title: SeeYou CUP file format description description: SeeYou CUP file format specification file, Copyright © 2018, Naviter d.o.o. All Rights Reserved

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SeeYou CUP file format description

SeeYou CUP Waypoint format is a simple comma separated text file. The extension is .CUP

It consists of two parts:

- Waypoints
- Tasks

The character formatting of the file is UTF-8 or Windows-1252.

Format of waypoint records

Each line represents one waypoint with the fields: Name, Code, Country, Latitude, Longitude, Elevation, Style, Runway Direction, Runway Length, Airport Frequency, Description the fields header:

"name, code, country, lat, lon, elev, style, rwydir, rwylen, freq, desc" is contained at line number 1 and is ignored when reading.

Here are a few examples:

- Waypoint: "Cross Hands","CSS",UK,5147.809N,00405.003W,525ft,1,,,,"Turn Point, A48/A476, Between Cross Hands and Gorslas, 9 NMl ESE of Camarthen."
- Airport: "Lesce","LJBL",SI,4621.379N,01410.467E,504.0m,5,144,1130.0m,123.500,"Home Airfield"
- Outlanding:"Aiton","O23L",FR,4533.517N,00614.050E,299.9m,3,110,300.0m,,"Page 222: O23L Large flat area. High crops. Sudden wind changes. Power lines N/S. S of road marked fields"

An example of an invalid entry:

- "Park, the","PRK",UK,5107.830N,00214.420W,697ft,4,,,129.975,"Turn Point, Hangar, NE side of site of Bath, Wilts & N Dorset GC, 3 NNE of Mere. Local knowledge required."

1 - Waypoint Name

This field contain the long name of the waypoint. It is supposed to be embraced in double quotes (") to allow any characters, including a comma in between. This field can't be left empty.

Example: "Lesce"

2 - Code

This field contains the code or the short name for the waypoint. It is used to make finding a waypoint in a gliding instrument easier. We however do not specify the max. length. This field must be embraced in double quotes (").

Example: "LJBL"

3 - Country

Country IANA Top level domain standard is used for the country codes. A complete list is available at https://www.iana.org/domains/root/db and a helpful wiki article can be found https://en.wikipedia.org/wiki/List_of_Internet_top-level_domains#Country_code_top-level_domains

Example: SI

4 - Latitude

Latitude It is a field of length 9, where 1-2 characters are degrees, 3-4 characters are minutes, 5 decimal point, 6-8 characters are decimal minutes and 9th character is either N or S. The ellipsoid used is WGS-1984

Char 0	Char 1	Char 2	Char 3	Char 4	Char 5	Char 6	Char 7	Char 8
5	1	0	7	.	8	3	0	N | S
10^1 Degrees	10^0 Degrees	10^1 Minutes	10^0 Minutes	.	10^{-1} Minutes	10^{-2} Minutes	10^{-3} Minutes	

Example: SeeYou 5107.830N is equal to 51° 07.830' E

5 - Longitude

Latitude It is a field of length 10, where 1-2 characters are degrees, 3-4 characters are minutes, 5 decimal point, 6-8 characters are decimal minutes and 9th character is either N or S. The ellipsoid used is WGS-1984

Char 0	Char 1	Char 2	Char 3	Char 4	Char 5	Char 6	Char 7	Char 8	Char 9
0	1	4	1	0	.	4	6	7	E | W
10^2 Degrees	10^1 Degrees	10^0 Degrees	10^1 Minutes	10^0 Minutes	.	10^{-1} Minutes	10^{-2} Minutes	10^{-3} Minutes	

Example: SeeYou 01410.467E is equal to 014° 10.467' E

6 - Elevation

Number with an attached unit. Unit can be either "m" for meters or "ft" for feet. Decimal separator must be a point. Mix of the units is allowed in the file.

Example: 504.0m

7 - Waypoint Style

Waypoint style describes the type of the waypoint. If a value other than the ones listed below is found in the file the parser should default it to 0. Following digits represent these styles:

Digit	Value
0	Unknown
1	Waypoint
2	Airfield with grass surface runway
3	Outlanding
4	Gliding airfield
5	Airfield with solid surface runway
6	Mountain Pass
7	Mountain Top
8	Transmitter Mast
9	VOR
10	NDB
11	Cooling Tower
12	Dam
13	Tunnel
14	Bridge
15	Power Plant
16	Castle
17	Intersection

Example: 5

8 Runway Direction

Three field string containing the heading of the runway in degrees.

Char 1	Char 2	Char 3
0-3	0-9	0-9

Example: 070

9 Runway Length

Number with unit representing length of the runway. Only used with Waypoint style types 2, 3, 4 and 5. The unit can be either "m" for meters "nm" for nautical miles "ml" for statute miles. Decimal separator must be a point.

Example: 540.3m

10 Airport Frequency

Number field representing the frequency of the airport of length 7. Decimal separator must be a point. It can also be embraced in double quotes: https://en.wikipedia.org/wiki/Airband

Char 0	Char 1	Char 2	Char 3	Char 4	Char 5	Char 6
1	1-3	0-9	.	0-9	0-9	0 | 5

Example: 122.355

Format of task record

Tasks part of the CUP file is divided from the Waypoints by including

-----Related Tasks-----

line.

Each Task is presented with comma separated task points in one line. Here are two examples:

- With description, options and observation zones: "1000km FAI Triangle","0LESCE","Sv Peter","1K MAIER","1K ZELTW","1K UDBIN","Sv Peter","0LESCE"
  Options,NoStart=12:34:56,TaskTime=01:45:12,WpDis=False,NearDis=0.7km,NearAlt=300.0m
  ObsZone=0,Style=2,R1=400m,A1=180,Line=1
  ObsZone=1,Style=0,R1=35000m,A1=30,R2=12000m,A2=12,A12=123.4
  ObsZone=2,Style=3,R1=2000m,A1=180,Line=1
- Without description, no options and observation zones: ,"0LESCE","0Start","750 Huje","750 Brenner","750 Gahns","0Start","0LESCE",

The format is:

description, 1 turnpoint, 2 turnpoint, ... , last turnpoint

Number of points in the task and number of tasks is not limited.

Description

First column is the description of the task. The field is optional. If filled it should be double quoted. If left empty SeeYou will determine the task type on runtime.

Turnpoints

and all successive columns, separated by commas Each column represents one waypoint name. The name must be double quoted. The waypoint name must match the name field of one waypoint listed above the "----Related Tasks----" line.

Options and Observation Zones

The line with the definition of the description and the list of task points is followed by "Task Options" line, this line is successively followed by "Observation Zone" lines for the turn points specified in the task above. Note that if any of the data is missing, default settings will be used instead. Here an example:

```
 Options,NoStart=12:34:56,TaskTime=01:45:12,WpDis=False,NearDis=0.7km,NearAlt=300.0m
ObsZone=0,Style=2,R1=400m,A1=180,Line=1
ObsZone=1,Style=0,R1=35000m,A1=30,R2=12000m,A2=12,A12=123.4
ObsZone=2,Style=3,R1=2000m,A1=180,Line=1
```

Options line must start with "Options" keyword.

Possible values in Options line:

- NoStart Opening of start line
- TaskTime Designated Time for the task
- WpDis Task distance calculation. False = use fixes, True = use waypoints for the distance calculation
- NearDis Distance tolerance
- NearAlt Altitude tolerance
- MinDis Uncompleted leg. False = calculate maximum distance from last observation zone.
- RandomOrder If true, then the random order of waypoints is checked
- MaxPts Maximum number of points
- BeforePts Number of mandatory waypoints at the beginning.
  - 1 start line only
  - 2 start line plus first point in task sequence (Task line).
- AfterPts Number of mandatory waypoints at the end.
  - 1 = finish line only
  - 2 = finish line and one point before finish in task sequence (Task line)
- Bonus Bonus for crossing the finish line Observation zone line must start with "ObsZone" keyword.

Possible values in Observation Zone line:

- ObsZone Consecutive number of a waypoint (0 = Start)
- Style = Observation Zone Direction
  - 0 - Fixed value
  - 1 - Symmetrical
  - 2 - To next point
  - 3 - To previous point
  - 4 - To start point
- R1 Radius 1
- A1 Angle 1 in degrees
- R2 Radius 2
- A2 Angle 2 in degrees

- A12 Angle 12