

SpaceX tests new high-tech suit

SpaceX's Polaris Dawn mission is set to launch four astronauts on a five-day flight to attempt the world's first private spacewalk. The mission will be a major test of SpaceX's new spacesuits

POLARIS DAWN Crew Dragon capsule launched atop **Falcon 9** rocket from Cape Canaveral, no earlier than Aug 26

Two-hour spacewalks to take place at 700km above Earth

Dragon has no airlock, so entire cabin will be slowly depressurized ahead of spacewalk

EXTRAVEHICULAR ACTIVITY (EVA) SPACESUIT

Helmet: 3D-printed, has visor coated with copper and indium tin oxide to reduce sun glare

Helmet also incorporates camera and **Heads-Up Display (HUD)** that provides real-time data on suit's pressure, temperature and relative humidity

Knees, elbows, wrists: Enhanced flexure joints allow for greater articulation, compared with traditional space suits

Shoulder and wrists: Semi-rigid rotator joints allow astronaut to work in pressurized and nonpressurized environments

Waist: Spiral zippers allow suit to be put on and taken off relatively easily

Boots: Made of same temperature resilient material found in SpaceX's Falcon rocket interstage