

## May 2011 Condor Corner

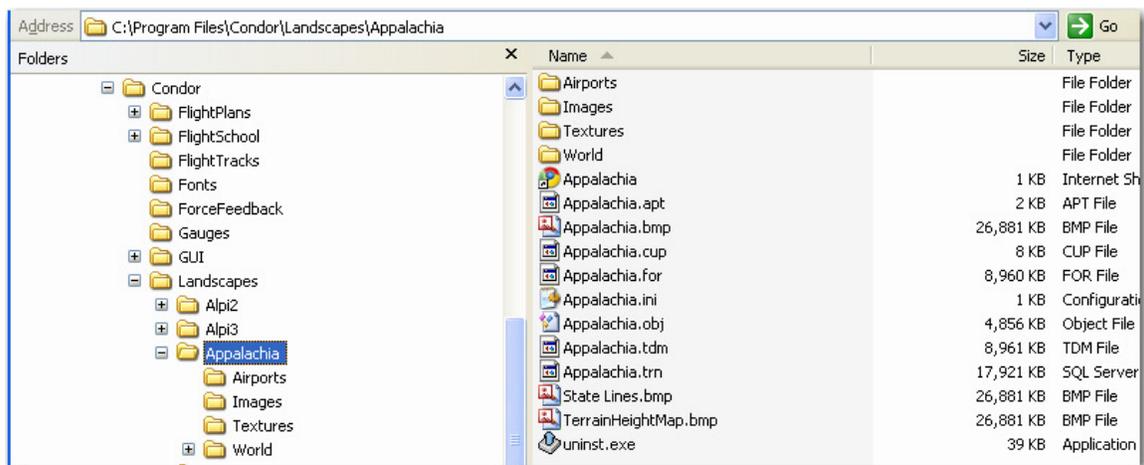
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I have received a number of requests from Condor Corner readers for information on how to get and install sceneries, and how to join an online race for the first time. So, rather than continue to answer the same questions via email, I thought it would make a good topic for a Condor Corner article.

### ***Downloading and Installing Sceneries:***

Condor sceneries are complete descriptions of a flying area, usually measuring hundreds of kilometers on a side. Terrain elevation information is usually very accurate, as it is derived from worldwide GPS elevation maps. Other information, like trees, roads, rivers, etc may be more or less complete, depending on the skill and pain tolerance of the designer. Sceneries range from sparse (Sierra Nevada, Rio Grande) to wonderfully rich (West Swiss, Alpi). All Condor sceneries reside in the Condor\Landscapes folder, with a separate folder for each scenery, i.e. c:\program files\condor\landscapes\Seirra Nevada. Installing a new scenery is simply the process of loading the new scenery files into the proper subfolder in the Landscapes folder

Scenery downloads come in two basic forms – a self-executing install file that does all the work for you, or a compressed file (ZIP or 7Z) that must be manually extracted to the proper place in the Condor folder tree. The figure below shows a partial layout of my c:\program files\landscape folder, with the Appalachia subfolder partially expanded. In the figure, the 'Appalachia.cup' file is a standard SeeYou compatible waypoints file that can be used just like any other waypoints file for an external PDA. It can also be loaded directly into SeeYou, and then saved in other waypoint formats (like the Cambridge .DAT format) if your PDA doesn't support .CUP files.



**Figure 1: Condor Scenery (Landscapes) Folder**

## **Executable Install File:**

To install a scenery that uses a self-executing install program, simply download the file, launch it (double-click) to execute the install program, and sip coffee while it does its thing. After the install completes, the new subfolder can be found in c:\program files\condor\landscapes. An example of this style is the very popular Mifflin scenery, available from <http://www.gliderracing.com> as Mifflin\_Setup.exe.

## **Compressed Scenery File:**

Download the scenery file to your PC. For example, go to <http://www.gliderracing.com> and download the Sierra\_Nevada\_1.1.ZIP file

Manually extract the compressed files into the proper place in the Condor folder tree. For WinZip files, this can usually be accomplished by right-clicking on the downloaded ZIP file and selecting 'Extract To...'. This brings up a dialog allowing you to choose the folder where the extraction will start. Navigate to C:\Program Files\Condor\Landscapes and click 'OK'.

Some compressed scenery packages come in the alternative .7Z compression format. If you have downloaded one of these packages, you will need to also download and install the free 7Zip extraction program from <http://www.7-zip.org/download.html> or update your WinZip program to one of the later versions that also supports the .7Z extension (I have WinZip v15 pro and it handles .7Z). Installing a .7Z package is very similar to installing a .ZIP one – simply set the extraction point to c:\program files\condor\landscapes.

**Note:** For those of you running Vista or Windows 7, you must run WinZip or 7-zip as an administrator to get the extraction process to work properly. If for some reason you can't run as administrator, you *might* be able to first extract the files to a temporary location in your 'My Documents' folder tree, and then 'move' the entire landscape folder tree to C:\Program Files\Condor\Landscapes. See your local geek for the details, or contact me and I'll be happy to walk you through it.

## ***Online Racing:***

### **Introduction:**

This section assumes you have successfully installed Condor and done the initial setup, you have flown in the offline 'Free Flight' mode long enough to be able to stay upright and aloft, and now you want to try your luck in an online competition. Online competitions require that someone, somewhere acts as a race 'server', and then competitors connect to that server over the internet. Anyone with a Condor program can act as the server, and can fly in the competition as well. So, for instance, I could email my buddy in East Ouagadougou and tell him that I was going to start up Condor on my PC and set up a race at such and such an IP address. My buddy would then start Condor on his PC, type in my IP address, and tell Condor to connect to that 'server'. Assuming we did everything correctly, my glider and my buddy's glider would now appear on the runway at the takeoff airport in the selected scenery, get towed up, and released just like in RL. I would see his glider through my canopy, and he would see mine through his.

Any changes in my plane's state (altitude, speed, attitude, etc) are instantly visible to my buddy, and vice versa.

While the above method for holding online races will work fine, it's a bit awkward having to announce the server URL and then having to type it in each time. So, the Condor Team maintains a central website where task setters can 'announce' servers in a very convenient way. Pilots who wish to join a race can simply click on a link, and their Condor program gets launched with all the relevant information already filled in. Shown below is a partial view of the Condor Server list, which can be found at <http://www.condorsoaring.com/serverlist.php>, along with a short description of each column in the list.



**Servers List:**

Here is the public servers list of active\* *Condor* servers to which you can join for online flying.  
 \*(list is automatically refreshed every 2 minutes)  
 To enter Condor Chat Lobby click [here](#)

Server	Scenery - ver.	Status	Players	Private	Server Uptime	Task Length	Distance Flown	Current Leader
!_Frisian Freeflight_!	RockyMountains - 1.01	Joining Enabled	0/32	No	533min	0km	0km	-
!_Frisian Pylon Races_!	Slovenia - 1.03	Joining Enabled	0/32	No	1min	5km	0km	-
!_Frisian Soaring_!	Provence - 1.30	Race in Progress	1/32	No	28min	90km	73km	t.habara
ACE Race 4	West_swiss - 1.02	Joining Enabled	0/32	No	2min	123km	0km	-
AIRBLADES QUICK RACE	Slovenia - 1.03	Joining Enabled	0/15	No	8min	95km	0km	-
crazy lazy	West_swiss - 1.02	Joining Enabled	0/32	No	14min	121km	0km	-
Default Server Name	NewZealand - 0.8	Joining Enabled	1/32	No	4min	294km	0km	-
GeZC - journey through Slovenia	Slovenia - 1.03	Joining Enabled	0/32	No	4min	71km	0km	-
Low Ridge Increasing Lift	West_swiss - 1.02	Joining Enabled	0/32	No	8min	40km	0km	-
Over The Hill and Back Patch 1.1	Sierra Nevada - 1.1	Joining Enabled	0/32	No	6min	137km	0km	-

**Server:** This column shows the name assigned by the person advertising the online server site. This name is a clickable link.

**Scenery – ver:** The scenery required for this server. You must have this scenery installed on your PC. See the bottom of the server list page for a link to a site that has many (but not all) of the sceneries available for free download. Also, many popular sceneries, and all of the sceneries used for Monday Night Soaring (MNS) races, are available at <http://www.gliderracing.com>.

**Status:** Shows the current status of the server. ‘Joining Enabled’ means you can join the race. ‘Waiting for Start’ means it is closed for new pilots, but the race has not started. ‘Race in progress’ means the start gate has opened.

**Players:** This column shows the number of players currently connected to the server, and the maximum number allowed. The default maximum is 32, but you will sometimes see lower numbers set by the task setter to limit the load on the server.

**Private:** A ‘No’ in this column means anyone can join. A ‘Yes’ means you need a password to get in.

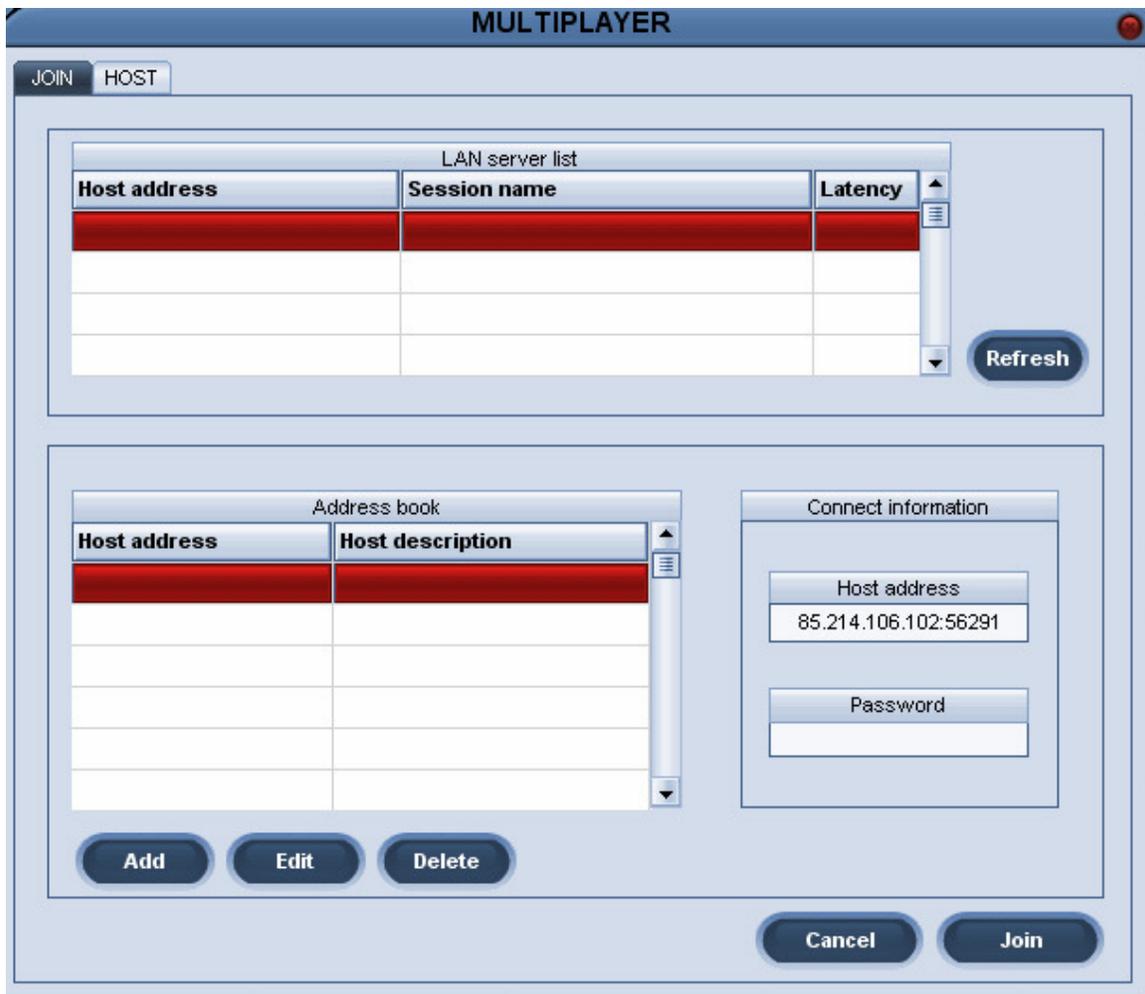
**Server Uptime:** The number of minutes since the server first announced the race. Note that large uptimes tend to indicate ‘free flight’ servers with no set task. Most races have a join time of between 5 and 30 minutes, so anything with an uptime of more than about 30 minutes with ‘Joining Enabled’ still showing is almost undoubtedly a zero-length task ‘free flight’ server.

**Task Length:** A task length of 0km means there is no task at all – it’s a free flight soaring area where you can just ‘fly locally’. A non-zero task length indicates a real task.

**Distance Flown/Current leader.** The distance flown by, and the name of, the current leader.

## **Connecting To The Server:**

To initially connect to a server via the Condor Server List (by far the most common way of joining), you must first make sure that Condor *\*IS NOT\** running on your PC. This is a bit counter-intuitive at first, but you get used to it pretty quickly. If you forget, Condor will remind you. Launch your favorite web browser, and navigate to the Condor Server List at <http://www.soaringsim.com/serverlist.php>. Click on the desired server name, and you will see Condor automatically launch and display a screen like the following:



Note the 'Connect information' section at the lower right has the server host address already filled in. If this particular race requires a password, you would enter it in the 'Password' field. Otherwise, leave it blank and click on 'Join'.

### Task and Plane Settings:

Once you have connected to a race server, a dialog showing all the relevant task and plane information will be presented, as shown in the following screenshots.

### Information:

This screen shows while Condor is attempting to connect. If successful, the progress bar will show 100% and the message will change to 'received server data' for a few seconds, and then the additional screens shown below will be presented. If unsuccessful, this screen won't disappear, but the connecting message will change to show the reason for the failure. 'Host Not Found' means nothing responded to the IP address. This can be a typing error if the address was entered manually, or the host went offline momentarily, or the server administrator didn't know how to make the server publicly visible (seeing 'Default Server Name' for the host name is an indicator that the host can't be reached)

## Task Tab:

The task tab shows the task layout on a map of the scenery. Right-click options allow you to change the map scale and/or change the map display. Changing from 'photo-realistic' to a pseudo-colored height map type can be important for races in mountainous terrain, like Provence or New Zealand.

The right side shows race details like the scenery being used, the task waypoints, and task timing details. The 'Time (hours, minutes)' field shows the time of day in the race scenery at the time the server started (often, but not always, a little after noon). The 'Race in' field shows the number of minutes between when the join time ends and the race start window opens. The 'Time window' field shows the number of minutes that the start gate is open. Note that in Condor races, the start window is often fairly short to keep the entire race time within bounds. **Important! If the 'Time window' field shows 0, then the race features a 'regatta' start. In a regatta start, the elapsed time all pilots starts at the end of the 'Race in' period, whether or not a pilot has actually crossed the start line. This means you want to start as close to (but not before!) the start of the race.**

The screenshot displays the 'FLIGHT PLANNER - JOIN' window. The main map area shows a task layout with waypoints and a route. The waypoints are labeled: '1. TP', '2. TP', and '3. TP'. The route starts at 'TAKEOFF SLOVENJ GRADEC', goes to 'FINISH SLOVENJ GRADEC', then to '1. TP', '2. TP', '3. TP', and back to 'FINISH SLOVENJ GRADEC'. The map also shows 'LESCE' and 'LESCE' locations. The map includes a scale bar for 10.8 nm and a total distance of 87.4 nm. The map shows a height of 1434 ft. The right panel contains the following details:

- Landscape: Slovenia [1.03]
- Task points:
  - Takeoff: SLOVENJ GRADEC
  - Start: SLOVENJ GRADEC
  - 1. TP: LIBELICE CHURCH
  - 2. TP: TRZIC
  - 3. TP: FERLACH CHURCH
  - Finish: SLOVENJ GRADEC
- Timing:
  - Date: 5/19/2007
  - Time [hours, minutes]: 13:00
  - Race in: 10
  - Time window: 20
- Task description: by RAS

At the bottom, there are buttons for 'New', 'Load', 'Save', 'Print', 'Cancel', and 'Join flight'.

## **Plane Tab:**

This screen has two sub-tabs: The 3D view shows a rotating view of the selected glider, and the 'Settings' tab allows you to set the water ballast level (if enabled), and the CG setting for the race (I typically use a CG setting of between -1.6 and -2.0 inches for better low-speed thermalling performance without significantly affecting high-speed cruise performance). The 'Plane class' field can be fixed to a particular class by the race organizer, or it can be a handicapped race where you can fly anything. The 'Plane type' field shows the models available for the selected class. Note that unless you have purchased and installed Plane Pack 1, some of the more modern 18-meter gliders won't be available. Plane Pack 2 adds many popular Club Class gliders, including my beloved LS-4. The 'skin' field allows the use of custom paint schemes for your glider (\*but\* – your whizzo custom paint job won't be visible to other pilots unless they also have your paint scheme installed on their PC, which makes this feature almost useless).

FLIGHT PLANNER - JOIN

TASK WEATHER PLANE NOTAM CHAT

Plane class: 15-meter | Plane type: Ventus2 | Skin: Default

3D view Settings

### SCHEMP HIRTH VENTUS 2BX

Auto rotate  
 Technical data

Wing span	49.21 ft
Wing area	104.10 sqft
Length	21.03 ft
Empty weight	507 lbs
Max weight	1157 lbs
Water ballast	52.8 US gal
Min wing loading	6.3 lbs/sqft
Max wing loading	11.1 lbs/sqft
Max speed	146 kts
Maneuvering speed	97 kts
Min speed	38 kts
Min sink	100 ft/min
Best glide ratio	48 at 53 kts
DAeC index	114



New Load Save Print Cancel Join flight

FLIGHT PLANNER - JOIN

TASK WEATHER PLANE NOTAM CHAT

Plane class: 15-meter | Plane type: Ventus2 | Skin: Default

3D view Settings

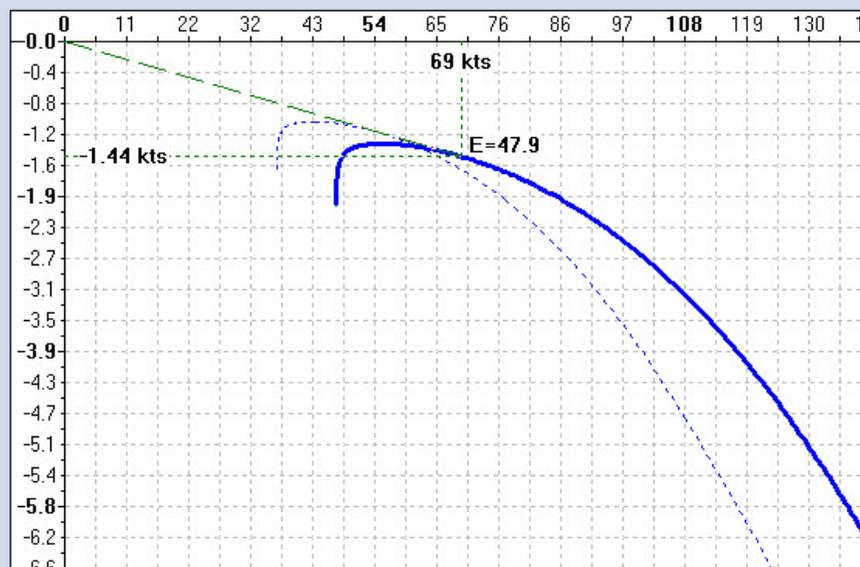
Water load: 441 lbs

Wing loading: 10.9 lbs/ft<sup>2</sup>

C/G bias (tail / nose): -2.0"

MC [m/s]: 0

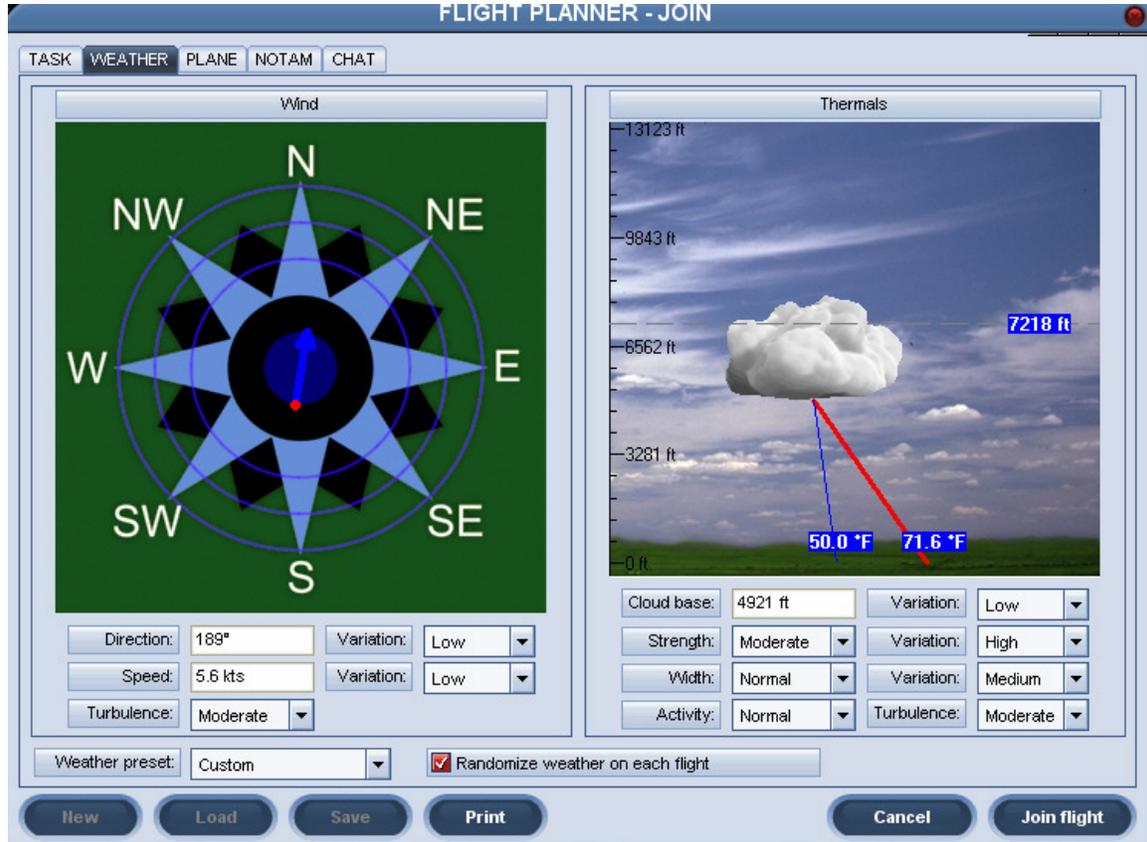
Wind [km/h]: 0



New Load Save Print Cancel Join flight

## Weather Tab:

This tab shows the relevant weather parameters set by the race organizer for the flight. This is mostly self-explanatory. Watch out for situations where the weather parameters have 'high' variation. Note that thermals in Condor are about one notch narrower than the 'Width' parameter indicates. For instance 'normal' width produces thermals that are actually fairly narrow, and 'narrow' thermals are basically unworkable.



## NOTAM Tab:

Take some time to look over the information on this tab, as there are a few very important items.

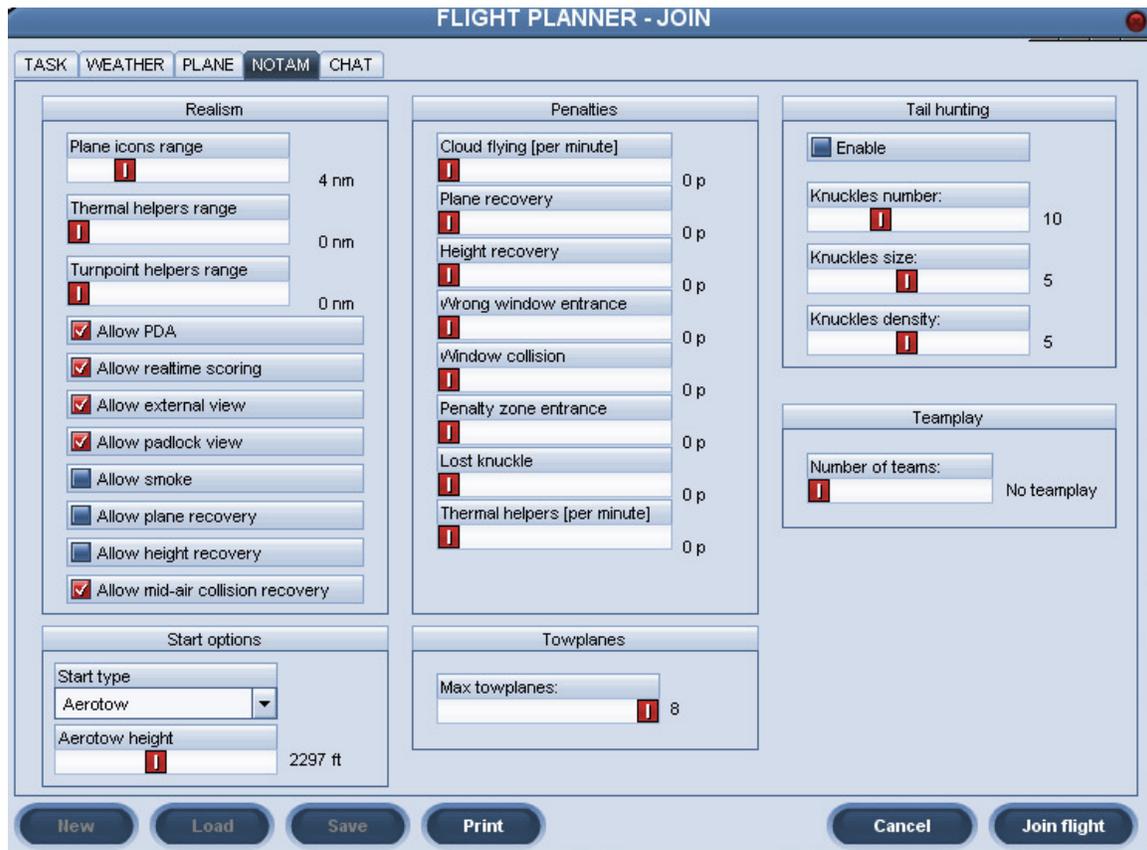
The Realism section shows how far away you can see glider 'tags', how far away you can see thermals (almost always set to zero for a real race), and how far away a turnpoint 'pole' can be seen (also generally set to zero for real races). The 'Monday Night Soaring' (MNS) race organizers generally set the Plane icons range to 1nm (very realistic), while other races tend to use larger values. Even without the tags, you can still see other gliders, just not quite as far away.

The checkboxes in the realism section enable/disable various realism options. The ones that are most often used for races are 'Allow PDA', 'Allow External view' (handy to check that you really did load up with ballast), and 'Allow mid-air collision recovery' (the Q key on the keyboard). This last option is very necessary in Condor due to the reduced peripheral vision inherent in all PC games and the close proximities inherent in gaggle flying. It's not at all unusual to have several mid-airs in the pre-start gaggles. The 'Q' keyboard key recovers from a mid-air (note – you may also have to hit 'F1' after hitting 'Q' to get back in the cockpit after having been ejected).

The sliders in the 'Penalties' section set the penalty levels for various activities. The only important one for real races is the 'Cloud flying' penalty. The penalty is usually set to 10 points per minute so an inadvertent dip into the 'wispiess' won't be too expensive, but deliberate cloud flying will be.

The 'Tail hunting' and 'Teampay' sections are almost never used in real competitions.

The 'Start options' and 'Towplanes' sections are set by the race organizers. It is sometimes useful to glance at the 'Start type', so you'll know to have your hand on the joystick if it is set for 'Airborne' or 'Winch'. Airborne or Winch launches start about 3 seconds after the glider becomes visible in the game, so be ready!



## Joining a Race:

After everything is set up the way you like in the Task setup pages, simply click on the 'Join Flight' button on any page to actually join the flight. Before clicking on 'Join Flight' you are 'In the GUI', and your status will be visible to other players as 'connected'. Once you join the flight, your status changes to 'in the game' and now your glider will be visible to others.

## Flying

Flying in Condor is very much like flying gliders in RL. If you are an experienced cross-country glider pilot, those techniques transfer readily into the Condor world. However, there are some aspects of the Condor world that aren't obvious to new users, so I have attempted to describe some of them here.

## Chat Feature and TeamSpeak

The Condor equivalent of the glider radio is the 'chat' feature, enabled with the keyboard 'Return' key. When 'Return' is pressed, a chat fill-in field appears at the bottom left of the screen, as shown in the following screenshot. Pressing 'Enter' again transmits whatever you typed to everyone else on the server. Note the default frequency for this fill-in field is 123.5, **BUT it can be (and sometimes is, inadvertently) changed!** The backslash (\) and single-quote (') keys step the frequency up and down in 0.25MHz steps, respectively. If you change the frequency (inadvertently or otherwise), only those on the same frequency will 'hear' you. Fortunately, non-default freqs are shown in RED so its easy to see when you've screwed up.

**TeamSpeak** is an application developed for use in multi-player team-oriented online games that has been adapted for use in Condor. A free TeamSpeak client program allows users connected to a TeamSpeak (TS) server to talk to each other in real time, independently of the Condor application itself. TeamSpeak supports this by allowing a keyboard key (usually the CTL key) to be used as a push-to-talk switch in TeamSpeak. There is also a neat little free app called JoyToKey that allows a joystick button (I use the trigger) to be assigned to a keyboard key. When done properly, pressing the appropriate joystick button causes TeamSpeak to receive the assigned keyboard keystroke, which then activates the TeamSpeak PTT feature. I personally don't use TS much, as it is every bit as much of a distraction as using the radio in real life, but it can be very useful for team flying or leader-follower flights. See <http://www.teamspeak.com/> for details. The TeamSpeak client program is a free download (as is the JoyToKey program), and the Monday Night Soaring homepage at <http://www.gliderracing.com> has a link to a free TeamSpeak server.

## PDA Basics

The PDA that comes with Condor is actually pretty good, although it does have some significant limitations. The worst problem with the PDA is that it is limited to north-up orientation, which means that when the task line happens to be oriented more east-west than north-south, it is much harder to look ahead for potential problem areas. There are 4

separate pages available in the PDA, accessible via the 1,2,3,4 number keys, but the '4' page actually has two different sub-screens.

***Screen 1: Map View:***

This shows the traditional map view of the task, using whatever map type was initially selected when first entering the race. The PageUp/Down keys change the scale, and the 'Cockpit Zoom' (Y) keyboard key zooms in on the PDA (very helpful in bridging between map zoom scales).

***Screen 2: Next Waypoint View:***

Shows the next and subsequent waypoints. Useless.

***Screen 3: Final Glide View:***

Shows the final glide situation for the next and subsequent waypoints at the selected MC value. Here 'DH' means your current height above the target waypoint, and 'DDH' means your calculated arrival height above the target waypoint. PageUp/Down moves up & down through waypoints (+1 means the 1<sup>st</sup> waypoint after the next one, etc). Very helpful.

***Screen 4a: Wind View:***

Shows the current wind at the current altitude. Extremely useful for ridge tasks.

***Screen 4b: Bread-crumb View:***

Shows the last few minutes of lift/sink activity. Extremely useful for centering thermals. PageUp/Down changes the scale.

**The 'Tilde'(~) key:**

If you read the manual very closely, you will find that the Tilde (~) keyboard key toggles main screen readouts on and off, including the chat text and flap/trim position readouts. I've never had the occasion to deliberately disable readouts, but I have inadvertently done so on a number of occasions while going after the '1' (map) key. So, when this happens to you and you can't figure out why readouts don't work anymore, try hitting the tilde key and see if it all comes back.