| Use Case Number: | 001 | Written By: | Ryan Bomalaski |
|-------------------------|--------|--------------|----------------|
| Sprint Number: | 1 | Application: | main.py |
| Tracker ID: | UC-001 | | |
| Module: | N/A | | |

Use Case – No Aircraft Nearby

The pilot and airplane are flying. While performing routine listening and broadcasting, the airplane sees that there are no neighbors nearby to interact with. In seeing that there is no one nearby, the collision avoidance algorithm, when checking nearby neighbors, should not recommend any change in direction or course.

| Flies the aircraft, uses collision avoidance to get corrective information | |
|---|--|
| Interfacing with different components needed for flight | |
| Component of the aircraft that brings information from nearby neighbors | |
| Component of the aircraft that sends out information about the aircraft | |
| Uses information from listen component to recommend a change of course if necessary | |
| | |

Priority

High. If the collision avoidance recommends flight changes when unnecessary, it isn't functioning correctly.

Pre-Conditions

The airplane is currently flying, able to listen and broadcast, and there are no neighbors nearby.

Related Use Cases

- 1. UC-002
- 2. UC-003