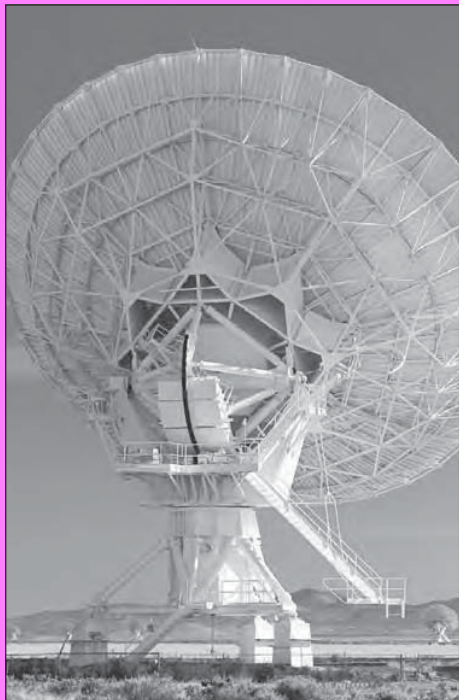

PRACTICAL RADIO AND TELEMETRY SYSTEMS FOR INDUSTRY



YOU WILL LEARN:

- How to design and install radio (wireless) links
- To apply latest satellite technologies to your telemetry system
- How to design and install microwave links
- Troubleshooting of telemetry communications problems
- The tips, tricks and traps with radio links

WHO SHOULD ATTEND:

- Instrumentation and Control Engineers
- Process Control Engineers
- Electrical Engineers
- Consulting Engineers
- Process Development Engineers
- Design Engineers
- Control Systems Sales Engineers
- Maintenance Supervisors
- Control Systems Applications Engineers
- Project Engineers
- Instrumentation Technicians
- Network System Administrators

Anyone who requires an understanding of the techniques to use and apply industrial communications technology as productively and economically as possible.

The Workshop

This is a comprehensive one-day workshop covering the essentials of telemetry and radio communications. It will clarify their meanings, describe their application and equip you with the skills to analyse, specify and debug telemetry and radio communications systems.

Workshop Objectives

After attending this workshop you will be able to:

- design and install an effective radio/microwave telemetry link
- design a reliable and robust radio and microwave link
- apply the latest satellite technologies to troubleshoot telemetry communication problems

Practical Sessions

Practical sessions include:

- radio telemetry path loss design exercise
- performing an intermodulation products calculation
- Bit Error Rate analysis

The Program

RADIO (WIRELESS) TECHNOLOGY

14 topics including:

- Fundamentals of propagation/gain/attenuation
- Selection of frequency bands
- Equipment - transmitters etc
- Cabling - coaxial/audio/signal
- Implementation & design
- Data & duplication over radio

SATELLITE SYSTEMS

9 topics including:

- Analog & digital
- FDMA, TDMA, CDMA
- Operation, downlinks & uplinks
- Practical implementation considerations

LINE OF SIGHT (LOS) MICROWAVE

7 topics including:

- Point to point, and point to multipoint
- Equipment, dishes & antennas
- Path loss calculations & multipathing

PERFORMANCE ANALYSIS

- Availability & reliability/BER testing
- Complete systems testing

INFRASTRUCTURE REQUIREMENTS FOR MASTER STATIONS AND RTUS

9 topics including:

- Location & mast selection
- Cabling/DC distribution/orderwire
- IP & temperature rating of equipment

FUTURE TRENDS

