

ABSTRACT

One of the needs of modern society now is a quick and safe transportation. Including the choice fell to the air transport aircraft. It takes a good security system to support aviation safety and security. To avoid accidents when the aircraft will arrive or land at the airport it needs auxiliary facilities to support the operation of the airport landing. One of such facilities is the Instrument Landing System (ILS) which is an instrument landing aids (non-visual) used to assist pilots in making aircraft approach and landing procedures at an airport. ILS consists of three sub-systems and one of them is the Glide Slope that will be discussed in the manufacture of this Final.

In the Final Project it has been designed a sub block Glide slope transmitter systems that work there are UHF frequencies between 329.3 to 335 MHz but only just a prototype, A prototype that is designed is expected to be a system that can be applied directly to the airport. To simplify design, the schematic used by an application data sheet in addition to the design of filters and amplifiers, software Advanced Design System is used to simulate the circuit directly so we get the corresponding results. Measurements were performed using a transmitter block oscilloscope and spectrum analyzer to obtain information about the performance and characteristics of the prototype which is made.

Prototype transmitter that has been realized has capability of generating a carrier frequency of 329.3 MHz to 335 MHz frequency range and work in accordance with the expected specifications. The sample frequency used was 329.3 MHz and 335 MHz. Parameters that have been tested from the prototype transmitter block is the response frequency and magnitude of output power. However, this prototype has not been able to replace the existing transmitter equipment at the airport because still not perfect.

Keywords: ILS, Glide Slope