

LIST OF FIGURES

Number	Page
1. Approximate simulation time at which rollover occurs versus velocity offset.	57
2. Example image saved by Gazebo.	128
3. Team 2005-06 challenge vehicle.	129
4. Model of the representative challenge vehicle.	130
5. Tower obstacle (DARPA description).	131
6. Tower obstacle (Gazebo model).	132
7. Car obstacle (DARPA description).	133
8. Car obstacle (Gazebo model).	134
9. 2004 GCE course superimposed on map and satellite view (Powerline Road 1).	135
10. 2004 GCE course superimposed on map and satellite view (Powerline Road 2).	136
11. Vertically-aligned LIDAR sensor configuration.	137
12. Horizontally-aligned LIDAR sensor configuration (overhead view).	138
13. Horizontally-aligned LIDAR sensor configuration (driver's seat view).	139
14. Horizontally-aligned LIDAR sensor configuration with a down angle of 4 degrees (overhead view).	140
15. Diagonally-aligned LIDAR sensor configuration (overhead view).	141
16. Diagonally-aligned LIDAR sensor configuration (driver's seat view).	142
17. Epsilon Lambda ELSC71-1A RADAR field-of-view limitation (simulation initial state).	143
18. Epsilon Lambda ELSC71-1A RADAR field-of-view limitation (showing the sensor	

cannot detect an obstacle in the path of travel).

144

19. Epsilon Lambda ELSC71-1A RADAR field-of-view limitation (after collision with
the tower obstacle).

145