

ANALOGUE RADIOS EQUIPMENT 900 SERIES

DURATION: 5 DAYS



AUDIENCE:

This training course is intended for technical personnel specialising in electronics who wish to gain knowledge about the principles of radiocommunications based on radio equipment from the 900 series.

PREREQUISITES:

Training accessible to anyone who understands the basics of analogue electronics.
Holder of electrical accreditation for the practical work section.

OBJECTIVES:

Master the principles of operation of 900 series transmitters, receivers and redundancy systems.
Handle the equipment, acquire the principles for configuration and measurement.

ADDITIONAL TRAINING(S):

Cohabitation of radio Systems.
Radio measurements.

1ST MODULE: OPERATING PRINCIPLE FOR A 900 SERIES TRANSMITTER

- Architecture of a transmitter, application to the EM900S8X transmitter
- Description of the VHF amplifier module
- Slaving of the amplifier module
- Description of the pilot:
 - The quartz pilot (e.g. PIL908)
 - The synthesised pilot (e.g. PY908A)
- Presentation of characteristic parameters of a transmitter
- Commissioning a transmitter
- Maintenance



2ND MODULE: OPERATING PRINCIPLE FOR A 900 SERIES RECEIVER

- Heterodyne structure of a receiver, application to the RPY908XT receiver:
 - The filters
 - The intermediate frequency
 - The automatic gain control
 - The AM demodulation
- Presentation of characteristic parameters of a receiver
- Commissioning a receiver
- Maintenance

3RD MODULE: PRESENTATION OF FREQUENCY REDUNDANCY TOOLS (1/2)

- Objectives
- The transmission and reception Normal / Back-up switching systems: Principle
 - Application to the BNS960A switching unit
 - Configuration and commissioning
 - Operating modes
 - Operation of a switched frequency



4TH MODULE: PRESENTATION OF FREQUENCY REDUNDANCY TOOLS (2/2)

- The coupling systems: Principle
- Transmission and reception coupling units:
 - Application to the CPV900 transmission and CPR900XT1 reception couplers
 - Operating principle, configuration and commissioning
 - Operation of a coupled frequency in transmission and reception



5TH MODULE: PRACTICAL WORK ON THE RADIO EQUIPMENT

- Presentation of the test bench
- Programming and measurement of an EM900S8X transmitter associated with a PY908A pilot
- Programming and measurement of an RPY908XT receiver
- Using a BNS960A switching unit
- Using a CPV900 transmission coupler
- Using a CPR900XT1 reception coupler
- Establishing a transmission/reception radio link

DOCUMENTATION

Each participant will be provided with hard copies of the course materials during training.

MAXIMUM NUMBER OF TRAINEES

8 people

INFORMATION

- Contact: Jean-François Iriart
- E-mail: formation@telerad.fr
- Tel: +33 (0)5 59 58 55 00
- Sheet available on the website: www.telerad.fr

REGISTRATION

Using the attached form

DATES

On demand

LOCATION

TELERAD