

Mission Planner Practice

From [2021 MP Practice](#):

1. Fly to Waypoint 38.366384, -76.535577 at 100' and hold for 2 seconds
 - Note: Need to delay after takeoff *before* first waypoint
2. Fly to Waypoint 38.366013, -76.536432 while descending to 50' and hold for 3 seconds
3. Fly to Waypoint 38.365836, -76.535508 while climbing to 100' and make the aircraft rotate to face due south
 - Notes from 2021 say: "do yaw absolute 180"
4. Fly to Waypoint 38.366351, -76.536409 at 75' and hold for 4 seconds
5. Fly to Waypoint 38.365481, -76.536362 at 100' and perform 3 circles around the point

To run simulation:

- Loiter (to ensure mode is not Auto and allow Arm)
- Arm
- Set Mode (Auto)
- Mission_Start: Do Action

[Screenshot](#) (from May 14, 2022):

The screenshot shows a Zoom meeting with a shared screen of the Ardupilot Mission Planner. The main window displays a 3D terrain map with a mission plan overlaid, including waypoints and a circular loiter pattern. A table at the bottom lists mission parameters. A chat window on the right shows a list of mission steps corresponding to the practice tasks.

| Comment | Seq | Delay | Alt | Radius | Turn | Yaw | Roll | Pitch | Yaw Rate | Roll Rate | Pitch Rate | Alt |
|---------------------|-----|-------|-----|-----------|------------|-----|----------|-------|----------|-----------|------------|-----|
| 1 TAKEOFF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 LOITER_TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 WAYPOINT | 0 | 0 | 0 | 38.366384 | -76.535577 | 100 | Relative | 0 | 0 | 0 | 0 | 0 |
| 4 LOITER_TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 WAYPOINT | 0 | 0 | 0 | 38.366013 | -76.536432 | 50 | Relative | 0 | 0 | 0 | 0 | 0 |
| 6 LOITER_TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 WAYPOINT | 0 | 0 | 0 | 38.365836 | -76.535508 | 100 | Relative | 0 | 0 | 0 | 0 | 0 |
| 8 CONDUCT_3_CIR | 0 | 0 | 0 | 0 | 0 | 0 | Relative | 0 | 0 | 0 | 0 | 0 |
| 9 WAYPOINT | 0 | 0 | 0 | 38.366351 | -76.536409 | 75 | Relative | 0 | 0 | 0 | 0 | 0 |
| 10 WAYPOINT | 0 | 0 | 0 | 38.365481 | -76.536362 | 100 | Relative | 0 | 0 | 0 | 0 | 0 |
| 11 LOITER_TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 WAYPOINT | 0 | 0 | 0 | 38.366384 | -76.535577 | 100 | Relative | 0 | 0 | 0 | 0 | 0 |
| 13 WAYPOINT | 0 | 0 | 0 | 38.366013 | -76.536432 | 50 | Relative | 0 | 0 | 0 | 0 | 0 |
| 14 LOITER_TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 RETURN_TO_LAUNCH | 0 | 0 | 0 | 0 | 0 | 0 | Relative | 0 | 0 | 0 | 0 | 0 |

Chat window content:

- Me to Everyone 9:29 PM: <https://drive.google.com/drive/folders/1U56A5S1VNMMyNZF7i175vNe0lnrEY>
- Muhammed to Everyone 9:29 PM: I will watch
- Me to Everyone 9:32 PM: 3-Fly to Waypoint 38.365836, -76.535508 while climbing to 100' and make the aircraft rotate to face due south
- 4-Fly to Waypoint 38.366351, -76.536409 at 75' and hold for 4 seconds
- 5-Fly to Waypoint 38.365481, -76.536362 at 100' and perform 3 circles around the point
- Me to Everyone 9:34 PM: 1-Fly to Waypoint 38.366384, -76.535577 at 100' and hold for 2 seconds
- 2-Fly to Waypoint 38.366013, -76.536432 while descending to 50' and hold for 3 seconds
- 3-Fly to Waypoint 38.365836, -76.535508 while climbing to 100' and make the aircraft rotate to face due south
- 4-Fly to Waypoint 38.366351, -76.536409 at 75' and hold for 4 seconds
- 5-Fly to Waypoint 38.365481, -76.536362 at 100' and perform 3 circles around the point