June 2013 Condor Corner Frank Paynter

Condor for WGC Training and Area Familiarization

While at the 2012 15 meter Nationals at Mifflin, I happened to be chatting with Australians Allan Barnes and his crew person Dave Holbrook. Allan, who is on the Australian Soaring Team and who competed in Standard Class at the WGC in Argentina, was spending the summer over here familiarizing himself with his LS-8/15 by competing as a guest in whatever comps he can find to fly in. Allan has also flown for Australia in 2008 in Rieti and in 2010 in Slovakia (Club Class). In Slovakia he won the pre-worlds in 2009 and finished 16th in the WGC in 2010 – so he's no slouch for sure.

Somewhere during the conversation it came out that he and some others on the Australian team used the Condor Soaring Simulator for area familiarization and team flying practice for both the Rieti and Slovakia WGC's, and of course my ears perked right up at this. As anyone who reads my blathering knows, I have been advocating the use of Condor for just this purpose for the U.S. Soaring Teams for years without much success, so it was a bit of irony to be hearing about just what I have been preaching, from these guys with funny accents, at a U.S. National Championships whose purpose is to select the U.S. Soaring team. Anyway, I asked Allan if he would be willing to sit still long enough for me to record his experience with using Condor in this way, with the aim of turning it into a Condor Corner article.

Allan flies out of the Darling Downs Soaring Club, in Southeast Queensland. In 2007 he had been selected to fly for Australia in Club Class at the Rieti WGC in 2008, and Chad Nowak, a Condor aficionado at his club suggested to Allan that he should consider using Condor to prepare for the contest. At this point Allan had heard about Condor, but had only messed around with it once or twice, without even a joystick – just using a computer keyboard for control. His impression at the time was that Condor seemed to have very realistic graphics and flight physics, but he didn't understand its potential for area familiarization and for online multiplayer flying. So, one weekend Chad brought his Condor setup out to the field, and gave Allan some 'dual' in Condor. After this Allan became enthusiastic about using it for Rieti WGC preparation and persuaded his WGC club-class teammate Peter Temple and one or two others (including Mike Codling, who became Allan's Club Class teammate at Slovakia in 2010) to participate.

Condor Training for Rieti:

Allan estimates that the group flew a half-dozen or so sessions in the Rieti scenery. The group consisted of:

- Allan Barnes club class team member for the Rieti 2008 WGC
- Peter Temple club class team member for the Rieti 2008 WGC

- Bruce Taylor standard class team member for the Rieti 2008 WGC
- Mike Codling not on team at the time, but became Allan's Club class teammate for the 2010
 Slovakia WGC
- Chad Nowak Condor aficionado and instigator of the project. He also acted as the 'designated bad guy' (known by the rest of the group as "The Evil One").

Although Allan Barnes and Peter Temple were both on the Australian team for Rieti, it was geographically impossible for them to work on team flying, as they were located thousands of kilometers apart. So, not only did the Condor project offer them both the opportunity for site familiarization, but in addition it erased the distance between them, at least while they were flying in condor.

During the sessions, Mike and Allan and Peter flew as the Australian team, with tasking that mimicked as much as possible the real Rieti tasking, and Chad flew as the competition ("The Evil One" as noted above). Because Chad had a lot more Condor time and was much more familiar with the Rieti area than the others, he regularly beat the team pilots (which may be what led to the 'Evil' moniker in the first place). The first few sessions were a bit of a learning experience; initially they planned for 3-4 hour tasks, but this proved impractical. Someone was always late or having equipment problems, and by the time they got going and completed a long task, it was way past everyone's bedtime. Later they backed the sessions down to 60-90 minutes and this worked out much better.

In terms of the area familiarization goal, Condor turned out to be a fantastic tool. Peter had flown the pre-worlds at Rieti, and so was able to share his first-hand knowledge with the rest of the group. Allan had also purchased a topographical map of the area, so he was able to attach some names to significant landmarks as he encountered them in Condor. The team flying goal was less successful, as Allan and Peter's flying styles and philosophical outlooks weren't as well meshed as they could have been.

Overall, Allan's perception of the usefulness of Condor for area familiarization was "Fantastic – the first time we drove into the actual Rieti valley, I looked around and everything was familiar, even though I had never set eyes on the place in real life. On many final glides into Rieti, you can't see the airfield until really late in the glide. Having done this several times in Condor gave me some real confidence when it came time to do it for real. There is one area we encountered in Condor where I thought the scenery depiction was totally unrealistic; there was this huge flat circular agricultural area (extinct volcano caldera) where the fields were all cut up into little tiny squares, not quite long or wide enough to land a glider in. However, when I actually saw it in real life, I realized that the Condor depiction was wholly realistic – it really **did** look like that".

Condor training for Slovakia:

After the Rieti experience, Allan in particular was sold on the idea of using Condor for area familiarization at least, and the jury on the idea of using it for team flying was still out. As it turned out, Allan was selected for the Australian team for Slovakia in 2010 in Club class, and his real life and Condor flying buddy Mike Codling, was also selected for the same class. Both Mike and Allan flew out of the same club (Darling Downs Soaring Club, in Southeast Queensland) and so they made a commitment to

fly together in real life as much as possible (in Queensland flying is possible all year round), and to use Condor for both area familiarization with the Slovakia soaring area and to work on team flying techniques. Real life flying was the primary factor in developing a pair-flying style and philosophy, and then they would try to apply the same principles and techniques in the Slovakia scenery in Condor.

Condor sessions were run about once per week in the evenings. As it happened, Mike and Allan lived near each other, and so after a couple of sessions from their own houses, Allan started driving over to Mike's house, where they would share pizza and beer, and fly a 60-90 minute task in Slovakia. To simulate the real world where they could only communicate by radio, they sat on opposite sides of the room with their backs to each other – close enough to talk easily, but far enough apart to be in their own spaces. One of the valuable lessons they learned was that the pair-flying techniques they had developed in flatland Queensland didn't always work well in hilly/mountainous Slovakia. In Queensland they adopted a technique where they would allow some vertical separation to develop in order to maintain horizontal contact. In a thermal, the bottom person would decide when to lead out. In Slovakia, it turned out they had to be a lot more conservative when a vertical separation developed, because if they didn't the bottom guy might not be able to make it over the next ridgeline. This required a lot more patience from both pilots, especially the top guy. This split-up scenario actually happened in real life at the 2009 pre-worlds when Mike couldn't get over a ridgeline and wound up having to backtrack (and eventually landed out). Because of their Condor experience, they were at least mentally prepared for this contingency, and Allan continued on alone and did well that day, and wound up winning the pre-worlds in Club class.

After the pre-worlds, Mike and Allan continued to fly together as much as possible in real life, and also continued the Condor sessions, refining their pair-flying techniques in the Slovakia area. They even tried some 'blue day' tasks in Condor, with limited success (the peculiarities of thermal placement in Condor make blue-day flying a real exercise in random-walk thermal searches).

At the 2010 Slovakia WGC, Mike and Allan didn't do as well as they had hoped, but Allan placed 16th in the world at a difficult site, not so shabby for a flatland pilot with very little mountain flying experience. Of course, there are many factors that go into how a team does in international competition, but my reason for writing this article is to highlight how one team used Condor for real-world site familiarization and for pair-flying practice.

Condor isn't perfect, and there a lot of things it doesn't do all that well (weather fronts, overcasts, blue days, etc). However, as the Aussies found, it can be used to erase distance barriers, either between you and someone you would like to fly with, and/or between you and someplace you would like to learn better, and it will allow you to fly with whomever you want, wherever you want, and whenever you want. The U.S, with its huge geographical extents, relatively sparse XC pilot population and physical distance from most WGC sites is very similar to the Australian situation and seems like it should be a similar natural match for Condor's strengths. Why we here in the U.S. have ignored Condor for WGC-level training while others in the world have embraced it is just beyond my understanding. We bemoan our perpetual bottom-of-the-scoresheet WGC results, and there have been lots of proposals for rule changes to make our pilots more competitive. However, IMHO, the single most effective thing a team

pilot could do would be to get on Condor and fly in the intended WGC scenery with his or her teammates on a regular basis to develop familiarity with the site and to learn how to pair-fly with their teammate. After all, it isn't like the intended site is a big mystery – it is known at least two years in advance. And it isn't like you don't know who your teammate is – that is known at least a year (or two) ahead of time as well. If a team practiced in Condor one night a week for 2 hours for two years, they could amass at least 300-400 hours of pair flying time in the contest soaring area. And, as the Aussies did, they could fly against other pilots or teams to hone their competition tactics. Oh, and all this for a total cost of about \$100!

Just in case this article doesn't fall entirely on deaf ears, I will make the following offer. If any U.S. Soaring team member or members has an interest in using Condor for WGC-level training, I will volunteer whatever expertise and/or facilities I can to help, including initial Condor familiarization, multiplayer online race hosting, opposition pilot flying, whatever. Give me a call or email me and I'll do whatever I can to make the U.S. Team stronger.



Allan Barnes at the 2010 Slovakia Club-Class WGC