Chapter 1

(W) Introduction

To be done here:

- Introduce UAV problem of integration into non segregated airspace.
- Open JARUS/NASA requirements and discuss legal framework a little
- Introduce Honeywell interest into topic.

1.1 (W) Related Work

To be done here:

- Ramasy work, Sabatiny work on LiDAR and obstacle avoidance, introduce movement automaton etc...
- Lattice search related work, the problem of lattice search above 4th dimension
- Reach set approximation related work

1.2 (W) Goals

To be done here:

- Propose abstract obstacle avoidance framework able to avoid obstacles in real time and guaranteeing safe path independent of controlled platform
- Define guarantee of safety margin concept.
- Define requirements for avoidance set.

1.3 (W) Assumptions

To be done here:

- Guarantee feasible safe trajectory in open world space at low altitude of the flight. Manage information resources about real obstacles, weather obstacles, ATM restrictions.
- create previously mentioned points as assumptions, xxx is accessible to feasible extent, etc ...

1.4 (W) Overview

To be done here:

- Chapter overview
- Notation of key concepts

1.5 (W) Contributions

To be done here:

- Notable contributions
- List of concepts and articles with references

Bibliography