

ABSTRACT

Fuel pressure monitoring in helicopters is crucial to ensure the proper and safe distribution of fuel during flight operations. To support this need, an Android-based pressure monitoring application was developed using Kodular. The application is designed to display real-time fuel pressure data numerically. Pressure readings are obtained from a digital pressure sensor and transmitted via a Wi-Fi network using the HTTP protocol. This project aims to provide a portable, practical, and user-friendly monitoring solution for field operators. The development process includes user interface design, data communication system integration between the sensor and the application and testing of pressure data display. The main tools used are Kodular for Android application development and a microcontroller to connect the sensor to the Wi-Fi network. Test results show that the application accurately and responsively displays real-time pressure data. This application can be utilized as a support tool in helicopter fuel pressure monitoring systems to improve efficiency and information accessibility.

Keywords: pressure monitoring, helicopter fuel, Android application, Kodular, pressure sensor, Wi-Fi.