigation Race

LANDING COMPETITION

A landing competition will take place

Race involving 2 landings:

1 x power landing

1 x power off landing



Air Navigation Race

PENALTY FOR DISTANCE

| | | PENALTYS | | | |
|--------|--|----------|--------|--|---------|
| Meters | | Ldg. 1 | Ldg. 2 | | |
| +45 | | 400 | 200 | | |
| +40 | | 135 | 90 | | |
| +35 | | 120 | 80 | | 5 m Box |
| +30 | | 105 | 70 | | |
| +25 | | 90 | 60 | | |
| +20 | | 75 | 50 | | |
| | | | | | |
| | | 3 p/m | 2 p/m | | 1 m Box |
| | | | | | |
| | | | | | 0 m |
| | | | | | |
| | | 7 p/m | 4 p/m | | 1 m Box |
| | | | | | |
| -20 | | 175 | 100 | | 5 m Box |
| -25 | | 400 | 200 | | |



Air Navigation Race

CHAMPION

There will be a **champion** in the categories

"Air Navigation Race"

"Landing"

"TOP Air Navigation Race"

(Air Nav Race + Landing)



Air Navigation Race

CONTACTS

Heinrich Schawalder he.schawalder@bluewin.ch

Maurice Ducret maurice.ducret@gmail.com

Swiss Precision Flying
Association www.pfa.ch



Air Navigation Race

SCHEDULE

- | | |
|--------------------|---|
| ✓ June 25/26 2010 | Swiss ANR championship Biel (Bienne) |
| July / August 2010 | 1st International championship ? |
| ✓ June 2011 | WAG |



AIR NAVIGATION RACE

