Tool for planning and evaluating aviation championships



Flight Contest 3.0

(Edition 3)

Dipl.-Ing. Thomas Weise March 28, 2017

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Flight Contest Introduction - Purpose



Flight Contest is a tool to schedule general aviation power flying competitions and to evaluate planning, navigation, observation and/or landing test results.

Flight Contest features flexible competition management, particularly supporting

- differing competition rules and regulations
 (FAI, Germany, Switzerland, Austria, expandable)
 (adjustment of individual evaluation details (points) possible, should the need arise)
- competition classes
 (different evaluation of groups of crews participating in a competition)
- combined competitions
 (competitions taking place at the same time with the same competitors participating in)
- parallel competitions
 (competitions taking place at the same time with different competitors participating in)
- the evaluation of specific groups of crews, which can be determined on an ad hoc basis

Flight Contest Introduction - Architecture



Is an advanced, Java technology-based, multilingual and network-compatible open source database application:

- User interface runs in a web browser (Firefox, Internet Explorer, etc.).
- It can be used simultaneously on several networked computers.
- Every user can use his/her preferred language (German, English, expandable).
- Crash-safe.
- High protection against operating errors.

Supports GAC, GPX and IGC logger data formats (expandable).

Creates PDF for printing and publication on the internet.

Sends competition maps to competitors by e-mail.

Introduction - Important features and functions



Supports special route features:

- Secret time checks
- Curved legs
- Touch-and-go landings

Displays live results (live scoring):

- Display of preliminary ranking during a debriefing
- Simultaneous publication in the local network and on the internet

Provides integrated map viewers for navigation flights, routes and logger files:

- Offline map display for navigation flight evaluation
- Online map display using Google Maps and Open Street Map
- Logger data display for GAC, GPX and IGC files

Flight Contest Installation



Computer requirements:

Windows at least 8 GB RAM CPU Intel® Core™ i5 or i7 (at least 2 cores, at least 2 GHz)

Necessary programs:

'Adobe Reader'
Web browser 'Mozilla Firefox' or other with HTML-5 support

Download of 'Flight Contest' setup (FCSetup-<Version>.exe):

https://www.dropbox.com/sh/7iiyj608t3icgab/L3GRISYuvM

Download of 'Adobe Reader' setup:

http://get.adobe.com/de/reader

Operating instructions - Program start



Start Flight Contest:

- 1. 'All programs -> Flight Contest -> Flight Contest Service Manager'
 The icon (Apache Tomcat FlightContest) appears on the taskbar.
- 2. Select "Start Service" from the context menu (right-click) of icon . The icon on the taskbar changes and turns into .

Start operation:

Click 'All programs -> Flight Contest -> Flight Contest' or



on the desktop.

Start operation on a remote computer:

Enter the address

'http://<IP address of computer with Flight Contest>:8080/fc/contest/start' in the address bar of a web browser.

Operating instructions - Browser main navigation





- Contest title
- Main menu major operating steps and basic competition evaluation sequence
- 3. Submenu contains commands or allows selection of additional data
- 4. Messages shows ready messages (blue) or error messages (red) of commands
- 5. Information, lists and dialogs display and input of data

Click on the text in the menu bar to execute commands or to open dialogs.

After a competition has been created, not all main menu items will be immediately available.

Flight Contest Operating instructions - Dialogs





- Contest title
- 2. Main menu major operating steps and basic competition evaluation sequence
- 3.
- 4. Messages shows ready messages (blue) or error messages (red) of commands
- 5. Dialog input fields input of data
- 6. Commands

Click on a command button to process data entered.

Flight Contest Operating instructions - Lists





- 1. Contest title
- Main menu major operating steps and basic competition evaluation sequence
- Submenu allows selection of list data or additional commands
- 4. Messages shows ready messages (blue) or error messages (red) of commands
- 5. Links to additional dialogs to display and process list data
- 6. Data list with links to additional data
- 7. Commands processing of marked or all list lines

Click on bold text or '...' to access additional dialogs.

Flight Contest Operating instructions - Hints



- Bold text or numbers as well as the character '...' are links providing access to additional data.
- When entering times, '.' may also be used instead of ':' to avoid the need of pressing the Shift key.
- When entering decimals, '.' may also be used instead ",".
- When entering landing results, small letters may be used instead of capital ones to avoid the need of pressing the Shift key.
- When entering landing results, "out" can be entered for landings outside the landing box and "no" in case that no landing was performed to avoid the need of using the mouse while entering data.

Flight Contest Competition preparation

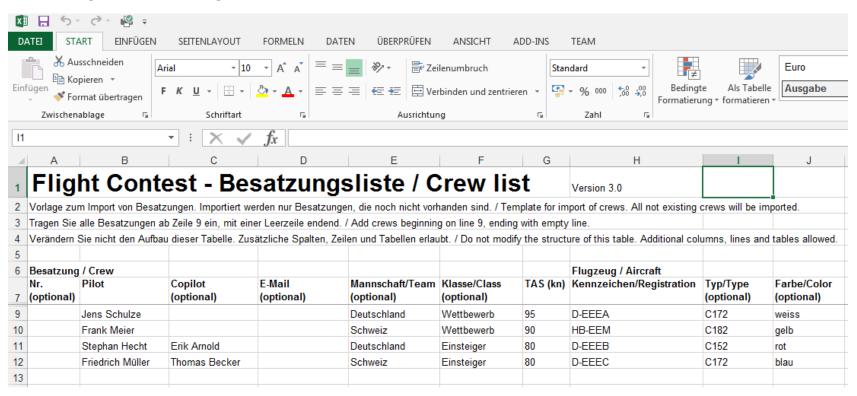


- 1. Crew list
 - -> Prepare Excel table using 'Flight Contest' Excel sample
- 2. Route planning
 - -> Make list of coordinates available in the 'Flight Contest' GPX format
- 3. Task planning
 - -> Number, contents, settings and evaluation of tasks

Competition preparation - Crew list



Use Excel Sample (All programs -> Flight Contest -> Samples -> FC-CrewList-Sample.xls)



Save sample to your contest folder and use it to enter data received from participants' registration. See also 'Help -> Besatzungsliste erstellen'.

Competition preparation - Route planning (1)



How to proceed:

- 1. Plan route(s) (e.g. using 'Flight Planner')
- 2. Plot route on the map (e.g. 'Top 200') and make prints available
- 3. Determine exact coordinates (degrees decimal, degrees/minutes decimal or degrees/minutes/seconds) and elevations (ft) using Google Earth
- 4. Routes for precision flying competitions:
 Take exact distances on the map (mm) from the printed maps
- 5. Enter or import route(s) in 'Flight Contest'
- 6. Check exact coordinates of the route(s) using the integrated online map display and correct coordinates, if necessary
- 7. GPX export of the route

See also 'Help -> Streckenplanung'.

Competition preparation - Route planning (2)



Features to be entered for a route's check points:

				•			
Point	Check	Gate		in Flight	Evalı	uation	
	Point	Width	Direction	Plan	Time	Course	Height
Takeoff	TO	0.05	250	yes	yes	no	no
Start Point	SP	1	_	yes	yes	no	yes
Turn Point	TP1	1	-	yes	yes	yes	yes
Secret Check Point	SC1	2	_	no	yes	yes	yes
Touch&Go Landing	iFP	1	_	yes	yes	yes	yes
	iLDG (1,2)	0.05	250	yes	no	no	no
	iSP (2)	1	_	yes	yes	no	yes
Curved Leg	SC2 (1,2)	2	_	no	no	yes	yes
	TP2 (2,3)	1	_	yes	yes	yes	yes
Final Point	FP	1	_	yes	yes	yes	yes
Landing	LDG	0.05	250	yes	yes	no	no

⁽¹⁾ No time check, no gate check (2) No planning test (3) Check point after curved leg

For all check points, coordinates, minimum altitude above MSL (in ft) and gate width (in NM) must be entered, with an additional runway direction entry for TO, LDG and iLDG.

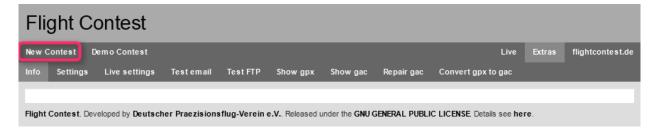
For TO, LDG and iLDG, enter a very narrow gate (<= 0.05NM), which must not be wider than the runway (without taxiways) to allow proper functioning of the automatic time measurement system.

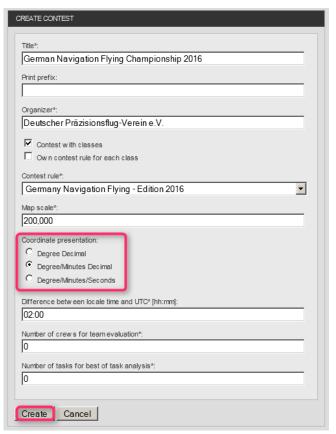
When routes for precision flying competitions are involved, all check points will be provided with an exact distance (taken from the map) to the previous turning point (distance measurement (map) [mm]). Secret check points (SC) must show a gate width of 1NM.

On a curved leg, all check points are secret check points (SC), evaluation of which will be restricted further by additional features.

Competition preparation - Route planning (3) - Input route (1)



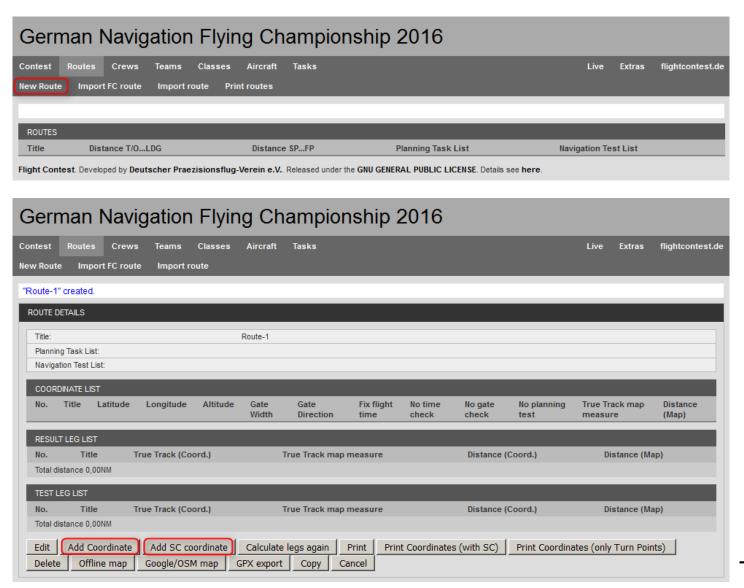




Select desired coordinate presentation.

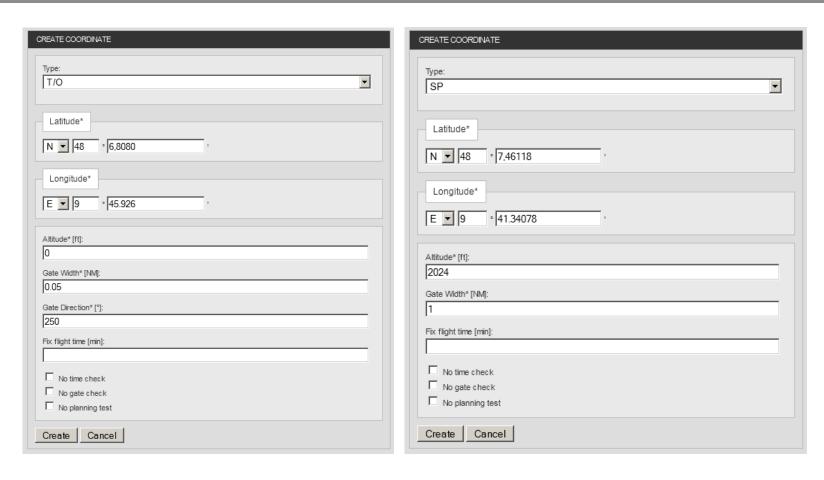
Competition preparation - Route planning (4) - Input route (2)











When entering routes in 'Flight Contest', please note that check points can only be entered consecutively. It is not possible to add check points later on.

Competition preparation - Route planning (6) - Input route (4)

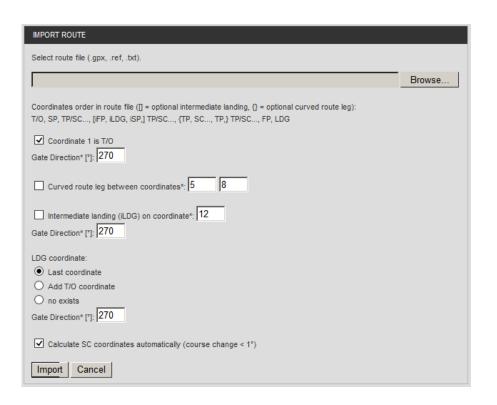




All features except type of check point can be changed before being used for the first time.

Competition preparation - Route planning (7) - Import route





Supported formats:

GPX file created by third-party software (e.g. 'Flight Planner') .

Must comprise exactly one route (<rte>...</ret>). Shall comprise altitude data (<rtept lat="49.118333", lon="9.784000"> <ele>400.00</ele></rtept>).

REF file generated from an AFLOS reference route.

TXT file, which, per line, comprises one coordinate with the following structure:

Latitude, Longitude, Altitude (in meters)

e.g. '48.830855,10.210301,624.84'

Values separated by comma

(Spaces before/after numbers will be ignored)

Blank lines and lines starting with # will be ignored.

Competition preparation - Route planning (8)



Title:			Route 1									
Planning	g Task List:		Planning Ta	sk-1.1		Width Direction time check check test measure (Map) 0.01NM 274° - - - - - - 1.0NM - <td< th=""><th></th></td<>						
Navigat	ion Test List:		Navigation 1	Test-1								
COORE	INATE LIST											
No.	Title	Latitude	Longitude	Altitude	Gate Width							Distance (Map)
1 🗸	T/O	Lat 52° 02,17070' N	Lon 013° 44,23210' E	180ft	0.01NM	274°	-	-	-	-	-	-
2 🗸	SP	Lat 52° 04,89700' N	Lon 013° 49,20700' E	500ft	1.0NM	-	-	-	-	-	-	-
3 ✓	SC1 (66,0%)	Lat 52° 05,12100' N	Lon 014° 06,67900' E	500ft	2.0NM	-	-	-	-	-	089,00°	99,0mm
4 🗸	TP1	Lat 52° 05,22300' N	Lon 014° 15,55500' E	500ft	1.0NM	-	-	-	-	-	089,00°	150,0mm
5 🗸	SC2 (28,5%) (≥90°)	Lat 52° 01,36700' N	Lon 014° 10,41700' E	500ft	2.0NM	-	-	-	-	-	219,00°	46,0mm
6 🗸	TP2	Lat 51° 51,71900' N	Lon 013° 57,66200' E	500ft	1.0NM	-	-	-	-	-	219,00°	161,5mm
7 🗸	SC3 (54,8%)	Lat 51° 44,63300' N	Lon 014° 01,63500' E	500ft	2.0NM	-	-	-	-	-	161,00°	68,5mm
8 🗸	TP3	Lat 51° 38,84700' N	Lon 014° 04,85700' E	500ft	1.0NM	-	-	-	-	-	161,00°	125,0mm
9 🗸	SC4 (18,3%)	Lat 51° 38,98300' N	Lon 014° 08,29900' E	500ft	2.0NM	-	-	-	-	-	086,00°	19,5mm
10 🗸	TP4	Lat 51° 39,53500' N	Lon 014° 23,40000' E	500ft	1.0NM	-	-	-	-	-	086,00°	106,45mr
11 🗸	SC5 (24,2%) (≥90°)	Lat 51° 38,02000' N	Lon 014° 19,60600' E	500ft	2.0NM	-	-	-	-	-	237,00°	25,5mm
12 🗸	TP5	Lat 51° 33,39900' N	Lon 014° 08,07900' E	500ft	1.0NM	-	-	-	-	-	237,00°	105,2mm
13 🗸	FP	Lat 51° 30,35300' N	Lon 013° 58,48500' E	500ft	1.0NM	-	-	-	-	-	244,00°	62,4mm
14 🗸	LDG	Lat 51° 29,50580' N	Lon 013° 52,83610' E	300ft	0.02NM	254°	-	-	-	-	-	-

. . .

Competition preparation - Route planning (9)



. . .

lo.	Title	True Track (Coord.)	True Track map measure	Distance (Coord.)	Distance (Map)
	T/OSP	048,29°	-	4,10NM	- (-)
	SPSC1	088,80°	089,00°	10,74NM	10,69NM (99,0mm)
	SC1TP1	088,93°	089,00°	5,46NM	5,51NM (51,0mm)
			Course change 130° (Procedure 1	Turn)	
	TP1SC2	219,33°	219,00°	4,99NM	4,97NM (46,0mm)
	SC2TP2	219,18°	219,00°	12,45NM	12,47NM (115,5mm)
	TP2SC3	160,88°	161,00°	7,50NM	7,40NM (68,5mm)
	SC3TP3	160,96°	161,00°	6,12NM	6,10NM (56,5mm)
	TP3SC4	086,36°	086,00°	2,14NM	2,11NM (19,5mm)
	SC4TP4	086,63°	086,00°	9,38NM	9,39NM (86,95mm)
			Course change 151° (Procedure 1	Turn)	
)	TP4SC5	237,24°	237,00°	2,80NM	2,75NM (25,5mm)
	SC5TP5	237,16°	237,00°	8,52NM	8,61NM (79,7mm)
2	TP5FP	242,96°	244,00°	6,70NM	6,74NM (62,4mm)
3	FPLDG	256,45°	-	3,62NM	- (-)
otal dist	tance 84,46NM				
	G LIST				
0.	Title	True Track (Coord.)	True Track map measure	Distance (Coord.)	Distance (Map)
	SPTP1	088,80°	089,00°	16,20NM	16,20NM (150,0mm)
			Course change 130° (Procedure 1	·	
	TP1TP2	219,33°	219,00°	17,44NM	17,44NM (161,5mm)
	TP2TP3	160,88°	161,00°	13,62NM	13,50NM (125,0mm)
	TP3TP4	086,36°	086,00°	11,52NM	11,50NM (106,45mm)
			Course change 151° (Procedure 1	•	
	TP4TP5	237,24°	237,00°	11,32NM	11,36NM (105,2mm)
	TP5FP	242,96°	244,00°	6,70NM	6,74NM (62,4mm)

Use 'Google/OSM map' to verify that all check points show exactly the desired position.

Check the legs to be evaluated to verify that the distances between the check points and the total distance match and that all procedure turns exist / no procedure turn exists.

Use 'GPX export' to deliver route to the scoring judge for his/her use with 'Routes -> Import FC route'.

Competition preparation - Plan competition tasks (1)



Determine number and contents of tasks:

- Planning test (calculation test) -> 'Help -> Planungstest und Flugzeugvorbereitung'
- Navigation test (navigation flight)
- Observation test (photographs of turning points and en route, canvas targets)
- Landing test (number of landings (4 max.), sequence of landings in precision flying competitions)

Determine settings for each individual task:

- Starting time
- Time interval between takeoffs (2 minutes recommended, at least 3 minutes when procedure turns are involved)
- Procedure to calculate flight time TO -> SP
- Procedure to calculate flight time FP -> LDG (to determine latest landing time)
- Landing time -> parking the aircraft
- Flying one-minute procedure turns, if any (yes/no)
- Procedure to calculate flight time iFP -> iLDG (in case of touch-and-go landings)
- Procedure to calculate flight time iTO -> iSP (in case of touch-and-go landings)

Determine evaluation settings for the competition:

- Determine turning points for time evaluation (all turning points/turning points to be evaluated)
- Determine secret check point time evaluation for each individual class

See also 'Help -> Standard-Wettbewerbsablauf'.

Competition preparation - Plan competition tasks (2)



Flight time calculation procedure:

Standard:

wind+:3NM Flight time will be calculated taking into account the distance between

check points increased by 3 NM as well as the wind, and rounded up

to the nearest minute.

Standard for TO -> SP and iTO -> iSP. iFP -> iLDG: 2NM, FP -> LDG: 6NM.

These distances must be increased for larger traffic patterns and

decreased for more direct tracks.

Other options:

time+:8min Fixed flight time of 8 minutes, rounded up to the nearest whole minute.

In precision flying competitions to be applied for TO -> SP and FP -> LDG.

wind:1 Flight time will be calculated to the second, taking into account the

distance between check points and the wind.

wind+:1.3 Flight time will be calculated taking into account the distance between

check points and the wind, multiplied by a factor of 1.3 and rounded up to

the nearest whole minute.

nowind:2.5NM Flight time will be calculated to the second, taking into account the

distance between check points increased by 2.5 NM and no wind.

See also 'Help -> Flugzeit-Berechnung für Starts und Landungen'.

Flight Contest Competition start

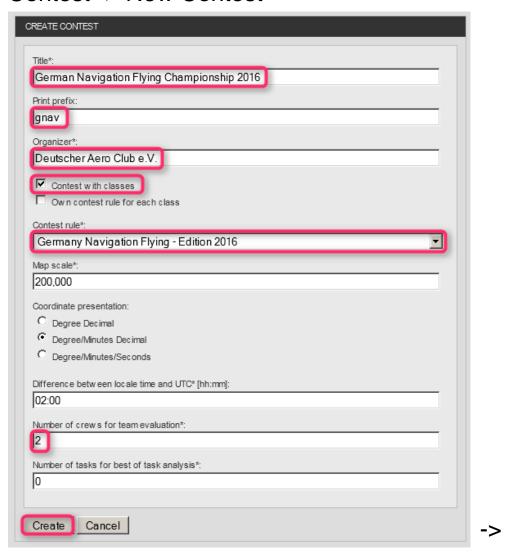


- 1. Create competition
- 2. Import route(s)
- 3. Import crews
- 4. Create task (time settings, evaluation details)
- 5. Task planning (planning test, time table)
- 6. Print task (time table, crew tasks and flight plans)

Competition start - Create competition (1)



Contest -> New Contest



Competition start - Create competition (2)





Competition start - Import route(s)



Routes -> Import FC route







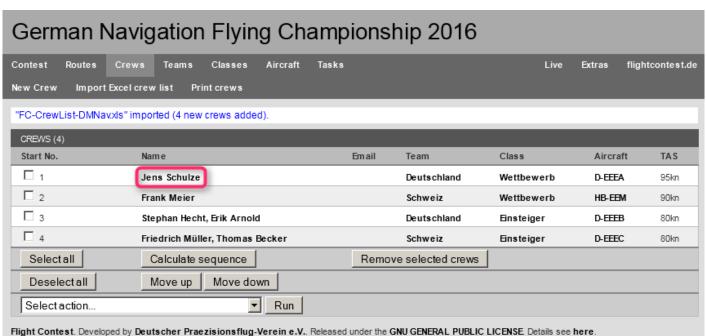
Competition start - Import crews (1)



Crews -> Import Excel crew list

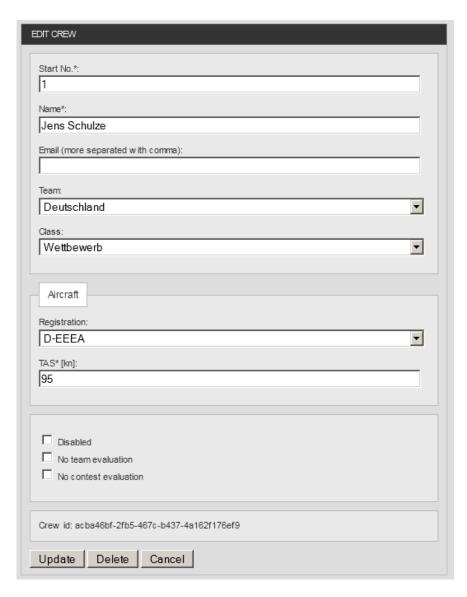






Competition start - Import crews (2)

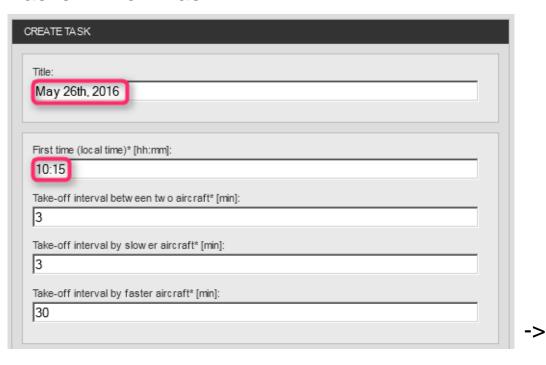




Competition start - Create task (1)



Tasks -> New Task



Competition start - Create task (2)

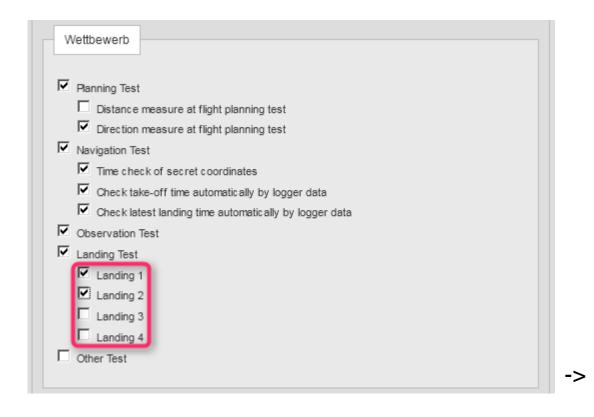


	of aircraft preparation* [min]:	
15		
light tim	e from take-off to start point*:	
wind+:	3NM	
laximun	duration from finish point to landing*:	
wind+:	6NM	
uration	of aircraft parking after landing* [min]:	
5	or an entriperioring actor among princip	
light tim	e of procedure turn (0 = do not fly procedure turn)* [min]:	
1	e of procedure turn (o - do not ny procedure turn) (mm).	
vind+:	from intermediate finish point to intermediate landing*:	
willia	21111	
	e to intermediate start point*:	
wind+:	3NM	

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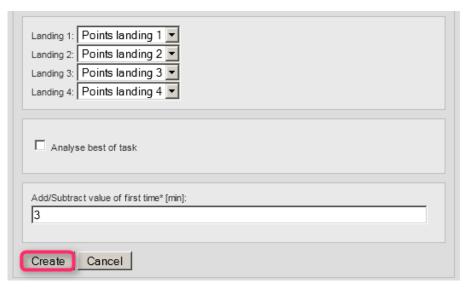
Competition start - Create task (3)



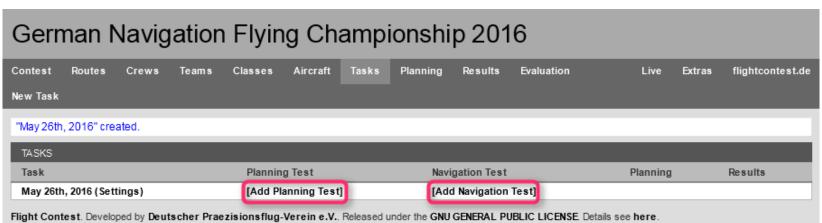


Competition start - Create task (4)





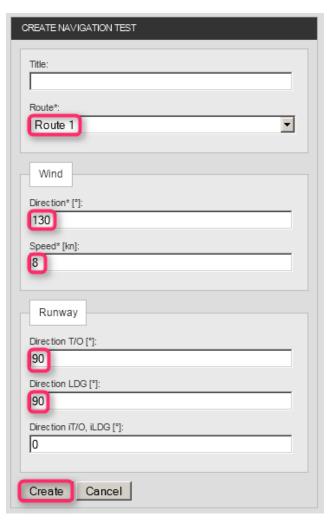




Competition start - Create task (5)



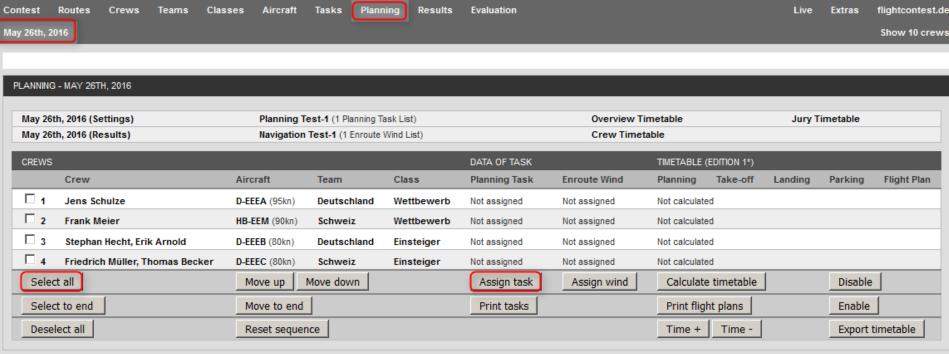




Competition start - Task planning (1) - Assign flight planning task (1)



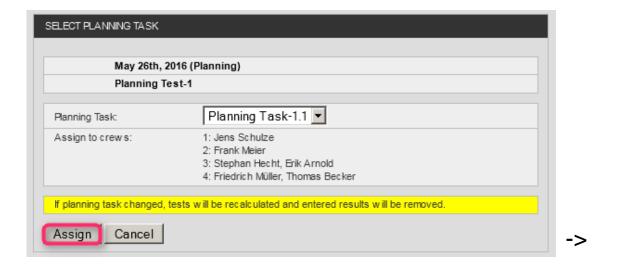
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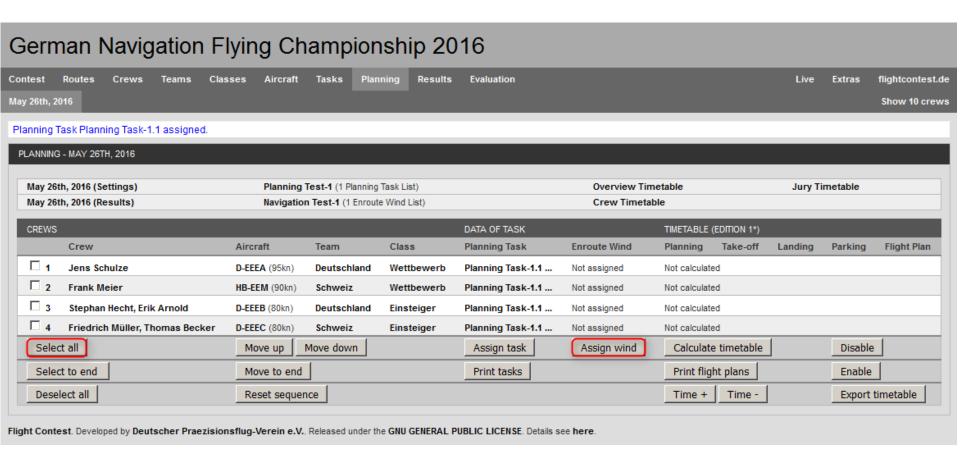












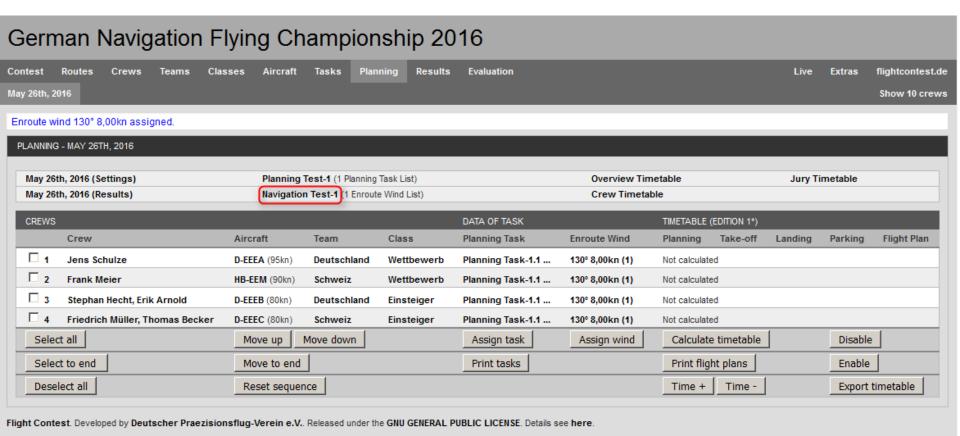
Competition start - Task planning (4) - Assign enroute wind (2)



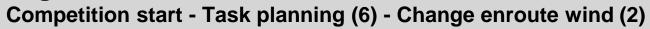








->





AVIGATION TEST DETAI	s	
Title:	Navigation Test-1	
Route:	Route 1	
Enroute Wind List:	130° 8,00kn (1)	
Edit Add Enroute	Wind Cancel	
\downarrow		
REATE ENROUTE WIND		1
Wind		
Direction* [°]:		
170		
Speed* [kn]:		
12		
Burning		
Runway		
Direction T/O [°]:		
90		
Direction LDG [°]:		
90		
_		
Create Cancel		

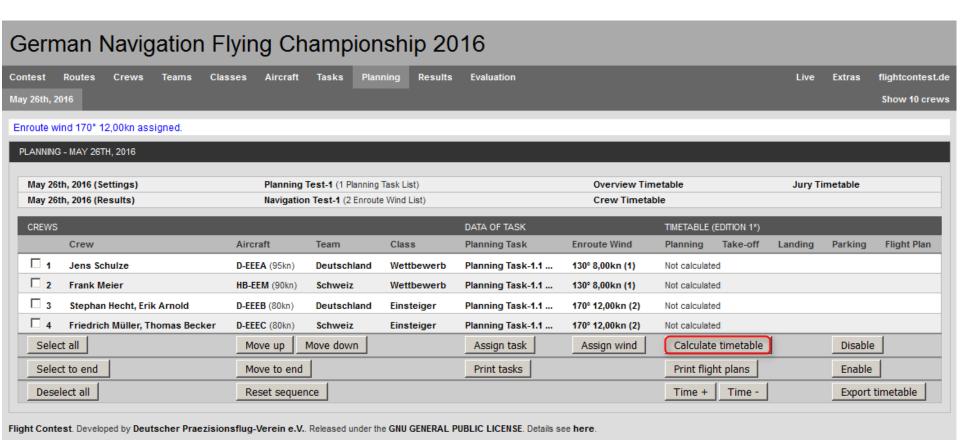






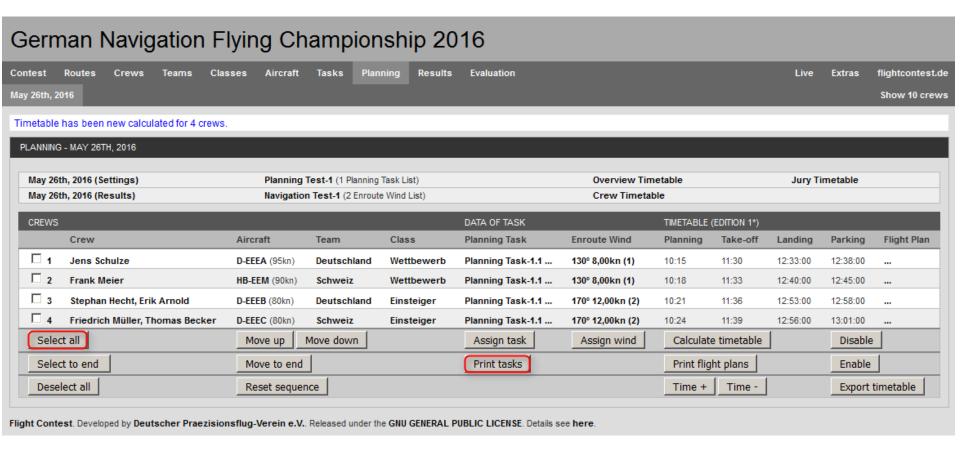






Competition start - Print task (1) - Flight planning test (1)





Competition start - Print task (2) - Flight planning test (2)



German Navigation Flying Championship 2016

Planning 1

May 26th, 2016

Crew: Jens Schulze Registration: D-EEEA
Team: Deutschland A/C Type: C172
Class: Wettbewerb TAS: 95kn

Wind: 270° 14,00kn

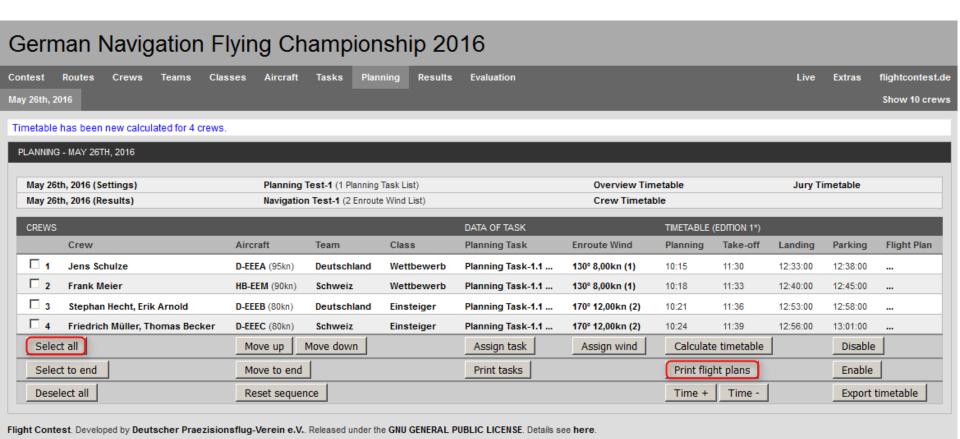
Point	Distance	True Track	True Heading*	Ground Speed	Flight time*
	[NM]	[°]	[°]	[kn]	[mm:ss]
SP	-	-	-	-	-
TP1	16,20				
TP2	17,44				
TP3	13,50				
TP4	11,50				
TP5	11,36				
FP	6,74				

Calculate legs to all listed points.

- Do not calculate this leg.
- Column for evaluation.

Competition start - Print task (3) - Flight plans (1)





->

Competition start - Print task (4) - Flight plans (2)



German Navigation Flying Championship 2016

Flight Plan 1

May 26th, 2016 (Timetable edition 1)

Crew:Jens SchulzeRegistration:D-EEEATeam:DeutschlandA/C Type:C172Class:WettbewerbTAS:95kn

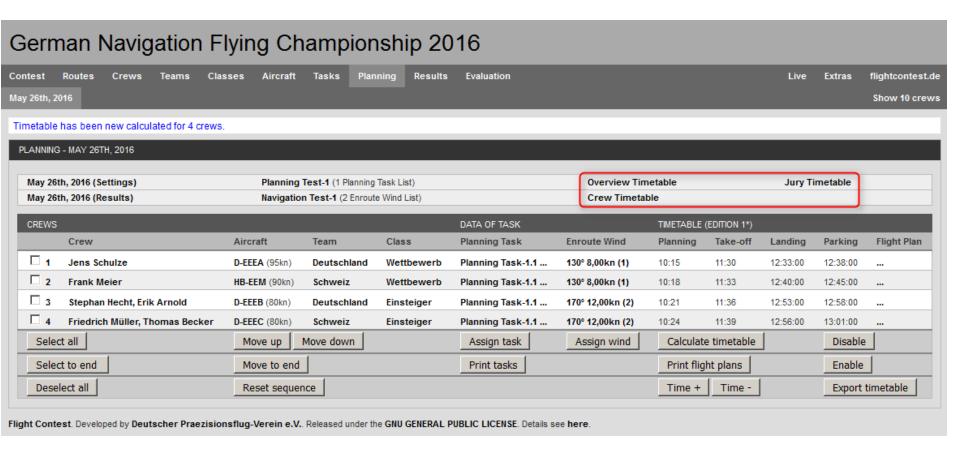
Wind: 130° 8,00kn Planning: 10:15 - 11:15

No.	Distance	True Track	True Heading	Ground Speed	Flight time	Point	Local time
						T/O	11:30:00
					00:04:00h	SP	11:34:00
1	16,20NM	089°	092°	88,8kn	00:10:56h	TP1	11:44:56
			Proc	edure Turn (1mi	n)		
2	17,44NM	219°	214°	94,5kn	00:11:04h	TP2	11:57:00
3	13,50NM	161°	159°	88,1kn	00:09:12h	TP3	12:06:12
4	11,50NM	086°	089°	89,1kn	00:07:44h	TP4	12:13:56
			Proc	cedure Turn (1mi	n)		
5	11,36NM	237°	232°	97,0kn	00:07:01h	TP5	12:21:57
6	6,74NM	244°	240°	98,0kn	00:04:08h	FP	12:26:05
					00:05:55h	LDG	12:32:00
	76,74NM	Distance SPl	FP		01:02:00h Total f	flight tim	e (T/OLDG)

LDG Latest landing time

Competition start - Print task (5) - Time tables (1)





Competition start - Print task (6) - Time tables (2)





Save modified options before print.

Competition start - Print task (7) - Time tables (3)



German Navigation Flying Championship 2016

Overview Timetable

May 26th, 2016 (Edition 1)

Briefing: 09:30

Planning Test: 10:15 - 11:24

Take-off: 11:30 - 11:39

Take-off interval: 3 min

Landings: 12:32 - 12:56

Total flight time (T/O...LDG): 80kn 01:17h

90kn 01:07h

95kn 01:02h

Competition start - Print task (8) - Time tables (4)



Crew Aircraft TAS Team Class Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All	REW TIMETABLE - MAY 26TH, 2016 (EDITION 1)
7. No. 7. Crew 7. Aircraft 7. TAS 7. Team 9. Class 9. Class (short) 9. Planning 1. Take-off 7. Edition 1. Total flight time (T/OLDG) 1. Standard 1. None 1. All 1. Anges: Remove changes 1. Add changes 1. Print landscape	Criet subtitle:
Crew Aircraft TAS Team Class Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	Filit Subilite.
Crew Aircraft TAS Team Class Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Print landscape	
TAS Team Class Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	☑ No.
TAS Team Class Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	
Class Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	
Class Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	TAS TAS
Class (short) Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	Team
Planning Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	
Take-off Edition Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	
Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	
Total flight time (T/OLDG) Standard None All anges: Remove changes Add changes Print landscape	
Standard None All anges: Remove changes Add changes Print landscape	<u>✓</u> Edition
Standard None All anges: Remove changes Add changes Print landscape	Total flight time (T/OLDG)
Remove changes Add changes Print landscape	
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Frint on A3 paper	
	Print on A3 paper
eve Print Cancel	Save Print Cancel

Save modified options before print.

Competition start - Print task (9) - Time tables (5)



German Navigation Flying Championship 2016

Timetable

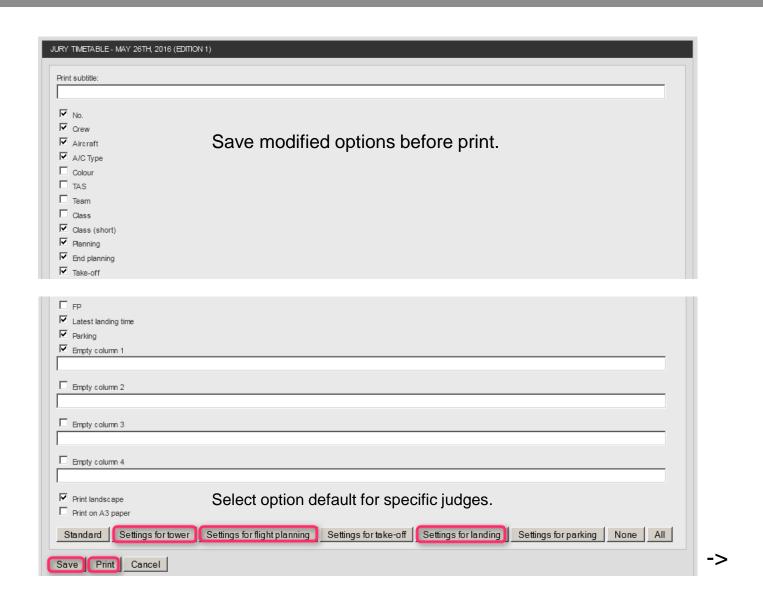
May 26th, 2016 (Edition 1)

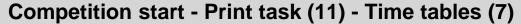
No.	Crew	Aircraft	TAS	Cl.	Planning	Take-off	E
1	Jens Schulze	D-EEEA	95 k n	W	10:15	11:30	1
2	Frank Meier	HB-EEM	90kn	W	10:18	11:33	1
3	Stephan Hecht, Erik Arnold	D-EEEB	80kn	Е	10:21	11:36	1
4	Friedrich Müller, Thomas Becker	D-EEEC	80kn	Е	10:24	11:39	1

E: Edition of last modified crew flight plan.

Competition start - Print task (10) - Time tables (6)









German Navigation Flying Championship 2016

Jury Timetable - Tower

May 26th, 2016 (Edition 1)

No.	Aircraft	А/С Туре	Take-off	Latest landing time	
1	D-EEEA	C172	11:30	12:32	
2	HB-EEM	C182	11:33	12:40	
3	D-EEEB	C152	11:36	12:53	
4	D-EEEC	C172	11:39	12:56	

Flight Contest Competition execution

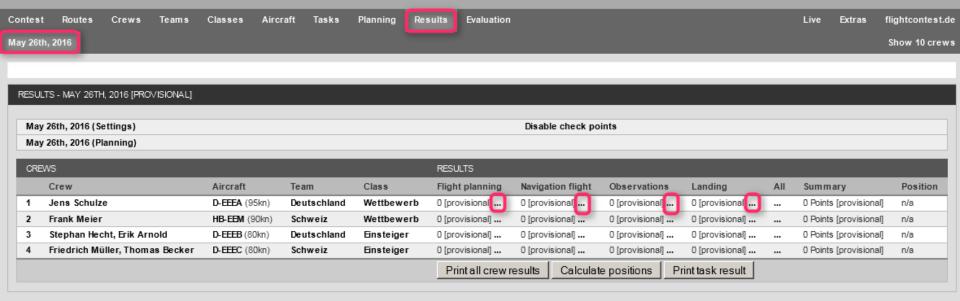


- 1. Input flight planning results
- 2. Logger evaluation
- 3. Input observation results
- 4. Input landing results
- 5. Response to modifications

Competition execution - Input start



German Navigation Flying Championship 2016

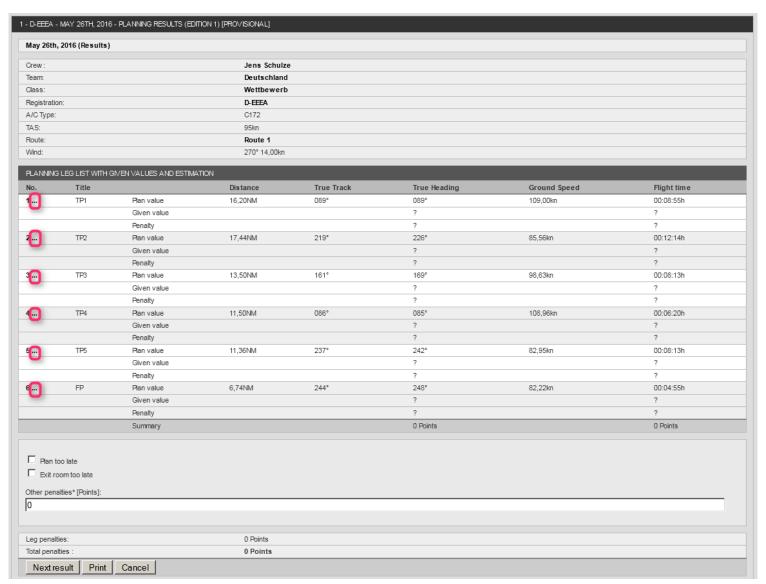


Flight Contest. Developed by Deutscher Praezisionsflug-Verein e.V., Released under the GNU GENERAL PUBLIC LICENSE. Details see here.

->

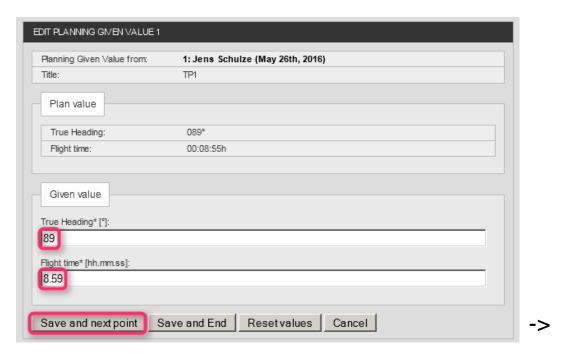
Competition execution - Input flight planning results (1)





Competition execution - Input flight planning results (2)



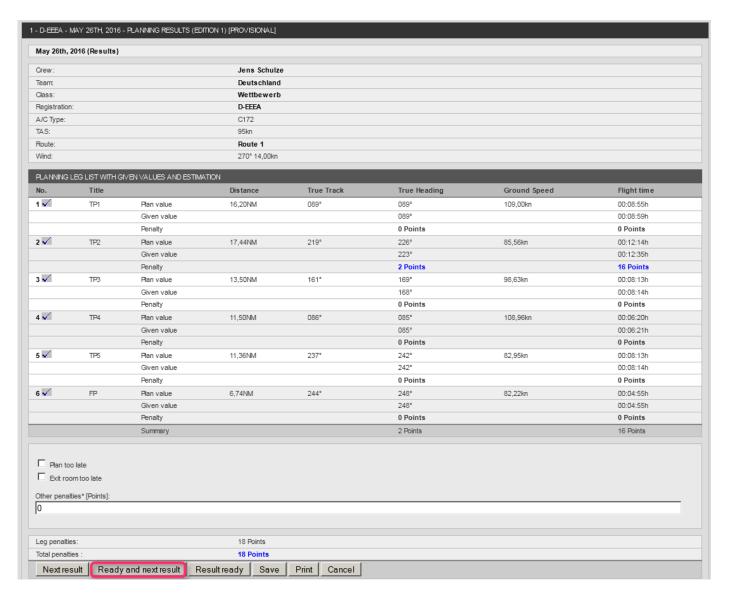


Use the tab key to move from field to field.

Use the point instead of the colon for flight time entry.

Competition execution - Input flight planning results (3)





Competition execution - Logger evaluation (1)



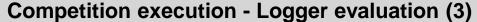
May 26th, 2	2016 (Results)				
Crew:		Jens Schulze			
Team:		Deutschland			
Class:		Wettbewerb			
Registration:	:	D-EEEA			
A/C Type:		C172			
TAS:		95kn			
Route:		Route 1			
Wind:		130° 8,00kn (1)			
	TITLE		Overnying time	Dad courses	Aititude
No.	ITS WITH MEASURED VALUES AND E		Overflying time	Bad courses	Altitude
	T/O	Plan value	11:30:00		180ft
		Measured value	?		180ft
1	T/O	Measured value Penalty	?		
1		Measured value Penalty Plan value	? ? 11:34:00		180ft 500ft
1	T/O	Measured value Penalty	?		
1	T/O	Measured value Penalty Plan value	? ? 11:34:00		
2	T/O	Measured value Penalty Plan value Measured value	? ? 11:34:00 ?	0	
2	T/O SP	Measured value Penalty Plan value Measured value Penalty	? ? 11:34:00 ? ?	0 ?	500ft
2	T/O SP	Measured value Penalty Plan value Measured value Penalty Plan value	? ? 11:34:00 ? ? ? 11:41:13		500ft
2	T/O SP	Measured value Penalty Plan value Measured value Penalty Plan value Measured value	? ? 11:34:00 ? ? ? 11:41:13	?	500ft
2	T/O SP SC1	Measured value Penalty Plan value Measured value Penalty Plan value Measured value Penalty	? ? 11:34:00 ? ? ? 11:41:13 ?	?	500ft 500ft
1 2 3	T/O SP SC1	Measured value Penalty Plan value Measured value Penalty Plan value Measured value Penalty Plan value Penalty Plan value	? ? 11:34:00 ? ? ? 11:41:13 ? ? ? 11:44:56	? ? 0	500ft 500ft
2	T/O SP SC1	Measured value Penalty Plan value Measured value	? ? 11:34:00 ? ? ? 11:41:13 ? ? 11:44:56 ?	? ? 0 ?	500ft 500ft



Competition execution - Logger evaluation (2)



12	Procedure Turn	Measured value	?		
		Penalty	?		
13	SC5	Plan value	12:16:38	0	500ft
		Measured value	?	?	
		Penalty	?	?	
14	TP5	Plan value	12:21:57	0	500ft
		Measured value	?	?	
		Penalty	?	?	
15	FP	Plan value	12:26:05	0	500ft
		Measured value	?	?	
		Penalty	?	?	
16	LDG	Plan value	12:32:00		300ft
		Measured value	?		
		Penalty	?		
		Summary	0 Points	0 Points	0 Points
	orse at start or landing nap and flight data too late				
Other penaltion	es* [Points]:				
	penalties:	0 Points 0 Points			





Import logger data (see 'Help -> Unterstützte Logger')
Save GAC, GPX or IGC data





Competition execution - Logger evaluation (4)

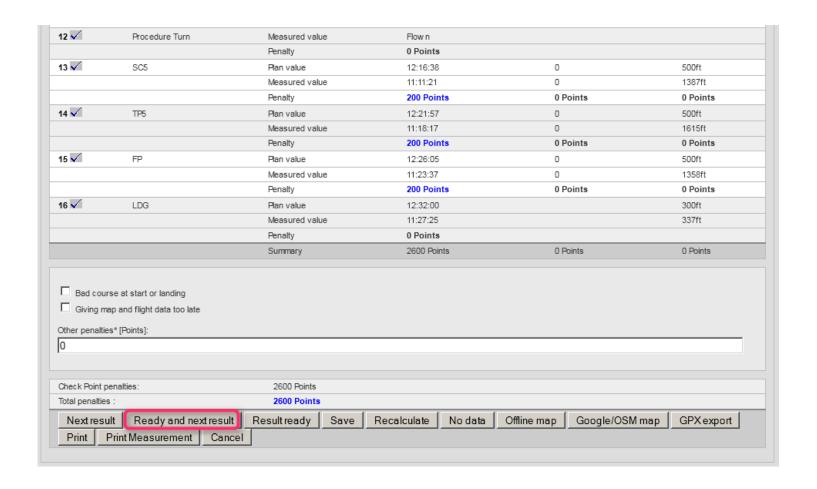


Crew:			Jens Schulze						
Team:			Deutschland		Flight Contest Wettbewerbs-Du				
Class:			Wettbewerb		Flight Contes	t wettbewerbs-bu			
Registra	ition:		D-EEEA						
A/C Type			C172						
TAS:	·.		95kn						
Route:			Route 1						
Wind:			130° 8,00kn (1)						
			,						
CALCUL	ATED POINTS								
Title	Local time	Latitude	Longitude	Altitude	Gate missed	Procedure turn missed	Bad course		
T/O	10:21:09	52.0361833333°	13.7371666667°	237ft	-	-	-		
SP	10:29:03	52.0808000000°	13.8201666667°	1375ft	-	-	-		
SC1	10:35:46	52.0882833333°	14.1113000000°	1409ft	-	-	-		
TP1	10:38:56	52.0874833333°	14.2589833333°	1609ft	-	-	-		
SC2	10:43:39	52.0215333333°	14.1757000000°	1399ft	-	-	-		
TP2	10:52:55	51.8615833333°	13.9614666667°	1629ft	-	-	-		
SC3	10:57:41	51.7446833333°	14.0302333333°	1496ft	-	-	-		
TP3	11:01:24	51.6480500000°	14.0827666667°	1569ft	-	-	-		
SC4	11:02:55	51.6518500000°	14.1378666667°	1707ft	-	-	-		
TP4	11:08:23	51.6588000000°	14.3902500000°	1523ft	-	-	-		
SC5	11:11:21	51.6329166667°	14.3275000000°	1387ft	-	-	-		
TP5	11:18:17	51.5573666667°	14.1341666667°	1615ft	-	-	-		
FP	11:23:37	51.5057166667°	13.9749833333°	1358ft	-	-	-		
LDG	11:27:25	51.4918000000°	13.8805333333°	337ft	-	-	-		
CHECK I	POINTS WITH MEASI	JRED VALUES AND ESTI	MATION						
No.	Title	ALD TALOUS AND LOT		Ov	erflying time	Bad courses	Altitude		
1 🗸	T/O		Plan value		30:00	200 0001000	180ft		
	.,,,		Measured value		:21:09		237ft		

Calculated Points: There will be overflying times for all gates in the event of a correct flight.

Competition execution - Logger evaluation (5)



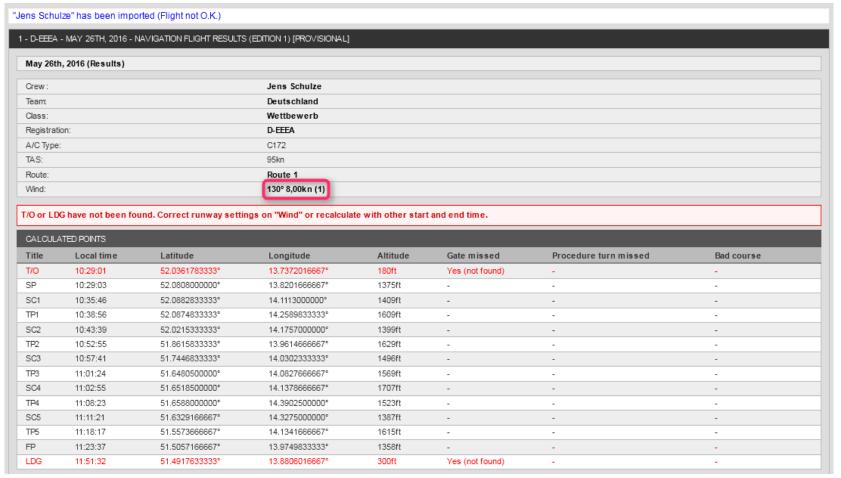


Competition execution - Logger evaluation (6)



Correcting settings for landing field measurement:

The below message appears when takeoff/landing direction or takeoff/landing gate have not been set correctly. Use 'Offline map' to view TO and LDG and go to 'Wind' to adjust direction and gate.





Competition execution - Logger evaluation (7)





Direction:

Enter takeoff/landing direction specified

Longitudinal offset:

Gate displacement in flight direction (-2.0 ... 2.0 NM)

- displacement to the back
- + displacement to the front

Lateral offset:

Gate displacement perpendicular to flight direction (-1.0 ... 1.0 NM)

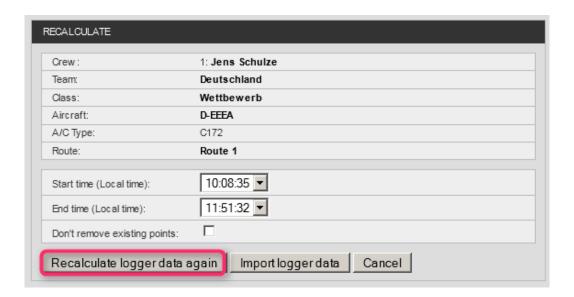
- displacement to the right
- + displacement to the left



Use 'Offline map, to check modifications and proceed with 'Recalculate'.

Competition execution - Logger evaluation (8)





Modify logger data range:

If logger recording starts too early, the start time used to calculate overflying times can be modified in the 'Start time (Local time)' field.

Import logger data anew:

If logger data are incomplete and data from a backup logger are available, these data can be imported using 'Import logger data'.

Competition execution - Logger evaluation (9)



Correcting procedure turns and track deviations

Γitle	Local time	Latitude	Lamaituda	Altitude	Gate missed	Procedure turn missed	Bad course	
			Longitude		Gate missed	Procedure turn missed	Bad course	
T/O	10:35:34	52.4818300000°	14.0879916666°	295ft	-	-	-	
SP	10:44:52	52.5024833333°	14.1429000000°	500ft	Yes (not found)	-	-	
SC1	10:44:54	52.5273733334°	14.2289233334°	1488ft	Yes	-	-	
TP1	10:47:18	52.4746550000°	14.3327666667°	1404ft	Yes	-	-	
SC2	10:49:25	52.4499133333°	14.3217966667°	1525ft	Yes	-	-	
P2	10:53:38	52.3995833333°	14.1663083334°	993ft	-	-	-	
SC3	10:58:04	52.3508533333°	14.2990466667°	1002ft	-	-	-	
P3	10:59:20	52.3369883333°	14.3526750000°	1097ft	-	-	-	
SC4	11:02:59	52.2986000000°	14.2778316667°	969ft	-	-	-	
	11:09:15	52.2081116667°	14.1121266667°	1058ft	-	-	Yes (72s)	
	11:10:33	52.2266600000°	14.1048583333°	1007ft	-	-	No (3s)	П
	11:10:37	52.2277533334°	14.1031750000°	1009ft	-	-	Yes (17s)	
	11:10:55	52.2327316667°	14.0959433333°	1044ft	-	-	No (3s)	Т
TP4	11:11:27	52.2414716666°	14.0815150000°	1007ft	Yes (fly-by)	-	-	
	11:12:25	52.2555200000°	14.0509733333°	1017ft	-	Yes	-	Т
SC5	11:13:28	52.2741000000°	14.0280300000°	907ft	-	-	-	-
P5	11:17:10	52.3270033333°	13.9489500000°	679ft	-	-	-	
606	11:19:49	52.3807316667°	14.0010683333°	1081ft	-	-	-	
P6	11:21:48	52.4313900001°	14.0396799999°	1166ft	-	-	-	
	11:21:57	52.4337666666°	14.0350750000°	1119ft	-	Yes	-	
P7	11:27:39	52.4826983334°	13.8495150000°	980ft	-	-	-	
C7	11:30:25	52.5106533333°	13.8947433333°	831ft	-		-	
P	11:33:15	52.4739883334°	13.9953966666°	1159ft	Yes		-	
DG	11:39:32	52.4817983334°	14.0915250000°	264ft	-			

Procedure turns missed or track deviations erroneously identified as failure can be disabled here:

- disable + reactivate

The color marking shows whether or not penalties will be given:

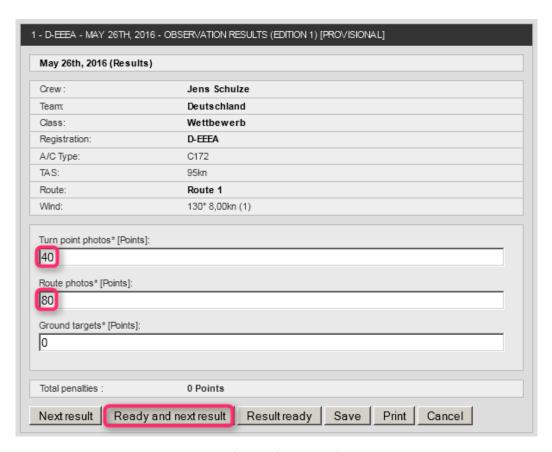
Red: Failure, penalties will be given Violet: Failure disabled, no penalties

Blue: Failure disabled by evaluation software, no penalties

Grey: no automatic TO/LDG evaluation

Competition execution - Input observation results





Use the tab key to move from field to field.

Competition execution - Input landing results





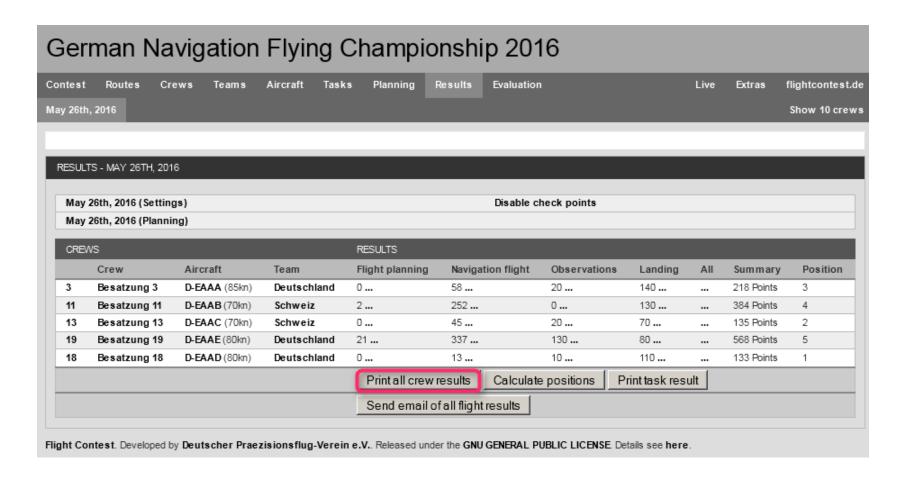
Landing Measure: You may use small letters for entering the measuring results.

Enter 'no' if no landing has been observed.

Enter 'out' in case of landing outside the landing box.

Competition execution - Input end





Competition execution - Response to modifications (1)



It is possible to respond to the following modifications:

- Crew cancels participation on short notice
 - -> Disable crew (time table remains unchanged)
- Crew cannot take off as planned
 - -> Put crew to the end of the takeoff sequence (a new flight plan will be prepared for the crew affected)
- Takeoffs are delayed
 - -> Modify start time for the crews affected (new flight plans will be prepared for the crews affected)
- Enroute wind changes during takeoff sequence
 - -> Assign new enroute wind to the crews still on the ground (new flight plans will be prepared for the crews still on the ground)
- Planning test shall be evaluated using wind data other than those originally given -> Assign new planning task (with new wind data added) to the planning test and provide the new planning task to the crew involved (Planning)
- Crew must change to another aircraft due to technical malfunction
 - -> Assign new aircraft and, if necessary, new TAS to the crew involved (Use new aircraft and TAS for all new tasks. Previous aircraft and TAS will be used for tasks already completed.)

->





- A crew's TAS changes after planning tests and flight plans have already been calculated
 - -> Once a crew's TAS has been modified, mark the crew and move it down and up once (Planning).(Modified TAS will be incorporated in the task. Planning test will be recalculated immediately. Flight plan will be recalculated using 'Calculate timetable'. This could result in warnings involving aircraft coming next in the sequence. In case of need, move the crew to the end of the task.)
- Recalculate a task's time table
 - -> Execute 'Reset sequence' and 'Calculate timetable' consecutively (Deletes all flight plans and resets crew sequence to the sequence given in the crew list. Start time for all crews and flight plans will be calculated anew.)

See also 'Help -> Änderungen bei Wettbewerbs-Durchführung'.

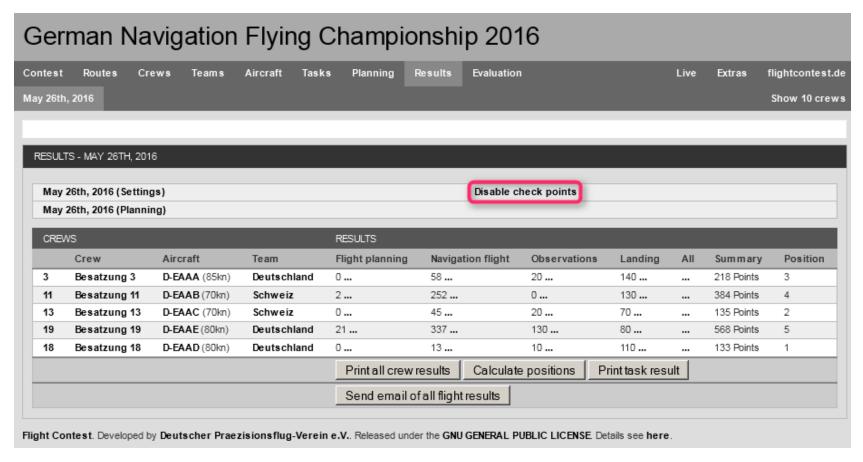
Flight Contest Competition evaluation



- 1. Disable check points
- 2. Evaluation by class
- 3. Mixed evaluation
- 4. Evaluation by team
- 5. Live scoring
- 6. E-mail to crews

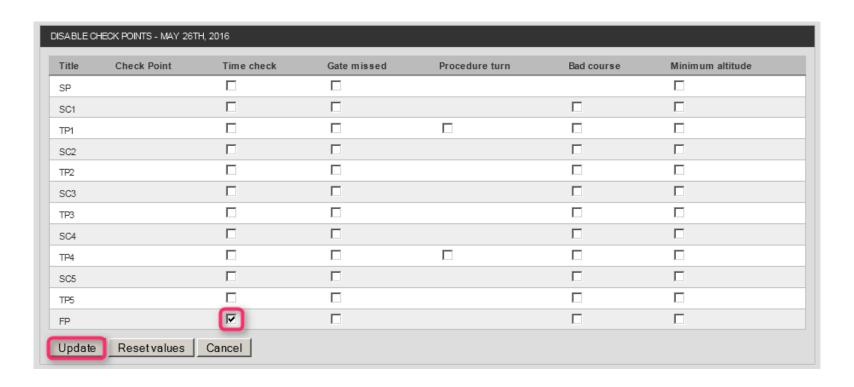
Competition evaluation - Disable check points (1)





Competition evaluation - Disable check points (2)



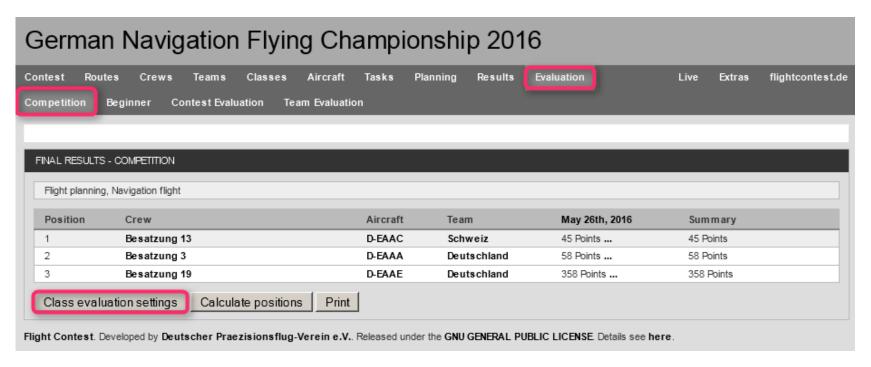


Items such as check point time evaluation, passing a gate, procedure turns carried out correctly, deviation from track to the check point, and altitude evaluation can be disabled independently of each other.

Every modification will lead to recalculating the result.

Competition evaluation - Evaluation by class (1)

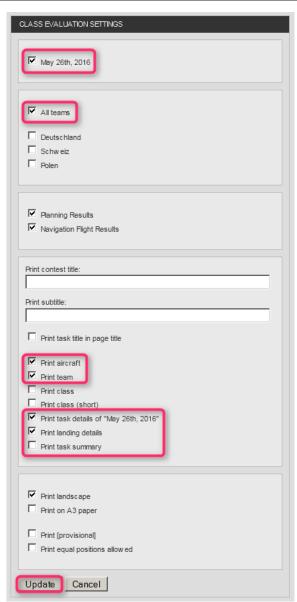




See also 'Help -> Auswertungen -> Klassen-Auswertung'.

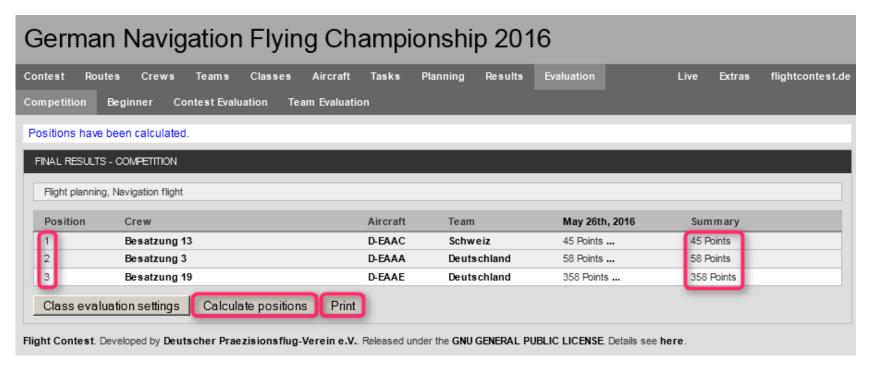
Competition evaluation - Evaluation by class (2)

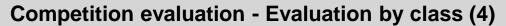




Competition evaluation - Evaluation by class (3)









German Navigation Flying Championship 2016

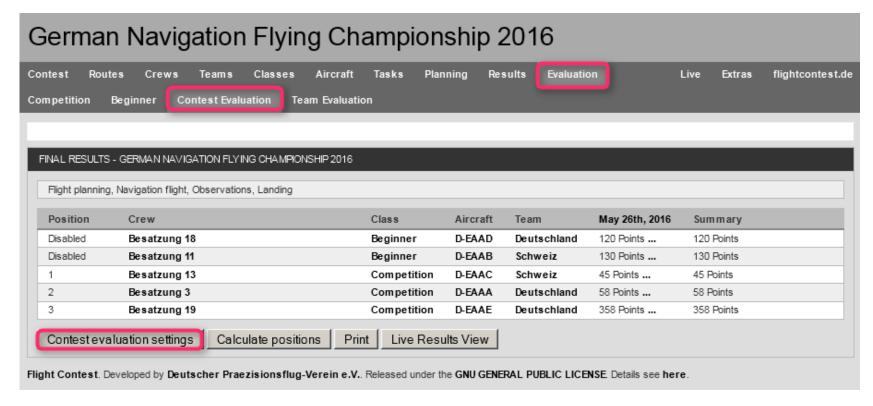
Final Results Competition

Flight planning, Navigation flight

Pos.	Crew	Aircraft	Team	May 26th, 2016		Summary
				Plan.	Nav.	
1	Besatzung 13	D-EAAC	Schweiz	0	45	45
2	Besatzung 3	D-EAAA	Deutschland	0	58	58
3	Besatzung 19	D-EAAE	Deutschland	21	337	358

Competition evaluation - Mixed evaluation (1)



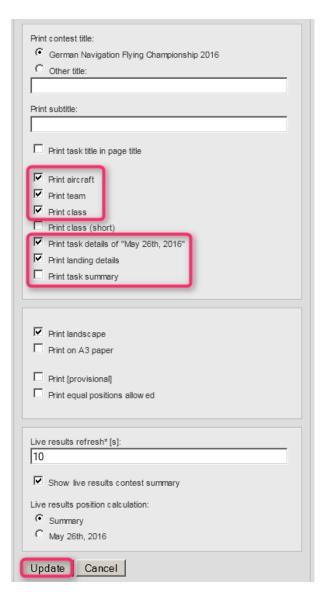


See also 'Help -> Auswertungen -> Wettbewerbs-Auswertung' and 'Help -> Auswertungen -> Sonder-Auswertungen'.

Competition evaluation - Mixed evaluation (2)

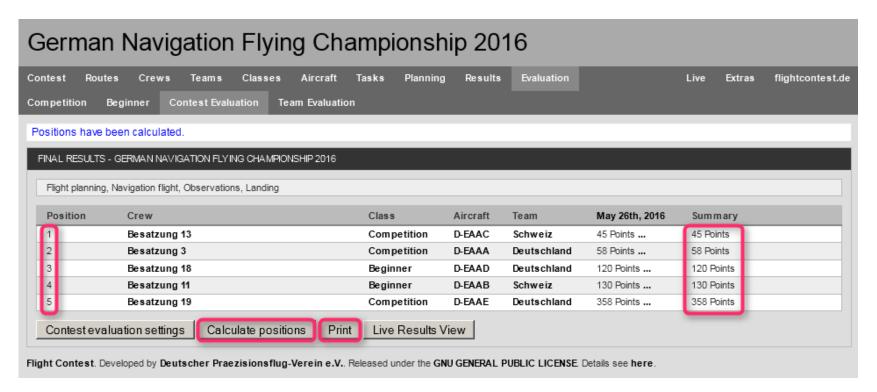






Competition evaluation - Mixed evaluation (3)





Competition evaluation - Mixed evaluation (4)



German Navigation Flying Championship 2016

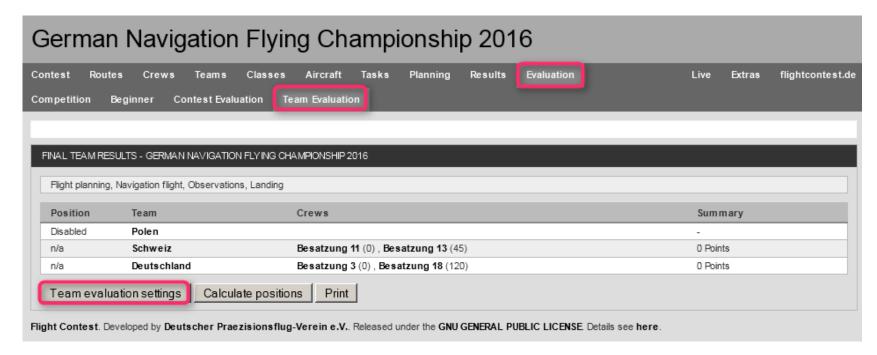
Final Results

Flight planning, Navigation flight, Observations, Landing

Pos.	Crew	Aircraft	Team	Class	May 20	May 26th, 2016						
					Plan.	Nav.	Obs.	Land1	Land2	Land3	Land4	
1	Besatzung 13	D-EAAC	Schweiz	Competition	0	45	-	-	-	-	-	45
2	Besatzung 3	D-EAAA	Deutschland	Competition	0	58	-	-	-	-	-	58
3	Besatzung 18	D-EAAD	Deutschland	Beginner	-	-	10	0	0	90	20	120
4	Besatzung 11	D-EAAB	Schweiz	Beginner	-	-	0	0	90	40	0	130
5	Besatzung 19	D-EAAE	Deutschland	Competition	21	337	-	-	-	-	-	358

Competition evaluation - Evaluation by team (1)

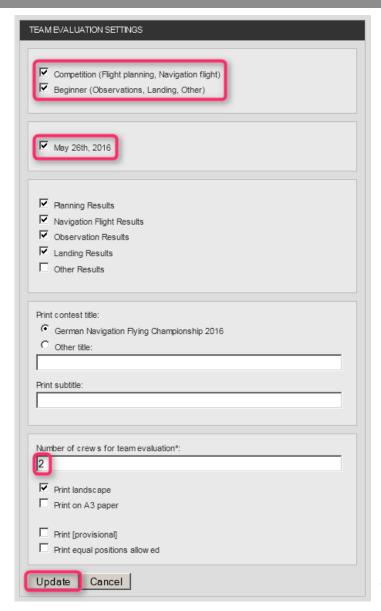




See also 'Help -> Auswertungen -> Team-Auswertung'.

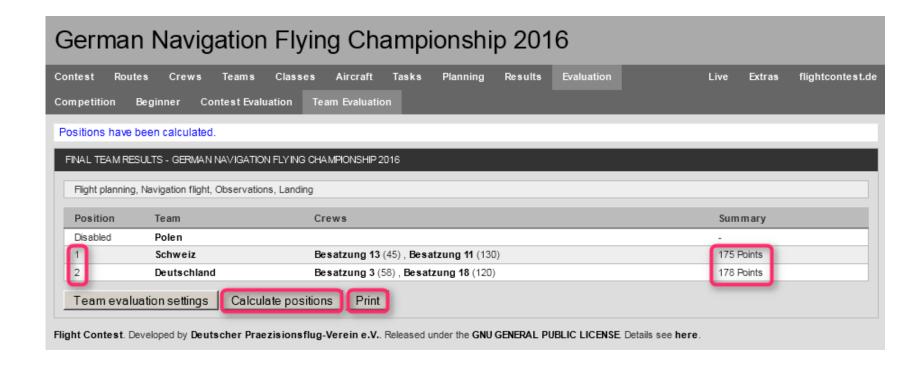
Competition evaluation - Evaluation by team (2)





Competition evaluation - Evaluation by team (3)





Competition evaluation - Evaluation by team (4)



German Navigation Flying Championship 2016

Final Team Results

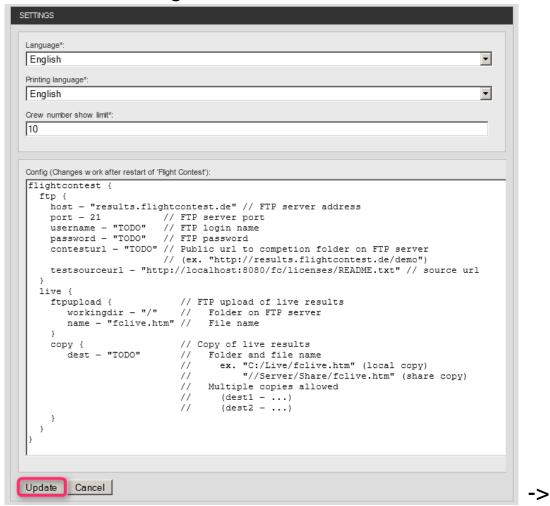
Flight planning, Navigation flight, Observations, Landing

P	os.	Team	Crews			
1		Schweiz	Besatzung 13 (45), Besatzung 11 (130)	175 Points		
2		Deutschland	Besatzung 3 (58), Besatzung 18 (120)	178 Points		

Competition evaluation - Live scoring (1) - Configuration



Extras -> Settings



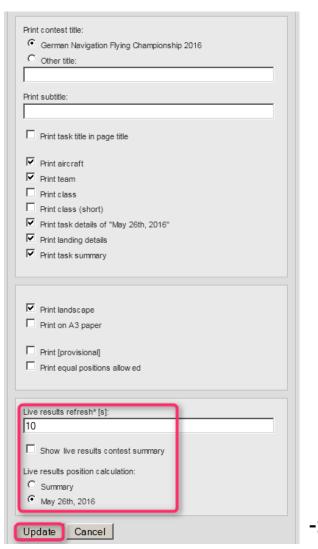
A configured FTP connection can be tested using 'Extras -> Test FTP'.

Competition evaluation - Live scoring (2) - Competition settings



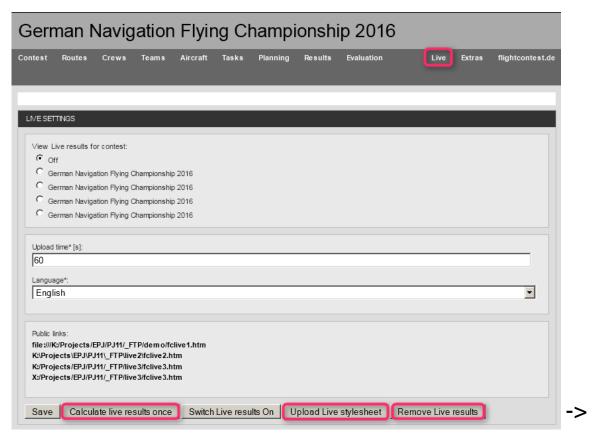
Evaluation -> Contest Evaluation -> Contest evaluation settings





Competition evaluation - Live scoring (3) - Run





Execute 'Upload Live stylesheet' and 'Remove live results' prior to the first live upload (use 'Public links' to check it) to create an empty live result.

Use 'Calculate live results once' to calculate a live result from all results completed and to upload it. Do not use automatic periodic live result calculation as it most often hampers result input through database locks.

See also 'Help -> Live-Ergebnisanzeige'.

Competition evaluation - Live scoring (4)



German Navigation Flying Championship 2016

Live Results [provisional]

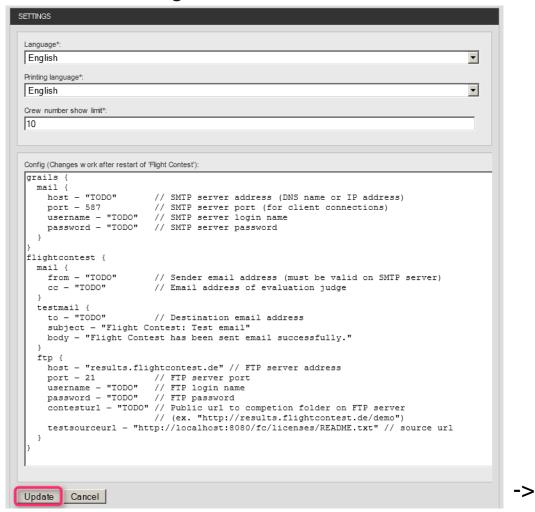
Position	Crew	Aircraft	Team	May 26	May 26th, 2016								
				Plan.	Nav.	Obs.	Landl	Land2	Land3	Land4	Sum.		
1	Besatzung 18	D-EAAD	Deutschland	0	13	10	0	0	90	20	133		
2	Besatzung 13	D-EAAC	Schweiz	0	45	20	50	0	0	20	135		
3	Besatzung 3	D-EAAA	Deutschland	0	58	20	140	0	0	0	218		
4	Besatzung 11	D-EAAB	Schweiz	2	252	0	0	90	40	0	384		
5	Besatzung 19	D-EAAE	Deutschland	21	337	130	40	20	0	20	568		

Deutscher Präzisionsflug-Verein e.V.

Competition evaluation - E-mail to crews (1) - Configuration



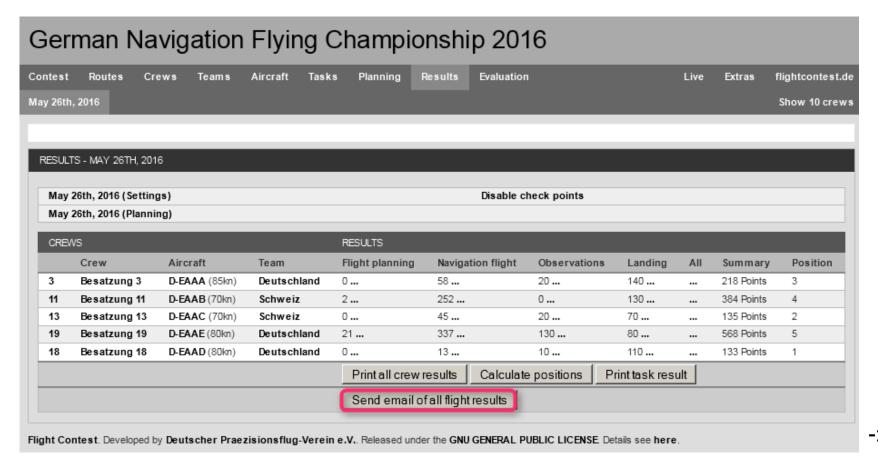
Extras -> Settings



Configured e-mail sending can be tested using 'Extras -> Test email' and 'Extras -> Test FTP'.

Competition evaluation - E-mail to crews (2) - Send

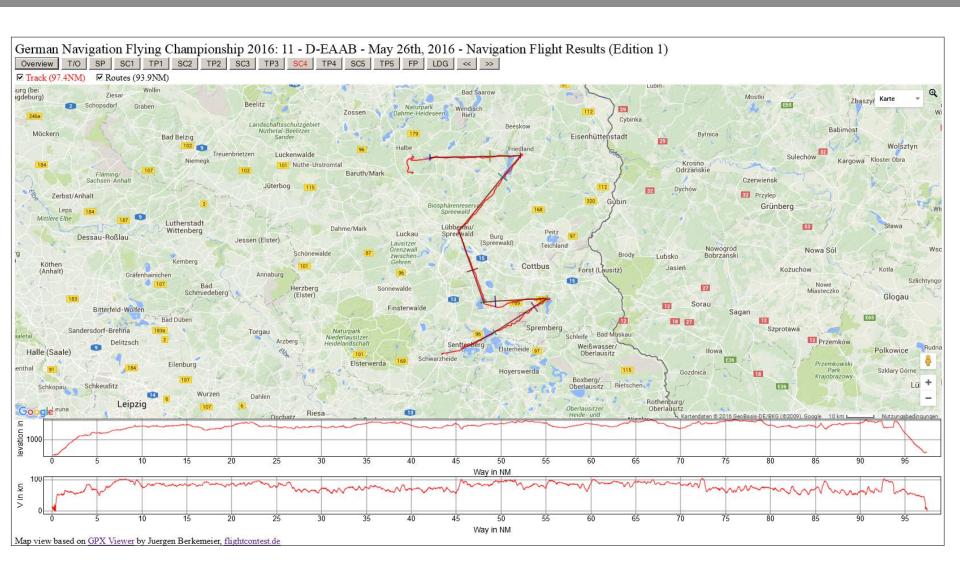




See also 'Help -> Installations-abhängige Konfiguration -> E-Mail-Versand konfigurieren' and 'Help -> Installations-abhängige Konfiguration -> FTP-Versand konfigurieren'.

Competition evaluation - E-mail to crews (3)





Flight Contest Save data (1)



We recommend that during a contest you save the following data:

'Flight Contest' database 'Flight Contest' prints

Data will be saved to the 'C:\FCSave' folder created while installing 'Flight Contest'.

Data backups are primarily intended to protect users against failure or loss of the Windows computer used for contest evaluation. At the end of a competition day or at a particular point in time, copy the 'C:\FCSave 'backup folder to an external storage medium, after you have saved all data as follows: 'All programs -> Flight Contest -> Scripts -> Save saved files'

Flight Contest Save data (2) - Save Flight Contest database



'All programs -> Flight Contest -> Scripts -> Save contest database'

- Stop service 'Apache Tomcat FlightContest'
- Save database with date and time to folder C:\FCSave (<Date>-<Time>-fcdb.h2.db).
- Start service 'Apache Tomcat FlightContest'

Save data (3) - Save Flight Contest prints (Firefox)



Recommended Firefox settings:

General-> Save all data to the following folder: C:\FCSave

Application -> Adobe Acrobat Document: Save file

These settings ensure that all prints will be stored in the C:\FCSave backup folder. PDF file print will be opened by the download manager.

Save data (4) - Restore Flight Contest database



- For database restore you have to stop service
 'Apache Tomcat FlightContest,
 ('All programs -> Flight Contest -> Scripts -> Stop Flight Contest')
- Copy 'C:\FCSave\<Date>-<Time>-fcdb.h2.db, to 'C:\Program Files (x86)\Flight Contest\fc\fcdb.h2.db'. You need administrator privileges.
- Start 'Flight Contest'
 ('All programs -> Flight Contest -> Scripts -> Start Flight Contest')

Flight Contest Contact details



Open source project "Flight Contest" http://flightcontest.de/

Deutscher Präzisionsflug-Verein e.V. http://www.praeziflug.de/