

Grading Test Plan Spring 2016

Deliverables:

- 1) A completed LOBBYIST hovercraft with all features described in the project document.
- 2) A Completed PAC controller with all features described in the project document.
- 3) The ability to control your LOBBYIST using your PAC.
- 4) The ability to control another team's LOBBYIST using your PAC.
- 5) The ability of your LOBBYIST to be controlled using another Team's PAC.

Test plan:

For deliverable #1:

1.1 Observe the LOBBYIST, look for a finished appearance and identify:

- ☐ 1.1.1 The lift fan.
- ☐ 1.1.2 A propulsion system
- ☐ 1.1.3 A steering system
- ☐ 1.1.4 a means to indicate Red or Blue Team
- ☐ 1.1.5 a means to indicate the remaining time paired
- ☐ 1.1.6 an electro-mechanical means to indicate the paired status
- ☐ 1.1.7 the badge mounting point

1.2 Power up the LOBBYIST.

- ☐ The electro-mechanical display of paired status should indicate unpaired.

For deliverable #2 :

2.1 Observe the PAC, look for a finished appearance and identify:

- ☐ 2.1.1 The display of active communications.
- ☐ 2.1.2 The method for an operator to choose a LOBBYIST
- ☐ 2.1.3 Battery power (un-tethered operation)
- ☐ 2.1.4 Inputs to the PAC involve at least 3 sensing modalities

2.2 Power up the PAC.

- ☐ The display of active communications should indicate unpaired.

For deliverable #3, **Using your team's LOBBYIST and PAC** with badge mounted:

3.1 Initiate the Pairing action and observe:

- ☐ 3.1.1 The display of active communications on the PAC indicates paired.
- ☐ 3.1.2 The electro-mechanical display of paired status on the LOBBYIST should indicate paired

- ☐3.1.3 The lift Fan should activate
- ☐3.1.4 The display of Red/Blue on the LOBBYIST should indicate the state shown on the PAC
- ☐3.1.5 The display of time remaining Paired should begin decreasing

3.2 Command the LOBBYIST to move forward and observe:

- ☐3.2.1 The LOBBYIST moves forward.

3.3 Command the LOBBYIST to turn left and observe:

- ☐3.3.1 The LOBBYIST turns left.

3.4 Command the LOBBYIST to turn right and observe:

- ☐3.4.1 The LOBBYIST turns right.

3.5 Wait for the expiration of the 45 second timer and observe:

- ☐3.5.1 The LOBBYIST indicates unpaired.
- ☐3.5.2 The PAC indicates unpaired.
- ☐3.5.2 The LOBBYIST ignores attempts to re-pair with the same PAC.

For deliverable #4, **Using your team's PAC and another team's LOBBYIST** with badge mounted:

4.1 Initiate the Pairing action and observe:

- ☐4.1.1 The display of active communications on the PAC indicates paired.
- ☐4.1.2 The electro-mechanical display of paired status on the LOBBYIST should indicate paired
- ☐4.1.3 The lift Fan should activate
- ☐4.1.4 The display of Red/Blue on the LOBBYIST should indicate the state shown on the PAC
- ☐4.1.5 The display of time remaining Paired should begin decreasing

4.2 Command the LOBBYIST to move forward and observe:

- ☐4.2.1 The LOBBYIST moves forward.

4.3 Command the LOBBYIST to turn left and observe:

- ☐4.3.1 The LOBBYIST turns left.

4.4 Command the LOBBYIST to turn right and observe:

- ☐4.4.1 The LOBBYIST turns right.

For deliverable #5, **Using your team's LOBBYIST and another team's PAC** with badge mounted:

5.1 Initiate the Pairing action and observe:

- ☐5.1.1 The display of active communications on the PAC indicates paired.
- ☐5.1.2 The electro-mechanical display of paired status on the LOBBYIST should indicate paired
- ☐5.1.3 The lift Fan should activate
- ☐5.1.4 The display of Red/Blue on the LOBBYIST should indicate the state shown on the PAC
- ☐5.1.5 The display of time remaining Paired should begin decreasing

5.2 Command the LOBBYIST to move forward and observe:

- ☐5.2.1 The LOBBYIST moves forward.

5.3 Command the LOBBYIST to turn left and observe:

- ☐5.3.1 The LOBBYIST turns left.

5.4 Command the LOBBYIST to turn right and observe:

- ☐5.4.1 The LOBBYIST turns right.