

FLIGHT DATA RECORDING SYSTEM

DESCRIPTION

The Flight Data Recording System, which records the mandatory parameters, consists of the following components :

- A Flight Data Interface and Management Unit (FDIMU)
- A Digital Flight Data Recorder (DFDR)
- A three-axis Linear Accelerometer (LA)

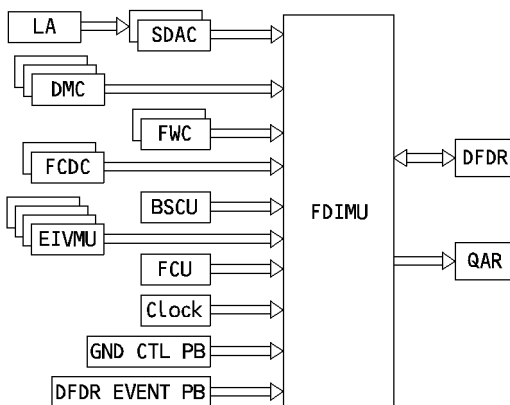
The FDIMU collects and processes parameters from the SDACs, DMCs, FWCs, FCDCs, BSCU, EIVMUs, FCU, the DFDR event pushbutton, the GND CTL pushbutton and the Clock.

It stores the mandatory flight parameters in the DFDR.

The DFDR can store the last 25 hours data, at least. It stores this data on a fireproof and shockproof device. An underwater locator beacon is attached to the DFDR.

The linear accelerometer measures the acceleration of the aircraft along each of the three axes.

The QAR is a recorder that stores the same data as the DFDR. However the QAR is more accessible for the maintenance crew.



The recording system is automatically active :

- On the ground, during the first five minutes after the aircraft electric network is energized.
- On the ground, after the first engine start.
- In flight (whether the engines are running or not).

On the ground, the recording system stops automatically five minutes after the second engine shuts down.

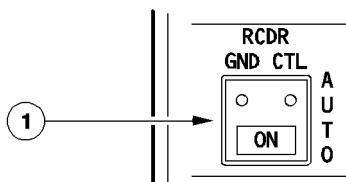
On the ground, the crew can start the recording system manually by pressing the GND CTL pushbutton.

virgin atlantic A340-600 <i>Flight crew operating manual</i>	INDICATING/RECORDING SYSTEMS FLT RECORDERS	1.31.60	P 2
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CONTROLS AND INDICATORS

OVERHEAD PANEL

FFCS-01-3160-002-A001AA



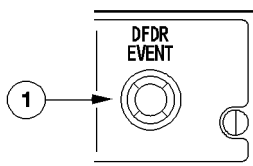
① RCDR GND CTL pushbutton (springloaded)

- ON : The Cockpit Voice Recorder (CVR) and the Flight Data Recorders are active. The ON light is on.
- AUTO : The Cockpit Voice Recorder (CVR) and the Flight Data Recorders are active, according to the logic.

The system automatically switches from ON to AUTO at the first engine start, and also in case of an electrical transient.

PEDESTAL

FFCS-01-3160-002-B001AA



① DFDR EVENT pushbutton

- Pressing this button (briefly) sets an event mark on the Flight Data records.

AIRCRAFT CONDITION MONITORING SYSTEM (ACMS)

DESCRIPTION

The ACMS is used to monitor various aircraft system parameters in order to make maintenance easier and to allow formulating operational recommendations.

The ACMS can generate system reports. The Airbus Standard Reports are preprogrammed reports available at aircraft delivery. The operator can create its own reports.

The ACMS uses the Flight Data Interface and Management Unit (FDIMU) to acquire the relevant aircraft system parameters. The FDIMU is connected to the rest of the ACMS as shown below.

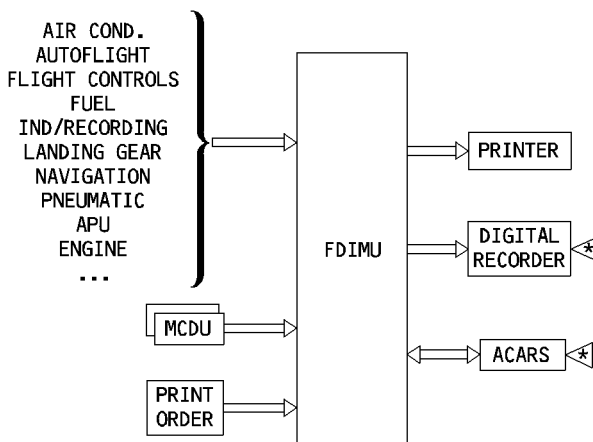
The system may be programmed using the MCDUs. The crew can select any report to be displayed on the MCDUs.

The Printer prints the flight phase programmed reports or any report selected on the MCDU.

This printing may be automatic or in response to the ACMS PRINT pushbutton.

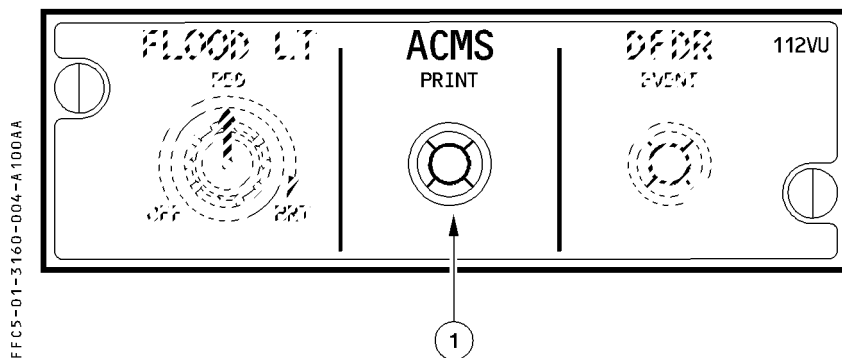
The ACMS may send automatic reports via ACARS (*).

An optional Digital Recorder may be installed to extend the recording capacity.



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CONTROLS ON PEDESTAL



① ACMS PRINT pushbutton

This pushbutton is used to immediately print a specific report, depending on the flight phase. The crew may then use the MCDU to select and instantly print another report.