

Thinking out of the MAT Box
Contest Corner
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There is nothing quite like the groan that erupts at the pilots' meeting when the CD says the three dreaded letters, "MAT."

(In the "MAT" or "modified assigned task," the competition director assigns a minimum time, and you choose where to go. The CD can also assign some turnpoints. In this case, you have to complete the assigned turnpoints before going on to turnpoints of your choice. If you can't get through all of the assigned turnpoints, you can still return to the home airport for a finish after completing only some of the assigned turnpoints.)

"Go where you want" is not as easy as it sounds. It adds a lot of decision-making. It's hard enough to fly the flight, but constantly evaluating where to go next can make your head spin. It leads -- I think -- to boring flights. If the weather is weak, the right strategy is often to come back and mill around the close-in turnpoints.

Other times, there is one cloud street, thermal source or other hot area, so the trick is to find it and then go around and around that all day long. There is a significant advantage to finishing close to the minimum time, so you always spend a lot of heads-down time playing with the flight computer to find an ideal sequence of final turnpoints.

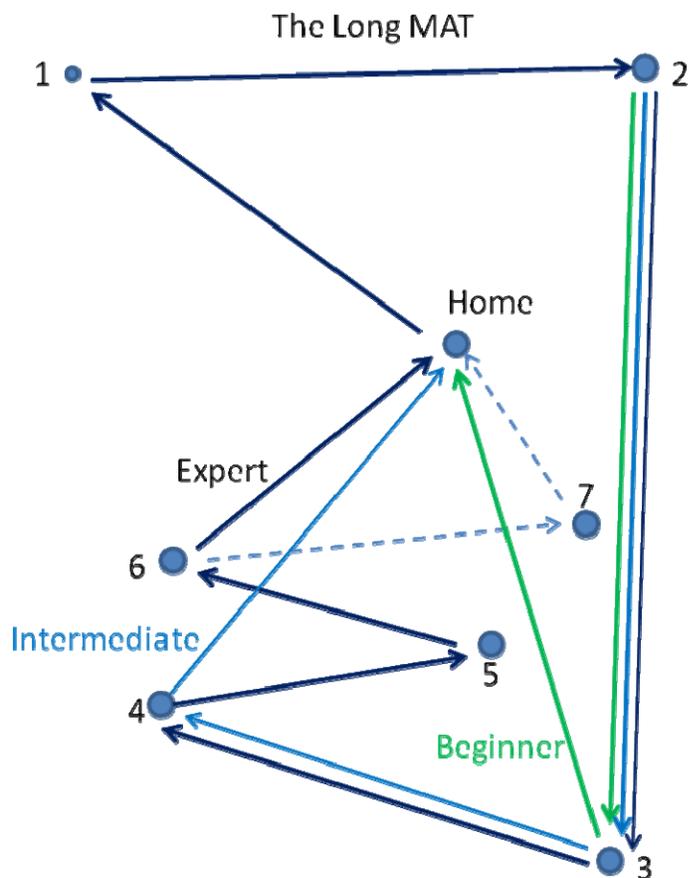
MAT tasks are important. They often save unpredictable and stormy days. They are really useful on the ridge. I enjoyed the chance to fly 600 miles at Mifflin a few years ago; that could only realistically happen with a MAT. But MAT tasking has settled into a bit of a rut: The CD calls one or two turnpoints worth maybe an hour of flying, and then the real race starts when pilots figure out what to do next. The rules give a lot more flexibility. Using some "out of the box" thinking that exploit this flexibility to create new and more interesting tasks could be a lot of fun.

- The Long MAT.

Many pilots miss the assigned task. They enjoy seeing other pilots, seeing who is winning and who is losing, and seeing quickly how different decisions work out. They enjoy being measured on speed over very similar conditions, rather than on their ability to pick turnpoints. But the assigned task is called less and less often. The assigned task is either too short for the hot pilots, or a large fraction of the newcomers land out. That's discouraging and sometimes damaging.

A "long MAT" can give us the best of both worlds. If the CD calls a lot of turnpoints, then the fast pilots have an old-fashioned race, but the slow pilots can give up and come home in the end, rather than trudge on to an inevitable field landing and midnight retrieve.

The drawing is adapted from a long MAT task Dave Coggins nearly called at Uvalde two years ago. (The weather didn't cooperate in the end.) You see how the "fast gaggle" and a "slow pilot" approach it, and how the slow pilots get to come home rather than doggedly keep going and land out.



The CD could set lots and lots of turnpoints, so that nobody can possibly finish them all in the minimum time. (Turnpoints 1-7 in my picture.) Then, while technically a MAT, the pilots will experience "assigned-task" style racing all the way around.

Or, the CD could set the turnpoints of a good assigned task, without the "extra" turnpoints of my picture. Typically, the fast pilots will just do the assigned turnpoints and fly home, and the slow pilots can still cut off the last few turnpoints rather than slog on and land out. However, sometimes fast pilots surprise the CD, and fly around the course much faster than expected. In an AST, this causes the day to be devalued. By declaring the same task to be an MAT, those pilots will add some extra miles rather than finish

too soon. In my picture, turnpoints 1-5 might have been assigned, but the leaders tacked on 6 rather than finish undertime.

Designing a good task of this sort takes a bit of thought. The turnpoints you expect pilots to reach near the end of the task should be spaced about 15-20 minutes apart and not too far from the home airport -- one or two thermals plus final glide. Pilots should not have to spend a lot of time strategizing about how to finish the task. If the turnpoints are far apart, the choice of 10 minutes early or 30 minutes over time will be difficult. On the other hand, if the turnpoints are too close together, you spend your whole time going through turnpoints.

If we started calling long MAT's or just turning ASTs into MATs by adding a time, it might get called more than once per contest as the AST is now. The purists and world-team contenders could get a lot more practice at classic racing, newcomers might get more chances to fly with the gaggle, and the few remaining crews could continue to enjoy days at the pool.

- The FAI/OLC MAT

FAI triangles and OLC tasks are very popular. When conditions are good, pilots love to cover big distances, explore terrain, and make a great flight, not just take in 11 turnpoints within 20 miles of the home airport. Well, why not? If we limit the task to 3 or 4 turnpoints we would eliminate the strategic incentive to spend all day in the same few turnpoints. Instead, pilots would go cover a lot of terrain in the style of big triangle or OLC flights.

- More restricted turnpoints

The CD can restrict the choice of turnpoints, and thoughtfully doing so can also make MATs much more interesting. Charlie Spratt often said “no repeated turnpoints.” Banning all the turnpoints within, say, 20 miles of the home airport would also be a way to turn MATs into more satisfying tasks.

- The Johnson task.

Here’s a wild idea: set an impossibly long time -- say 6 hours. Now it’s a distance day. Goodbye start-gate roulette. Towards the end of the day, you keep going among nearby turnpoints as long as you can. Dick Johnson advocated these kinds of tasks as fun flights for practice. Why not do one at a contest?

Ok, that last idea is probably not going anywhere. But it illustrates the point: We have a very flexible set of rules, and we can use them creatively to create tasks that are fun, fair, and might be a lot more popular than the garden-variety MAT.

Contests are here for pilots to have fun. CDs and task advisers are always open to suggestions. If these ideas sound like fun, ask for them! And let’s all think outside the box. Our rules are flexible, we can set up tasks that are a lot more fun than the standard 3 hour MAT with one assigned turnpoint!