## **Tanegashima Space Center**

The Tanegashima Space Center, located on the south-eastern tip of Tanegashima Island located to the south of Kagoshima Prefecture, is the largest launch complex (9,700,000 square meters) in Japan. It consists of facilities including "large rocket launching pad," "satellite assembling building" and "satellite fairing assembling building." It conducts a series of operations including assembling, fitting, inspection and launch of vehicles as well as final checking of satellites, mounting of them on the vehicle, and tracking and controlling of launched vehicles. The Tanegashima Space Center plays a key role in satellite launches as part of Japan's space development activities.



# Firing tests

Ground firing tests are carried out on rocket engines to collect all types of data including



## Assembly

Launch vehicles satellites are assembled. fitted and inspected.



### Launch

Launch vehicles transported on a movable launcher to the launch complex, filled with fuel oxidizer, and launched



### Launch control

Launch is controlled with data sent by the launch vehicle about acceleration, pressures, temperatures positions and physical quantities.

### **Space Museum**

The Space Museum, an "active place" for feeling the link of the Earth with space on the unique Tanegashima Island, provides opportunities for rare experience.

The facility houses many attractive exhibitions and areas where visitors can touch rocket components and play a "touch game." These features will help visitors feel and enjoy space with their body.

At the Liftoff Theater, you can experience a virtual liftoff of a large rocket on a large screen on wall and floor with full audio and smoke. You feel realistic sensations as if you were on a launch site.



Liftoff Theater for audience's body sensory experience of virtual rocket liftoff







A photo spot in the scale model of the JĖM Kibo

Open 9:30 a.m. to 4:30 p.m.

Mondays (If Monday is a public holiday, we're closed on Closed Tuesday. There are no closing days in August.)

Year End and New Year holidays: December 29 to January 2 (Closing dates may be changed according to

rocket launch schedule.)

0997-26-9244 (direct to the Space Museum) Telephone

0997-26-9125 (voice guidance)

Admission

Facility guide tour organized from Tuesday to Sunday. For details, call the Space Museum. **Bus Tour** 



### Access to the Tanegashima Space Center 70 min. drive from Nishinoomote Port 50 min. drive from Tanegashima Airport

Rocket launch observation points

On the launch day, the entireTanegashima Space Center and within a radius of 3 km centerd on the Launch Pad are off limits. At the observation points of the launch managed by Minamitane Town, JAXA broadcasts a countdown coverage. Please check the Minamitane Town Website for details on the observation points.

### **Tanegashima Space Center**

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Tanegashima Space Center Website http://fanfun.jaxa.jp/visit/tanegashima/

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JAXA Website http://www.jaxa.jp/



# **Tanegashima Space Center**



# **Uncovering new values** For people, nations and the Earth

The environment surrounding the use and development of space is now dramatically changing. JAXA is expected to play a far greater role, not only in pioneering the frontiers of space science, but also in contributing to national security, disaster prevention, and industrial development.

The agency has committed to enhancing its existing efforts centering on technology development and tests for broadening the range of the aerospace industry by collaborating with private companies and universities. Our mission is to respond to ever-changing social needs with technologies to open up a new era.

### **Activities of Japan Aerospace Exploration Agency (JAXA)**

Space Utilization with **Satellites** 

Achieve a more prosperous society by observing the Earth's environment. monitoring disasters, and developing communications and positioning technologies.



round and Spa

Enhancing rocket technology nurtured in Japan to maintain and further improve technological foundations while reducing costs to contribute to space development.



Research on space science

Exploring the mysteries of the origin an evolution of space and the beginning of life. Paving the way for the future of mankind through the results of our experiments and advanced engineering research in the space environment.



Space Utilization

Contributing to an international society by safely and steadily operating the Japanese Experiment Module "Kibo" and the H-II Transfer Vehicle (HTV) "KOUNOTORI" a cargo transporter to the ISS.



Research on **Aeronautical** Technology

Contributing to the growth of Japan's aviation industry and a safer society by promoting research and development mainly on the environment" and "safety."



Research Relating to **Fundamenta Technology** 

Contributing to strengthening Japan's industrial competitiveness by improving advanced and fundamental technologies in the aerospace field.



# The Tanegashima **Space Center** is a facility for launching satellites.



Launch vehicles are assembled, fitted, filled with fuel and launched at the Yoshinobu Launch Complex on the north side of the Tanegashima Space Center.



VAB is a facility for assembling, outfitting and inspecting launch vehicles shipped from factory. At the VAB, two vehicles can be assembled simultaneously. The launch vehicles are assembled on a Movable Launcher (ML) and finally payload fairing is mounted on it. (Height: 81m, Width: 64m, Depth: 34.5m)



This is the ground firing test site for the firststage engine, which can be said to be the heart of the rocket. At present, it is used for testing the first stage engine (LE-9) of the H3 launch vehicle being developed.



The launch control room is located 500 meters from the launch pad, 12 meters underground. All launch preparations up to the launch are remotely monitored and controlled from the Block House. And also, necessary information is transmitted to the Takesaki Range Control Center.



Launch Vehicles are transported from the VAB to the Launch Pad right before the launch. H-IIA Launch Vehicles are launched from the Launch Pad 1 and H3 Launch Vehicles are launched from the Launch Pad 2.









### **Building/Spacecraft and** Fairing Assembly Building These buildings are used for assembling and

testing satellites and encapsulating them with a fairing cover that protects the satellite





### **Rocket Garage**

The Rocket Garage exhibits real components of launch vehicles such as H-II Launch Vehicle No.7, giving visitors sensation of overwhelming reality.



### Takesaki Launch Control Center (LCC)

This facility was newly built as a launch control center for the H3 Luanch Vehicle at a distance of about 3 km from the launch pad. Adjacent to the Takesaki Range Control Center, it has become easier to cooperate. Also, the number of operators is reduced to 1/3 to 1/4 compared to the H-IIA Launch Vehicle.



### Takesaki Range Control Center (RCC)

The Takesaki Range Control Center is the "brain" for launch. To launch a vehicle, the responsible persons for different tasks related to rocket launch enter this facility. All information is gathered here and used to make decisions related to launching and tracking and conducting safety management.

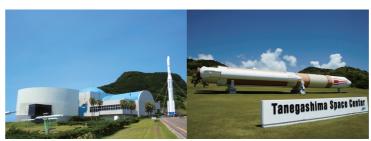


General Visit Points

**Bus Tour Visit Points** Participants in the facility guide tour are permitted to enter the facility.

# R Takesaki Observation

When a rocket is launched, this building is used as a press center. It has a rooftop stand for press coverage, a briefing room and a newsroom. (You can visit building top only.)





### Space Museum

For general public's better understanding of Japan's space development, the museum exhibits various items related to launch vehicles, satellites, the International Space Station(ISS), lunar and planetary exploration. Also, the full-scale models of the N-I Launch Vehicle and the H-II Launch Vehicle are displayed outdoors.



### Takesaki Static Firing Test Facility for Solid Motor

This facility is used for conducting ground firing tests of solid rocket boosters that generate a strong propulsion force. The firing tests of the solid rocket booster (SRB-3) of the H3 launch vehicle being developed were



Osaki Launch Complex for Mid-size Launch Vehicles



**Rocket Hill Observatory** 



Kamori Peak Observatory



Takesaki Range

