Decommissioning of Fukushima-Daiichi NPP

(3/14/2012)

Satoshi Tadokoro
Tohoku University
International Rescue System Inst.
For Effective Solutions

- Test Field + Benchmark Test
  - Evaluation of Certainty as well as Feasibility
  - Clarify Problems and Challenges to be Solved
  - Verification of Performance in Real Situation

- Planning on the Premise of Failure
  - Accidents must happen during the long 40 years for decomission

- Trial and Errors Without Hesitation

- Open Competition of Multiple Methods and Technologies
  - Visible for Non-Professionals and General Public

- Establish User Organization for Robotic/Remote Systems
  - Deployment for Immediate Response
  - Operation with Practical Exercises
  - Improvement for Practical Solutions
  - R&D for New Solutions
  - Rolling for Better Strategy
Confined Space Inspection

ActiveScope Camera

Normal Video Scope

ActiveScope Camera

× 3

× 3
Active Scope Camera Deployment to Construction Accident in Jacksonville

Jan. 4-5, 2008 @ Jacksonville, FL

- Gathered evidence info. 7 m deep
  - Shape & direction of RC cracks
  - Shape & cross section of flakes
  - Image of spaces inside
- Impossible by other equipment
  - size, mobility, controllability

(Tadokoro, Tohoku U Murphy, USF)
Inspection of Pipe with 12 Elbows

With 12 Rectangular Elbows

Straight Pipe