

# Application Article 203

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## Global Defence and Aerospace

**Product:** GasCheck 3000is

**Industry:** Global Defence and Aerospace

**Application:** Detecting refrigerant leaks on the wing tips of Typhoon Euro Fighter Jets

**Customer:** BAE Systems

### Introduction

The GasCheck 3000is was purchased by BAE Systems to meet the need for leak detection. This was used alongside the CalCheck equipment.

The big advantage of the GasCheck 3000is was the ATEX approval, which met BAE's requirements together with the direct ml/sec readout and the ability to calibrate the unit with the CalCheck for traceability.

Mark Rhodes of BAE stated that "The way we use the GasCheck 3000is, is as a leak detector for the refrigeration units located in the aircraft wing tips for simple leak detection of refrigerant R245fa this allows us to quickly check the integrity of the system and that they meet our required standards."

### BAE Systems' Major Customers

BAE's major customers include "the air forces of UK, Italy, Spain and Germany to be followed by Austria". In the future the GasCheck may become a recommended service tool to be used with the Typhoon.

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What benefits/ features exist with the GasCheck 3000is?

- Detecting almost any known gas/gas mixture
- Micro thermal conductivity sensor
- Rapid response times
- Easily detects the smallest gas leaks
- Conveniently calibrated against helium
- Intrinsically safe for use in areas classified as zone zero flammable and can also safely detect flammable gases
- Easy operation
- Fitted with a large back lit display
- Advanced software features allow user to program the unit to deliver maximum sensitivity and to hold peak readings
- Designed specifically for search and location of non-flammable gases

### The Main Benefits/Features Of CalCheck Include:

- Versatility - the same base unit can be used for calibration with many different gases/leak rates
- A reliable tool for the self calibration of gas and leak detection instruments, giving you confidence in the accuracy of the measurements you rely on

**BAE SYSTEMS**



- An easy to use and convenient means of traceably checking normal response of gas leak detecting instruments i.e. Ion Science's GasCheck 3000is
- Incorporates a Standard Calibrated Leak, with a specified flow rate at 1 bar gauge pressure, through which the gas from the can leaks enabling the user to present their instrument a known leak testing its accuracy
- Both the gas/ standard calibrated leak can be easily changed in the field. Ion Science can supply any non-corrosive gas at a variety of concentrations. A wide variety of standard calibrated leaks are available, the smallest being  $1 \times 10^{-4}$  ml/sec.

For more information contact Ion Science:

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