New U.T.A.H. Scenery in Condor Surely Stands for "Unmatched Terrain, Astounding Horizons!"

Virtual Vulture Column by Allen "Moon Doggie" Deever Photos by Piotr Strzelec & Allen Deever

Living and gliding in Nevada, we local soaring enthusiasts have more than a passing familiarity with the alluring neighboring state of Utah and its excellent opportunities for sky sailing over stunning sandstone

panoramas of orange, red and yellow painted buttes. It is for just such reasons that this reporter showed way more than a passing interest when learning of the newly



-released freeware Condor scenery that covers the heart of this glider pilot's paradise. In fact, after soaring from quite a number of different airports within this scenery, including some of my favorite real-life flyin destinations such as Cedar City and Bryce Canyon, I immediately saw the title of Utah as not merely the name of the state but as an acronym of U.T.A.H. that must surely stand for "Unmatched Terrain, Astounding Horizons!"

First available for download on May 14 by Piotr Strzelec, Utah covers approximately 386 x 386 square kilometers of superb soaring destinations, including such well-known National Parks and Monuments as Zion, Bryce Canyon, and Canyonlands. The top of the



2014 has been a great year for virtual soaring enthusiasts in the Southwest USA.The month of March brought us the stark beauty of Southern Nevada scenery and now May has given us the splendor of Utah.



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scenery extends a bit further north than Tooele, allowing one to soar along the southern shores of the Great Salt Lake. It's starboard border stretches

about a dozen miles east of Vernal. Likewise, its southern border stretches about a dozen miles south of Escalante (near Utah's Petrified Forest State Park); and closer to Nevada, its western border extends about 15 miles west of Cedar City with the breathtaking Cedar Breaks and renowned Brian Head ski resort area to explore. Also included within this scenery are the well-known destinations of Panguitch, Milford, Parowan, Beaver, Delta, Fillmore, Junction, Richfield, Salina-Gunnison, Nephi, Cedar Valley, Spanish Fork, Heber City, Mount Pleasant, Manti-Ephraim, Huntington, Duchesne, Hanksville, Carbon County, Green River, Monticello, Roosevelt, and Wayne Wonderland (gateway to both Capitol Reef and Arches National Parks), plus it even includes major portions of the Lake Powell National Recreation Area in the south.

"Utah for
Condor scenery
allows you to
soar over all
five of the
state's National
Parks, as well as
over the Lake
Powell National
Recreation Area
and numerous
state parks.

Speaking with the artist/programmer of this superb scenery, there's a chance that a future edition might encompass the southern border of Utah, going all the way down to our nearest neighbor of St. George. The only reason it wasn't originally included was simply due to the resultant download size of this very high resolution, which at present

Even the medium resolution version of the program, which is available

is 7 gb.



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on the Condor Club site's scenery download section, still requires four separate downloads and approximately 2 gb. of zipped folders to procure altogether.

As usual, all the world's best freeware and shareware sceneries for *Condor: The Competition Soaring Simulator* can be downloaded at the following web address: http://www.condor-club.eu/sceneries/197/. Be aware that the Condor Club's version of the Utah scenery is classified



medium resolution scenery and that the high definition version is not available at that location. The reason is that not everybody's computer can handle the highest resolution version of Utah. Even my own relatively new laptop (Pentium i7 processor with 8 gbs. of RAM) could not deal with using the high resolution scenery while flying and trying to take screenshots at the same time. This doesn't mean that it's not worth getting the high resolution scenery as well, but keep in mind that you'll want to make sure that all non-essential programs are turned off so that you can fully enjoy the soaring experience without any hangups in flight.

Know that the same version of this software, which appears on Condor Club, is also available as a single 1.8 gb. download through

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<u>www.gliderracing.com</u>, a site that is definitely worth visiting for any glider pilot interested in improving their competition soaring skills.

Soaring along Utah's scenic Green River in Canyonlands National Park is a breathtaking experience.

For those with newer computers and plenty of space (terrabytes) on their hard drive, who want to see Utah in all of its glory, you can download the high definition texture files from Piotr's Google Drive account at the following address:

https://drive.google.com/folderview? id=0BxvG7U4FJfbrOUczenhzOTZUVFU&usp=sharing

"I thought it would be instructive this month to offer some insight into just how much work goes into producing an amazing Condor scenery."

If doing so, please contact the author to send your heartfelt thanks for this great gift to the virtual and real-life soaring community at his email address: pstrzelec@comcast.net. Your thoughtful consideration will be greatly appreciated by the genius behind this awesome contribution, who spent untold hours throughout the long winter nights asking, posting, Googling, downloading, and pulling his hair out to make this lonely project a reality for your enjoyment.

Recently, as LVVSA club members will recall, we've had some excellent articles from our club's own general and board members detailing the great lengths that our dedicated members have gone

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through to keep everybody up and flying. Likewise, I thought it would be instructive this month to offer some insight into just how much work goes into producing an amazing Condor scenery such as this recent Utah edition, not to mention a similar amount of work that was accomplished by our previously-featured Southern Nevada scenery that was created by Andy Souter.

To get as much of a real insight into this process as possible, I explored the various threads found on the Condor Club scenery-maker's forum to discover just when this gargantuan project began and what all was involved in the process. To my surprise and admiration, I found out that this scenery required months of learning, reconnaissance, and decision-making just to get the idea off the ground (pardon the pun), and then another six months of gut-wrenching development to make it a reality. The Utah scenery officially began on November 11, 2013, when Piotr Strzelec announced to the scenery-maker community the following message:

"After many months of research, trial, error, and utter frustration, I settled on what I'd like to be my first (hopefully) published scenery. It is 16 x 16 Terragen tiles @ 8192 pixel HD resolution, giving it a size of roughly 368 x 368 km. It overlaps the Logan scenery in the north to include the High Uintas mountain range, my home airport of Cedar



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Stunning
freeware
sceneries such
as Utah for
Condor, don't
just design
themselves.
Such sceneries
require many
months of
intensive labor
to produce.

Valley, but most importantly my house. I used 1 meter resolution 2011 aerial photographs of Utah and down-sampled them to 2.8 meters. It will still be a big download with over 10 GB of DDS textures alone, so I may need to include a low-resolution version."

In case anyone mistakenly thinks that a Condor scenery developer can simply download aerial photographs, press a button, and compile such scenery for inclusion into Condor's landscape folder, they have a lot to learn. Just the act of compiling the graphic files can easily take an entire day. On that same date, Piotr mentions having to "mosaic, sample, and slice the aerial photographs," not to mention fixing certain aberrations found in the original photographs, and finally exporting the lot as a large set of BMP files. Although it might sound to neophytes like the majority of the work had been accomplished, so many tasks still remained to be tackled, such as the "fun" of creating airports and



Beautiful mixed forest scene (deciduous trees and conifers) demonstrate the beauty of both this scenery and of the higher mountain areas of Utah. texturing their runways, adding a world of virtual objects such as hangars, houses and trees, plus creating maps for choosing departure airports from within the Condor program.

After accomplishing the act of putting together all the aerial photographs, Piotr found himself to be the owner of a file that was

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over 50 gb. He next had to slice the scenery into vertical strips as an intermediate step before creating the collection of scenery tiles. At this point, if you're wondering where the aerial photos come from for such a program, many developers rely on lower resolution Landsat photos that are available to the public for free. Why not use Google Earth, one

Here we are in this screenshot, flying up the canyon from Cedar City toward Cedar Breaks and the Brian Head region.



might ask? Simply because doing so would cost the developer a small fortune for the privilege. Being resourceful, however, Piotr used aerial photography of Utah that is available for free from the National Agriculture Imaging Program (NAIP). Under that program, the Utah government regularly photographs the state and makes the images available to the public, provided that proper credit is given when applications are developed from them. To access the source of the aerial photos used to create this scenery, visit the following site: http://gis.utah.gov/

Continuing to follow the Herculean effort that goes into making these great sceneries, on January 10, it could be seen that Piotr was pulling his hair out trying to make vegetation maps line up with the scenery, since they unfortunately use different projections to portray them. In the end, Piotr had to scale non-uniformly by providing a different factor in X and Y, and by having to stretch corners to make it work. According to Piotr, "It's a good thing that Utah has a lot of lakes and a

This beautiful, new **Utah scenery** couldn't have come at a better time considering that our LVVSA **Summer Soaring** Safari is to be held at Parowan this season, Club members will now have a chance to perform reconnaissance around the area a month before they arrive to fly in it. (See three Parowan screenshots on the following pages.)

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long river, which I used as references. I think I got it to within 50 m or so." At that same time, he also reported having successfully improved the colors of his aerial scenes, as well as having started the work of creating nearly 30 airports.

After overcoming those great hurdles, it was obvious by January 12 that Piotr was having difficulties with the building of the airports, which could be seen in the words of his posting, "I think I will stick with just outlines for runways for now. I'm starting to get burned out..."



After eight more days of perseverance, he reported on January 20, "Well, it took just a bit more ambition and diligence but the runways will be properly rendered after all." Another eight days later, Piotr was still working on the runways as can be seen in his January 28 post, "All runways will now be rendered as asphalt

(one runway is packed gravel). Some of our Utah runways are only 18 meters wide." As can be seen, simply putting in realistic runways is not a task for the faint of heart.

In the continuing saga of this scenery making episode, it wasn't until February 10 that Piotr's local gliding haunt of Cedar Valley was reported as starting to take shape, including the placement of orange safety cones on the runway to help in practicing precision landings. More than a month later, on March 18, Piotr reported that his scenery was in the beta-testing stage, and that all 29 airports in the scenery now had custom runways, plus four of the airports were populated with custom-built objects while the rest would sport Condor's default airport objects. At that time, Piotr was still looking at a couple days work

to update the .cup files with turnpoints (he included 160 turnpoints altogether) for use in virtual soaring competitions. Finally, after two more months of extensive beta testing and tweaking, on May 14, at least nine months after the original



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idea was born, Utah scenery was released by the Condor club.

Keep in mind that this article offers just a brief glimpse of what it takes to accomplish such a grueling task as building a high-definition scenery, which is a daunting emprise that



hasn't even taken into consideration the amount of weeks dedicated to learning the various software programs necessary to build such sceneries in the first place. A big kudos to our unseen friends who do so much to make virtual gliding an amazing experience for thousands of people they'll never even meet.

As a real-life certified flight instructor myself, I have heard more than a couple of negative comments from club pilots concerning their opinion of the usefulness of soaring in the virtual world. It should be obvious by now, in common with *Soaring Magazine*, I am a huge proponent of the many advantages one can gain through these sceneries, including reconnaissance of airports and cross-country terrain that one can experience long before ever taking real flights to such locations, not to mention unhindered practice on any day of the week, despite the raging conditions of weather outside. Likewise, in common with

Andy Souter, maker of the Southern Nevada scenery, Piotr Strzelec of Utah scenery fame is also a real glider pilot, and therefore his scenery was made as much for actual soaring enthusiasts as it was for those in the virtual world.

Hopefully, these comments will give present and future Condor users at least a glimpse into the difficulties of making even portions of these sceneries for all of us, so we the non-scenery makers can have a much greater appreciation concerning what great gifts these creations truly are to the world of aviators.



Soar Utah is a first-class commercial soaring operation located at Heber Valley Airport, located in Heber City, UT. They provide instruction, tows, rides, and glider rental May through October. Soar Utah is closed on Mondays and Tuesdays.