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Design

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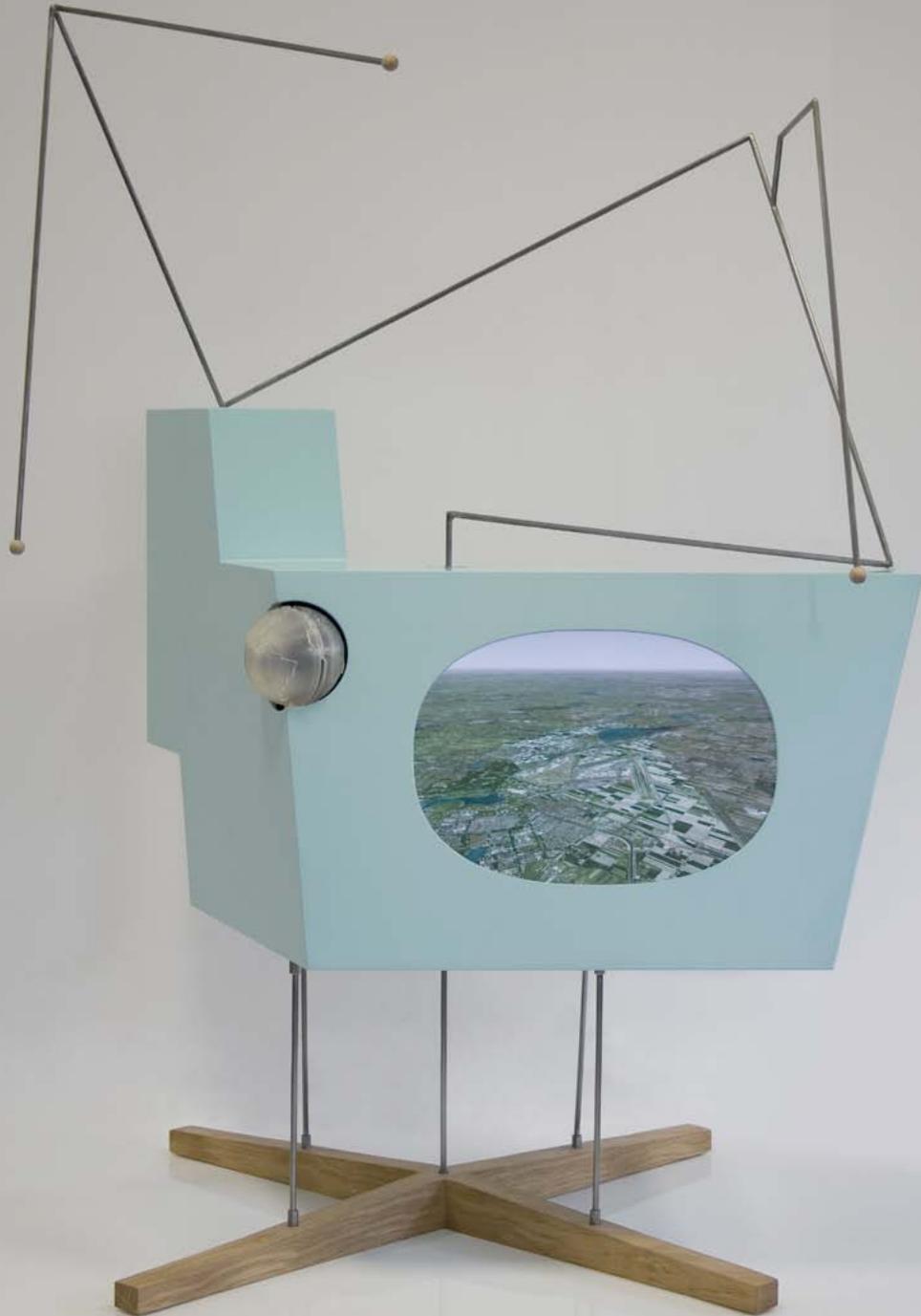
The Plane Tracker (Overview)

Plane Tracker

Aeroplanes continuously transmit information about their journey, and these signals can be captured and decoded in the home. The Plane Tracker uses this data to visualise the imagined routes of individual flights, shown on screen as aerial imagery that flows smoothly from origin to destination. As you watch, you are able to vicariously experience the flights from the comfort of your front room. There's no particular purpose in this - the design is not centred on any clear task or problem. Instead, we want to create a situation that highlights air travel, an issue about which different people (e.g. frequent travellers, environmental activists, plane spotters) might have different opinions.

The design of the Plane Tracker, echoing modernist 'jet age' forms, also derives from the need to support the unusual antenna, which was designed by NASA Intelligent Systems Division and engineered by Arup, This is specifically tuned to receive aircraft registration transmissions, This which contains unique aircraft registration numbers and current flight numbers and is used to visualize flight paths using Google Earth and a mechatronic globe positioned on the front left corner of the enclosure.

We gave the Plane Tracker to a volunteer household to live with for an extended period of time so that we could observe their lives in relation to flights overhead, mediated by the device. Since our volunteers lived in intimate proximity to Heathrow airport (in Isleworth, Greater London), their everyday lives were coloured by the ceaseless air traffic. During the deployment, the Plane Tracker was used in the household's living room and routinely engaged the family in following and identifying of flights, in activities which called upon their worldly knowledge and experience. For some family members the Tracker spurred wanderlust, while for others it raised concerns about the environmental impact of air travel. This is part of ongoing research on how to design for a rich interpretative flexibility.

Threshold Devices

The Plane Tracker is an example of a 'threshold device' that presents information gathered from the home's surroundings to give new views on domestic circumstances. A focus on the home and its surroundings complements more traditional applications for domestic computing. Whereas conventional systems for the home focus on bringing placeless and generic content into the home, Threshold devices, in contrast, particularise content by linking it to the home's physical location. Further examples of Threshold Devices include the 'Drift Table', the 'Local Barometer' and the 'Video Window'.

The Plane Tracker field trial with a volunteer household.

View from the volunteer household window, Isleworth, Greater London.

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