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|--|--------|---|----------------|
| Use Case Number:   | 003    | Written By:   | Ryan Bomalaski |
| Sprint Number:   | 1      | Application:  | main.py        |
| Tracker ID:  | UC-003 |   |                |
| Module:  | N/A    |   |                |
| Use Case – Aircraft Nearby and NOT in TOO CLOSE Proximity  |        |   |                |
| The pilot and airplane are flying. While performing routine listening and broadcasting, the airplane sees that there is at least one (1) neighbor nearby to interact with. The listen component brings in the information about the neighbor. The collision avoidance component then checks to see if an avoid is necessary. Since the plane is not in TOO CLOSE proximity, it does not recommend an avoidance to the pilot. |        |   |                |
| Actors   |        |   |                |
| Pilot  |        | Flies the aircraft, uses collision avoidance to get corrective information          |                |
| Aircraft   |        | Interfacing with different components needed for flight                             |                |
| Listen Component   |        | Component of the aircraft that brings information from nearby neighbors             |                |
| Collision Avoidance Component  |        | Component of the aircraft that sends out information about the aircraft             |                |
| Broadcast Component  |        | Uses information from listen component to recommend a change of course if necessary |                |
| Priority   |        |   |                |
| High. Recommending a change of course when it is unnecessary could waste fuel. This is also one of three most likely base scenarios that will occur.   |        |   |                |
| Pre-Conditions   |        |   |                |
| The airplane is currently flying, able to listen and broadcast, and there are no neighbors nearby.   |        |   |                |
| Related Use Cases  |        |   |                |
| 1. UC-001<br>2. UC-002   |        |   |                |