



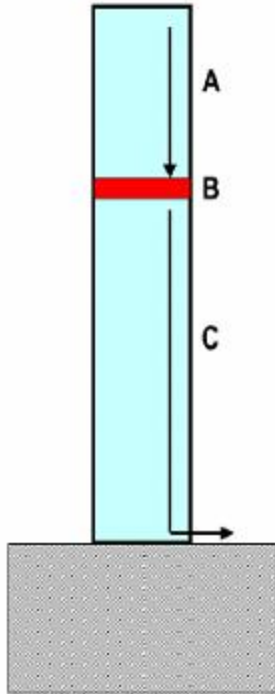
***(Patented Technology)***

**Roberto Sanchez Catalan**  
***President***

***(Participating Member, ASTM E06.77)***

# The Root Cause of 'Entrapment'

Nearly ALL high-rise buildings have only ONE effective vertical egress path, and that is INSIDE the building.



**The 'EVENT ZONE' (B)  
at the First Interstate Bank  
Los Angeles, California on  
May 4, 1988**

***Everyone trapped at and  
ABOVE the Event Zone (A) is in  
mortal danger.***

# Why is the Patented AESOP Unique?



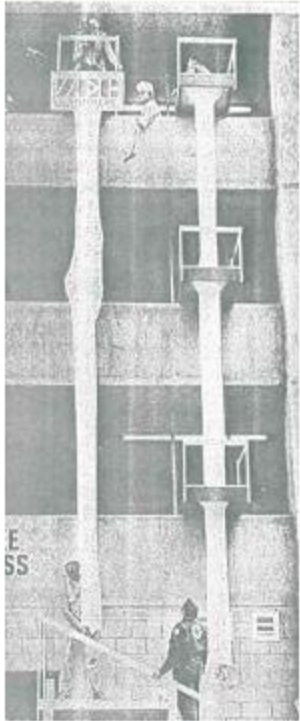
**In the digital age of the 21st century, we know one thing for certain:**

**The ONLY WAY to swiftly transport a enormous amount of anything from one point to another in a SAFE and ORDERLY fashion is to use a *NETWORK*.**

**AESOP is unique and superior to all prior art due to its embedded network intelligence.**

***(NETWORK: an intelligent transport method governed by strict protocols.)***

# Elastic Rescue Chutes History



**1970s - France (External)**



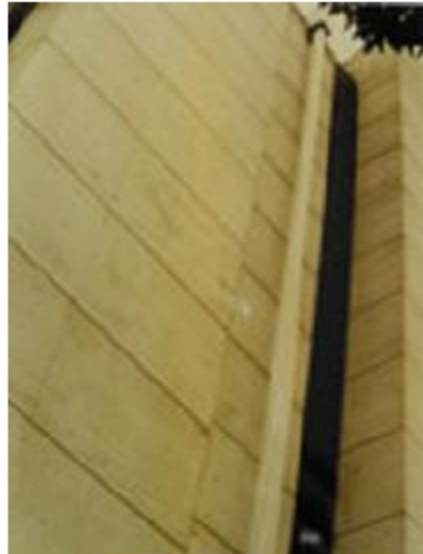
**1970s - (Internal)**



**1990s**

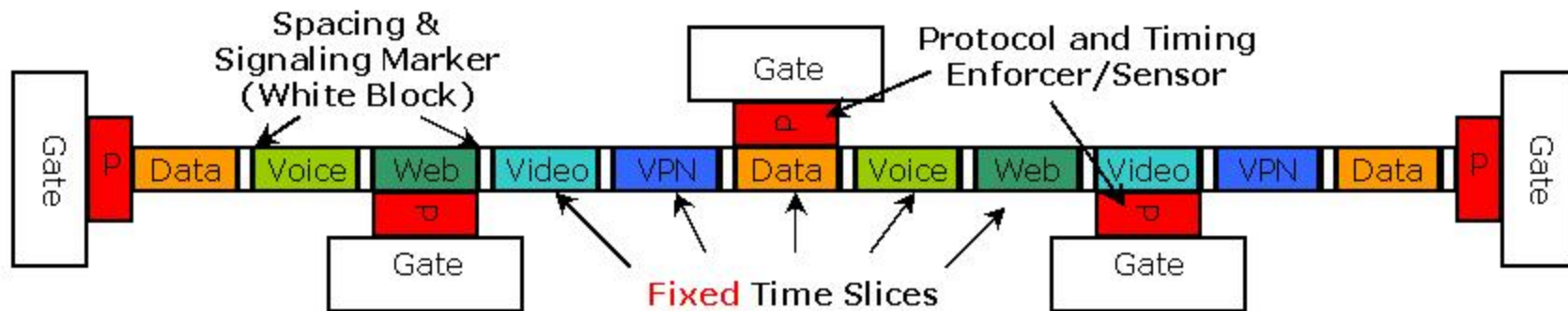


# Rescue Chutes: NOT Good Enough

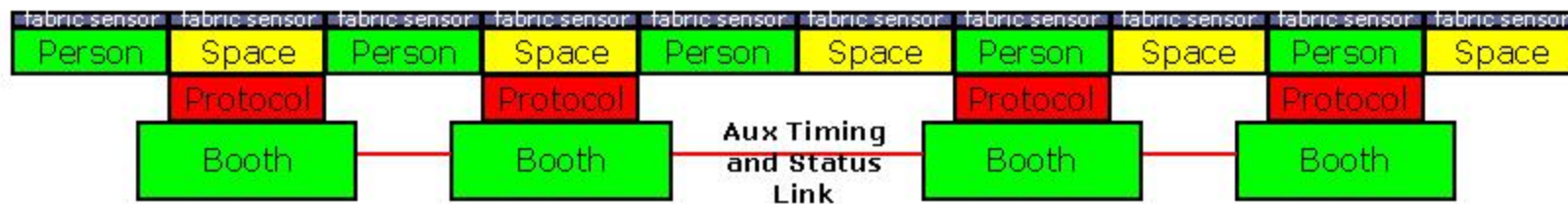


**Nonetheless, Controlled Descent From Any Height**

## Common Time Division Multiplexing (TDM) Network Principles



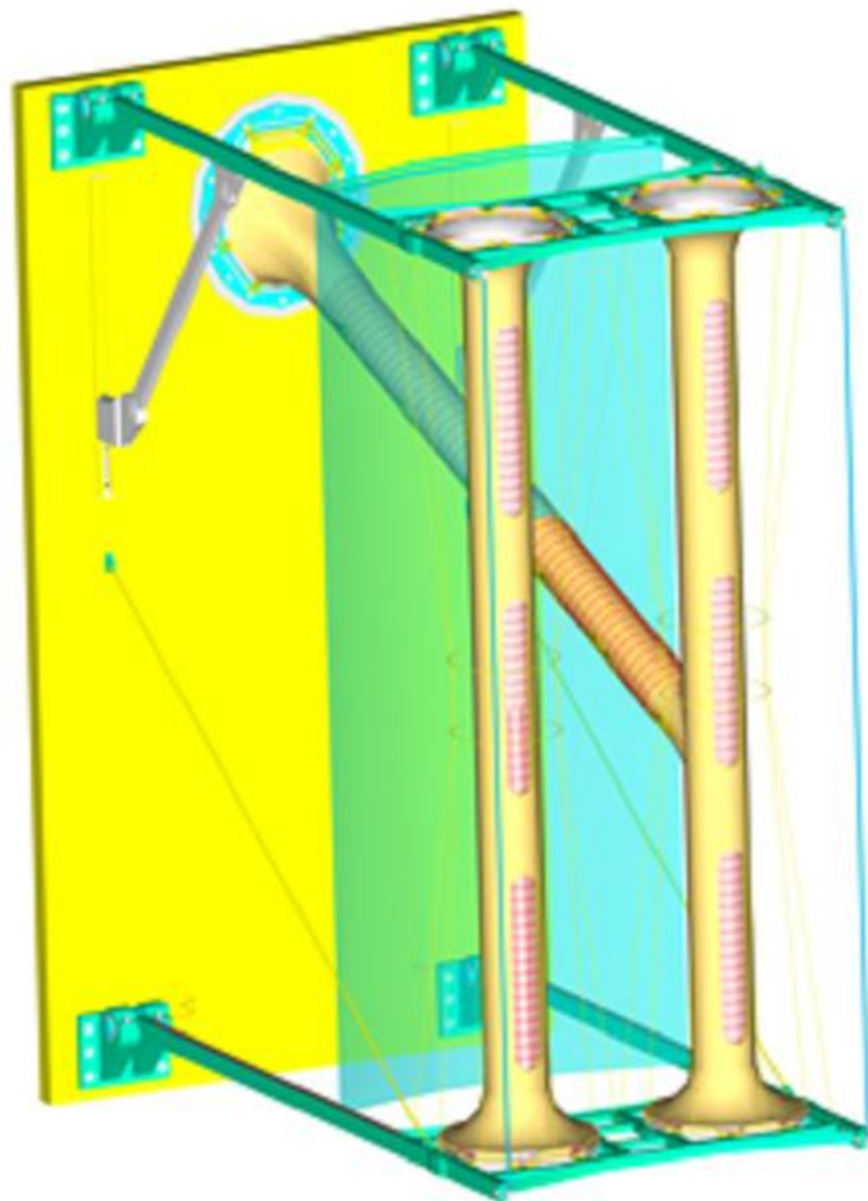
## AESOP's Fabric Sensor TDM plus Access/Egress Control



# Fabric Sensors and Fiber Optic Cables



# AESOP Descent Tubes

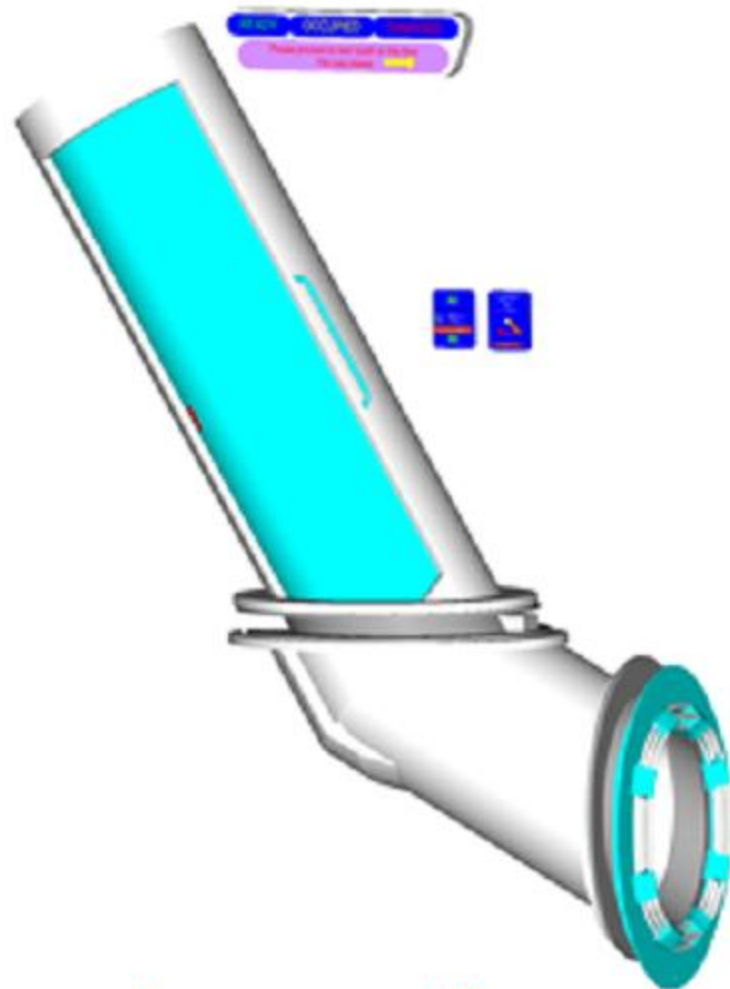


## Descent Tubes features:

- Fire-Resistant skin,
- Rock-climbing rope netting
- Breathable elastic core
- Stabilizer webbings
- Fiber Optic Cables
- and Fabric Sensors



# AESOP Egress Booth and Trap Door

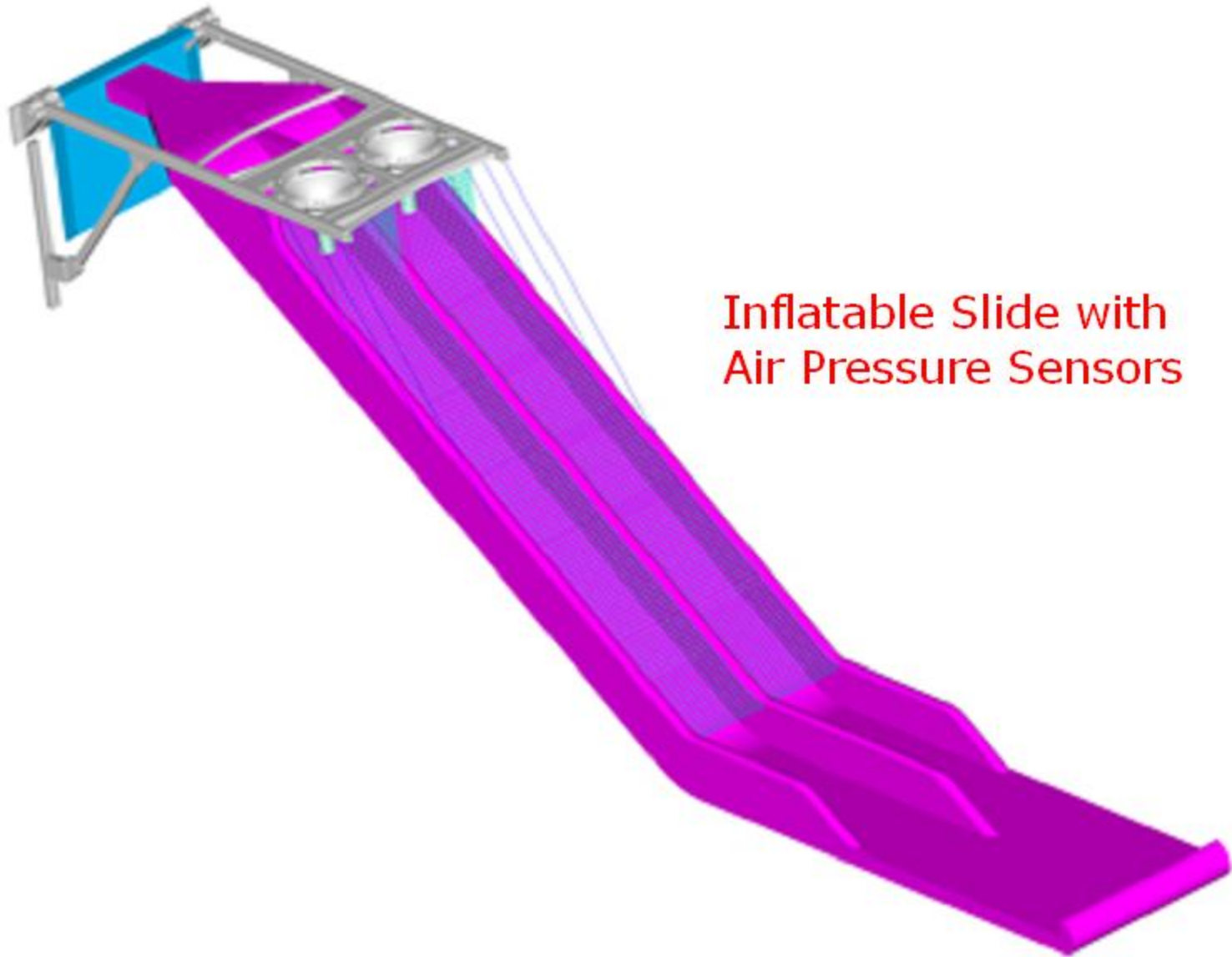


Access and Egress Control



Timing and Safety Checks

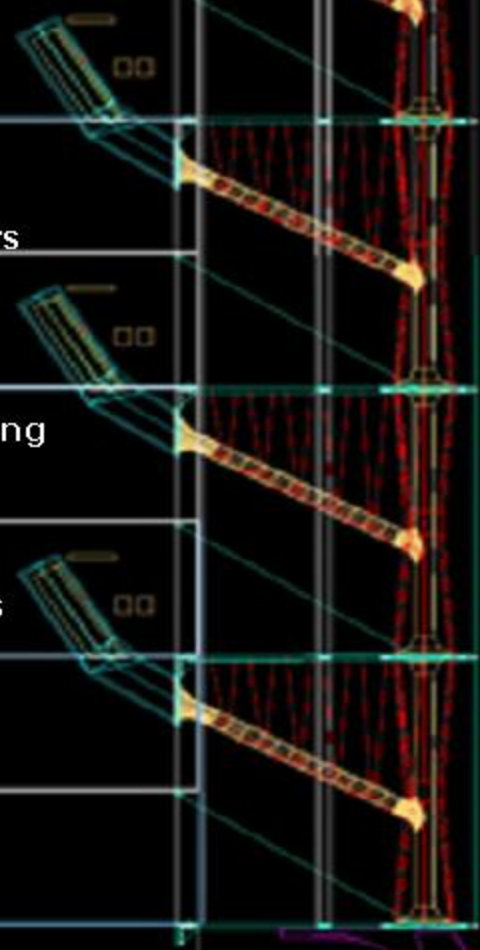
# AESOP Inflatable Slide



Inflatable Slide with  
Air Pressure Sensors

# AESOP Deployed. External View

- Fabric Sensors
- Air Pressure Sensors
- Fire-resistant Skin
- Rock-climbing Netting
- Position Sensors
- Stabilizer Webbing
- Fiber Optic Sensors
- Fabric Sensors



**AESOP's Advantages:**  
**Swift, full streaming, automatically coordinated, non-strenuous evacuation of thousands of people, even from ABOVE the 'Event Zone' in a handful of minutes.**

**Externally Concealable, Effortless Deployment, Functions despite Power Outages, Accessible Internally from every floor, AESOP checks and advertises the Wholeness of the Escape Path - PRIOR to Permitting Egress**

## AESOP's Network Intelligence

# AESOP Folding Poles



Folding Poles facilitate  
concealability for preserving  
external building aesthetics



# Question to the Audience

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**If patented AESOP devices that you just saw was available at the WTC on 9/11, could it have significantly reduced the number of fatalities?**

**For ordinary high-rise fires, will AESOP assist in full evacuation within a shorter amount of time?**

**Needed for Implementation: Resources (NIST, Partners) and Time (visit duration).**

# Why is AESOP the BEST Solution?



## AESOP is a 'Performance-Based' System:

- AESOP repeatedly conquers the "Event Zone", providing evacuation even from above the flames.
- Evacuees need not wait for ANY external assistance to deploy or use the AESOP device.
- So intuitive to use, AESOP can be operated by 12 year-olds. Special training is not necessary.
- AESOP enforces access control and is designed for human behavior under panic situations.
- AESOP pre-qualifies safety conditions for evacuees PRIOR to permitting egress.
- AESOP facilitates swift, non-strenuous and automatically coordinated en-masse evacuations.

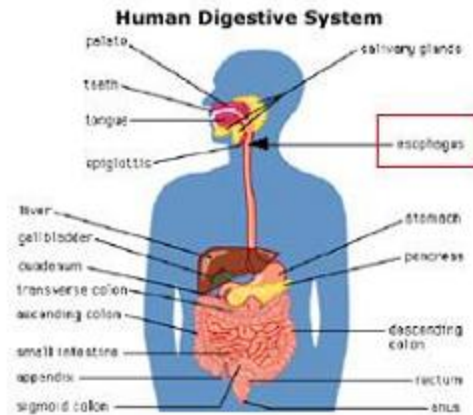
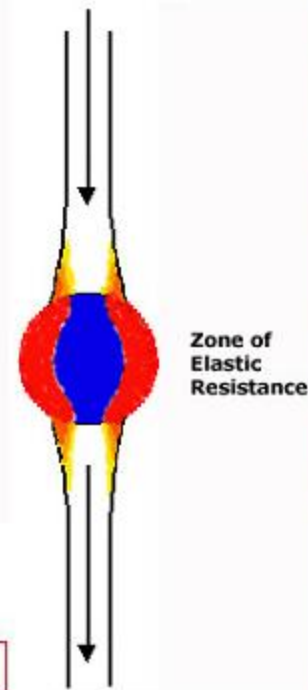
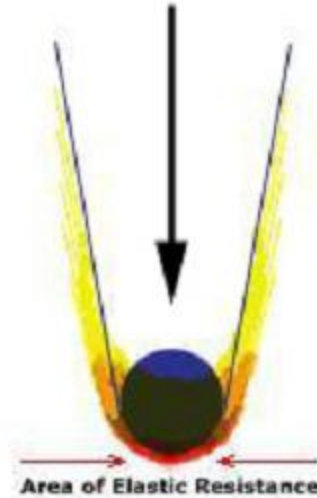
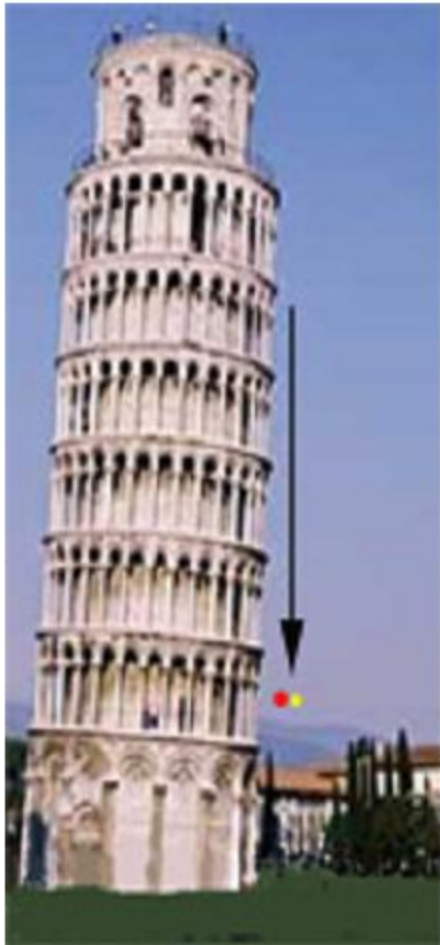


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# The Physics behind Rescue Chutes



**Learning from and Harnessing Nature: Uniform Gravitational Pull + Uniform Elastic Resistance = Controlled, Deterministic Descent**