Status of efforts of Naraha Center for Remote Control Technology Development

Fukushima Research Institute,
Sector of Fukushima Research and Development,
Japan Atomic Energy Agency
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History of NARREC

★ The Great East Japan Earthquake
★ Serious accident at the TEPCO’s Fukushima Daiichi Nuclear Power Station(1F)
★ Construction of mock-up facility for remote control technology decided by Japanese Government

★ Site Decision
(Naraha South industrial park)
- Close to 1F (about 20 Km (12.4mile))
- Sophisticated infrastructure
- Near from business activity base
- Good traffic access, etc

★ Opening Ceremony
(Completion of Research Management Building)

★ Full Operation Started

Land acquisition: Jul. 23, 2014
Test Building: Aug.25, 2015
R & D base for remote control technology
Operation started in FY2015

Full-scale Mock-up Test Area
The world's first test of fuel debris retrieval by side access aerial methods planned

Component Test Area
Used for decommissioning, decontamination, disaster response etc.
Place of “Creative Robot Contest for Decommissioning”

Virtual Reality System
Limited Reactor Building of 1F

Test facilities of NARREC
**Usage Record**

230 cases

85 cases were used by companies, schools in Fukushima

**4th Creative Robot Contest for decommissioning**

18 teams from 17 colleges were participated

About 300 visitors

Funded by the MEXT

**Exhibition of robotic and relevant technologies for decommissioning and disaster response**

30 organizations exhibited

About 500 visitors

organized by decommissioning robotic technology association in Fukushima Prefecture

**Fukushima Research Conference**

**Practical training and school by universities**

**summer**

**Robot operation training program**
Coast region is a place for mock-up tests and training of decommissioning.

Decommissioning R & D conducted at NARREC

101 cases

New entry of companies and universities to “Hama-dori area”

15 cases

Visitors to NARREC

19,165 cases

Leading demonstration tests and training for 1F decommissioning

Fukushima from disaster area to challenge area

Realize the effects of the base
Fukushima Innovation Coast Framework aims to build a new industrial base in coast region, in order to restore industries that have been lost due to the Great East Japan Earthquake and nuclear disasters.

**Purpose**
- Industrial cluster formation
- Human resource development
- Expansion of exchange population

**Projects**

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**R&D for Decommissioning (JAEA Fukushima)**

- CLADS
- Okuma Analysis and Research Center
- NARREC

**Robot (Fukushima Robot Test Field)**
- Large test field to sea, sky and field robots.
- Full opening from FY2019.

**Transportation of disaster relief supplies** (IHI, Kyoeiseiki)

- Minamisoma: Verification test
- Naraha: Basic test
- TO

Fukushima Robot Test Field

- Unmanned Aerial Vehicle Area
- Underwater & Above-Water Robot Area
- Development Base Area
- Infrastructure Inspection & Disaster-Response Area
• About **4,000 to 5,000 people** visited the NARREC per year
• NARREC is cooperating with Naraha Town to promote the use of accommodation, transportation and eating & drinking facilities for contributing town’s reconstruction

### Visitors (total)

![Bar chart showing visitors (total) from 2015 to 2019.](chart)

#### Examples of use

- **NARAFUKU, V-Chain NEMOTO** (foods & drinks)
- **Naraha Taxi**
"Michi-no-Eki Naraha" reopen

Along with the reopening ceremony of "Michi-no-Eki Naraha (rest stop) " NARREC facility tour was held. (22 visitors, Apr. 25, 2019)

Tour of NAREEC

Along with the “FUTABA-World 2019 in J-Villge” of regional events, NARREC facility tour was held. (about 200 visitors, Oct. 5, 2019)

Article of NARREC tour was published
Access & Contact

○ Access

By Car
Misato JCT (Joban EXPWY) 130min. → Hirono IC (R6) 10min. → NARREC

By Train
Tokyo Sta. (JR Joban Line, Limited Express) 140min. → Iwaki Sta.
Iwaki Sta. (JR Joban Line) 30min. → Kido Sta.
Kido Sta. (Taxi*) 10min. → NARREC
*Reservation required

○ Contact us

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