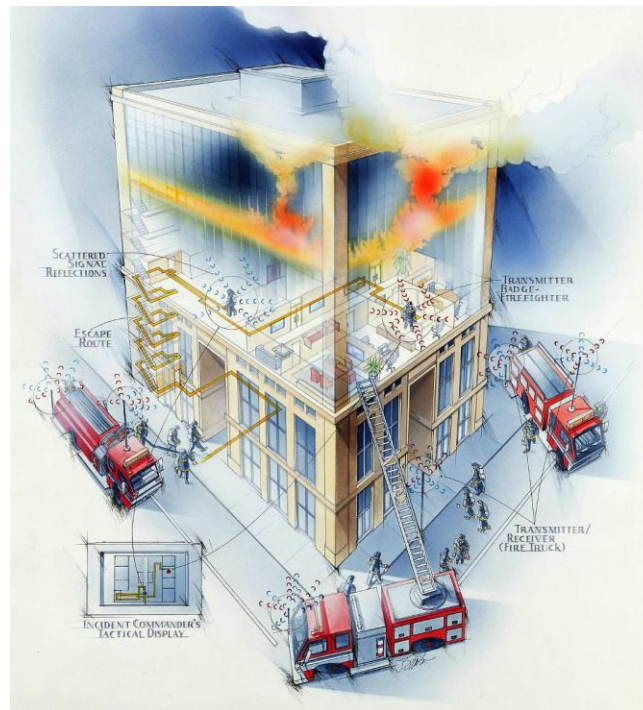


WPI Workshop Live Demo

OVERVIEW and RESULTS

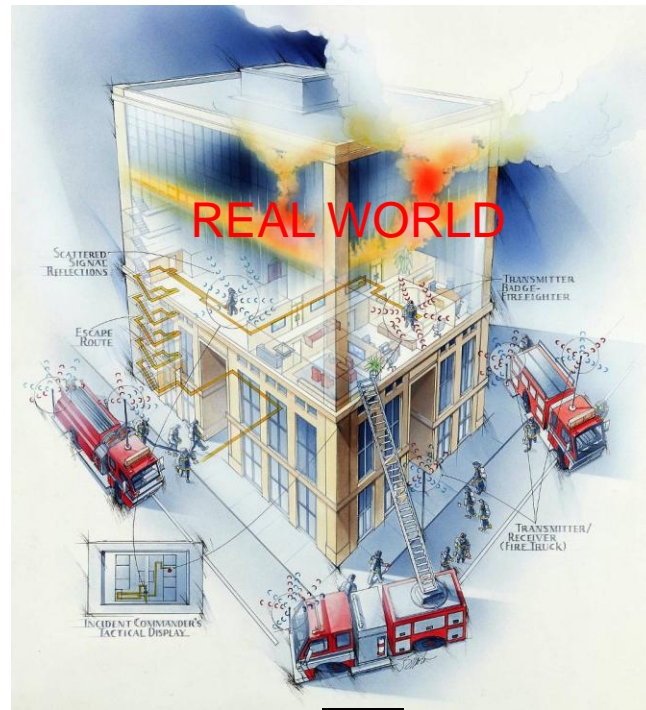
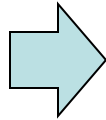


WPI Workshop Live Demo

A Real World Test Bed to Provide a Connection

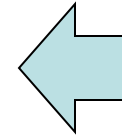
Technology

RF Sys.
Inertial
Homing
Comp.



First Responders

Fire
Law Enforcement
Corrections
E M A



Assess the present state of the art
Feedback for Further Development / Enhancement

Together WE WILL Solve this SERIOUS Problem

WPI Workshop Live Demo

To Provide a Realistic Demonstration Scenario

A Campus Building of Ordinary Construction

Worcester Fire Department

– Standard Operating Procedures & Personnel

Put the Prototype Systems to work, as they would be deployed

In Rescue Mode

In real world, when deployed:

Prevention – i.e. Command and Control
Self Rescue



WPI Workshop Live Demo

Exercise Outline –

Rescue of a Lost Firefighter who was doing a Primary Search

Live Demos:

Baseline – WFD FFs unaided by technology

Rescue Aided by three different Locators

The critical criteria: Time to Locate the lost firefighter



WPI Workshop Live Demo

The Target Structure



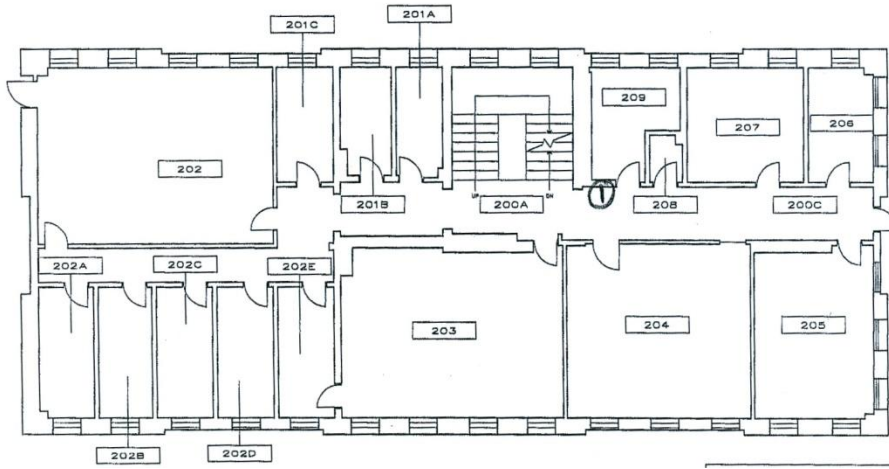
A&B - Sides



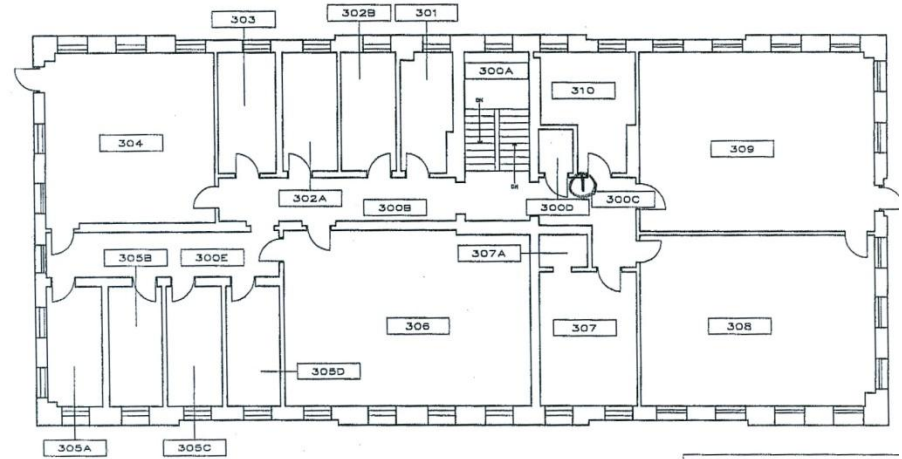
C&D - Sides

WPI Workshop Live Demo

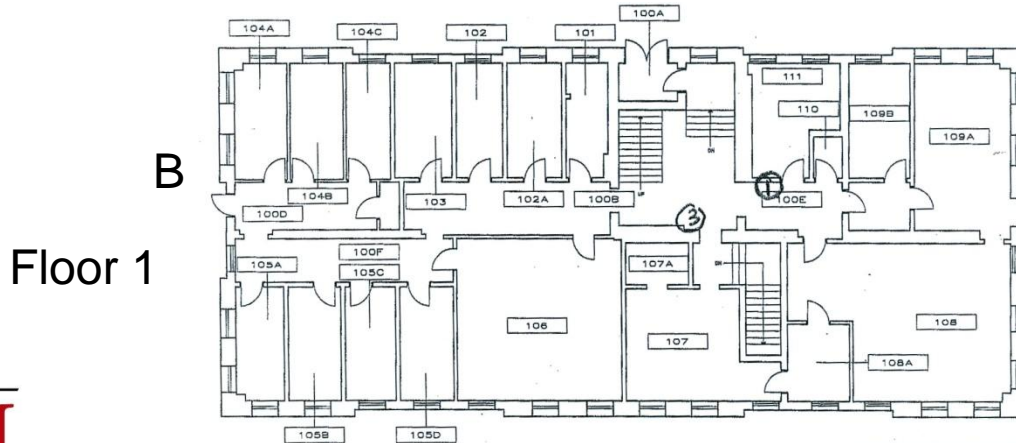
Interior Floor Plans



Floor 2



Floor 3



Floor 1

A

B

C

D

WPI Workshop Live Demo

The Scenario:

Arrival

Upon arrival, fire A / D Corner, top floor
Possible victims top floor

Initial Action Plan

Primary Search Team, Engine 22, to use C entry to top floor

Search

The search team gets to the top floor, but conditions deteriorate
The IC calls for evacuation of the building
During rapid evacuation one FF is lost and his partner calls MAYDAY
A RIT operation is initiated

R I T

Ladder 33 has last known location as top floor
R I T uses A side entry to begin search
Using:

Baseline uses physical search

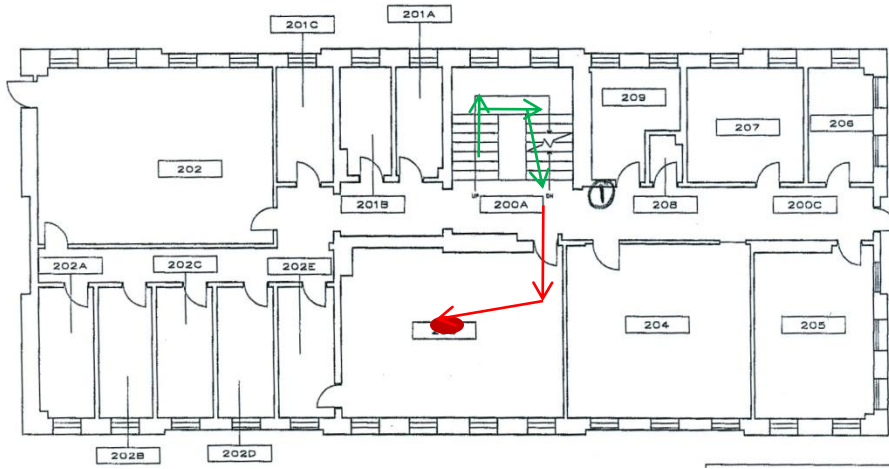
Live Demo uses Locator System as an aid

They are found on the 2nd floor, room 203

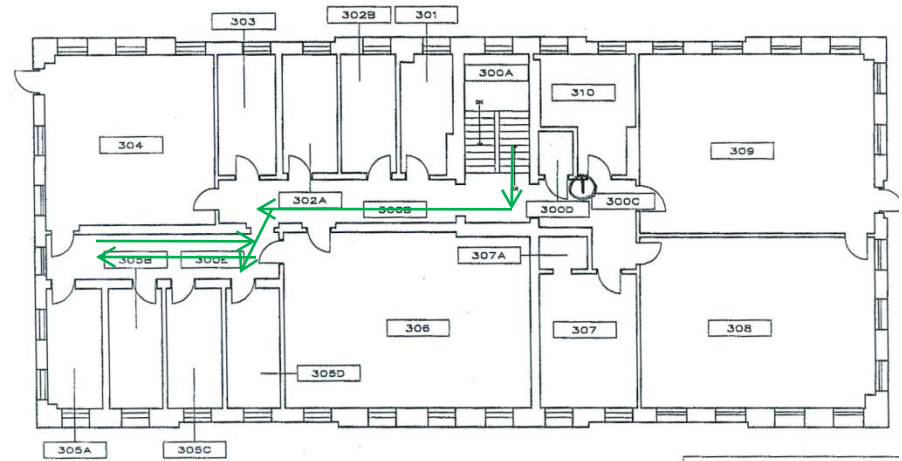


WPI Workshop Live Demo

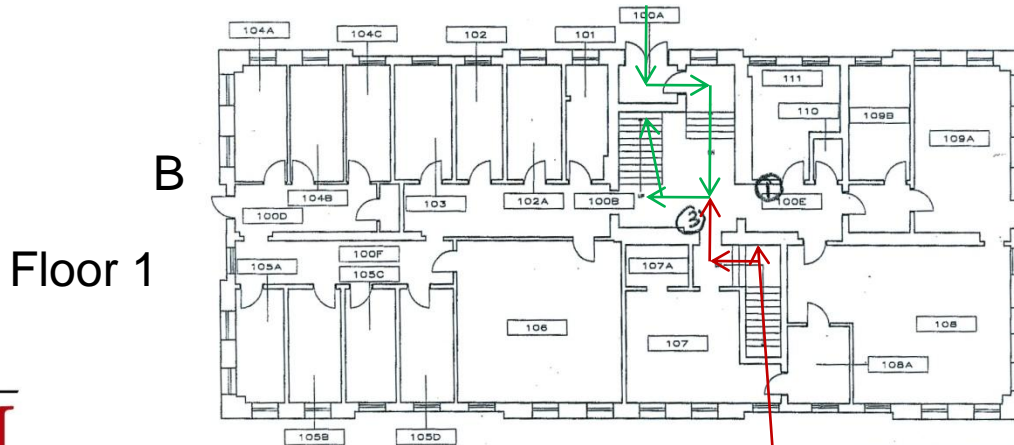
Interior Floor Plans



Floor 2



Floor 3



Floor 1

A

C

D

B



WPI Workshop Live Demo

Recorded Events:

Video: Follow CAM for both teams
CAM on IC Console / Radio Audio

Times: Point Events
Time to Find Lost FF

Conditions: No PASS, and no SCBA on victim

Playback is console screen with PIP of follow cam



WPI Workshop Live Demo

Review of Baseline

Three videos each followed by brief vendor comments

Following the Three Videos:

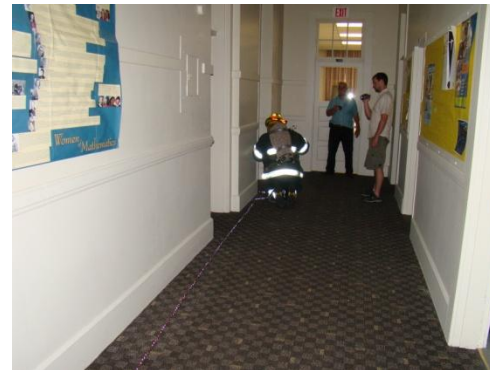
Comments from the Panel & WPI Professors

Questions and Comments



WPI Workshop Live Demo

Base Line Search
First RIT – 4th Floor



16 minutes to search 3rd floor

WPI Workshop Live Demo

Baseline Search Second RIT 3rd Floor



Additional 8 minutes to find FF

WPI Workshop Live Demo

Baseline Results

<u>Event</u>	<u>Baseline</u>
Time of Alarm	N/A
Search Entry	N/A
MAYDAY	N/A
RIT Entry	00:00
FF Found	24:00 total, 2 teams, 16 + 8
Time To Find	24:00

WPI Workshop Live Demo

Q – Track Video



WPI Workshop Live Demo

U Mich Video



WPI Workshop Live Demo

SEER Video



WPI Workshop Live Demo

Time Log

RESULTS



WPI Workshop Live Demo

Results

<u>Event</u>	<u>Baseline</u>	<u>Q-Track</u>	<u>UMich</u>	<u>SEER</u>
Time of Alarm	N/A	00:00	00:00	00:00
Search Entry	N/A	00:54	02:41	02:27
Evacuation Order	N/A	04:15	05:40	05:31
MAYDAY	N/A	07:05	08:58	07:58
RIT Entry	00:00	08:46	10:45	09:50
FF Found	24:00 (16 + 8)	15:48	22:41	19:32
Time To Find	24:00	07:02	11:56	09:42



WPI Workshop Live Demo

Panel Comments

Questions

Thank You !

