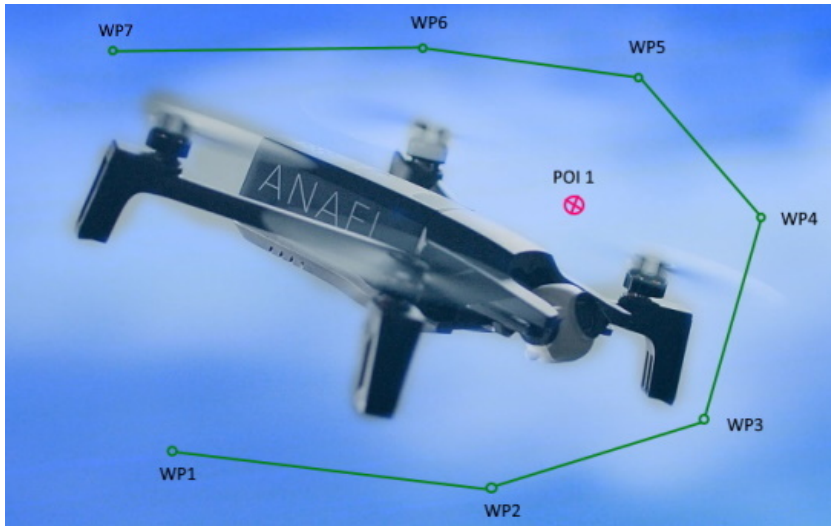


AnafiPlanToGPX



Summary

"**AnafiPlanToGPX**" is an application to convert JSON flight plan files from Parrot's "Anafi" quad-copter into GPX files for review by map services.

It's not possible to edit waypoints.

Installation

No installation needed, this is a portable application. But you need write access to the directory where the application located. "AnafiPlanToGPX" will store its settings in an XML file there.

Usage

Open file "savedPlan_*.json". A list of waypoints will be shown on page "Waypoints" and some meta data (such as POI) on "Info" page. The related GPX file will be created and saved in the same folder as the flight plan file is.

It is possible to create additional trackpoints between waypoints in the target GPX file.

Enjoy.

Waypoints

Open a flight plan file by button "Open". A file select dialog will appear. Select the file you need to convert.

Allow/disallow additional trackpoints between waypoints.

Rate [1..100] of additional trackpoints. Smaller value means more additional trackpoints between waypoints. Rate 1 is approximately one trackpoint per 3D-distance in meter (optimal rate: 10 to 40).

The screenshot shows the 'Waypoints' tab of the 'AnafiPlanToGPX 1.0' application. At the top, there is an 'Open' button, a checkbox for 'Add. trackpoints' (checked), and a dropdown menu for 'Rate of additional trkpt' set to '3'. A 'Close' button is also visible. Below these controls is a table with 16 rows of waypoints. The table columns are: #, latitude, longitude, altitude, speed, yaw, lastYaw, continue, followPOI, follow, actions, Distance, Delta, and Add. trkpt. The 'Add. trkpt' column shows the number of additional trackpoints calculated for each segment. A status bar at the bottom shows '16 .GPX D:\Lazarus\Projekte\AnafiPlanToGPX\savedPlan_RDC.gpx'.

#	latitude	longitude	altitude	speed	yaw	lastYaw	continue	followPOI	follow	actions	Distance	Delta	Add. trkpt
1	42.884776271	-76.170391156	29,0	6	330,99	330,99	True	False	0		###	###	###
2	42.884776271	-76.1708964221	107,0	5	21,32	21,32	True	False	0		201,9	78,0	25
3	42.884776271	-76.1706718542	280,0	5	319,94	319,94	True	False	0		297,4	173,0	56
4	42.884776271	-76.170422239	600,0	5	359,26	359,26	True	False	0		456,0	320,0	105
5	42.884776271	-76.17085...					True	True	1		496,8	109,0	35
6	42.884776271	-76.17051525					True	True	1		164,2	4,0	0
7	42.884776271	-76.1706244851					True	True	0		175,4	5,0	0
8	42.884776271	-76.1707704978					True	True	1		214,2	5,0	0
9	42.884776271	-76.1709911095					True	True	0		216,5	-6,0	1
10	42.884776271	-76.170978614	709,0	5	292,03	213,98	True	True	0		256,2	-8,0	1
11	42.884776271	-76.1703927033	650,0	5	268,06	268,06	True	False	0		411,3	-59,0	18
12	42.884776271	-76.1705392860	280,0	5	161,48	161,48	True	False	0		457,7	-370,0	122
13	42.884776271	-76.1708206162	120,0	7	166,05	166,05	True	False	0		333,7	-160,0	52
14	42.884776271	-76.170252687	58,0	5	44,94	44,94	True	False	0		211,1	-62,0	19
15	42.884776271	-76.170309684	16,0	5	53,97	53,97	True	False	0		63,3	-42,0	13
16	42.884776271	-76.170363999	3,0	5	83,83	83,83	True	False	0	VideoStopCapture	53,3	3,0	3

Delta altitude (ascent/descent) between waypoints.

List of waypoints. Latitude, longitude and altitude will be used for GPX tracks.

Preview number of additional trackpoints between waypoints.

Distance between waypoints

$$\text{Number additional trackpoints} = (\text{square root of } (distance^2 + delta^2) \text{ divided by } rate_of_additional_trkpt) - 1.$$

Meta data

This is just for information and reference.

The screenshot shows the AnafiPlanToGPX 1.0 application window. The title bar reads "AnafiPlanToGPX 1.0 (2019-11-24) savedPlan_RDC.json". The interface includes a menu bar with "Open", "Add. trackpoints" (checkbox), and "Rate of additional trkpt" (set to 3). The main area is divided into "Info" and "Waypoints" tabs. The "Info" tab contains two tables of metadata. The left table lists parameters like title, version, date, product, uuid, zoomLevel, rotation, tilt, mapType, progressive_course_activated, and dirty. The right table lists parameters like TAKEOFF 1, type, cameraId, resolution, fps, POI 1, latitude, longitude, altitude, and color. The status bar at the bottom shows "16 .GPX" and the file path "D:\Lazarus\Projekte\AnafiPlanToGPX\savedPlan_RDC.gpx".

Close application

Open Add. trackpoints 3 Rate of additional trkpt

Info Waypoints

Parameter	Value
title	RDC-3—3
version	1
date	2019-11-19 15:22:47
product	ANAFI_4K
uuid	RDC-3—3
zoomLevel	16,08
rotation	337,58
tilt	0,00
mapType	4
progressive_course_activated	True
dirty	False

List of meta data from JSON flight plan file. CTRL+C to copy whole table to clipboard.

Parameter	Value
TAKEOFF 1	-----
type	VideoStartCapture
cameraId	0
resolution	2073600
fps	30
POI 1	-----
latitude	29.130000000000001
longitude	-75.898336
altitude	690
color	-7589836

Different points from from JSON flight plan file. CTRL+C to copy whole table to clipboard.

Number of waypoints.

Number of trackpoints

Output file name. Double click to open file explorer.

16 .GPX D:\Lazarus\Projekte\AnafiPlanToGPX\savedPlan_RDC.gpx