#### Audience Analysis

The piece of the hardware I will working with is the **ILS Calibration Receiver.** This piece of hardware is used to test the Instrument Landing System (ILS) beam accuracy and calibration.

The ILS Calibration Receiver is a crucial piece of hardware designed to test and ensure the accuracy and calibration of Instrument Landing System (ILS) beams. This device plays a vital role in maintaining the precision of ILS signals, which are essential for safe and reliable aircraft landings, by verifying that the system meets stringent aviation standards.

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| Question | Answer |
| Who is the audience? | *The Audience for my user manual will be the ATC crews who have experience in guiding aircraft pilots to land when approaching an airport.*  *The second category of the audience is the pilots flying the aircraft. They have previous experience in manual landing of aircraft and using other aircraft landing solutions.*  *The last category of my audience is the airport manager, they are the stakeholders who will read the user manual and understand how important the test user manual is and why its safe to opt for the ILS solution.* |
| Why does the audience need the documentation? | *The ATC crew needs this document because they would be able to read about the test and accuracy of the ILS solution, and also understand what aspect of the hardware hasn't been tested when it comes to using the solution to record the overall success of the ILS system. They will also be able to use the document to calibrate the ILS system and observe if there are any changes in the system over a long period.*  *The pilots need the manual also to familiarize themselves with the test solutions that were developed, why the ILS calibration is important, and how to perform this calibration in tune with any type of aircraft they are flying.*  *The airport manager as the stakeholders, can also use the manual as a document to prove to the authority that the ILS system in their airport conforms with the aviation standards. Also, they can use the document to source funding and investments in other safety-critical investments.* |
| When will the audience use the documentation? | *When the ATC crew receives the* **ILS Calibration Receiver,** *they will want to set up the device and understand the process of configuring it to perform the test for the airport ILS system.*  *The first contact of the pilot with the user manual for the* **ILS Calibration Receiver *will*** *be when they want to understand the accuracy of the ILS system of the airport they are flying to and how effective it is, what are the parameters to input and read back from the test to ensure they can depend on a particular ILS of an Airport.*  *The airport managers will need the user guide when its time to explain to the authorities how effective their ILS is and how they have been fulfilling the Aviation standards.* |
| Where and how will the audience use the documentation? | *The ATC crew would need the user manual at the control tower when the* **ILS Calibration Receiver** *hardware is being set up or when they are troubleshooting any fault. Also, familiarization with the configuration process and step-by-step process of how it will be integrated into the existing system will be needed.*  *The pilots will need the user manual whenever they are in the flight cockpit and are about to embark on a journey. This will then help them to test the efficiency of the ILS receiver on the aircraft itself.*  *The airport managers will need the document in the conference room whenever they are having meetings with the pilots or training new pilots as well.* |