

**FDR & CVR  
READOUTS**



## **Introduction to Muirhead Avionics and Ametek MRO**

Muirhead Avionics is a subsidiary of AMETEK Inc, a global manufacturer of electronic instruments and electromechanical devices with annual sales of approximately \$4 billion. Our facility, conveniently located near to London Heathrow Airport is one of the largest independent repair facilities in Europe, offering an extensive range of services including sales, repair, overhaul, modification and flight data recorder transcription capability. The breadth of the services offered by Muirhead Avionics' OEM approved repair facilities allows the company to be a major supplier to many fixed and rotary wing operators world-wide. Our capability covers radio, radar, navigation, communication, flight data and cockpit voice recorders, instrumentation and test equipment

## **Flight Data & Cockpit Voice Recorder Readouts -What We Do**

Muirhead Avionics provides readout services to operators, MROs, Leasing companies and accident investigation organisations worldwide and has a comprehensive database available for aircraft operating under most major regulatory authorities.

We have been providing flight data services for over 30 years and currently accomplish over 2000 readouts per year, both annual and incident related. With a software database comprising over 1000 active programs for analysing FDR data, Muirhead Avionics can cater for most aircraft types flying today from general aviation to the latest wide-body commercial airliners such as A380 and B787 and military transport aircraft such as the A400M and MRTT.

With our team of dedicated data analysts and software developers we have the capability to handle ARINC 542, 542A, 573, 717, 767, binary, packed, unpacked and compressed data supporting both fixed and rotary wing aircraft.

**Muirhead Avionics' process involves downloading the raw data from the FDR and converting it to check for intelligibility. These intelligibility tests are now becoming a requirement to be performed every year.**

## **Data Confidentiality, Security and Storage**



With regards to our facilities, the flight data readouts will be conducted at our secure premises here in Southall, close to London Heathrow Airport. The site has 24hour security and is home to our service centre and head office. Muirhead Avionics treats flight data as strictly confidential. Analysis is carried out by our expert Flight Data Readout team in privacy and copies of all recordings are in encrypted format held on a dedicated sever with access limited only to those authorised members and the Product Manager. Our reputation for confidentiality has seen Muirhead Avionics handle some of the world's elite military and Air Accident Investigation Bureau's flight data readouts.

## FDR & CVR READOUTS

### Pricing

Muirhead Avionics' pricing structure is based on the data frame sizes of the aircraft and is measured in Words Per Second (WPS). Our fixed price quotations are available upon request.

### Sending Data

If it is possible to download the file directly from the FDR or CVR the best and preferred method of receiving data is via our **AMEfex** file exchange system. This provides for a quicker service and eliminates the need for removing and shipping the units and the additional costs of test & recertification.

**AMEfex** requires a simple one time registration of your email address. Instructions can be found at the bottom of this document.

Alternatively, you can send the file using most forms of media storage, Quick Access Recorders (QARs) or via email to [UK-SOU.fdr@ametek.com](mailto:UK-SOU.fdr@ametek.com)

If the unit itself requires shipping please send to us directly at the following address:

3 The Square Heathrow | Southall Lane | Southall | Middlesex | UB2 5NH | UK

### Download Unit Rental

Muirhead Avionics hold several handheld data download units available for loan. We can arrange for an engineer to assist with onsite downloads, or simply ship the downloader directly to your facilities.

For more information and availability please contact: [UK-SOU.fdr@ametek.com](mailto:UK-SOU.fdr@ametek.com)

### Turnaround Time & AOG

Muirhead Avionics have a 3 day turnaround time on all routine readouts or 5 days if we receive the complete FDR or CVR for download + test & recertification

In the event of an AOG, critical or operational requirement Muirhead Avionics can perform the analysis immediately upon receipt of data to deliver a same day TAT. This service will be subject to additional cost.

### Transactions

Please send a Purchase Order (PO) to comprise the full scope of work and information relevant to the FDR/ CVR unit and aircraft. Part number, serial number, quoted price and aircraft registration should all be included as a minimum. Your contact details must also feature in this document.

## FDR & CVR READOUTS

### Quality - Airworthiness Approvals

Muirhead Avionics carries out all flight data services in accordance with Cap 731 which is issued by the UK CAA. This meets all requirements of ICAO in respect to flight data.

For more information on our extensive airworthiness approvals please visit our website:  
[www.muirheadavionics.com](http://www.muirheadavionics.com)



**MUIRHEAD  
AVIONICS**

**AMETEK® MRO**

### AMEfex (AMETEK File Exchange System)

#### Instructions:

Customer & Vendor Login

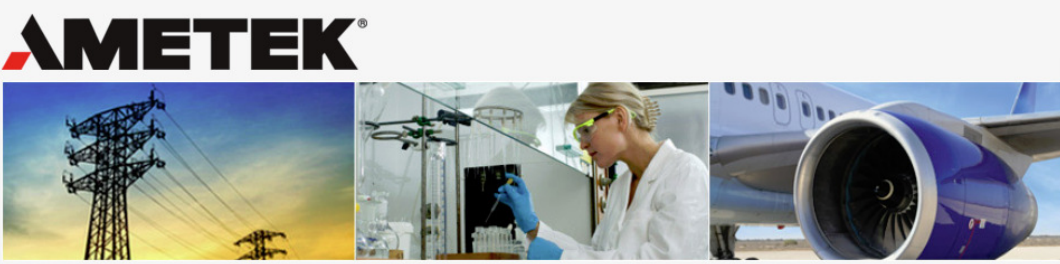
To access the system, go to <http://amefex.ametek.com>

Customers & vendors will need to create an account by clicking on **Register** to be given appropriate access to send files & documents to **AMETEK** employees. All people within the organisation that are to send or receive files must be registered.

The password reset button will only work on registered accounts.

You will be prompted to Login. Enter your email address and password

## FDR & CVR READOUTS



AMETEK®

For Authorized Use only!

Email  Password

## Uploading & Sending Files

Upon successful login, you will be taken to the File Upload screen:

1. Enter the recipients e-mail address: [uk-sou.fdr@ametek.com](mailto:uk-sou.fdr@ametek.com) in the **To** field.
2. Enter the **Subject** that you want used in the e-mail notification to the recipient. This should show the aircraft registration / tail number and, if applicable, AOG.
3. Click on **Choose Files** to select files to upload.
4. Optionally enter a **Message** that you want included in the e-mail notification to the recipient(s).
5. Select the appropriate **Permissions**.
6. Optionally you can choose to **Send a Copy to Myself** and also change the **Message Expiry** date.
7. Click the **Send** button to upload the files to the server.

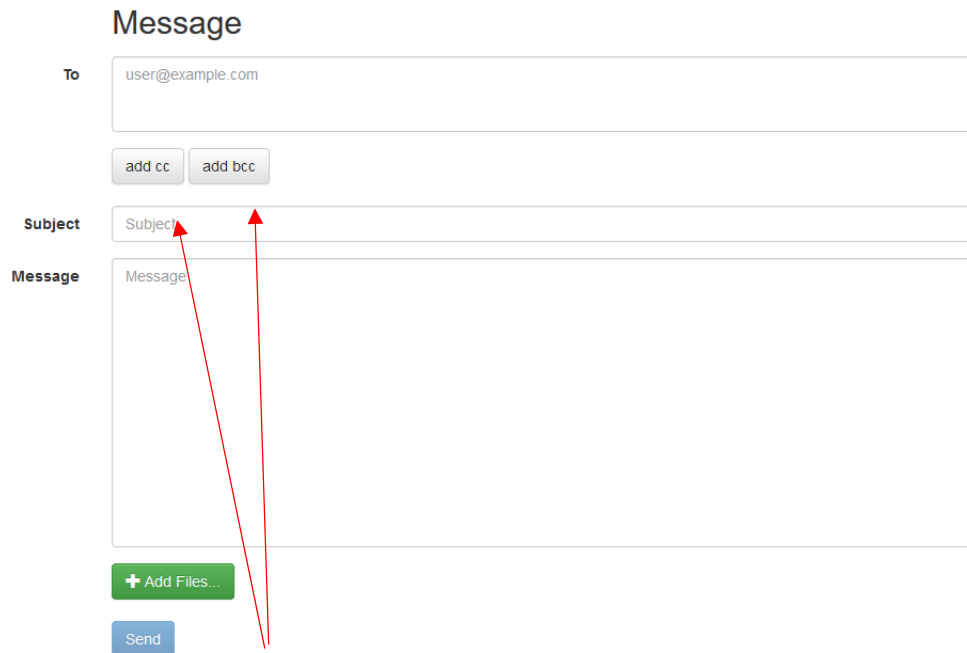
## FDR & CVR READOUTS

Message

To:

Subject:

Message:



Please note that 'add cc / add bcc' buttons are currently active to AMETEK employees only.

Once your files have been uploaded the following confirmation screen will appear:

## Your message has been sent

<b>Message ID</b>	48jMUFkh
<b>Subject</b>	Flight Data
<b>Message Expires</b>	September 20, 2017
<b>Access Restriction</b>	<ul style="list-style-type: none"><li>• Only Specified Recipients can access the message and download the files.</li><li>• Forwarding of the email or URL is not allowed to anyone.</li><li>• Recipients will be required to login to access the message.</li><li>• A download receipt will be sent when each user downloads each file with detailed download information.</li></ul>

## Downloading / Receiving Files

The recipient(s) will receive an e-mail with links to download the file(s). The e-mail will show coming from the sender.

Once the user opens the message a list of files will be shown that can be

## FDR & CVR READOUTS

downloaded by clicking on the file link. See image below:

Please find the requested files attached.

Regards,

---

### Files attached to this message

Filename	Size	Checksum (SHA1)
AME-MUIRHEAD LOGO 1.png	28.4 KB	ce4e3289e711ccad2be0131d19c28bc711d8a1d8

Please click on the following link to download the attachments: <https://amefex.ametek.com/message/48jMUFkh1H1aoXDTfTTVq6>

This email or download link can not be forwarded to anyone else.

The attachments are available until: **Wednesday, 20 September.**

Message ID: 48jMUFkh

---

LiquidFiles Appliance: <https://amefex.ametek.com>

Once the user clicks on the link you will see the list of files that can be downloaded:

## Message

---

**Message ID** 48jMUFkh

**From** user@example.com

**To** UK-SOU.fdr@ametek.com

**Subject** Flight Data

**Access Restriction** Only Specified Recipients can access

**Message Expires** September 20, 2017

**Attached files** [AME-MUIRHEAD LOGO 1.png](#) (28 KB) Checksum (SHA1): ce4e3289e711ccad2be0131d19c28bc711d8a1d8

---

**Message** Please find the requested files attached.

Regards,