Flight Information

May 15, 2025, at 1148 UTC the balloon was crossing the Southern coast of Ireland near the town of Youghal. The balloon/payload status is nominal, with a speed of 20 MPH (33 KPH) at an altitude of 43,387' (13,200 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 284K. The satellite image from windy.com indicated the temperature of the land at that location was 293 K, an error of 9 K. The SondeHub tracking website forecasts the balloon will loop around the British Isles following the Eastern coastline and back toward France in the next few days.

May 14, 2025, at 1138 UTC the balloon was crossing highway A28/E402 leaving the Eure department and entering Calvados department, Normandy, France near the city of Orbec. The balloon/payload status is nominal, with a speed of 17 MPH (28 KPH) at an altitude of 42,651' (13,000 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 281K. The satellite image from windy.com indicated the temperature of the cloud tops at that location was 289 K, an error of 8 K. The SondeHub tracking website forecasts the balloon will do a loop around the British Isles and return to its current location in the next few days.

May 13, 2025, no signals received today.

May 12, 2025, at 1418 UTC the balloon was 40 miles (65 Km) West of Lyon, France. The balloon/payload status is nominal, with a speed of 8 MPH (13 KPH) at an altitude of 42,257' (12,880 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 230 K. The satellite image from windy.com indicated the temperature of the cloud tops at that location was 234 K, an error of 4 K. The SondeHub tracking website forecasts the balloon will soon turn slowly toward the North.

May 10, 2025, at 1238 UTC the balloon was 290 miles (468 Km) Northwest of the Spanish coastline over the Atlantic Ocean. The balloon/payload status is nominal, with a speed of 11 MPH (19 KPH) at an altitude of 41,995' (12,800 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 275 K. The satellite image from windy.com indicated the temperature of the Atlantic Ocean at that location was 286 K, an error of 11 K. The SondeHub tracking website forecasts the balloon will soon turn toward the Bay of Biscay and travel along the Northern coast of Spain.

May 9, 2025, at 1548 UTC the balloon was 35 miles (57 Km) South-Southwest of Plymouth, England over the English Channel. The balloon/payload status is nominal, with a speed of 23 MPH (33 KPH) at an altitude of 42,126' (12,840 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 275 K. The satellite image from windy.com indicated the temperature of the English Channel at that location was 285 K, an error of 10

K. The <u>SondeHub</u> tracking website forecasts the balloon will continue out into the Celtic Sea, before looping back toward the Bay of Biscay and France.

May 9, 2025, an analysis of the Infrared (IR) temperature data from 0948 to 1548 UTC (6-hour test) over a cloudless English Channel shows a consistent temperature range of 270 – 275 K (single highest and lowest value discarded), a variance of 5 K/C. Over the entire path windy.com showed a consistent water temperature of about 12 C or 285 K, and confirmed here. The average temperature for the period was approximately 273 K for an average error of 12 C. Looking at past readings, the error seems to change depending on whether the sensor is seeing water, snow, clouds or land. This most likely has to do with the emissivity constant of the object(s) being viewed. Also, keep in mind the sensor sees an area of about 0.6 Square Miles (1.5 Square Kilometers). It is important to keep these errors in mind, when reading temperatures from the sensor in the future.

May 8, 2025, at 1528 UTC the balloon was 15 miles off the West coast of Denmark over the North Sea. The balloon/payload status is nominal, with a speed of 31 MPH (48 KPH) at an altitude of 41,798' (12,740 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 273 K. The satellite image from windy.com indicated the temperature of the sea surface at that location was 283 K, an error of 10 K. The SondeHub tracking website forecasts the balloon will continue South toward the Europe/UK.

May 7, 2025, at 1558 UTC the balloon was near the town of Bodo, Norway. The balloon/payload status is nominal, with a speed of 41 MPH (66 KPH) at an altitude of 41,535' (12,660 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 259 K. The satellite image from windy.com indicated the temperature of the clouds at that location was 261 K, an error of 2 K. The radio wave propagation in the area on the 10 m band was good today. The SondeHub tracking website forecasts the balloon will continue South toward the UK/Europe.

May 6, 2025, at 1808 UTC the balloon was 500 miles Northwest of Tromso, Norway over the Greenland Sea. The balloon/payload status is nominal, with a speed of 35 MPH (56 KPH) at an altitude of 40,880' (12,460 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 252 K. The satellite image from windy.com indicated the temperature of the clouds at that location was 258 K, an error of 6 K. The radio wave propagation in the area on the 10 m band was very poor today with only a limited number of spots received late in the day. The SondeHub tracking website forecasts the balloon will continue Southeast toward Norway.

May 5, 2025, at 1938 UTC the balloon was 50 miles East of Myggbukta, Greenland. The balloon/payload status is nominal, with a speed of 31 MPH (50 KPH) at an altitude of 41,076' (12,520 m). The Infrared (IR) temperature sensor reading below the balloon at the time was 262 K. The satellite image from windy.com indicated the temperature of the clouds at that location was 267 K, an error of 5 K. The radio wave propagation in the area on the 10 m band was very poor today with only a limited number of spots received late in the

day. The <u>SondeHub</u> tracking website forecasts the balloon will soon turn Southeast toward Norway.

May 3, 2025, at 2008 UTC the balloon was crossing over the Southernmost tip of Greenland. The balloon/payload status is nominal, with a speed of 23 MPH (37 KPH) at an altitude of 41,470' (12,640 m). The radio wave propagation in the area on the 10 m band was very poor today with only 6 spots received late in the day. The **SondeHub** tracking website forecasts the balloon will continue to move slowly Northeast along the Greenland coastline before turning back South toward Norway.

May 2, 2025, at 1308 UTC the balloon was 400 miles (645 Km) Southwest of Greenland. The balloon/payload status is nominal, with a speed of 17 MPH (27 KPH) at an altitude of 41,601' (12,680 m). The radio wave propagation on 10 m band is poor today with very few spots received. The SondeHub tracking website forecasts the balloon will continue to move slowly Northeast toward Greenland.

May 1, 2025, at 1208 UTC the balloon was 100 miles (161 Km) Northeast of Newfoundland. The balloon/payload status is nominal, with a speed of 9 MPH (15 KPH) at an altitude of 41,667' (12,700 m). Radio wave propagation on 10 m is poor today with very few spots received for either balloon. The <u>SondeHub</u> tracking website forecasts the balloon will continue to move very slowly Northeast and then back Southeast in the same general area.

April 29, 2025, at 1248 UTC the balloon woke up along the border of Colorado and Nebraska. The balloon/payload status is nominal, with a speed of 41 MPH (67 KPH) at an altitude of 42,782' (13040 m). The **SondeHub** tracking website forecasts the balloon will continue to move Northeast and then East along the US/Canada border.

April 28, 2025, at 1438 UTC (0738 PDT) TALARC ALP40-I was launched from the Boulder City Dry Lakebed. It can be tracked **HERE**. More to follow.

IR Sensor Object Temp (K)	262
IR Sensor PCB Temp (K)	257
Solar Panel Voltage	4.05