



## PHASE 12501 501 Gas Generator Familiarisation & Operation With Borescope Procedures

<b>Who should attend</b>	: Operators, mechanics, technicians and supervisors who support daily operation of the equipment.
<b>Duration</b>	: 4 days (between Mon-Fri)
<b>Location</b>	: RR Ansty Facility / Customer Facility on-shore
<b>Class Size</b>	: 12 Maximum
<b>Course Identification</b>	: Phase 12501 (501)
<b>Prerequisites:</b>	: None

### AIMS:

The course is designed to give the attendee a detailed knowledge of the 501 Gas Generator construction and operation, as well as the oil and fuel requirements.

### OBJECTIVES:

Upon successful completion of the course, the attendee should be able to:

- Describe the theory of gas generators
- Describe the construction of the Gas Generator.
- Identify the oil requirements of the Gas Generator.
- Explain the airflow and airflow control of the Gas Generator.
- Describe the operation of on engine ignition, fuel, oil and air flow devices.
- Explain the operating limitations of the Gas Generator.
- Explain borescope procedures.

### COURSE CONTENT:

- Course Introduction
- Gas Turbine Theory and Construction
- Gas Generator Introduction, detailed description and Operating Limitations
- Gas Generator compressor air flow control and surge prevention
- Gas Generator bearing design and operation
- Gas Generator mounted instrumentation and sensors
- Corrective and Preventive Procedures including Borescope
- Gas Generator mounted instrumentation and sensors
- Required Gas Generator support services.
- Fuel system – Lubricating scavenge and hydraulic oil
- Instrument, bleed, and seal air -- Ignition
- Gas Generator compressor washing procedures and intervals
- Basic Gas Generator removal and installation procedures

N.B: Access to Rolls-Royce 501 Gas Turbine and borescope equipment is essential.

