

AAIB Report: Boeing 737-408, partial electrical failure

News story

A Boeing 737-408 (G-JMCR) suffered a partial electrical failure resulting in the loss of a number of systems. The pilot declared a MAYDAY and proceeded to land but poor weather meant that visual references were lost during the approach. A go around was initiated followed by a successful second approach, 4 June 2019.



While descending to land at Brussels National Airport, a partial electrical failure occurred resulting in the loss of a number of systems including the electronic and analogue flight instruments on the left side of the cockpit. The pilot declared a MAYDAY and aware that a thunderstorm was approaching the airfield, assessed that the weather reported by Air Traffic Control (ATC) would allow him to continue and land at Brussels. However, visual references were lost at a late stage of the approach when the aircraft entered a heavy rain shower. A go-around was initiated during which the pilots estimated the amount of thrust required; the aircraft initially appeared to be slow to accelerate and establish a positive rate of climb. The aircraft entered an orbit and subsequently landed successfully from a second approach.

The electrical failure was caused by a fault in the transfer relay which resulted in the loss of power to a number of electrical buses. Following the electrical failure, the commander's assessment was that the aircraft was in a stable condition so continued the approach to land at Brussels National Airport. This gave the pilots relatively little time to assess the situation and a number of non-normal checklists actions were not carried out; consequently, the aircraft was incorrectly configured for the approach and landing.

At a late stage of the approach the pilots lost visual references and executed a go-around. The aircraft then orbited while the thunderstorms cleared the airfield and the pilots used the time to further analyse the failure. The second approach and landing were uneventful.

Safety action has been taken by the operator to provide clarity in the aircraft documentation.

[Read the report.](#)

For media enquiries, please call 01932 440015.

Published 18 June 2020

[AAIB Report: Cirrus SR22T, insufficient engine power on takeoff](#)

News story

A Cirrus SR22T (2-R0R0) produced varying amounts of power on takeoff, insufficient to allow the aircraft to climb away and it contacted power lines before pitching down and striking a dual carriageway, 12 May 2019.



On takeoff from Abergavenny Airfield the engine of a Cirrus SR22T (2-R0R0) started to produce varying amounts of power, which the pilot and witnesses described as the engine “surging”. The power available was insufficient to allow the aircraft to climb away, and it contacted power lines before pitching down and striking a dual carriageway. The aircraft came to rest inverted and was quickly consumed by fire. All three occupants were helped to escape by a passing motorist and suffered only minor injuries.

The loss of engine power was probably caused by too much fuel being delivered to the cylinders. Due to the significant damage to the aircraft and parts of the engine, the investigation was unable to determine the cause of the over-fuelling because many components of the fuel system as well as the data recorder were not located or were destroyed in the post-impact fire.

[Read the report.](#)

For media enquiries, please call 01932 440015.

Published 18 June 2020

Government sets out plans to drive up smart meter installations

- Consumer safety at heart of new government plans to install smart meters in homes and businesses over 4 years
- ambitious future targets for smart meter installations to be set out for energy suppliers, while flexibility given around current targets due to the impact of lockdown restrictions
- smart meters key to UK reducing emissions and instrumental in cutting up to £16 billion off annual cost of delivering net zero emissions by 2050

The UK government today (18 June) set out new plans for the installation of smart meters in households across the country, ensuring that consumers continue to be able to cut their energy bills and carbon emissions as coronavirus lockdown measures are eased.

Installing smart meters could save savvy consumers up to £250 on their bills, while slashing countrywide carbon emissions by 45 million tonnes – the equivalent of taking 26 million cars off the road for a year.

Putting consumer safety first during this pandemic, energy suppliers are being granted an extra 6 months to ensure they have taken all reasonable measures to install smart meters in households and small businesses – making up for the reduced contact they have had with customers. New secondary legislation laid today will see a consultation with industry set strict future annual targets that could result in fines if missed.

Minister for Climate Change, Lord Callanan, said:

Smart meters are playing an important role in helping the UK deliver a cleaner and more efficient energy system, with the added benefit of also saving tens of billions of pounds in the process.

By allowing households to conveniently track their energy use, and prepayment customers to more easily top-up credit, we are working with industry to safely install even more across the country in a way that keeps consumers and suppliers safe.

The rollout of smart meters will represent up to £16 billion annual savings

on the cost of reaching net-zero emissions by 2050 thanks to creating a more flexible, cleaner energy system, while small businesses with smart meters collectively save around £1.5 billion each year on their energy bills.

Smart meters are revolutionising the way consumers use electricity, including facilitating cheaper off-peak charging for electric vehicles, as well as boosting household incomes by helping renewable energy generators export green energy to the grid. Thanks to smart tariffs, smart meters have even led to some customers getting paid to use electricity during windy days when there is excess clean energy in the system.

Energy suppliers have been ramping up installations, with 21.5 million smart and advanced meters already in homes and small businesses across Great Britain. This replacement of traditional gas and electricity meters with smart meters is an essential national infrastructure upgrade that is digitising Britain's energy system, so that it is cleaner, more flexible and saves consumers money. But the onset of the coronavirus crisis led to an inevitable drop in the rate of nationwide smart meter installations.

Since lockdown restrictions started easing, engineers have begun undertaking non-emergency installations of smart meters again in accordance with published guidance on safe working in other people's homes.

Government and Ofgem ensured that energy suppliers have the flexibility to prioritise essential and emergency metering work and focus on the needs of vulnerable customers. This has enabled them to have the safety, health and wellbeing of their customers and staff as their central priority when installing smart meters in homes.

Ambitious targets for individual suppliers will be agreed later this year following consultation, and will be implemented from July next year.

Until early March, around 19,000 smart meter installations were taking place each day. However, following public health advice in response to COVID-19, government and Ofgem ensured that energy suppliers had the flexibility to curtail smart meter installations, prioritise essential and emergency metering work, and support those in vulnerable circumstances in the communities they serve.

[4 out of 5 people with a smart meter](#) say it gives them a better idea of their energy costs and nearly [two-thirds of people would recommend one](#) to friends and family. [Research conducted by Ipsos MORI on behalf of BEIS](#) also shows that 9 in 10 are satisfied with the installation process.

The Committee on Climate Change have said that without the flexibility enabled by smart meters the cost of reaching net zero could be up to £16 billion a year more expensive than current estimates predict:

[CCC Net zero technical report](#)

Read the [cost benefit analysis of the smart meter programme](#).

Read the [government response to the Smart meter policy framework post 2020](#)

[consultation](#).

Respond to the [Smart meter coordinated consumer engagement consultation](#) – closes 13 August 2020.

[Greater Manchester to house to world's largest liquid air battery](#)

- government awards £10 million for cutting-edge electricity storage facility, creating 200 jobs and helping better harness green energy generated by UK renewables
- CryoBattery to bring greater flexibility to UK's energy grid, by storing enough electricity to power 200,000 homes
- smart battery technology uses liquid air and provides longer energy storage compared to traditional lithium batteries

The world's largest and first commercial liquid air battery facility is planned for Trafford, Greater Manchester, creating over 200 jobs and putting the city at the forefront of the latest green technologies.

Backed by £10 million of government investment, the revolutionary CryoBattery project will be run by energy storage company Highview and will help the UK make the most of the energy generated from its world-class solar and wind sectors.

The CryoBattery offers a means of storing that excess energy and will do so on a far larger scale and for longer than existing batteries.

Energy and Clean Growth Minister Kwasi Kwarteng said:

This revolutionary new Cryobattery facility will form a key part of our push towards net zero, bringing greater flexibility to Britain's electricity grid and creating green collar jobs in Greater Manchester.

Projects like these will help us realise the full value of our world-class renewables, ensuring homes and businesses can still be powered by green energy, even when the sun is not shining and the wind not blowing.

The CryoBattery works by using electricity to cool and compress air, turning it into liquid and storing it in industrial sized containers. It then feeds the liquid through a turbine, turning it back into electricity and pumping it back into the grid when it is needed.

This will give the UK far greater flexibility in helping meet the country's electricity needs from the grid and when up and running could be used to power as many as 200,000 homes for 5 hours a day.

The UK is now home to the world's largest offshore wind farm, and a third of the country's electricity needs are now met from renewable sources. But the unpredictable nature of wind and solar power means that energy can be produced when it is not needed by the grid.

Harnessing storage technologies is a key part of meeting the UK's legally-binding target to reach net zero carbon emissions by 2050.

The project will be managed by energy storage company HighView and its partner Carlton Power, both UK firms.

The CryoBattery project is funded through the [BEIS Energy Innovation Programme](#).

About Highview Power

[Highview Power](#) is a designer and developer of the CRYOBattery™, a proprietary cryogenic energy storage system that delivers reliable and cost-effective long-duration energy storage to enable a 100% renewable energy future. Its proprietary technology uses liquid air as the storage medium and can deliver anywhere from 20 MW/100 MWh to more than 200 MW/2 GWh of energy and has a lifespan over 30 years. Developed using proven components from mature industries, it delivers pumped-hydro capabilities without geographical constraints and can be configured to convert waste heat and cold to power.

[French Resistance fighters awarded honorary MBEs: 18 June 2020](#)

- PM announces MBEs for veterans of the French Resistance, recognising their role defending the UK and France in WWII
- President Macron visits UK today to commemorate 80th Anniversary of General de Gaulle's broadcast from London
- PM and President Macron to hold a bilateral meeting, view WWII artefacts and watch a fly past by the RAF and the French Air Force

Four French Resistance fighters will receive honorary MBEs from Britain in recognition of their role defending the UK, France and other Allies in the Second World War.

Edgard Tupët-Thomé (aged 100), Daniel Bouyjou-Cordier (aged 99), Hubert Germain (aged 99) and Pierre Simonet (aged 98) are the four surviving 'Compagnons' of the Order of Liberation and played a significant role in

facilitating the Allies' rapid advance through France following the invasion of Normandy in 1944.

Their nominations come as the Prime Minister welcomes French President Macron to London today (Thursday) to commemorate the 80th Anniversary of General de Gaulle's 'Appel', when Churchill gave special permission for de Gaulle to broadcast from the BBC directly to occupied France following the Nazi invasion. This moment is widely considered to be the origin of the French Resistance.

Prime Minister Boris Johnson said:

Eighty years ago Charles de Gaulle, the leader of the French Resistance, arrived in London knowing that the values of freedom, tolerance and democracy that Britain and France shared were under threat. He pledged that we would stand together to defend those values and protect our citizens from those bent on destroying us.

The four men we are honouring today – Pierre, Edgard, Daniel and Hubert – symbolise the enduring depth and strength of the friendship between our two countries. They are heroes, and I am immensely proud that as a nation we are paying tribute to their courage and sacrifice in defending us and the whole world from fascism.

The struggles we face today are different to those we confronted together 80 years ago. But I have no doubt that – working side by side – the UK and France will continue to rise to every new challenge and seize every opportunity that lies ahead.

Following ceremonial events with the Prince of Wales today, President Macron will be hosted by the Prime Minister in Downing Street. The leaders will view artefacts documenting General de Gaulle's time in London and his close partnership with Winston Churchill – including their letters. They will also hold a bilateral meeting to discuss a range of issues, including our shared battle against coronavirus.

The Prime Minister and President Macron will also watch a flypast together, performed by the Red Arrows and their French equivalent, La Patrouille de France – who are flying over London to mark the anniversary of the Appel.

The honorary MBEs will be presented at a ceremony in France in the coming months.

Notes to Editors

- The veterans are being recognised for 'services to the United Kingdom in the Second World War'. The title of 'honorary MBE' – which is awarded to foreign nationals – makes the recipients honorary members of the Order of Chivalry and allows them to use the initials 'MBE' after their name.

- Edgard Tupët-Thomé was born on 19 April, 1920 in Bourg-la-Reine (Seine). He took part as a Sergeant in the attacks in Lorraine in September 1939 and then in Belgium in May 1940. His unit was part of the defending force during the evacuation of the British Expeditionary Force from Dunkirk and he went on to become a Lieutenant in the 4th Air Infantry Battalion, completing several parachute missions.
- Pierre Simonet was born on 27 October, 1921 in Hanoi. He was part of the Expeditionary Force whose mission was to rally French West Africa (AOF) to Free France in Dakar. Throughout the war he took part in various campaigns including in France and Italy. Second Lieutenant Simonet flew a total of 137 war missions in 250 flying hours and was awarded four commendations.
- Daniel Bouyjou-Cordier was born on 10 August 1920 in Bordeaux (Gironde). He enlisted with his comrades in the "Légion de Gaulle" on 28 June 1940. He was parachuted into France near Montluçon on July 26, 1942 as a radio operator. In March 1944, he was pursued by the Gestapo and escaped through the Pyrenees before travelling to England at the end of May 1944 and being appointed head of the Bureau of Intelligence and Action's agent parachuting section.
- Hubert Germain was born on August 6, 1920 in Paris. He engaged in the Free French Forces from the outset and went on to serve in Egypt, Tunisia and Italy. He took part in the landing in Provence in August 1944 and in the liberation of Toulon, the Rhone Valley and Lyon. He then took part in the Vosges and Alsace campaigns and ended the war in the southern Alps.

Photos of the four recipients are available below:

In Downing Street the Prime Minister and President will view artefacts including the 'Order de la Liberation' – a Cross of Lorraine in crystal glass gifted from General De Gaulle to Churchill, a microphone from the 1940s similar to that used by de Gaulle to broadcast his 'Appel' and a letter from General de Gaulle to Winston Churchill dated 23 June 1940 in which he discusses the launch of the French Resistance.