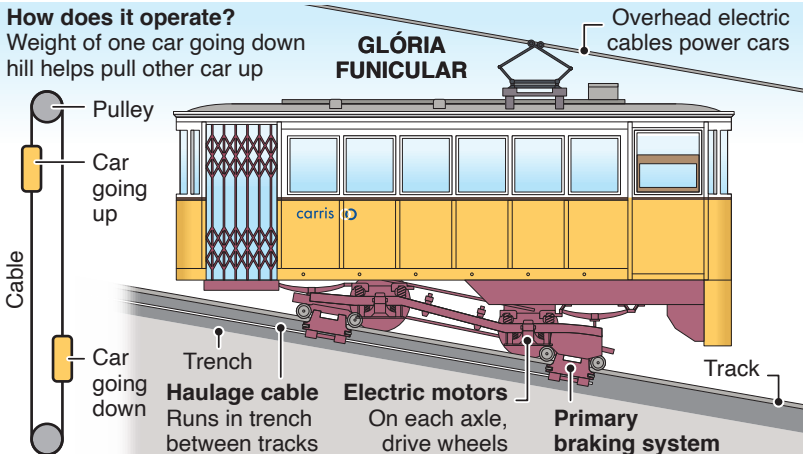


Lisbon funicular crash linked to failures

An uncertified cable and maintenance failures caused the Lisbon funicular crash that killed 16 on September 3, a preliminary report finds

How does it operate?

Weight of one car going down hill helps pull other car up



REPORT KEY FINDINGS

■ **CABLE:** Cable that broke, causing crash, was defective and never certified for passenger transport. Purchased in 2022 by municipal operator **Carris**, it did not meet specifications, including steel grade, and was untested before installation

■ **MAINTENANCE:** Outsourced by Carris to private firm **MNTC**, was unsatisfactory. Inconsistencies in inspectors' time sheets raise doubt that maintenance occurred on morning of disaster

■ **BRAKE:** Emergency brake, which driver attempted to apply when cable snapped, failed and had never been tested. When cable broke, safety system cut power to funicular, disabling pneumatic brake, while manual brake was too weak to stop car from crashing



Descent after failure lasted around 20 seconds and speed reached some 50km/h before impact

Picture: Google Earth

Sources: Portugal's Air and Rail Accident Investigations Bureau (GPIAAF), Carris, BBC, AP
© GRAPHIC NEWS