# Autonomous Snowplow Competition



ION North Star Section
Outreach Program

**Autonomous Snowplow Committee** 



Final Report Information & Outline 2014-15 Competitors

December 2014

### **Final Report Rules**

- Final reports: Teams are requested to follow the given outline
  - Standardize judging for all Teams
  - ASC Committee hint:
    - Judge's scoring form follows the outline exactly ensure that the Section headings of the Final Report match the Section names given in the outline
    - Teams will not score points if Sections of the given outline are not addressed
      - Example: Teams that do not address their Safety System will receive 0 points for that Section
- 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 format: "Final Report Style Sheet and Format"

http://www.autosnowplow.com/2013 Event and Results.html



### **Final Report Rules**

- Final Reports submission deadline
  - Date: 19 January 2015
  - Time: 12 pm (noon) Central time
  - Email submission: <u>vibhor.bageshwar@honeywell.com</u>
  - Please submit a PDF version of the Final Report 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 24 January 2015
    - 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 & 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