

- Between 2012 and 2023, we conducted internal investigations of the Unit 1 primary containment vessel (hereinafter referred to as, "PCV") that focused primarily on the subfloors of the PCV in order to examine the condition of fuel debris.
- In preparation for fuel debris retrieval, we are planning to implement an internal investigation of non-submerged area of the Unit 1 PCV that focuses on the first floor. This is necessary to ascertain the overall condition inside the PCV, not just the condition of the subfloor.
- Since the inside of the PCV is cramped and dark, we will use small drones that are highly maneuverable and have enhanced photographic capabilities. We will also be employing a snake-like robot that houses wireless communications relay so that we can properly cover the radio transmission area within which the small drones will be operated.
- During this investigation of non-submerged area, we will look not only at the outside of the pedestal, but also at the area around the bottom of the RPV inside the pedestal that is exposed to the air and could not be investigated using the submersible ROV.

<Announced by February 27>

- At 1:18 PM on February 28, we commenced Unit 1 PCV internal investigation of non-submerged area using the small drones. At 2:13 PM, we completed the first day of the two-day investigation.
- Today, we investigated the outside of the pedestal using the small drones. We observed the status of PCV penetration (X-6 penetration), opening used to replace the control rod drive mechanism (CRD), and CRD rails.
- The video footage taken from these drones today (February 28) is currently being used to determine whether the inside of the pedestal can be accessed for the second investigation that is planned tomorrow (February 29). If we determine that the inside of the pedestal can be accessed, prior to commencing the investigation tomorrow, we will temporarily suspend the injection of cooling water into Unit 1 to ensure stable flight of the drone inside the pedestal.
- As with the submersible ROV investigation conducted in the past, an isolation chamber is being attached to the X-2 penetration so as to prevent external leaks of the gases inside the PCV, and the small drones and snake-like robot are employed into the PCV while it is being isolated.
- In the course of this work series, we prioritize safety and carefully perform this investigation so as not to affect the external environment.

Timeline of the PCV internal investigation of non-submerged area on February 28

- 11:35 AM Commencement of preparations for the PCV internal investigation of non-submerged area (Final airtightness check of sealed container for investigation robots)
- 12:12 PM Employment of small drones into PCV through X-2 penetration (isolation valve opened)
- 12:51 PM Employment of snake-like robot into PCV through X-2 penetration
- 1:18 PM **Commencement of PCV internal investigation of non-submerged area**
(small drone (first drone) lifts off from install tray)
- 2:13 PM **Completion of PCV internal investigation of non-submerged area** (isolation valve closed)

[Reference: Small drone flight time]

First drone: Approximately 5 minutes from 1:22 PM

Second drone: Approximately 5 minutes from 1:34 PM

PCV internal investigation of non-submerged area on February 28



Photo 1: Remote operation center



Photo 2: Installment of the snake-like robot (left: front side right: back side)

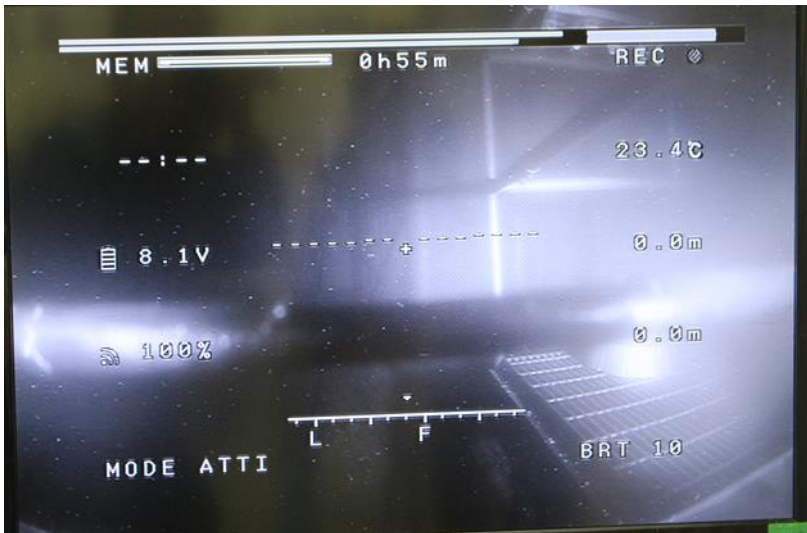


Photo 3: Installment of the small drone (drone #1)

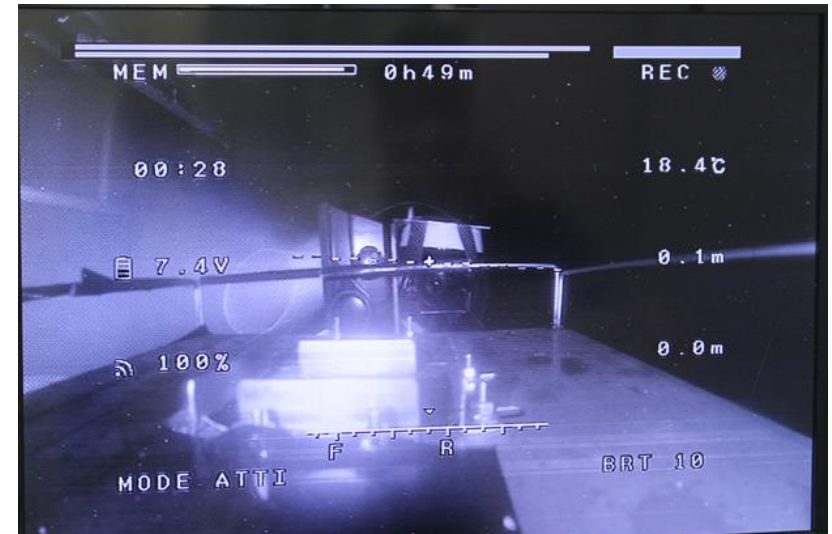


Photo 4: Landing the drone (drone #2)