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### ***Research Area & Research Interests***

*Development,Operation,Maintenance and Augmentation of High Power Radar Systems.*

### ***Academic Qualification***

*Diploma in Electronics Engineering*

### ***Professional Background***

- Experience in Operation, Maintenance and Augmentation of S-Band Tracking Radar System operating at 2.8 GHz with a Peak Power of 800 KW.
- Provided Tracking Support in pre-flight and real time operations of S-Band Radar of Ground Support Facility Division during the

RH200,RH300, M 100 Rockets and High Altitude Balloon flights from TERLS.

- Provided Tracking Support for the operation of GMD during Balloon flights for a campaign in MINICOY.
- Participated in the observation schedule of HF Radar and PR Radar.
- Experience in Development, Operation, Maintenance and Supporting Augmentation of Atmospheric Radar.
- Involved in the Development work of Digital Range Tracking System for S Band Tracking Radar at TERLS and BRLS in Balasore, Orissa.
- Involved in the Development work of Partial Reflection Radar Transmitter.
- Involved in the development of PR Radar Transmitting Antenna and Receiving Antenna.
- Provided technical support for the erection of 25 meter height aluminum make Transmitting Antenna Tower and 3 Nos. of 8 meter height Receiving Antenna Tower of Partial Reflection Radar.
- Provided technical support for the erection of SKiyMet Radar System.
- Provided technical support for the erection of Digisonde System.
- Worked for the Refurbishment of HF Radar phased antenna array.

- Developed ,Tested and integrated TR Switch using PIN Diode UM 9415 for use in 50 kW Peak Power,18 MHz transmitter. It is a conventional TR/ATR design with equivalent  $\lambda/4$  transmission line sections constructed of lumped coils, capacitors and PIN diodes. Three T/R sections are placed in series to achieve adequate receiver protection.
- The front end of the receiver has been converted to solid state LNA using MITEQ 1310 as the replacement for the *Nuvistor tube based System*.
- Designed, developed, tested and integrated *Receiver Protection Limiter Circuit*. Radar transmitter produces a peak power of 50 kW, so much more isolation is required to protect sensitive receiver components.
- Developed, tested and integrated Electronic Beam Switching Circuit. It is used so that beam position can be moved quickly from one direction to another.