```
state_0: (0 t, 0 x, 0 y, 0 z, 1 x_dot, 1 y_dot, 1 z_dot, 0.9553166181245092 phi,
 1
     0.9553166181245092 theta, 0.9553166181245092 psi, 0 phi_dot, 0 theta_dot, 0 psi_dot)
 2
 3
     update_2dof with no commanded turn
 4
     update: (0.1 t, 0.08164965809277262 x, 0.11547005383792518 y, 0 z, 0.8164965809277261
     x_dot, 1.1547005383792517 y_dot, 1 z_dot, 0.9553166181245092 phi, 0 theta,
     0.9553166181245092 psi, 0 phi_dot, 9.553166181245091 theta_dot, 0 psi_dot)
 5
     1245092 psi, 0 phi_dot, 7.807836929250762 theta_dot, 0 psi_dot)
 6
 7
     update_2dof_turn_rate_constraint with commanded turn rate constraints
     update: (0.1 t, 0.08164965809277262 x, 0.11547005383792518 y, 0 z, 0.8164965809277261
 8
     x_dot, 1.1547005383792517 y_dot, 1 z_dot, 0.9553166181245092 phi, 1.0076764956843391
     theta, 0.9553166181245092 psi, 0 phi_dot, 0.5235987755982988 theta_dot, 0 psi_dot)
 9
10
     update_3dof with commanded turn and roll
11
     update: (0.1 t, 0.05773502691896259 x, 0.11547005383792515 y, 0.1414213562373095 z,
     0.5773502691896258 x_dot, 1.1547005383792515 y_dot, 1.414213562373095 z_dot,
     0.9553166181245092 phi, 0.17453292519943295 theta, 0.17453292519943295 psi, 0 phi_dot,
```

7.807836929250762 theta\_dot, 7.807836929250762 psi\_dot)