

Our INCOSE award at St. Mary's Science And Engineering Fair

John B. Walker

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So-MD Chapter Meeting

What Is INCOSE About?

- “Our mission is to advance the state of the art and practice of systems engineering ...”
- In the short term we advance the state of the practice
 - Teach ourselves from our most experienced
- In the long term we advance the state of the art
 - Engage with our youth and establish the passion to learn, build and improve

So-MD INCOSE Chapter Systems Engineering Awards

- All students competing in the fair are eligible
- A first and second place is given in each division
- Criteria: Any project that investigates an aspect of a complex system that is critical to the complex system being used to develop a useful system would be a good choice for the INCOSE award. A project using engineering tools, software and/or hardware, would be a better choice than one that did not use tools. A project in which the competing aspects of a system is investigated such as: weight and strength, cost and schedule, manufacturing and disposal would be a better choice than one that only looked at one aspect in isolation. A project in which system quantitative and qualitative measures were integrally important to the research would be a better choice than one in which only one type of measure is used.

Our Judging Process

- Judges split into two groups one for Senior and Junior Division
 - Parallel Efficiency & Eliminate Conflict Of Interest
- Quick Look to minimize the number of projects to rate
 - mostly outside of Engineering categories
- Interview and Rate project using score sheets
- Combine scores and rank 1st and 2nd in each Division
- Judges Discussion to break ties and rating inconsistencies
- Final 1st, 2nd and Awards decided and recorded
- Judges Document what worked and what didn't and suggestions for process improvement

Fair Schedule – Sat Feb 2 or 9 if snow

8:00 –9:00 A.M. Projects are judged without exhibitors.

9:00 A.M. –Noon. Judging continues with exhibitors present.

Noon –1:00 P.M. Exhibit area closed. Lunch will be available for exhibitors to purchase. Exhibitors should remain for grand award judging and other special award judging.

1:00 -3:30 P.M. Exhibits are open to the public. Exhibitors must be at their exhibit.

3:30 –5:30 P.M. Awards Ceremony, which is open to the public is held. All exhibitors should be present.

Last Year Quick Look

- 16 Senior Division Projects
 - Six Categories
- 10 Junior Division Projects
 - Six Categories

INCOSE

1st
Mark Dowdle
The Skyscraper
Father Andrew White
School

2nd
Molly Tracy
*Don't Be A Drag –
Shape Up!*
Esperanza Middle School



Honorable Mention
Meghan Neace
*Making Invisible
Visible, Infrared*
King's Christian Academy

Honorable Mention
Heidi Reed
It's All About the Light
Leonardtown Middle
School

Honorable Mention
Kallie Jahn
*What on Earth is Good
Bedding*
Spring Ridge Middle
School

Junior Division Winners

INCOSE

1st

Julie Walker

Oops! I Made a M.E.S.

Leonardtown High School

2nd

Travis Mattingly

Survivor: Smith Island

Leonardtown High School



Honorable Mention

Stacey Tilghman

*Building a Better
Sandbag*

Leonardtown High School

Honorable Mention

Robert

Barthelmes

*LASER Light, Heat &
Reaction Rate*

Leonardtown High School

Senior Division Winners

Honorable Mention

Lauren

Finkenauer

*Truss Design Vs.
Bridge Efficiency*

St. Mary's Ryken High
School

Honorable Mention

Daniel Brand

*Window Pain: The
Cost of Heat Lost*
Leonardtown High School

Registered INCOSE Judges

- John Walker, Karl Geist, Ted Warren
- Mary Redshaw said she could but hasn't registered yet
- We would like six Judges
- Commit today and we can get your name in the Awards Program
- Let me know and/or register at
 - www.sm-sef.org on the judges page