Secretive U.S. space plane due to land

U.S. Air Force's robotic X-37B space plane is set to return to Earth after almost two years in orbit. The secret mission is believed to have been a test of new sensors and other next-generation satellite technologies

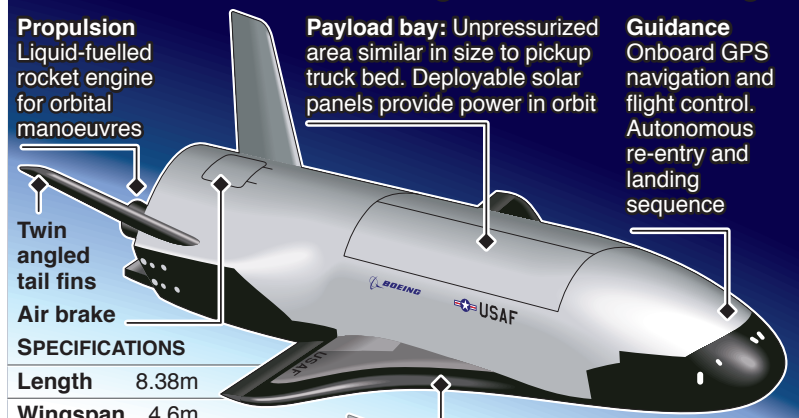
Propulsion Liquid-fuelled rocket engine for orbital manoeuvres

Payload bay: Unpressurized area similar in size to pickup truck bed. Deployable solar panels provide power in orbit

Guidance Onboard GPS navigation and flight control. Autonomous re-entry and landing sequence

Twin angled tail fins

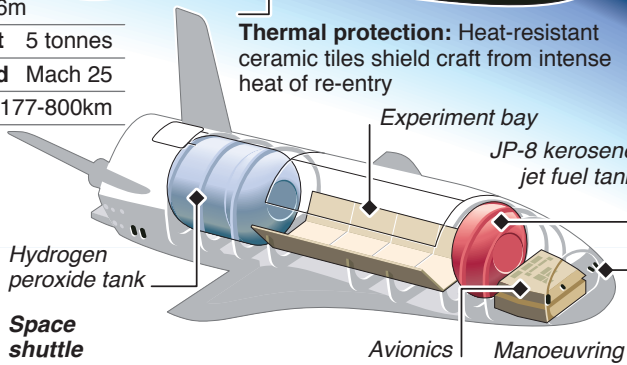
Air brake

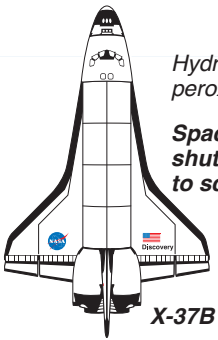


SPECIFICATIONS

Length	8.38m
Wingspan	4.6m
Launch weight	5 tonnes
Re-entry speed	Mach 25
Orbit range	177-800km

Thermal protection: Heat-resistant ceramic tiles shield craft from intense heat of re-entry





Space shuttle to scale

X-37B

X-37B MISSIONS

VEHICLE	Launched	Landing	Duration
OTV-1	Apr 22, 2010	Dec 3, 2010	8 months
OTV-2	Mar 5, 2011	Jun 16, 2012	15 months
OTV-1	Dec 11, 2012	Oct 14, 2014	22 months

Sources: U.S. Air Force, Boeing, Space.com