

Welcome to STAMP/STPA 2017



Attendance

- 275-300 people (12% more than last year)
- Industries

Aerospace/Defense (40%)		Automotive (20%)	
Communication	Info. Technology	Medical/Healthcare	Railways
Cybersecurity	Insurance	Nuclear Power	Robotics
Education	Labor Union	Oil and Gas	Semiconductors
Energy	Maritime	Paper Production	Structural Eng.
Environmental	Manufacturing	Particle Accelerator	Transportation

Attendance (2)

- 24 countries

Austria	Israel
Brazil	Italy
Canada	Japan
China	Netherlands
Denmark	New Zealand
Finland	Norway
France	Serbia
Germany	South Korea
Greece	Sweden
Iceland	Switzerland
India	Turkey
Ireland	United Kingdom

Program Notes

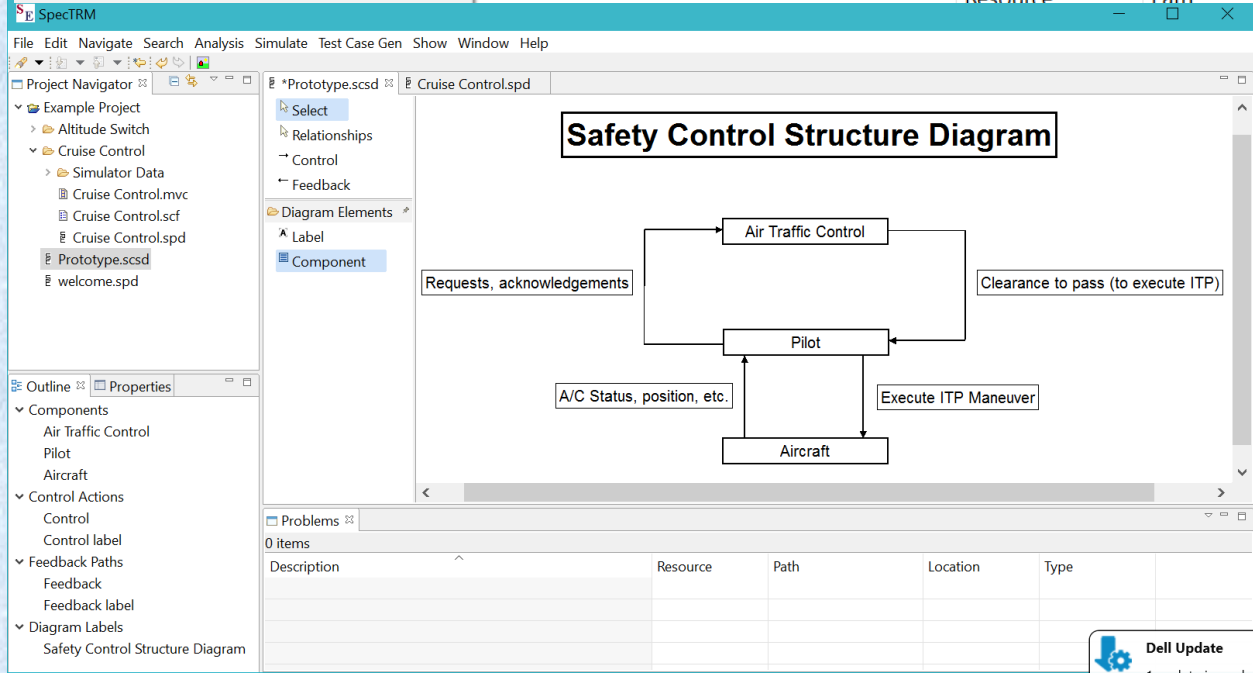
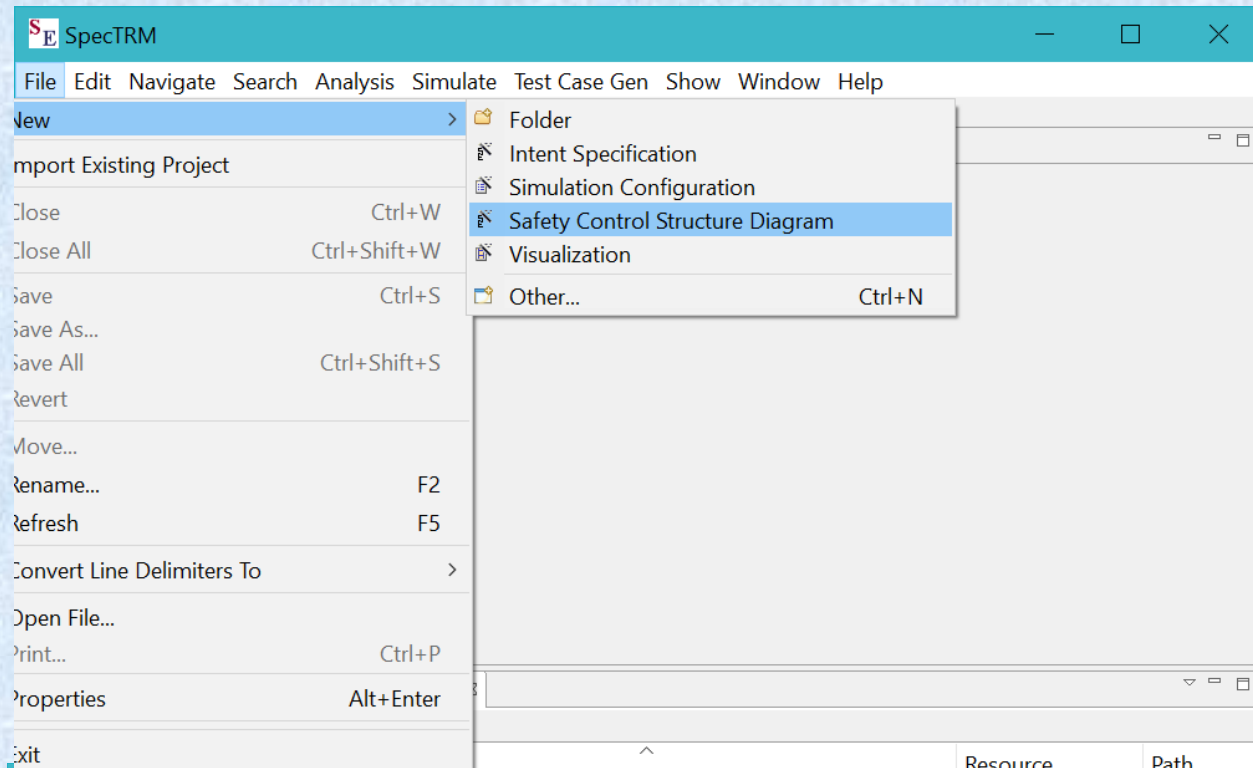
- “Birds of a Feather” lunch Tuesday
 - Aerospace/Defense, 32-124
 - Automotive, 32-144
 - ??? (See Lorena before noon)
- Buffet Dinner/Poster Session, Tuesday night
- Wednesday morning starts at 8 a.m.

Coming Soon

- Free On-line Course (Leveson and Thomas)
- Assistance in generating STPA causal scenarios
- “Architecting” software using STPA results
- New fully worked examples of STPA and CAST
- Integration of STPA into industry standards
- Another commercial tool to support STPA and its integration into system engineering.

SpecTRM

Safeware Engineering



Why do Accidents Occur?

- Types of accident causes
- Traditional safety engineering and its limitations
- Why we need something new
- Introduction to system theory/system thinking



Investigating/Understanding Accidents

- Increasing learning from accidents
- Identifying ALL the factors involved
- A method to help identify causal factors
- How to minimize hindsight bias



Hazard Analysis

- Investigating an accident before it occurs
- Identifying potential causal scenarios
- Worst case analysis vs. average (expected) case analysis



Design for Safety

- Elimination or control of scenarios (causal factors) identified by hazard analysis
- Design precedence for hazards
- Design to prevent operator error



Operations

- How to operate systems to prevent and reduce accidents
- Contents and use of a Safety Information System
- Creating an Operational Safety Management Plan



Management

- Does safety conflict with productivity and profits? Why management should care about safety.
- “Safety culture” and how it is established and cultivated. The role of management in creating the safety culture.
- Creating and evaluating an effective Safety Management System



Additional Topics

- Extending STPA for cyber security (Col. Bill Young)
- Workplace safety