

## **Mission Building for Online Use**

Have you ever come up with a great idea for an online mission? You spend hours setting up all the intricate triggers. After numerous test flights offline your sure all the bugs are worked out. Off you go to Jane's lobby and enlist some cooperative pilots to test it out. You jump through all the hoops of loading the mission and answering numerous questions via the chat line, explaining goals and other procedures. Once in the air though, nothing works like you planned. Your helpful pilots are left scratching their heads wondering what you had been thinking when you wrote the mission. Or even worse, the mission won't launch at all. Well... been there, done that!

Good old Jane places far more restrictions on mission behavior online than off. Knowing what those restrictions are before building a mission can save a lot of time and headaches. With that in mind I will try to pass on what I have learned through trial and error.

The most glaring difference between on and offline missions is the way you can use triggers. Online any human pilot other than the HOST of the mission CANNOT be used to set off triggers! In other words when you build an online mission you are basically building a single player game as far as trigger use goes. Other players can join the game, but they cannot influence the direct triggering of events. They may destroy a target that once destroyed will set off a trigger; but as an entity, they themselves cannot directly trigger anything. This precludes the checking of location, speed, altitude, damage, etc., of any player other than the host! For example: counting the number of revives for online players is impossible (excepting the host).

Another peculiarity is the type of entity you must set up for other players to join as. These MUST be individual flights. You cannot create 1 flight of 4 planes for 4 players. You must create 4 flights of 1 plane each, 1 flight for each individual player. Otherwise the mission will fail to launch. As far as starting on the ground goes, you can do so. But bare in mind that, unless all players are very familiar with the situation, the possibilities for collisions on the ground are quite high. One work-around to this is to instruct all players to engage autopilot from start up until airborne to avoid collisions. You will also see strange effects such as other pilots' planes not having their landing gear down while taxiing on the ground, but this doesn't effect game play.

As for text and sound messages, I'm not quite sure. I have found that in some missions other players will see and or hear triggered messages, and in others they will not. The number of players and or the number of entities in play at the time might influence this, I don't know. What I do know is that you shouldn't depend on all seeing and or hearing triggered messages, they may or may not be able to do so.

One other factor to consider applies to all types of missions both online and off. Keep it simple. The less you have going on at once, the faster the game will play. If you plan on a lot of AI entities you will find the game slowing down considerably. Instead, introduce AI entities gradually, only awakening some after others have been destroyed. This will keep the gameplay at an acceptable speed. You can have dozens of AI entities but only have a small percentage of them awake at any one given time. Ground entities also have the same effect. If you have too many of either type, you may still be able to play off-line; however, the mission will refuse to start on-line.

One final thought is to be creative. Just because Jane and her triggers won't let you do outright what you had in mind doesn't mean that there aren't another ways to accomplish your goals.

For example: I had an idea for a mission that would allow me to practice communication codes with a fellow squad member online. The premise was to fly against 2 AI pilots in a setting identical to the Quick Mission. When one side or the other was defeated the winners would also crash, then all would revive together to start the next round with neither side having an altitude advantage. Since I couldn't use a trigger to determine if my wingman had survived or not I had to find another way to triggering either the AI revives at the proper time, if they had lost; or their crashing in order to reset for the next round, if they had won. The solution was to trigger their revive with my own if they had lost; or if they had won, my revive would trigger their crashing, at which time I would revive a second time triggering the AI to then revive for the next round. In effect, since Jane couldn't check on my wingman's status to determine the win/loss condition of a round, I was doing it manually through my revives.

One final tip. In order to keep your custom mission files from getting overcrowded in the single player screen do this: place any online-only missions in a folder named "online" and place that folder in the missions folder. Since you only plan to use these missions online they then won't show up in your offline custom mission screen. When you launch from multi-player, you can then select the on-line folder from the left-hand side of the screen to open it up and choose the mission you want. The only drawback to this is that the mission briefing will only be visible in the second launch screen. But since players joining lose the ability to see the briefing in the first screen once they type in the chat line anyway, it is no great loss.

If online mission building interests you I hope you will find this helpful.

Good Luck,

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