

X104

The Japanese Experiment Module "Kibou"

日本実験棟「きぼう」

■ Purpose of Exhibition

The module "Kibo" displayed in the outdoor square is an exhibition of a structural test model of the Japanese experimental module "Kibo" in the International Space Station.

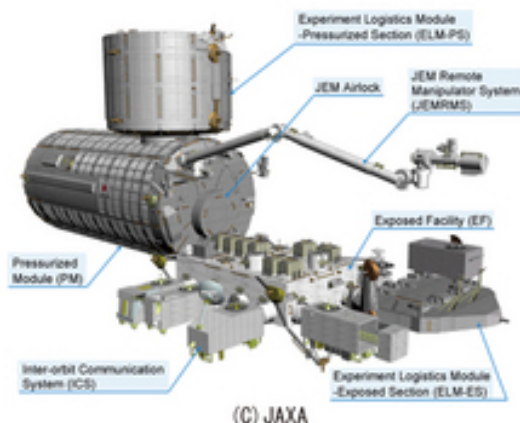
It was a model built for the structural testing (modal survey), in the Nagoya Space Equipment Manufacturing Factory.

The structure is identical to the actual structure tested in 1999 at the Tsukuba Space Center.

Connected to the International Space Station, you can observe the size and appearance of "Kibo", in which astronauts carry out various experiments.



■ Additional Knowledge



[Structural Test Model]

In the experiments conducted in 1999, the module "Kibo" was carried into space onboard the space shuttle to determine at how many vibration levels it caused sympathetic vibration and to capitalize on that for the manufacturing of the model for the final launch. With the vibrations caused during the launch, onboard luggage ("Kibo" in this case) are greatly shaken about.

Also, "Kibo" vibrates a lot, having an adverse effect on the space shuttle orbit, and therefore testing is required before launch.

[Kibo Structure]

"Kibo" primarily consists of an "On-board Laboratory" in which astronauts conduct experiments, an "On-board Storage Room" connected on the upper part of the on-board laboratory, an "Out-board Platform" to expose observatory equipment and experimental instruments to space, and "Robot Arms" that play an important role when attaching equipment. In this exhibition is presented the main section of the "On-board Laboratory".

Since the main body of the space station is equipped with stairs, it is possible to look inside.

Cooperation: JAXA, Mitsubishi Heavy Industries, Ltd.
Article by Masao Suzuki, curator