# U.S. Air Force launches reusable space plane

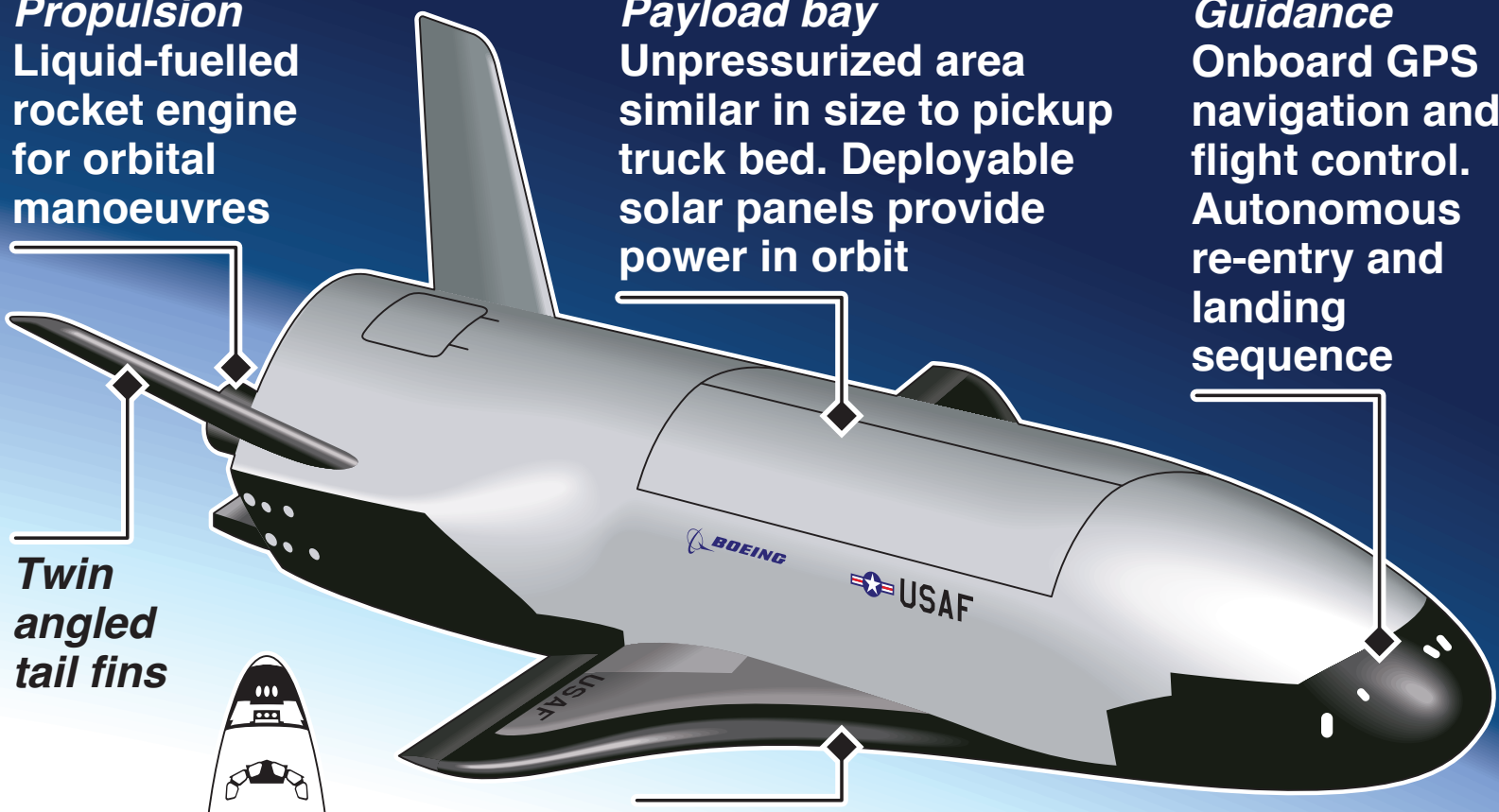
**After a decade of development, the U.S. Air Force has launched a prototype space plane which could serve as a potential space shuttle replacement. The robotic *X-37B Orbital Test Vehicle* was launched by rocket to conduct technology tests in orbit before gliding back to Earth**

***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**

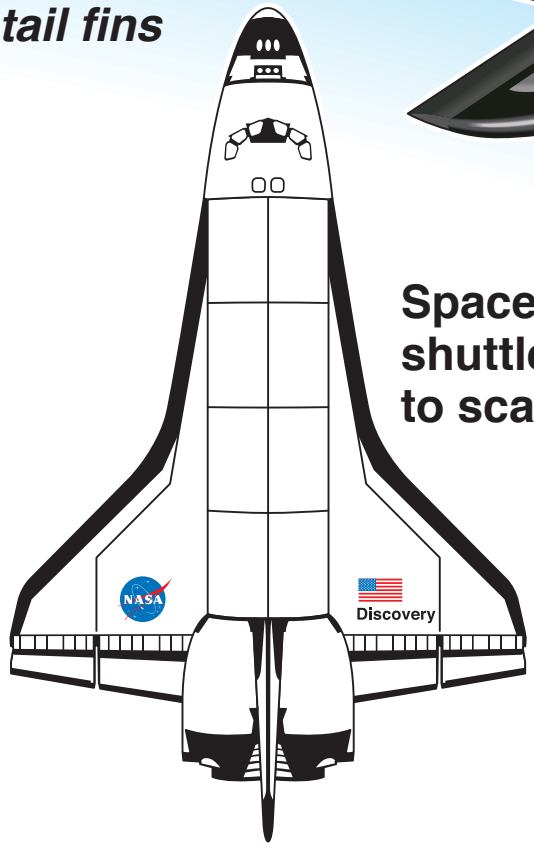
***Guidance***
**Onboard GPS navigation and flight control. Autonomous re-entry and landing sequence**

***Twin angled tail fins***

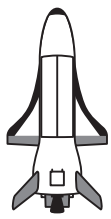



***Thermal protection***
**Heat-resistant ceramic tiles shield craft from intense heat of re-entry**

**Space shuttle to scale**




**X-37B**



## X-37B SPECIFICATIONS

| | |
|---|---|
| **Length** | 8.38 metres |
| **Wingspan** | 4.6 metres |
| **Launch weight** | 5 tonnes |
| **Operating altitude** | 200-925km |
| **Re-entry speed** | Mach 25 |
| **Time in orbit** | Up to 270 days |

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