Autonomous Snowplow Competition



ION North Star Section
Outreach Program

Autonomous Snowplow Committee



Final Report Information & Outline 2013-14 Competitors

December 2013

Final Report Rules

- Final reports are suggested to follow the given outline
 - Standardize judging for all Teams
 - ASC Committee hint:
 - Judges scoring form follows the outline
 - Teams will not score points if sections of the given outline are not addressed
- Final report page length
 - 10 page maximum, double column format (see below)
 - Judges will only read the first 10 pages if a submitted report is greater than 10 pages
- Final report format
 - ION conference paper format
 - ASC website provides this format

http://www.autosnowplow.com/2014_Event_and_Results.html



Final Report Rules

- Final reports submission deadline
 - 20 January 2014
 - Time: 12 PM (noon) Central time
 - Email submission: <u>vibhor.bageshwar@honeywell.com</u>
 - Please submit a PDF version of the presentation to minimize file size
- Final Report scoring
 - Final Report scoring: 10% of the total Competition score
 - Final Report scoring will be completed before Final Presentations
 - Final Report scoring is independent of Final Presentations
 - Team standings will be updated by 25 January 2014
 - Website www.autosnowplow.com
 - ASC Scoring Board at the Competition Venue

Final Report Outline

- Abstract
- Introduction
- Top Level Requirements (include a summary table)
- Snowplow Vehicle Design
 - Concept/Plowing strategy
 - Snowplow vehicle design
 - Navigation system design
 - Guidance system design
 - Control system design
 - Processor & Software design
 - System integration
- Safety System
- Failure Modes and Recovery Actions
- Vehicle Design Challenges (highlight changes from existing design)
- Commercialization and Implementation
- Conclusions & Recommendations



Final Report Scoring

• Final Report scoring: 10% of the total Competition score

| Category | Scoring |
|--------------------------|---------|
| Requirements Definition | 100 |
| Technical Content | 100 |
| Originality & Innovation | 125 |
| Practical Application | 100 |
| Quality | 75 |
| Total Points | 500 |