(Photo, left and center: House of Mr. Hiroshi Soutome and Mrs. Keiko Soutome, right: SHIZUOKA DAIICHI TELEVISION)

## Seismic isolation systems ensure safe flights







Seismically isolated JAL servers

Some people may think that making a building earthquake-proof will protect important data from being destroyed. However, the hard disk of a server or other device that is inside of a building can be destroyed in an earthquake even if the building does not suffer damage or the hard disk itself is not hit and damaged by a falling object. Furthermore, think of the opportunity loss if a server were to topple over causing the system to go down. We felt a need to introduce the most effective method possible in order to avert this type of risk.

Japan Airlines manages large amounts of information on the servers of its data center including a system to support flight safety, its check-in system at airports and websites for booking flights. When the greatest earthquake on record struck on March 11, 2011, these systems remained completely unaffected by the earthquake because they were secured by THK's seismic isolation system.

On the day of the earthquake, the Haneda and Narita Airports were shut down, grounding numerous flights. If the servers had broken down due to the earthquake, this would have seriously affected all

flights and the resumption of operations even to non-affected areas. The fact that the data center remained intact was a major feat for our company.

The idea of installing a seismic isolation system at the data center arose immediately after the Kobe Earthquake. There were a number of choices including decentralization of the data center. In the end, the decision was made to go with a seismic isolation system which promised a stabilizing effect with the lowest investment. At first, seismic isolators of another manufacturer were installed, but hearing reports that their isolation effect was insufficient, the decision was made to switch to THK's seismic isolation system with top and bottom plates that stay in place.

Having now experienced the Great East Japan Earthquake, we are satisfied that our decision to install a seismic isolation system was a most prudent measure both in terms of cost and risk aversion.

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