

AeroAccess



ACCESSIBLE AIR TRAVEL FOR THE VISUALLY IMPAIRED

Sponsor Brief

Boeing is a global leader in designing and manufacturing commercial airplanes, serving customers in over 150 countries worldwide. One of Boeing's missions is to have the aerospace industry be inclusive and accessible to all. Boeing challenged our team to explore this mission with an open-ended and research-driven approach.

Problem Context

Despite technological advances in aviation, accessibility for visually impaired passengers remains limited. Our focus is to identify the barriers that these individuals experience during air travel and design a solution that promotes independence, safety, and an equitable in-flight experience.

Design Question

How might we enhance accessibility to ensure visually impaired passengers have a safe, informed, and independent in-flight experience?

Key Findings



Flying independently is challenging and a source of stress



Flight communications are missed (ex. seatbelt status, pilot announcements, and flight updates)



In-flight naviagtion is very challenging



Entertainment system is inaccessible







AeroAccess includes audio-

descriptions for movies,

addressing a major gap in

current in-flight

entertainment for visually

impaired passengers.

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Process

RESEARCH

Five 40 min interviews with visually impaired individuals

IDEATION

Multiple rounds of rapid ideation and SWOT analysis



PROTOTYPE

Two sets of Figma wireframes Low and High Fidelity

Provides audio guidance to help users locate bathrooms, seating, and stay informed about key flight protocols like when to fasten their seatbelt.

AeroAccess allows users to recieve their boarding passes through the app, helping them feel more confident and prepared for their destination.

HUMAN CENTERED DESIGN & ENGINEERING UNIVERSITY of WASHINGTON

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ANTHONY ANDERSON SPONSOR LANI HATHAWAY

SPECIAL THANKS TO

PROFESSOR Alan Marks **Mentor** Lubna Razaq