



# Socorro Systems Summit

6-7 October 2017

All Day with 8:00am Start

New Mexico Tech, Socorro, NM

**Internet: unencrypted-web-login**

**User: incose**

**PWD: nmtsss**

**Co-Sponsors:**

**INCOSE Enchantment Chapter**

**New Mexico Tech Electrical Engineering Department**

# Event Objectives

- **Participants have a valued experience of collaborative teaming on a mission**
- **Participant's expand personal knowledge of selected systems engineering issues**
- **Participants have the opportunity to expand personal networks**

# Topics and Facilitators

## Morning today

- **Systems Engineering Cultural Transformation** Heidi Hahn
- **Agile Security Adaptable to Attack Evolution** Rick Dove
  
- **SE as Multidiscipline Enabler/Art/Science** Ron Lyells
- **Problem Space Risk Characterization** Regina Griego

## Afternoon today

- **High Performance Teaming** Frank Reinow
- **Integrating Project Mgmt & Systems Engineering** Ann Hodges
  
- **Quick Reaction Capability for Urgent Needs** Ed Carroll
- **Fail-Fast Rapid Innovation Concepts** Bill Schindel

| Friday October 6, 2017   |  |   |  |  |
|--------------------------|--|---|--|--|
| 08:00                    | <b>General Session:</b> Welcome and What Will Happen – Aly El-Osery and Rick Dove, Ballrooms B & C   |   |  |  |
| 08:45                    | <b>Keynote:</b> Anne O’Neil, CSEP, INCOSE Founders Award Recipient, Anne O’Neil Consultants, Ballrooms B & C   |   |  |  |
| 09:15                    | <b>Front is C</b>  | <b>Adjust Room Walls for Break-Outs – Coffee Break</b>  |  | <b>Back is B</b>   |
| 09:30                    | <b>Systems Engineering Cultural Transformation</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom C, Facilitator: Heidi Hahn | <b>Agile Security Adaptable to Attack Evolution</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom B, Facilitator: Rick Dove      |  |  |
| 11:00                    | <b>SE as Multidiscipline Enabler/Art/Science</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom C, Facilitator: Ron Lyells   | <b>Problem Space Risk Characterization</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom B, Facilitator: Regina Griego           |  |  |
| 12:30                    | <b>Lunch on Your Own</b>   |   |  |  |
| 13:30                    | <b>High Performance Teaming</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom C, Facilitator: Frank Reinow                  | <b>Integrating Project Mgmt and Systems Engineering</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom B, Facilitator: Ann Hodges |  |  |
| 15:00                    | <b>Quick Reaction Capability for Urgent Needs</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom C, Facilitator: Ed Carroll  | <b>Fail-Fast Rapid Innovation Concepts</b><br>Topic Intro and Objective Setting for Saturday Workshop<br>Ballroom B, Facilitator: Bill Schindel           |  |  |
| 16:30                    | <b>Break</b>   |   |  |  |
| 17:00                    | <b>Reception with Refreshments and Saturday Workshop Posters: Objectives and Choices, Ballroom A</b>   |   |  |  |
| 18:30                    | <b>Dinner on Your Own</b>  |   | <b>Optional Dinner Gathering</b> (Separate Advanced Ticket):<br>Empowering Women as Leaders in Systems Engineering |  |
| Saturday October 7, 2017 |  |   |  |  |
| 08:00                    | <b>Systems Engineering Cultural Transformation</b><br>Workman Room: 109  | <b>Fail-Fast Rapid Innovation Concepts</b><br>Workman Room: 113   | <b>Integrating Project Mgmt and Systems Engineering</b><br>Workman Room: 117                                       | <b>Agile Security Adaptable to Attack Evolution</b><br>Workman Room: 205 |
| 11:30                    | <b>Lunch on Your Own</b>   |   |  |  |
| 12:15                    | <b>High Performance Teaming</b><br>Workman Room: 109   | <b>Problem Space Risk Characterization</b><br>Workman Room: 113   | <b>SE as Multidiscipline Enabler/Art/Science</b><br>Workman Room: 117  | <b>Quick Reaction Capability</b><br>Workman Room: 205                    |
| 15:45                    | Workman Room: 101  | <b>General Session:</b> Eight Brief Outs of Results @ 10 Minutes Each   |  |  |
| 17:15                    | Workman Room: 101  | <b>General Session:</b> Wrap Up and Open Discussion   |  |  |
| 18:00                    | <b>Adjourn</b>   |   |  |  |

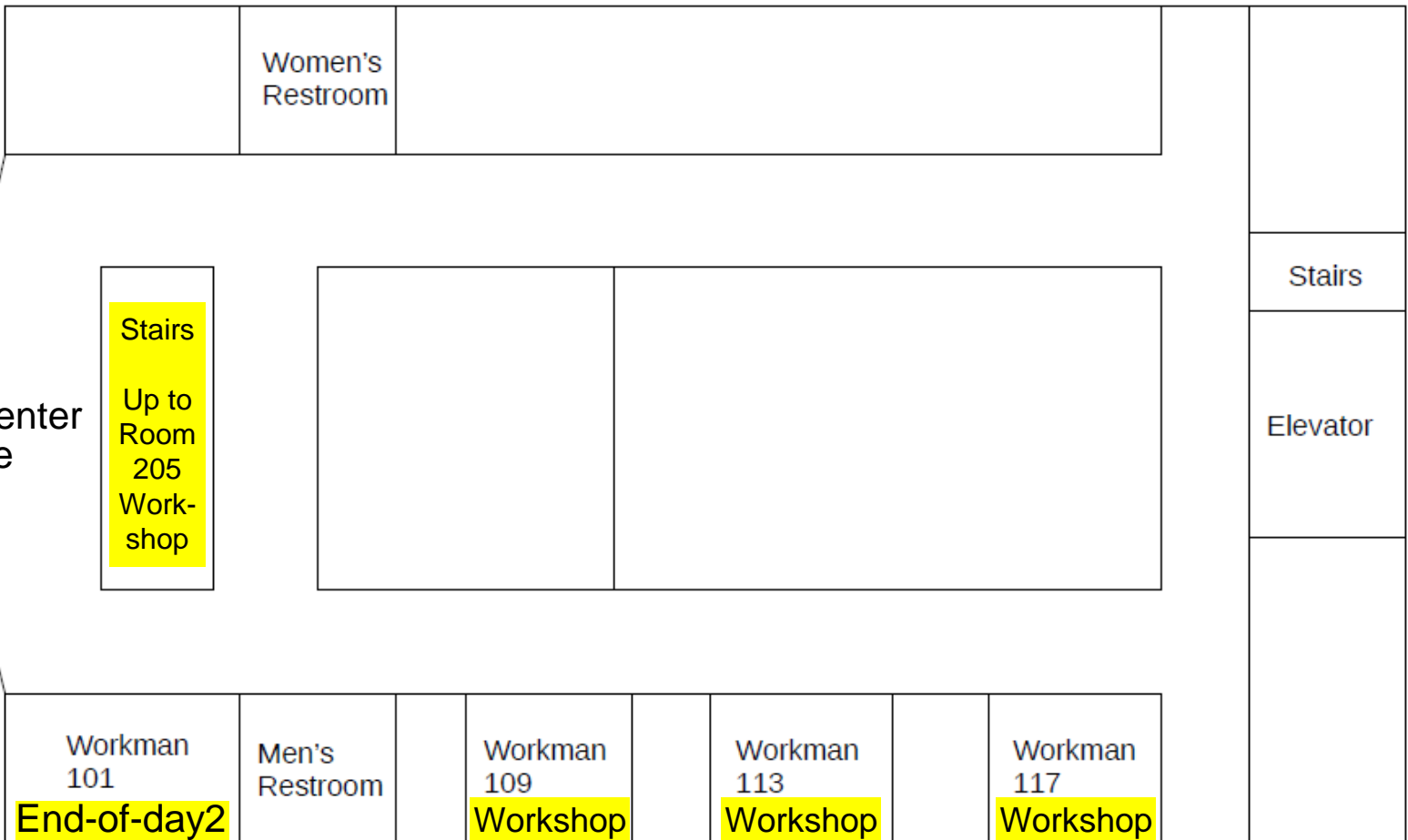
# Saturday at Workman Center

**Day 1**

Fidel  
Building

**Day 2**

Workman Center  
Entrance



# **Collaborative Knowledge Development**

## **Mission:**

- 1: Articulate the unresolved problem concisely.**
- 2: Identify the Customer(s) that would support a solution**
- 3: Identify organizational/cultural impediments to a solution.**
- 4: Converge on requirements for an embraceable solution.**

## **Culture:**

- Everybody has a voice & perspective that is heard.**
- Welcoming to all levels of experience – students to elders.**
- Everybody engages as a team on a mission.**
- Facilitator is there to guide toward mission completion.**

**Workshops on Saturday can decide on coffee break time.**

# Working Outlines

## Day 1 Session:

1. **Optional: 15 minutes max, facilitator positioning of the problem space.**
2. **Everybody: who you are, what you know and question in the area, what topic issues you would like to see as a focus.**
3. **Convergence on a concise statement of topic-resolution need, and identify the target Customer(s).**
4. **Select a short list of topic issues for Day-2 focus.**
5. **One-slide poster of intended Day 2 focus, for display at reception.**

## Day 2 session:

1. **Identify organizational and cultural impediments to recognizing the problem as one in need of attention and solution.**
2. **Converge on broadly acceptable requirements for an embraceable solution.**
3. **If appropriate, plans for subsequent solution collaborative action.**
4. **Develop general session brief out slides.**

**Facilitators manage the time for mission completion**

# Day-1 Brief Out Single-Slide Poster Template

**<Topic Name>**

- 1. Need (Articulate the unresolved problem-need for resolution).**
- 2. Customers (Identify the customers for a solution – provides context).**
- 3. Issues to Focus On (Day-2 intended focus).**

=====

**This Poster will be displayed at the reception,  
with the intent of enticing participants to attend the Day-2 session.**

**Facilitator may suggest a concisely articulated problem statement – for  
modification or replacement by Day-1 participants.**



# Example: SE Appreciation/Adoption Across the Organization

## Need:

- **We're not able to get things done to our satisfaction: reputation, cost, schedule, risk appetite, lack of beneficial outcomes, etc.**

## Customers:

- **Key organizational business managers, decision makers, & political influencers.**

## Issues to Focus On:

- 1. Lack of knowledge and appreciation of the SE domain.**
- 2. Perceived cost/value barriers.**
- 3. Inertial attitude: If it ain't broke don't fix it!**
- 4. Siloed mission understandings.**
- 5. My ox will be gored (budget and turf competition perception).**

# Feedback at the End

This Summit was an experience in collaborative exchange.

Are you glad you came (1-5)? \_\_\_\_\_ (1=No, 5=Definitely)

Should we do another (1-5)? \_\_\_\_\_ (1=No, 5=Definitely)

Feedback on what you liked :

Feedback on what you didn't like:

Feedback to make it more effective:

# **Keynote Speaker Anne O'Neil**

**Principal, Anne O'Neil Consultants; CSEP; INCOSE Founders Award.**

**Former INCOSE Board member, Director of Industry Outreach.**

**Spearheaded the evolution of the INCOSE Transportation Working Group into an international forum for industry exchange, serving 6 years as co-chair.**

**Founded and chaired the Systems Engineering Committee for the American Public Transportation Association.**

**Anne was profiled as a systems engineer by Money magazine, boosting the recognition of the value of systems engineers across many sectors.**

**Founding Chief Systems Engineer for New York City Transit (2005-2013). Built systems engineering awareness among peer transit properties, consultants, contractors and systems suppliers. Responsibilities spanned the planning, design and construction phases of projects. She has served in corporate strategy, program leadership, engineering design, technical management, and construction management capacities.**

**Career began as an electrical/control systems engineer in the power industry.**