Literature review

**Problem Statement**

**Static Map Single agent**

The agent fly from one node to another node cost a virtual time t, which is much longer than the computation time.

Step by step. During the time, the agent can search for its path, make an reservation, and fly one

**Static Map multi-agent**

Same as the static map, there are multiple agents fly in the virtual air-space. They have to make reservations and plan their path avoiding crush each other.

For A star.

**Dynamic Map single-agent**

There are path-unknown agents flying around the air-space, and the weather becomes unstable. Some air-space will be closed temporarily for safety.

The agents must check the clearness of their path and replan the path if their path is blocked.

Experiments

**Dynamic Map single-agent**

Future work

Finding Neibor()

A\*

search a path.

If block

Weather

Contribution:

1, dynamic reservations versus static reservations. Shorter distance, more space utility.

2. adaptability to new information.

3.