

## PROJECT BRIEF

Client:	Airplane Owners & Pilots Association (AOPA)	Deadline:	April 30 <sup>th</sup> , 2021
Project Name:	MyPlan(e) Mobile App	Author:	Jesse Peltonen

### THE ASK

#### What is the objective of the project?

Here you need to define the problem: the need statement that you have chosen to address, the target audience (who the apps users will be)

And describe your solution: what your mobile app will be and how it meets the need statement

The objective of this project is to develop a mobile app that reduces the amount of pre-flight check listing for pilots, as well as, providing an all-in-one flight log experience. In-turn the AOPA hopes that this app will also increase membership incentives for both - users who are thinking of joining and user who are thinking of returning. For example:

“Howard Hughes, a flight enthusiast and hobbyist who enjoys flying – but doesn’t like the hours it takes to fill out navigation logs or calculating fuel burn, wind corrects, time en route, etc.”

The ‘MyPlan(e)’ mobile app would take care of this demographics needs-statement by providing an app that will enable the user to conduct automated pre-flight checks, stream-lined navigation planning, and a robust and intuitive weather pattern algorithm that adjusts wind-corrections in real time.

The app will sync and integrate with an on-board computer chip within the aircraft after the user inputs all of the aircraft’s registration information. This technology enables us to not only provide a state-of-the-art application on launch day, but also provide a roadmap of features future implementation. While the app will provide navigation logging, pre-flight checks, weather conditions, and fuel monitoring – we will also be able to provide many other features on launch such as, aircraft status reports, fuel monitoring systems, flight control checks, gyro calibration, altimeter sets, and landing gear states.

While the target demographic of this app is for pre-existing pilots and enthusiasts – we hope that the ease of use and accessibility of this app will also give incentive for people wanting to get into flying, and people who want to return to flying.

#### What are the deliverables?

Here you need to define your minimum viable product - exactly what it will include (you should include the number of screens and what would be on each screen).

And describe your three additional features - exactly what they will be (and whether they will be embedded on existing screens or if they will add screens to the app). List them in order of priority.

The bare minimum screens to launch day will include 3 core menus or screens – Home, Flight Check, and Settings.

The ‘Home’ screen will act as a “welcome” screen, where the user is greeted with current flight

conditions, hourly weather patterns, destination planning, and quick launch icons to the other screens in the app. All of these things are also accessibly within the app navigation menu.

The 'Flight Check' screen is where the user confirms information from the 'NavPlan' screen that is pertinent to flight planned. The on-board computer chip will run an automatic checklist and if the checklist returns with no critical errors then the user can confirm the flight check response and begin engine start-up.

The 'Settings' screen is where the user will be able to access full customization control to tailor the app to personal preference. A wide range of accessibility features is also presented within the app and can be access through this screen depended on what the user wants based on their needs.

If development goes smoothly than three additional screens we would like to see on launch are: NavPlan, Fuel, and Weather.

The 'NavPlan' screen is where all of the tools needed for navigation planning is. Here the user can plan destinations and routes and with the aircraft's registration info the app will also automatically calculate flight time, airspeeds, projected ground speed, heading, distances, projected fuel per hour counts, as well as flight data from previous trips.

The 'Weather' screen displays real-time weather data based off the user's current location. It will show hourly weather patterns and wind calculations. If the user has a flight planned, then this screen will also provide information for the flight based off of data from the previous two screens (NavPlan and Flight Check). The screen also provides a flight risk assessment based off weather data for the currently planned flight.

The 'Fuel' screen provides the user with in-depth fuel level checks, estimated fuel per hour remaining for the next trip that is planned, as well as fuel usage analysis from previous trips.