

How to declare a task in the Flarm

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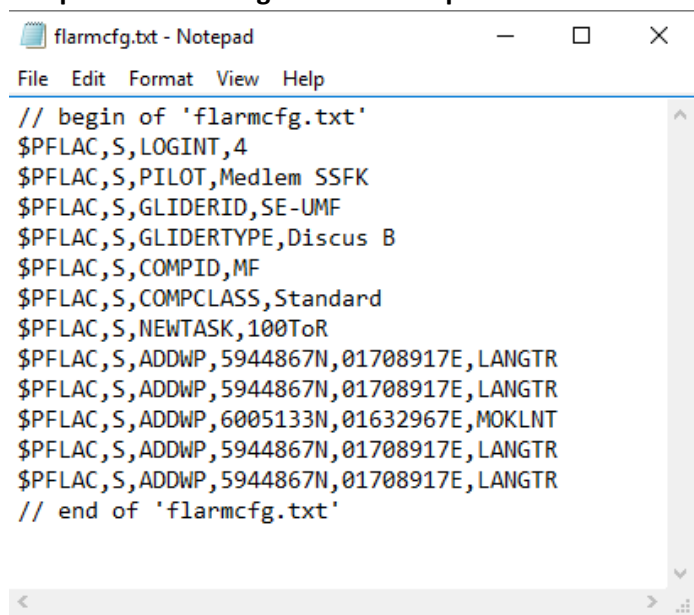
To declare a task in the Flarm, you need to change the flarm-configuration-file (simple text-file) on the Flarm-SD-card.

For that you need a computer with an SD-card-reader and the list of turnpoints with coordinates. Each plane has an own SD-card, WHICH MUST NOT BE TAKEN HOME!

You have 2 options:

1. Use the plane's own SD-card, change the flarm-configuration-file and change it back after your flight (save a copy on your PC of the original file)
2. Use your own SD-card and the structure of the original flarm-configuration-file from the plane, you want to fly the task with. Don't forget to put back the plane's SD-card after your flight.

1. Open file "flarmcfg.txt" from the planes SD-card in a text-editor



```
flarmcfg.txt - Notepad
File Edit Format View Help
// begin of 'flarmcfg.txt'
$PFLAC,S,LOGINT,4
$PFLAC,S,PILOT,Medlem SSFK
$PFLAC,S,GLIDERID,SE-UMF
$PFLAC,S,GLIDERTYPE,Discus B
$PFLAC,S,COMPID,MF
$PFLAC,S,COMPCLASS,Standard
$PFLAC,S,NEWTASK,100ToR
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR
$PFLAC,S,ADDWP,6005133N,01632967E,MOKLNT
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR
// end of 'flarmcfg.txt'
```

This file configures the Flarm, sets the plane and the task.

In this example you see, that the Flarm knows, that it is our Discus SE-UMF from SSFK.

Below that follows the task description.

On all our clubplanes the task "out-and-return"/Tur-och-Retur to Möklinta is declared.

When you want to make an own task, look up the RST-rules for "Fördeklarerad Bana (FB)" in the Segelflyghandboken under "Flygsport".

	Segelflyghandboken	Artikel	720
		Datum	160228
Flygsport		Sid nr	1 av 6

Tävlingsregler för Rikssegelflygtävlingen RST samt SM i höjdvinst, distansflygning, hastighetsflygning, segelflygkombination och lag

Segelflyghandbokens artikel 723 innehåller tips och anvisningar för tillämpning av dessa regler

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Deltagare ska avsluta sin flygning på ett säkert och omdömesgilt sätt så att mållinjepassage kan utföras med landningsvarv eller som direktlandning rakt fram. Mållinjepassage ska utföras med största möjliga hänsyn till övrig trafik.

Deltagare som utför molnflygning ska inneha gällande behörighet för IMC-flygning.

Då flygning utförs utanför kontrollerat luftrum bör passage av brytpunkter samt beslut om utelandning meddelas hemmaklubben.

4 Deltagare

Deltagare ska vara aktiv medlem i klubb ansluten till Segelflyget och inneha gällande Nationell tävlingslicens-Segelflyg eller FAI Sporting Licence.

Deltagare som ej är svensk medborgare ska dessut-

<http://www.flygsport.se/globalassets/svenska-segelflygforbundet/shb/shb720-2016.pdf>

A task in the flarmcfg.txt has always the following structure:

Line	Coordinates of...	Description
1	Launching point	where you launch (most likely Långtora)
2	Start-line	start of speed-section = a 6 km-line through this point perpendicular to the first leg of the task (= line between start and 1. turnpoint)
3	First turnpoint	all turnpoints have a 0.5 km radius
4	Second turnpoint	optional. Read the RST-rules in the SHB how to make a task
5 ...	Third turnpoint
n	Finish-line	end of speed-section = a 1 km-line through this point perpendicular to the last leg (=line between last turnpoint and finish)
n+1	Landing point	where you land (most likely Långtora)

Our example:

```
$PFLAC,S,NEWTASK,100ToR
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR      Launch at Långtora
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR      Start of Task at Långtora
$PFLAC,S,ADDWP,6005133N,01632967E,MOKLNT      First and only Turnpoint in Möklinta
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR      End of Task at Långtora
$PFLAC,S,ADDWP,5944867N,01708917E,LANGTR      Landing at Långtora
```

For making another task, just replace all lines by the start-, turn- and finish-points, you wish. Don't change anything else in the structure, leave first and last row with Långtora as a launch and landing point.

2. Open the file "langtrc6_flarmcfg.txt"

```
langtrc6_flarmcfg.txt - Notepad
File Edit Format View Help
$PFLAC,S,ADDWP,5944833N,01708700E,001ESVL Laangtora
$PFLAC,S,ADDWP,5947000N,01708500E,002Alpha
$PFLAC,S,ADDWP,5945067N,01702033E,003Bravo
$PFLAC,S,ADDWP,5945267N,01713383E,004Charlie
$PFLAC,S,ADDWP,5948850N,01710117E,005Delta
$PFLAC,S,ADDWP,5947917N,01658183E,006Echo
$PFLAC,S,ADDWP,5943650N,01704717E,007Haernevi
$PFLAC,S,ADDWP,5942833N,01702000E,008Jaedra
$PFLAC,S,ADDWP,5945233N,01707233E,009Ryda Vast
$PFLAC,S,ADDWP,5958650N,01658333E,010P1
$PFLAC,S,ADDWP,5956633N,01653483E,011P2
$PFLAC,S,ADDWP,5954200N,01647700E,012P3
$PFLAC,S,ADDWP,6008433N,01336567E,013Acksjon
$PFLAC,S,ADDWP,6120717N,01603717E,014Aifta
$PFLAC,S,ADDWP,5926417N,01424483E,015Aikvettern
$PFLAC,S,ADDWP,6030567N,01309067E,016Ambjorby
```

This is a list of all our turnpoints with name, number and coordinates.

Most of them are in alphabetical order, or you search them with the search-function.

Note that "å" becomes "aa", "ö" becomes "o" ...

3. Pick a turnpoint and copy+paste the entire line into your flarmcfg.txt-file.

The names of the turnpoints have recently changed a bit, don't worry about that, the important thing for the FLARM are the coordinates

Example:

\$PFLAC,S,NEWTASK,100ToR

\$PFLAC,S,ADDWP,5944833N,01708700E,001ESVL Laangtora

Launch at Långtora

\$PFLAC,S,ADDWP,5945233N,01707233E,009Ryda Vast

Start of Task at Ryda Väst

\$PFLAC,S,ADDWP,6002133N,01648183E,049Enaaker

First turnpoint Enåker

\$PFLAC,S,ADDWP,5956467N,01602133E,239Vastervaala

Second turnpoint Västervåla

\$PFLAC,S,ADDWP,6009267N,01655367E,225Tarnsjö

Third turnpoint Tärnsjö

\$PFLAC,S,ADDWP,5944833N,01708700E,001ESVL Laangtora

End of Task at Långtora

\$PFLAC,S,ADDWP,5944833N,01708700E,001ESVL Laangtora

Landing at Långtora

4. Save the changed file on the SD-card, put it into the plane, turn on the battery of the plane.

The Flarm will then read in the configuration-file, when it has GPS-contact. Your task is declared.

Good luck with your XC-flight!

(How to *navigate*, is another issue, but if you want to use the free software XCSoar on your mobile phone or eBook-Reader, feel also free to ask Andreas or me)

*Caroline