



September 18, 2010 (JST)
Japan Aerospace Exploration Agency

First Quasi-Zenith Satellite MICHIBIKI Result of the Drift Orbit Injection

The Japan Aerospace Exploration Agency (JAXA) has been conducting operations to inject the first quasi-zenith satellite “MICHIBIKI” into the drift orbit by firing its apogee engine five times until September 17, 2010 (Japan Standard Time, JST) since it entered into the first transfer orbit on September 11, 2010 (JST).

As a result of orbit calculation after the fifth apogee engine firing, the MICHIBIKI was confirmed to be injected into the following scheduled drift orbit. (Please refer to the attachment below.)

	Drift orbit *	Schedule *
Apogee altitude	38,974km	(38,975km)
Perigee altitude	32,071km	(32,051km)
Orbit inclination	41.0degrees	(41.0degrees)
Period	23h 43m	(23h 42m)
Drift rate	3.5degrees/day	(3.6degrees/day)

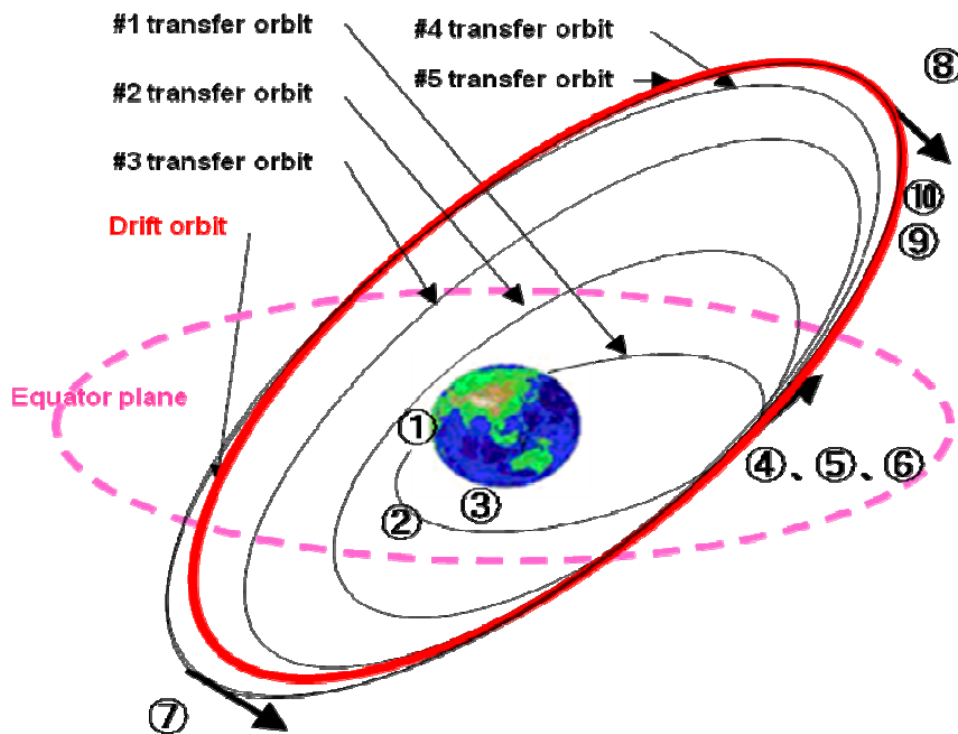
The satellite is in good health.

We will shift from the attitude control mode to the regular control mode by turning the orientation of the positioning antenna, which will be used in the regular control mode, to the Earth.

We plan to announce the results of shifting to the regular control mode at around 11:30 p.m. on September 19 (JST).

(Note)

- Drift rate Satellite’s moving speed to the longitudinal direction when looking from the earth.
- Transfer orbit A temporary orbit for the satellite between the launched orbit by the launch vehicle and its final quasi-zenith orbit.
- Transfer orbit phase: A period between the end of the fifth apogee engine firing and the establishment of the three axis attitude stabilization



Event	Revolution
① Payload separation	1
② Solar array paddle deployment	1
③ Sun acquisition by the solar array paddle	1
④ First apogee engine firing	2
⑤ Second apogee engine firing	4
⑥ Third apogee engine firing	5
⑦ Fourth apogee engine firing	7
⑧ Fifth apogee engine firing	8
⑨ Paddle auto-tracking	10
⑩ Shift to the regular control mode	10

Flight Plan of MICHIBIKI