

MACH 2

Concorde
magazine

SPECIAL ISSUE

*Concorde's
world tours*



Concorde watch
Brooklands Museum

Speed records
*Fastest circumnavigations of
the Earth by an airliner*

Issue 27
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INTRODUCTION

For this summer issue Mach 2 presents a feature on Concorde's world tours. Both British Airways and Air France operated special round-the-world charters, beginning within a week of each other in late 1986. There were 53 tours in all, with the last one taking place at the time of the millennium.

The flights often set air speed records for airliners – sometimes several records were broken during the same trip. Most spectacular of all were the two Air France flights in which Concorde F-BTSD set world records for circumnavigating the Earth with an airliner. These records still stand today.

With lockdown for COVID-19 easing in many countries, Concorde museums are starting to re-open. Some have taken the chance to carry out maintenance on their aircraft during the quiet period. James Cullingham reports on the work currently being done on Concorde G-BBDG at Brooklands Museum.

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THE SUPERSONIC FAST LANE

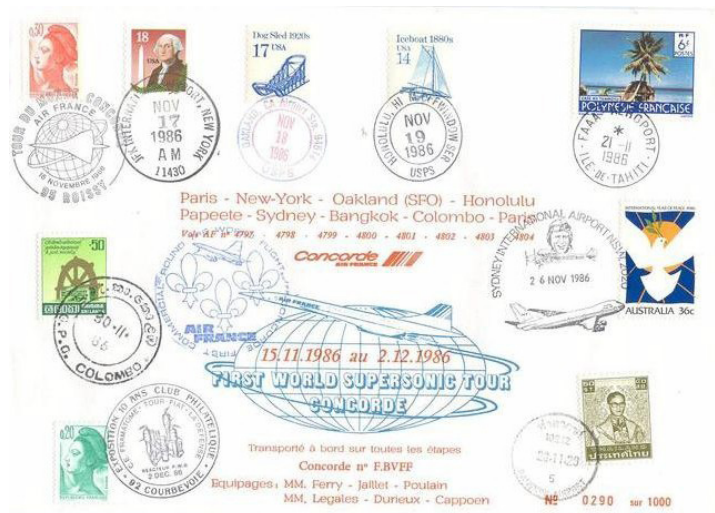
For 14 years, travellers with British Airways and Air France had the chance to enjoy the ultimate aviation experience – a round-the-world trip on Concorde, combining luxury with the aircraft’s matchless speed. Two of the Air France tours actually set speed records that are still unbroken by any other commercial airliner. George Blundell-Pound, Concorde Commercial Manager for British Airways, describes how these special charters came about, and looks back at several of the most remarkable tours. We also hear from British pilot Captain John Hutchinson and from some of the cabin crew members and engineers who made these feats of aviation possible.

THIS ACCOUNT FOCUSES on the successes of both British Airways (BA) and Air France (AF) in undertaking round-the-world charters with their Concorde from 1986 until 2000.

By 1986 both airlines’ Concorde scheduled operations had stabilised. By then BA was operating twice-daily services from London to New York and flying three times a week to Miami via Washington. The flights to Bahrain, Singapore (with Singapore Airlines), and Dallas (with Braniff International Airways) had stopped. The scheduled service to Barbados would not start until December 1987. Air France was then operating a single daily flight to New York. Their early flights to Rio de Janeiro via Dakar, Caracas via Santa Maria, Mexico City via Washington, and Dallas (with Braniff) had all ceased.

The charter programme for both airlines, however, was constantly expanding further across the globe. BA’s Concorde flights for Cunard were well established and fed into the transatlantic crossings of the QE2. In addition, BA was chartering Concorde to feed into the ship’s annual round-the-world cruise, with flights to Sydney and Cape Town among other places setting records in the process: Sydney 17 hours 3 minutes, and Cape Town 8 hours 8 minutes. By 1986 there was on average one BA Concorde charter nearly every day.

It was a long way from the first BA Concorde charter on the 19th September 1978 chartered by the landlord of the Bell Inn, Aldworth on behalf of his customers. At that time it would have been difficult to imagine that from those modest beginnings the charter business of both British Airways and Air France would grow to the extent that it did.



Indeed, early on the airlines were reluctant to compromise the regular scheduled services, both in terms of their operational integrity and also for fear of diluting the exclusiveness of flying on Concorde. However, for all sorts of sensible reasons commercial common sense prevailed to the extent that the aircraft then visited many destinations around the

First day covers

Records of the first round-the-world flights by BA and Air France.

Images: George Blundell-Pound



Arrival in Hawaii

BA Concorde G-BOAF at Honolulu during the Goodwood Travel World Air Cruise.

Photo: Keith Williams

world. It had the bonus of making the aircraft more accessible to those who particularly wanted to travel on Concorde. It was thus no surprise that eventually a request was received by BA's Concorde Division to consider a flight around the world.

Planning the first tour

That initial request came from Imperial Tobacco on behalf of its John Player brand. They were already famous for their sponsorship of Formula 1 racing cars, and the idea was to capitalise on their consumers' likely desire to fly on Concorde by making seats on a round-the-world flight the top prize in a promotion.

It was obvious that there might be some initial internal resistance to sending a Concorde so far away from the relatively easy

"It was obvious that there might be some ... resistance to sending a Concorde so far away from ... engineering support"

engineering support available at BA's established schedule service points. The benefit in revenue received would have to be significant as well as being supported by a detailed operational plan such that any potential technical issues might be mitigated.

Once the route and probable timescale were established, costings could commence

that would lead to a final price. An internal business case was developed on the basis that if the aircraft developed a significant fault at the most technically challenging point on the route (Guam in the Pacific), sending a replacement aircraft from London would still enable a reasonable profit to be retained. The final figure was circa £1.2 million, or nearly £3.0 million in today's money. Alongside the technical evaluation the price was signed off and the customer agreed in principle, so the charter proposal continued.

The detailed operational planning then commenced in earnest. Most of the points of call would not have seen a Concorde, so a handy leaflet was prepared to give ground staff knowledge of critical access points. A list of spares to be carried on the aeroplane needed to be assessed. All of the points not on BA's regular schedules were visited to evaluate support available. The plans also included careful study of routings and feasibility of supersonic flights, and subsequent briefing of air traffic control about the specialities of Concorde operations.

Eventually the contract had to be signed, and with some concern I set off for Imperial Tobacco's head offices in Bristol. The aroma of tobacco in the air became ever stronger as one got closer to their HQ! In the end I shouldn't have worried. After going through the details of the contract, their Director picked up his pen to sign. Before he did he looked at me and said it was very expensive, and enquired whether that was the best we could do on the price. There was, however, a smile on his face, and so I replied that a subsonic round-the-world charter could be cheaper, but the speed of the aircraft, alas, would also be much slower. We both knew that with all the promotional expenditure that had gone on since the launch of the promotion they were not going to back out and go subsonic now.

French global charters

Interestingly Air France had also been working on a round-the-world charter of their own. The company chartering their aircraft was American Express. Initially we did not know the timing for the start of their flight, but in due course it became clear that the BA Concorde would be departing on 8 November 1986 and the Air France Concorde on 15 November – exactly one week later.

Memories of remarkable flights

In all, the British Airways and Air France Concorde carried out 53 round-the-world charter flights between 1986 and 2000. George Blundell-Pound looks back at some of the most memorable flights by both airlines.

British Airways world tours

#1 John Player

DATE 8–23 November 1986

DURATION 20 days

FLIGHT TIME 34 hrs 25 mins

AIRCRAFT G-BOAF

DESTINATIONS London–New York–Oakland–Honolulu–Guam–Hong Kong–Denpasar (Bali)–Colombo–Bahrain–Cairo–London

The first Concorde round-the-world charter left London Heathrow for New York on Saturday 8 November 1986 with Captain Brian Walpole in command, Rob Taylor as co-pilot, Norman West as flight engineer, and Tony Meadows as PR.

PR stands for ‘public relations’, but in reality the pilot performing this role managed the many visits to the flight deck by passengers, gave a commentary, and provided support to the flight deck, often on the ground. Tony Meadows was also a Concorde captain, so Brian Walpole shared some of the flying; he continued to share it with Captain John Butterley, who replaced Tony Meadows in Hong Kong.

What made this particular flight unique, apart from its being the first round-the-world charter, was that all the passengers were prize-winners and they came from all sorts of backgrounds. One husband and wife couple who had not flown before at all confided in Rob Taylor in London, at the start, that they had needed to acquire passports and borrow some suitcases from a relative in order to travel. Subsequently at the gala dinner in New York the passengers were encouraged to remain in the hotel until the following day. Not all complied, and the

Hawaiian welcome

The flight crew at Honolulu having been awarded a welcoming lei along with Concorde. From left to right: Norman West (flight engineer), Rob Taylor (co-pilot), Brian Walpole (captain), Tony Meadows (PR).

Photo: Rob Taylor

next day at breakfast the previously mentioned husband told Rob Taylor that he had gone onto a bar near Times Square for a few more drinks. There he had met a pair of black men who insisted on buying all his drinks. Afterwards they took him on to a night club for black people only in Harlem. In the early hours of the morning they had then paid for and put him in a taxi to take him back to the hotel. On reflection Rob wondered how he had avoided becoming an accident statistic. Harlem had a rough reputation at that time, even in daylight!

The flight then went onto Oakland before Honolulu. It had been hoped to operate via San Francisco but the airport’s environmental objections couldn’t be overcome and so Oakland was chosen as the launch point from the American continent until that time Oakland had never been visited by a Concorde, and then two – the British flight and the Air France aircraft – came within a week of each other!

The flight to Honolulu with Tony Meadows in command took 2 hours 43 minutes, including a fly-past down Waikiki Beach; Concorde still holds the speed record for this journey. The flight continued on via Guam, Hong Kong, Denpasar (Bali), Colombo, Bahrain, Cairo, and finally London. John Butterley



replaced Tony Meadows with David Rowland as co-pilot and Phil Newman as the flight engineer.

#4 Goodwood Travel

DATE 7–24 March 1987

DURATION 18 days

FLIGHT TIME 37 hrs 40 mins

AIRCRAFT G-BOAF

DESTINATIONS London–Moscow–Cairo–Delhi–Hong Kong–Guam–Honolulu–Mexico City–Kingston–Barbados–New York–London

Goodwood Travel was a creative and prolific charterer of Concorde, beginning with a charter to Nice in 1983 (see Mach 2, Feb 2019) and continuing until the end of Concorde services in 2003.

Goodwood’s press release targeted at the USA filled the flight; 70% of the passengers originated in the United States. Subsequent round-the-world Concorde flights were predominantly chartered by US companies.

AROUND THE WORLD IN 18 DAYS

The Greatest 'Round the World' tour since Jules Verne

Goodwood Travel's itinerary

An extract from the Goodwood brochure showing the stopping points on the March 1987 tour, with hotels and local excursions and entertainment.
Image: Goodwood Travel

Concorde G-BOAF set off for Moscow with Captain David Leney (Concorde Flight Manager Technical), co-pilot Derek Whitton, and flight engineer George Floyd. The passengers were an interesting mix. One, a lady from the USA, failed to join the flight even though she had paid in full for the trip. Goodwood found out in due course that she was in jail for murder! Another lady had insisted that she should sit in seat 1A (where she believed the Queen always sat). It was a highly popular seat as it is a window seat at the very front of the aircraft. After the aircraft arrived in Moscow, however, she hurriedly spoke to Goodwood and asked to be moved. She claimed that the passenger next to her had dreadful body odour!

Great care had been taken over choosing the hotels. Most of the

hotels were members of the Leading Hotels of the World, with the exception of those in Moscow and Cairo, where Goodwood had previously chartered Concorde. Goodwood kindly included the crew in all the ground arrangements.



The flight continued to Cairo and then Delhi, in order to visit the Taj Mahal at Agra. After Delhi it was on to Hong Kong. The intention had been to fly to Beijing, but despite a visit by a joint Goodwood and BA team to the Chinese authorities they refused permission for a Concorde visit. Thus, the passengers were flown from Hong Kong to Beijing by scheduled service. The flight crew changed in Hong Kong, with Captain John Chorley, co-pilot Keith Williams, and flight engineer Tom Dewis taking over.

The next stop was Guam, a US island in the Pacific, where this time there was a change of cabin crew. An Irish passenger whose birthday

Egyptian entertainments

The Goodwood team had primed the Egyptian belly dancer in Cairo, 'Madame Shoo Shoo', to get the Concorde Captain up to dance, and so the legendary David Leney is seen here doing his lively best.

Photo: Ivan De-La-Plein



Concorde in Hong Kong

Goodwood Travel had planned to fly Concorde from New Delhi over Mount Everest to Peking (Beijing), but had to re-route to Hong Kong. *Photo: Keith Williams*



Homeward bound

Captain John Chorley plans Concorde's journey home from Kingston to Barbados, March 1987. Note the crowds on top of the terminal building. *Photo: Keith Williams*

coincided with St Patrick's Day crossed the International Date Line from west to east and was then able to celebrate twice – once in Guam and then in Honolulu.

The next stop was Mexico City before transiting Kingston, Jamaica and then Barbados. At Barbados, after dinner, one of the passengers bought a case of champagne and the partying continued on the beach and in the sea! The final stop was New York before returning to London.

#12 Intrav
DATE 2–19 October 1988
DURATION 19 days
FLIGHT TIME 43 hrs 20 mins
AIRCRAFT G-BOAG
DESTINATIONS London–New York–Dallas–Oakland–Honolulu–Nadi (Fiji)–Sydney–Guam–Hong Kong–Dhaka–Delhi–Abu Dhabi–Cairo–London

Intrav, a travel company based at the time in St Louis, Missouri, USA, became the most prolific organiser of Concorde round-the-world charters with both Air France and BA. By 2000, when these charters stopped, Intrav had operated 28 – over half the total.

This was the first Intrav charter on a BA Concorde. On the first leg of the journey the aircraft flew west via New York, Honolulu, and

Sydney to Hong Kong, where there was a crew change. The new crew were Chris McMahon (captain), Steve Bohill-Smith (co-pilot), Phil Newman (flight engineer), and Dick Routledge (PR). On the flight from Hong Kong to Dhaka, Dick Routledge mentioned to the passengers a charity that was being set up by Pat Kerr, a BA cabin crew member, to support poor mothers and their children in Bangladesh. An impromptu collection was made, which resulted in a substantial sum of money being donated to the charity.

The flight continued to Delhi, from where the passengers and Concorde crew were flown on an Indian Airlines Boeing 737 to see the Taj Mahal. The next stop was Abu Dhabi. The crew carefully monitored the local radio frequencies approaching the Persian Gulf as the US warship USS *Vincennes* had shot down an Iran Air Airbus A300 a few months earlier. It was going to be the then

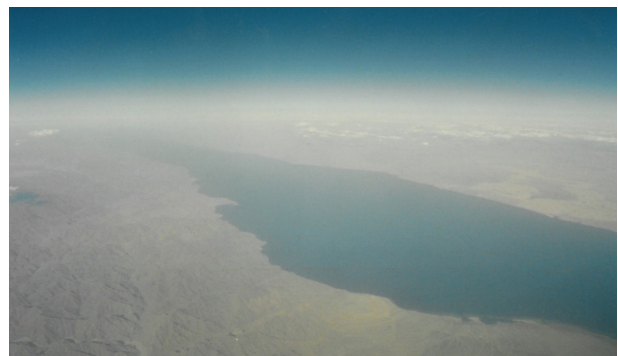
Flight across Arabia

Below: A view of the Red Sea from the flight deck, on the flight between Abu Dhabi and Cairo.

Photo: Steve Bohill-Smith

Sheikh of Abu Dhabi's birthday, so a request had been made for them to do a fly-past for his benefit. On approach air traffic control (ATC) gave the crew radar vectors to the correct point. The fly-past was obviously well received as the Sheikh sent two of his sons to meet the aircraft and offer his personal thanks.

The flight from Abu Dhabi to Cairo was all subsonic. Cairo ATC cleared Concorde to accelerate and fly direct to a point west of Crete before turning north between the heel of Italy and Albania. That gap is about 75 miles wide – only just wide enough for the sonic boom not to reach land. Therefore, navigation had to be checked very accurately. Deceleration was started at Mach 1, about 100 miles out from Venice. There then followed a subsonic transit back to London – a routing that had been well established in the days when Concorde operated to Singapore via Bahrain.



#16 Concorde Spirit Tours

DATE 1–23 April 1989

DURATION 25 days

FLIGHT TIME 39 hrs 30 mins

AIRCRAFT G-BOAF

DESTINATIONS London–New York–Acapulco–Oakland–Honolulu–Papeete (Tahiti)–Christchurch–Sydney–Perth–Colombo–Mombasa–Cape Town–Monrovia (Liberia)–London

For the outbound leg of the flight, from London to Sydney, the flight crew were Captain David Leney, co-pilot Chris Norris, flight engineer Pete Ling, and PR Roger Mills.

The flight between New York and Acapulco had exercised the navigational planners. There were two possibilities. First two supersonic phases, east coast USA, subsonic across Florida, and supersonic across the Gulf of Mexico. The alternative was supersonic all the way, slipping down between the Bahamas and Palm Beach with a tight right turn between Key West and Cuba. The latter looked OK on paper, so the crew decided to use it. If there were no complaints it would be called the ‘Leney Gap route’. There were none!

On the flight between Christchurch and Sydney, whilst the aircraft was decelerating through Mach 1.3, a vibration was briefly noticed – but the landing was normal and the



crew unaware that there had been any problem until air traffic advised them that they believed a part of their rudder was missing.

There was to be a crew change in Sydney, and the new crew – Captain Dick Boas, co-pilot John White, flight engineer Paul Egginton, and Steve Bohill-Smith as PR – had already arrived. Steve remembers calling Qantas operations to check on Concorde’s progress. The guy responded in an Aussie drawl, “yes, it’s just landed ... well, bits of it has. Have a look on your TV mate, it’s all on the telly”. On arrival the flight engineer Pete Ling contacted David Macdonald (Concorde Flight Engineer Superintendent) at 5.00 am UK time to tell him the good news. A replacement rudder, other spares, and a team of engineers swiftly set out for Sydney the same day, while the Qantas engineering team and the local BA engineer prepared for the arrival of the repair team. In the end, by deleting the stopover in Perth on the trip back and simply making it a technical stop before Colombo, the trip was brought back on schedule.

“it’s just landed ... well, bits of it has”

Huge crowds came to watch the aircraft depart from Sydney’s Kingsford Smith airport. The trip to Perth was supersonic all the way, with the route looping around Tasmania and across the Great Australian Bight before turning north; TV helicopters were filming Concorde as it taxied in. This flight set the first of 11 speed records for the trip. The aircraft flew on to Colombo, from where passengers went by train to the Sri Lanka highlands and Kandy.

Rudder failure

G-BOAF on landing at Sydney, with obvious damage to the top part of the rudder. The part was replaced and the aircraft was able to make up the lost time during the tour.

Photo: David Macdonald

At Mombasa, there were aircraft standing by to fly the crew and passengers to the Masai Mara for game viewing. Next stop was Cape Town., with Concorde routed down the east coast of Africa and east of Madagascar before rounding the Cape of Good Hope.

The final flight back to London required a short refuelling stop in Monrovia, Liberia if the speed record were to be broken. Steve Bohill-Smith was despatched in a military jeep at high speed to the control tower at Monrovia with the paperwork that required signing. All was done in just an hour, setting a Cape Town to London record of 7 hours 53 minutes.

#20 Lorraine Travel/ Concorde Spirit Tours

DATE 14 March–7 April 1990

DURATION 25 days

FLIGHT TIME 39 hrs 15 mins

AIRCRAFT G-BOAF

DESTINATIONS London–New York–Acapulco–Las Vegas–Honolulu–Papeete (Tahiti)–Christchurch–Sydney–Bali–Colombo–Mombasa–Cape Town–Monrovia (Liberia)–London

Don Pevsner collaborated with Jack Guiteras of Lorraine Travel in Coral Gables, Florida for a second Concorde round-the-world flight. While the route and the aircraft used were both the same as before, the focus was still on setting or breaking records.

The outbound crew was captain John Hutchinson, co-pilot Roy Withey, flight engineer Bill Johnstone, and PR Geoff Mussett, who was to become the commander on the return flight. Accompanying all as an excellent host was the US astronaut Frank Borman.

All the sectors from London to Sydney except one resulted in new records being set. As they were crossing the Pacific, the crew heard that Scotland’s rugby team had won



Arrival in Cape Town

G-BOAF visited Cape Town during the BA round-the-world charters in both 1989 and 1990.

Photo: Steve Bohill-Smith

the Grand Slam, beating England. This was happily celebrated by the Scottish flight engineer. Little did they know that they would meet them later that summer.

During the Pacific crossing, one passenger approached John Hutchinson to say that a lot of the passengers wanted to show their appreciation of the crew's service and friendliness. As most were US citizens, John Hutchinson suggested that they might like to contribute to a fund being organised to support the daughter of one of BA's New York operations officers, who needed a liver transplant. (See p.15.)

The crew changed in Sydney, with Captain Geoff Mussett, co-pilot Neil Rendall, flight engineer Bill Brown, and David Macdonald as PR. The guest of honour at the final gala dinner in Cape Town was Christiaan Barnard, the first heart transplant surgeon. He presented the \$10,000 donation for the liver transplant to Geoff Mussett. With further records achieved, they reached London.

To their complete surprise the crew and their wives were invited to one of the Queen's garden parties held for sporting achievement, in recognition of the records they had set. So they met that Scottish rugby team, as well as Frank Bruno the boxer, ice skaters Jane Torvill and Christopher Dean, and many others.

#22 Intrav

DATE 28 October–14 November 1990

DURATION 18 days

FLIGHT TIME 31 hrs 50 mins

AIRCRAFT G-BOAC

DESTINATIONS London–New York–Dallas–Las Vegas–Honolulu–Nadi (Fiji)–Sydney–Denpasar (Bali)–Hong Kong–Bangkok–Delhi–Bombay (Mumbai)–Nairobi–Aswan–Rome–London

This flight left London under the command of Roger Dixon and routed out to Hong Kong via New York, Honolulu, and Sydney. In Hong Kong the new crew were Captain Norman Britton, co-pilot John Phillips, flight engineer Bill Brown, and PR Andy Darke.

Their first flight was to Delhi via a technical stop at Bangkok. The next flight was to Nairobi via Bombay. The intention thereafter was to fly to Cairo. Unfortunately the political situation in Egypt was becoming more unstable at the time, parliament having been dissolved over claims of fraud in the 1987 election. Despite Cairo being a popular destination on these round-the-world charters, a late decision was made to change Cairo for Rome.

This necessitated a technical stop at Aswan in Egypt. The usual careful prior preparation for a Concorde visit was thus less than comprehensive. It was a refuelling transit, and the local handling staff were politely requested to touch nothing. However, one of the ground staff, no doubt

trying to be helpful, had located the toilet servicing panel and sadly made an incorrect selection. In the process he managed to dump the entire toilet contents onto the tarmac. As Concorde had no ground power unit and Aswan no air conditioning unit, and with the outside temperature at +40°C, the crew had to let the passengers off in what became nearly a two-hour transit. It is perhaps an illustration of the need on the part of the airline, charterer, and passengers to demonstrate flexibility even in the best-laid plans.

The ground arrangements in Rome were of necessity a last-minute plan but very well executed. At the last night's black tie gala dinner the captain suggested that the flight deck crew and the senior cabin crew member each host a table. The table hosts' feedback afterwards was that the world, with the exception of Aswan, was OK, but Concorde itself was worth every penny.

#30 Intrav

DATE 12 October–4 November 1994

DURATION 24 days

FLIGHT TIME 35 hrs 40 mins

AIRCRAFT G-BOAD

DESTINATIONS New York–Dallas–Oakland–Honolulu–Nadi (Fiji)–Christchurch–Sydney–Denpasar (Bali)–Hong Kong–Delhi–Nairobi–Jeddah–Paris–New York

The Intrav charters unusually started and finished in New York, due to the demand from US passengers to leave from and return to the USA.

Captain Terry Henderson, co-pilot Alan Bird, and flight engineer Derek Jackman took G-BOAD to Oakland via Dallas, before a change of crew to Captain Alan Harkness, co-pilot Andy Darke, and flight engineer Ian Fellowes-Freeman. Terry mentions having had dinner at Fisherman's Wharf with friends and emerging onto the San Francisco waterfront just in time to see

Concorde overflying the Bay on its way to the Golden Gate Bridge.

The flight continued to Honolulu, Nadi (Fiji), and then Christchurch. Christchurch can be a windy place, and a really strong gust sent a set of engineering steps off across the apron – missing all the parked aircraft except, alas, Concorde. The poor Air New Zealand engineer (Ross McLelland) tasked with keeping an eye on the aircraft called Ian Fellowes-Freeman to tell him the bad news. When he arrived at the aircraft, the engineer was trying to stop a major puncture in a fuel tank and was covered in fuel himself. Boarding the aircraft, Ian was able to transfer fuel from the leaking tank. The outcome was that a repair party flew out from London, the passengers and cabin crew flew to Sydney subsonically, and the aircraft and flight crew finally caught up with them there. As grateful thanks to Ross McLelland for the support he had given, he was offered a seat on the empty aircraft to Sydney.

From Sydney, G-BOAD flew via Denpasar (Bali) to Hong Kong. There, Captain Roger Mills, co-pilot Tim Orchard, and flight engineer Alex Jones took over the flight, with Alan Bird continuing as PR.

Tim Orchard knew Hong Kong very well, having had family living

there. He had arranged for a tailor to meet him at the hotel on check-in and measure him up for a suit, to be delivered before their departure to Delhi. This was done, to the amusement of others in the hotel lobby. He was also able to buy some new glasses, and whilst at the shop bought some novelty ones for the rest of the flight crew.

On the next flight a lady passenger was about to visit the flight deck, and on an impulse the flight crew all donned these 'new' glasses. The lady commented on them and Tim Orchard said that they were indeed very special glasses, very useful for landing and taking off in poor weather. Some time later she returned to the flight deck with a letter addressed to the 'Chief Pilot, British Airways'. When asked what it contained she said that on a previous Concorde round-the-world that she had been on, the crew were not wearing these special glasses and she was hoping that they could be universally issued. They had to come clean and explain their 'joke'. She did take it in good part.

The flight continued to Delhi, with the usual side trip to Agra and the Taj Mahal, then to Nairobi, with visits to a game lodge and game drives, and on to Paris via Jeddah. At Paris there was a partial crew

change, with Captain Alan Harkness and flight engineer Dave Hoyle joining to take the aircraft to New York and the end of the trip.

#52 TMR

DATE 18 February–7 March 2000

DURATION 19 days

FLIGHT TIME 37 hrs 50 mins

AIRCRAFT F-BVFC

DESTINATIONS Paris–Bahrain–Muscat–Delhi–Bangkok–Bali–Darwin–Sydney–Auckland–Papeete (Tahiti)–Île de Pâques (Easter Island)–Iguaçu (Brazil)–Rio de Janeiro–Dakar (Senegal)–Paris

It would be wrong to conclude this account on round-the-world Concorde operations without making further reference to Air France's significant contribution to round-the-world flights. They did, after all, operate nearly 75% of them.

Why was this? Well, Air France were cheaper for a start. BA had more scheduled services and those, plus Cunard and Goodwood Travel and other charters, made for a much busier Concorde flying programme. Supply and demand is key in pricing. At one stage BA were operating near-daily charter flights, and round-the-world flights took up a lot of days and resources.

TMR, the charterer, is still a significant French tour operator and travel agent, based in Marseilles. One bonus of using Air France is that almost from the beginning they had a single crew for the whole flight, whereas BA would certainly change crews at least once and the flight crew sometimes much more often. Air France's approach enabled the crews and passengers to form a longer-term relationship more akin to that on a cruise ship. In fact, Goodwood Travel used to call their flight a World Air Cruise.

Sadly this flight was to be the penultimate round-the-world Concorde operation ahead of the tragic crash in Paris.

Gala dinner in Hong Kong

Below: The crew and passengers about to attend a grand dinner at the Hong Kong Club, with the flight crew modelling their 'special' glasses.

Photo: Tim Orchard



The flight crew for this world tour were Captain (Commandant de Bord) Charles Catania, co-pilot Eric Celèrier, and flight engineer Gilles Jardinaud. The cabin crew was led by Alain Verschuère.

Leaving Paris, Concorde initially headed south to Montpellier before turning left into the Mediterranean and going supersonic towards the east. The aircraft had to slow down before reaching Beirut and then fly subsonic until arrival at Bahrain, where there was a one-hour transit before leaving for Muscat in Oman and the first night stop.

Two nights were spent in Muscat before heading for a stay in Delhi, Bangkok, Bali, Darwin, and Sydney – almost reaching the halfway point. On leaving Sydney a technical stop at Auckland brought them to Papeete (Tahiti) for two nights. Then there was one night at each of Isle de Pâques (Easter Island) and Iguazu for the waterfalls.

The flight then continued to Rio de Janeiro for four nights. This was just in time for the spectacular Rio Carnival of that year. Finally it was time to head back to Paris via a technical stop at Dakar, Senegal.



Arrival at Easter Island

Left: Mataverí Airport at Easter Island; the airport had been extended by NASA in case it was needed for emergency Space Shuttle landings.

Right: Concorde F-BVFC (Fox Charlie) after arrival at Easter Island.

Photos: Marie Guillon



The Air France crew

Front, left-right: flight engineer Gilles Jardinaud, Captain Charles Catania, co-pilot Eric Celèrier. Cabin crew, left-right: Muriel, Hervé, Virginie, Denis, Anne.

Photo: Alain Verschuère

British Airways or Air France?

During the first full year of Concorde round-the-world tours, 1987, there were no fewer than six charters, operated by five different companies, and by the time of the Air France crash in Paris in 2000 a total of 53 had been operated. Many of these flights by BA and AF Concorde set world speed records for commercial airliners.

Ignoring the availability of aircraft and price, in general the language of the passengers steered them in one direction or the other. TMR, Prado Voyages, ASA Aerospace, Kuoni, and American Express preferred Air France, and the US charterers Intrav and Concorde Spirit Tours, British Airways.

Feedback from Intrav, who used customer questionnaires and followed up on them, was quite specific. They liked the fact that the Air France crews went all the way round with the passengers. This seemed to positively influence the passenger input to the questionnaires. The passengers particularly rated the in-flight service. Some research established that the food was very similar, as it was being picked up from the same in-flight kitchens to very similar specifications. The Air France cabin crew changed uniforms to deliver the meal service, gentlemen donning tuxedos and the ladies long dresses. Quite impressive given the very small galley area on the air-

craft, and perhaps giving a bit more style to the service!

Air France did not have a PR flight deck member whereas BA nearly always did, which was appreciated by the passengers, adding to the in-flight experience. Neither airline's Concorde had much in the way of in-flight entertainment, only audio. So in the end there was probably little to choose between the two airlines. They both undoubtedly delivered superb supersonic service!

I would like very much to thank all those crews who were kind enough to provide photographs and anecdotes, and my apologies if they didn't make it into this account.

Concorde's world speed records

The Concorde round-the-world flights set numerous air speed records for airliners – often several during the same trip. Most spectacularly, Air France Concorde F-BTSD set speed records for circumnavigation of the Earth that still stand today. George Blundell-Pound gives the details from the French viewpoint. We also hear from Donald Pevsner, Director of Concorde Spirit Tours, who chartered the aircraft for both flights, and Alain Verschuère, the purser for part of the second journey.

From inspiration to achievement

Donald Pevsner, aviation lawyer and Director of Concorde Spirit Tours



As an aviation enthusiast since I saw the first BOAC Comet 4 aircraft leave Idlewild Airport/IDL, New York for London/LHR, on October 4, 1958, I decided to begin chartering Concorde in 1985.

My first charter, from Miami/MIA to Aruba/AUA and return on November 16-17, 1985, with BA Concorde G-BOAG, was such a consummate thrill that I later proceeded to operate two all-supersonic around-the-world luxury Concorde tours with G-BOAF, in 1989 and 1990. (See pages 8–9.)

Getting the green light

Numerous official International Aeronautical Federation (FAI) world air speed records were set by these three flights, all going to the pilots (as they should do), but an around-the-world record remained a tantalizing prize. Then, after

Sunchaser One

F-BTSD arrives in Honolulu during the westbound round-the-world trip.

Photo: Source unknown

months of discussions, Air France Chairman and CEO Bernard Attali gave his personal approval for the airline to operate a Concorde world record flight westbound around the world, to commemorate the 500th anniversary of Columbus' first New World landing on October 12, 1492. Ironically, this was the suggestion of a top BA marketing executive, as BA refused to charter me one of its Concorde for this purpose, citing "potential embarrassment" should a mechanical delay occur en route.

Air France Concorde F-BTSD performed flawlessly on this epic flight, with six refueling stops. I named the flight "SUNCHASER ONE", as the sun literally never set on the entire 32 hour 49 minute 3 second journey from Lisbon/LIS back to Lisbon/LIS. M. Attali stood

smiling on the Lisbon/LIS ramp to welcome us back with the new world record.

On August 15–16, 1995, again with M. Attali's total support and encouragement, the same AF Concorde beat her own westbound record by flying the companion eastbound around-the-world journey in just 31 hours 27 minutes 49 seconds. This record remains *The Guinness Book of Records* entry for the fastest circumnavigation of the Earth (not counting astronaut Tom Stafford's Apollo X spacecraft record), and it will last for decades in the absence of a worthy successor to Concorde.

A video of the press conference after the 1995 flight can be seen on YouTube: <https://www.youtube.com/watch?v=820Ux0afpdY>

Les tours du monde

George Blundell-Pound, Concorde Commercial Manager for British Airways

#23 Concorde Spirit Tours

DATE 12–13 October 1992
DURATION 2 days
FLIGHT TIME 25 hrs 15 mins
AIRCRAFT F-BTSD
DESTINATIONS Lisbon–Santo Domingo–Acapulco–Honolulu–Guam–Bangkok–Bahrain–Lisbon

One cannot mention Concorde Spirit Tours without recalling the two world speed records set by Don Pevsner and Air France.

The decision on which aircraft to choose for the record attempts was both an engineering and an operational one. The aircraft had to keep going! The aircraft chosen was F-BTSD, at the time the lightest in the Air France Concorde fleet at 77,475kg. The lower weight allowed the aircraft to climb slightly faster and have a greater range. Over similar longer distances the fuel consumption would be 400 to 500 litres less on arrival.

The route was one that would exceed the length of the Tropic of Cancer or Capricorn (22,850 miles) around the globe and ideally be the most direct allowing for transit points to be able to refuel quickly. The route chosen by Air France in collaboration with Don Pevsner was Lisbon – Santo Domingo – Acapulco – Honolulu – Guam – Bangkok – Bahrain – Lisbon. The primary flight deck crew would have to stay on the aircraft but have relief available. Bunks were created in the rear cabin to allow for crew rest, and seats were made available for ground engineers to manage the aircraft during the short transits involved.

The main crew were Captain Claude Delorme, co-pilot Éric Celerier, and flight engineer Jean Escuyer, who operated the first and last flights and some of those in between. Just 25 hours 15 minutes



after leaving Lisbon, the aircraft touched down again at Lisbon the following day and set a record for a commercial aircraft flying west. The passengers were prepared for the long flight and were looked after by the cabin crew, who did not need to stay with the aircraft all the way and so changed in Santo Domingo, Honolulu, and Bangkok.

#32 Concorde Spirit Tours / Coors Light Beer

DATE 15–16 August 1995
DURATION 2 days
FLIGHT TIME 22 hrs 39 mins
AIRCRAFT F-BTSD
DESTINATIONS New York–Toulouse–Dubai–Bangkok–Guam–Honolulu–Acapulco–New York

For this account I am obliged to have been able to read a detailed account by the Commander of the flight, Captain Michel Dupont. At the time of the flight Michel Dupont was also the Chief of the Air France Concorde Division. The account is on a French web-site, 'Les Vols du Concorde'. I should also thank Google Translate, as his account is in French.

It is no surprise that Donald Pevsner would return to Concorde, seeking not only to set a record for a

Arrival in Lisbon

13 October 1992: Concorde F-BTSD lands in Lisbon, having set the world speed record for a westbound circumnavigation of the Earth by an airliner. *Photo: Pedro Aragão / Wikimedia Commons CC BY-SA 3.0*

round-the-world flight going east but to beat the previous westbound record set with the same aircraft in 1992. For this flight Concorde Spirit Tours had contracted with the US beer company Coors to take 80 passengers (main dealers) on this promotional flight for the company, and that the record attempt should start in New York.

The team had to go through the same thorough planning again, given the change of direction of flight. The added complication was that the record attempt would therefore take place in the northern hemisphere summer. The two targets to beat were not only the previous Concorde time of 25 hours 15 minutes set by the westbound Concorde (see above), but also the then eastbound record set by a Grumman Gulfstream jet in 1988, of 36 hours 8 minutes. The Gulfstream route had been Houston – Shannon – Dubai – Taipei – Maui – Houston. The advantage of the much slower Gulfstream was the longer range and the fact that the subsonic Gulfstream

had no need to either slow down when flying over land or take a much longer route.

The final routing was agreed two weeks out as being New York – Toulouse – Dubai – Bangkok – Guam – Honolulu – Acapulco – New York. The flight deck crew was finalised with the Commander as Captain Michel Dupont, supported by Captain Claude Hetru, then head of Concorde training. There were three co-pilots: Jean Marcot (who would tragically lose his life in the crash of July 2000), Bernard Bachelet, and Bernard Depouez. Finally, there were three flight engineers: Jean Lombart, Claude Billerey, and Jean Louis Masselin.

On 13 August the aircraft left Paris for New York. That evening a full and comprehensive crew briefing was held in Rosie O'Grady's bar on 7th Avenue. The following day they relocated to the Holiday Inn near to the airport for the real briefing! That evening they met the passengers for cocktails (and Coors beers). The 98 passengers on this historic flight included 48 winners of the Coors Light Memorial Day sweepstakes, chosen from more than 34,000 entries; an observer from the record-sanctioning Fédération Aéronautique Internationale; representatives from the sponsor, Coors Brewing Company; and Donald Pevsner, the organiser and head of Concorde Spirit Tours. Also on board was former astronaut General Tom Stafford, commander of the Apollo 10 space flight. (Before they left JFK, Gen. Stafford was heard to remark, "This is the slowest I've ever gone round the world.")

On 15 August the flight left for Toulouse and the start of the record attempt. A huge turnout of spectators greeted them at Toulouse, filling the roads and roadsides around the airport, but just 1 hour 15 minutes later the aircraft was airborne again and heading for Dubai.

Very much earlier in the planning stages, the Saudi authorities

had been approached multiple times to allow supersonic overflight of Saudi Arabia, but always unsuccessfully. On calling Saudi air traffic control, the crew requested to remain at 52,400 feet (and thus supersonic). Amazingly, this was now agreed all the way until slowing down to arrive at Dubai. They thus arrived 40 minutes early.

The next stage was to Bangkok, routing around southern India and across the Bay of Bengal. Continuing through the first of two nights that the aircraft would see between 15 and 16 August, Concorde flew through a faster than normal sunrise. With the -70°C temperatures during the supersonic cruise, Concorde reached 59,000 feet.

The next stage was to Guam. Climbing up out of Bangkok a solid line of cumulonimbus barred the way. The last thing they wanted at that stage was a lightning strike and damage. Fate was kind, however, and they cleared the clouds at 50,000 ft. This was the second night, so more on-board flight deck crew changes took place. The crew had been concerned that the refuelling operation at Andersen Air Force Base on

Guam might be slow, so people took the chance to have a quick shower. They were therefore surprised that all was done in 50 minutes!

The next stop was Honolulu, where things did not go so well. The airbridge to allow passengers off was broken, and the transit was slow (1 hour 47 minutes). There was a thought that French nuclear tests in the Pacific might have contributed to the delay.

The flight and transit through Acapulco went according to plan, and they touched down at JFK after a flight of 31 hours 27 minutes and 21 seconds and another record.

As the wheels touched the runway the roar of the passengers blotted out even the sound of the landing as everyone realised they had done it – the record was theirs. The Air France flight crew were more modest about the achievement, saying they were going to "celebrate" by sleeping in an actual bed. Captain Dupont observed, "We didn't do anything special – we are not race pilots, we are airline pilots."

It was then time to meet the press and for Donald Pevsner to celebrate achieving his goal.

The view from the cabin

Alain Verschuère, chef de cabine (chief purser) for Concorde

I participated in the second world speed record, on the sectors for Toulouse–Dubai–Bangkok. I also took part in the last but one world tour on Concorde, in March 2000.

On the round-the-world flights the cabin crew could disembark after just a few stages, but the pilots – who stayed with the aircraft throughout and took turns to fly – could not, and had to use improvised bunks for rest.

During the round-the-world flight, the welcome that we received everywhere was fantastic. The stopovers were completed in good time, with the ground staff playing their part – except in Honolulu, where the memory of the French atomic bomb tests in Polynesia was still recent! There, the airport staff perhaps deliberately slowed the refuelling; the pilots decided that they could not wait for the meal that had been planned, as it was taking too long to appear, and all the passengers agreed to carry on without it. So Concorde left, and eventually won its round-the-world wager.

A captain's experience

John Hutchinson, Concorde captain for British Airways

IN MARCH 1990 I set off from New York on one of the most memorable flights of my 15 years on Concorde. It was the first half of a round-the-world air cruise organised by a Miami-based travel company called Lorraine Travel. (See also pp.8–9.)

I describe it as an air cruise because we were stopping at each of the destinations for at least two nights, staying at the swankiest hotels and dining with our passengers in private dining rooms. There was even a “Captain’s table” organised for dinner every evening so I could invite selected passengers to join me and get to know them! During my half of the air cruise I was able to enjoy the company of all our passengers on at least one occasion.

In the months leading up to that charter I had frequent meetings with the owner of the company, Jack Guiteras. It was at one of those meetings, a month or so before departure, that Jack told me he had only sold 80 out of the 100 seats and would the flight crew like to take their wives? This offer was accepted with alacrity once I had checked with the cabin crew that they had no objections. In fact, my wife Sue was enrolled as assistant to the cabin crew and became very adept at opening champagne bottles! My co-pilot was Roy Withey and flight engineer was Bill Johnston, with Captain Geoff Mussett doing the PR. The Cabin Services Director was a splendidly imperturbable Irish lady, Maggie Dolan. Accompanying the passengers was a guest celebrity in the shape of astronaut and CEO of Eastern Airlines, Frank Borman.

The charter set off on 14 March on G-BOAF, from JFK bound for Acapulco. The flight time was 3 hours 5 minutes. This was the first of many records claimed during this



A stopover at Christchurch International Airport, New Zealand

Photo: Rob Neil

voyage of discovery. We stayed at a wonderful hotel, Las Brisas, perched on a hillside overlooking Acapulco. Instead of the conventional hotel room we all stayed in individual cottages and each one had its own swimming pool with lotus blossom floating on the water; very superior!

The next leg was to fly from Acapulco to Honolulu with a refueling stop at Las Vegas. My vivid memory of that day was the landing at Las Vegas. As we were on our approach I could see black dots lining both sides of the runway. Those black dots materialised into cars! It turned out that Concorde had never been to Las Vegas before and the airport authority had decreed that sightseers could pitch up in their cars, lining them up on both sides of the runway for a ringside view. I have never seen anything like it, ever, and it somehow typified the enthusiastic attitude of the Las Vegas and their determination to give us a right royal welcome.

We spent three nights in Honolulu, and my personal highlight was a visit to the Pearl Harbor Memorial. It is a most beautiful and moving memorial; on the day we went we

were able to listen to an introductory talk by a US Navy veteran who had witnessed that “day of infamy” and was able to give us a vivid account of events that day.

We set off for Tahiti on 19 March, and the flight time of 2 hours 55 minutes was another world record. On arrival we were treated to a spectacular welcome with lots of gorgeous Tahitian ladies doing seductive Polynesian dances and inviting us to join in, which we did quite enthusiastically. Our American passengers had a wonderful time during our stay there, buying black pearls by the sackful. We left Tahiti on 22 March for Christchurch, but before we set course ATC gave us clearance to do a sightseeing tour of Moorea followed by a beat-up of Papeete. Those were the days!

Another record was claimed for our flight to Christchurch, with a time of 3 hours 5 minutes. This, of course, was long before the catastrophic earthquake and Christchurch reminded us in many ways of Cambridge; a beautiful city. The highlight of our stay there was a flight in a ski-equipped plane that landed on the Mount Cook glacier

on a fantastic cloudless day with stunning views. Landing on the glacier was quite unlike any other landing I have ever experienced. It was quite a physical experience, with the aeroplane shaking violently as the skis clattered noisily on the unrelenting icy surface.

The final sector of my half of this round-the-world trip was a 1 hour 40 minute flight to Sydney on 26 March, where I handed over command to Geoff Mussett (lucky chap!), who had been doing the PR for the first half of the trip. By

this time we had bonded with all the passengers, and it was quite an emotional experience saying our farewells. One rather wonderful footnote I should mention is that there was a final gala dinner in Cape Town with Christiaan Barnard as the Guest of Honour. At the end of the evening he summoned Geoff Mussett up to receive a thank-you gift from the passengers as a token of their appreciation. This gift amounted to \$10,000 and was given to one of our dedicated staff at JFK, whose teenage daughter needed a

liver transplant. The transplant was successfully performed, and that young lady remains alive and well and is happily married with children thanks to the generosity of those passengers!

That round-the-world air cruise and the rapturous welcome Concorde received at all the different airports will remain one of the highlights of my flying career; Sue and I will always have the happiest of memories of those exotic destinations and our wonderful group of fellow travellers.

The view from the cabin

Janie Day, Concorde stewardess for British Airways 1985–1995

I flew as cabin crew from 1974 until 2011. The aircraft that I was licensed to fly on during my career were: DC10, B707, BAC1-11, Tridents 1,2 and 3, B737, B757, Concorde, B767, A319, A320 and A321. (I would have loved to have worked on the 747, but this was never to be!) I joined the British Airways Concorde fleet in 1985, and flew on her for 10 years.

This article isn't so much about facts and figures; it's a 'view from the cabin', so to speak, to give the reader an idea of the normal (if any trip on Concorde can be described as normal), day-to-day operational requirements of a special charter.

As well as our rostered trips to JFK, IAD, MIA, and BGI, we were also rostered on special charters, usually but not exclusively operated by Goodwood Travel. These included the 'Round the Bay' (Of Biscay) days out; trips to Lapland to see Father Christmas; to Moscow to visit the Bolshoi Ballet; and to Jordan (Petra). There were trips to air shows. Concorde charters were run for large companies, such as the Ford Motor Company and BP, and special journeys were arranged for royal families, celebrities, and

various government departments, as well as wealthy individuals who were celebrating special occasions.

I was involved with many of these trips during my career. However, I was selected to be part of a round-the-world special charter in October 1988, for about 16 days. The itinerary for our crew was Oakland – Honolulu – Fiji – Sydney – Hong Kong. A second crew would take over from us in HKG, and we positioned home from there via Bombay, or Mumbai as it is now.

As always, for any flight operation, there would be a stand-by crew in case of 'no shows' or an aircraft having to return to base due to a technical fault, medical emergency, bad weather, etc. Concorde was no exception, and I have been on stand-by myself many times to cover such an eventuality. The difference between a scheduled trip stand-by and that of a special charter would be the fact that having to pack for a 'round-the-world' was very different to packing for a couple of days in New York. We had been briefed to pack a few changes of formal even-

ing wear, plus clothing suitable for the different changes in climate. Together with extra uniform (in those days we had a summer and a winter uniform), it meant that if we wanted to go shopping in Hong Kong, a huge suitcase would be required. Then of course, the stand-by crew might not be used, so this exercise of packing for a world trip was just that – an exercise!

Our crew consisted of four flight crew and six cabin crew (with an extra flight engineer to commentate from the flight deck for the passengers' benefit, giving technical details of the progress of the flight, and information regarding the aircraft itself). We positioned from LHR to SFO on a scheduled Jumbo, and then went by road to Oakland.

Ready for departure

The crew assemble at LHR for our trip to SFO on the outward leg.

Photo: Janie Day



After a couple of days acclimatising and sightseeing, we picked up our aircraft, G-BOAG (Alpha Golf).

The last word in luxury

We were greeted by a bemused catering team who had never seen Concorde at Oakland before, let alone the type of catering to be offered on this and the following legs, which were Oakland to Honolulu, then Honolulu to Fiji. The catering was totally different from our usual scheduled services. The passengers had requested their own menus consisting of, among other things, Maine Lobster, which had been especially flown to us. Dom Perignon champagne was their champagne of choice, and I think that on our particular section of the trip we got through well over 150 bottles. This would have been simply the champagne. In addition, there would be fine wines such as Meursault and Chateau Latour. Concorde always carried stunning wines, which obviously travelled well!

Our passengers were all members of the Dallas Yacht Club – 100 passengers who had all paid around \$26,800 each for the trip. They were all lovely people who really appreciated how special our bird was, and the vast majority of them hadn't flown on Concorde before. As usual, when anyone boarded for the first time, they were surprised at how small the aircraft was inside.

I remember two passengers in particular for a unique reason. They were two elderly gentlemen (travelling with their wives), who sat together at the back of the aircraft playing poker for the entire time that we were airborne. Nothing unusual about passengers finding ways to amuse themselves, true, but the stakes for this game of poker were a black velvet bag of rubies. We got to know our passengers very well, and I said to these two guys ... why the rubies? They replied that they both had more money than they needed, and they supported lots of charities;

there would be just no point in winning money from each other.

I asked if I could see the rubies. They were stunning in colour and quality, all various sizes and shapes. They were worth a staggering \$2 million. The men had a special customs declaration form for them, but had never been asked to show it to anyone. I resisted the temptation to relieve them of a couple, even if they are my birth stone.

As this charter was different from our usual rostered trips, we crew generally took the stance that there would not be a 'normal' cabin service, as such. We set up a permanent bar in the midships. (On scheduled trips this bar would be set up after take-off and used as a replenishing station for wine, water, and soft drinks. A great idea as it didn't interrupt the trolley service in any way.) On the round-the-world we decided to make it into a complete bar, so enabling the crew to do second, third, and fourth drinks rounds without having to interrupt galley service. An entire bar compliment would be available for the duration of the flight at the forward, mid, and rear of the cabin. It would also enable the crew in the mid 'galley' to run any drinks requested by the crew on the meal service trolleys. Essentially, this meant that the galley crew could concentrate on getting the hot meals out without the need to help with extra drink requests. It ran like a well-oiled machine. When you consider the length of service and experience of the Concorde crews, there was certainly an air of confident expertise and professionalism on board.

We served a salad of lobster followed by a cheese plate and lemon mousse for this sector to Honolulu, which was a pit-stop on our way down to Fiji. Time literally flies on Concorde ... and the crew were ever mindful that we wouldn't have the luxury of time to squander over the service. We were soon preparing the cabin for landing.



A wonderful welcome

Janie with Alpha Golf and two very glamorous Hawaiian ladies.

Photo: Janie Day

Arrival at Honolulu

Honolulu was not used to seeing Concorde at their airport, so a band and red carpet greeted us, together with various dignitaries. They had laid on a lavish reception for the passengers in one of the hangars, so we crew were able to mingle with our paying guests, getting to know them a little better. We were still in uniform, obviously, as we had another sector ahead of us, so it was soft drinks only for us!

There were ladies in grass skirts circulating with trays of drinks and canapés, and I was beginning to think that if the amount of food available to the passengers that day was anything to go by, at the end of their trip they would be forgiven for not wanting to eat again for a considerable amount of time.

Photographers recorded our visit, the band played Hawaiian music, and all was well. We had refuelled and swapped old catering for new from the hold of the aircraft, so we were good to go. Onward to Fiji, where we were to spend two days.

It was straight into supersonic cruise out of Honolulu, and with no land beneath us, just the Pacific Ocean, we had no constraints at all as far as the sonic boom was concerned. (Incidentally, according to one of the flight crew who took over

from us in HKG, who is a friend to this day, the opportunities to fly supersonically on their sectors were few and far between. They were due to fly from Hong Kong to Delhi, but with China being below them, they could not go anywhere near Mach 2. In fact, they had to put down in Dhaka, Bangladesh, to refuel, which caused lots of security problems as there was no perimeter fence to the airport. The army had to be called in to control the masses of people who had come to see this unexpected arrival. See p.7, above.)

From Fiji to Sydney

We fed and watered our passengers, this time with a hot meal consisting of fillet steak and foie gras, and the mood on this sector was far more relaxed. Having struck up a rapport with the passengers we were able to discern the likes and dislikes of those in our own sections of the aircraft. To be able to pre-empt passengers' needs was a huge part of our job, which we took delight in.

We accompanied our passengers on all the sightseeing, special parties, entertainments, and dinners that were laid on for them, at each of their destinations. In Fiji, on the first evening the hotel provided us with a wonderful meal under the stars, with a traditional Fijian band playing. There were Fijian dancers who entertained us, and a fire-eating troop of men who were amazing to watch. The following day was a day of leisure, so various trips were organised to see more of the island both by road and by water. Wherever we went we were treated like celebrities, which was normal when associated with Concorde!

As we gathered for cocktails on the second evening, the talk was of our arrival into Sydney the following day. Our captain, Jeremy Rendell, remarked that Concorde had never flown from Fiji to Sydney before, and it would be interesting to put the aircraft through her paces. Once again, we would have no land be-

An evening in Sydney

The ladies of the cabin crew in evening dress, posing before the Sydney Harbour Bridge, before our 'Night at the Opera'.

Photo: Janie Day



neath us until we reached the Australian coast, so no one knew exactly what the flight time would be.

As it turned out, we were over an hour early into Sydney, where a band, red carpet, and dignitaries were supposed to welcome us. They had to scramble pretty quickly to get themselves into position whilst we did a few unscheduled fly-bys of Kingsford Smith Airport. The airport perimeter road, and all major roads leading to the airport, were packed with cars. We made all the news channels that day; it was great to watch ourselves on the approach later that evening at our hotel.

We had about four days in Sydney. We visited the Opera House, where an al fresco pre-theatre drinks reception awaited us. Afterwards we all went inside to watch an opera ... which was in Japanese, and which very few of our passengers enjoyed. Fortunately, it wasn't BA who had written the itinerary for the trip!

On the sector from Sydney to Hong Kong, the passengers were all allowed to visit the flight deck and take photographs, so there was very little time for cabin service. (This was pre-9/11, so the flight deck door stayed open at all times, even on scheduled trips. I can't remember a time when the door was closed.)

The final leg

On approach to HKG, Kai Tak airport, the Captain very kindly invited me to the flight deck for landing.

The flight engineer would sit in my seat and I would sit behind the skipper on the jump seat. There was a huge chequerboard on the approach which I'd seen many times before, but never from Concorde's flight deck. It was sensational. (Concorde's approach to Kai Tak can be viewed on YouTube: <https://www.youtube.com/watch?v=1s7Q-Z2PGQw>)

At breakfast at the hotel, on our last morning, we met the crew that would take over from us. It gave us the chance to exchange passenger information, preferences, and seat numbers with them – where the vegetarians would be sitting, etc. This meant that the new crew were able to introduce themselves to individual passengers and would already know their requirements. We thought it would be highly professional for them to say, "How lovely to meet you, Mrs X, Janie told me that you weren't keen on desserts; I'm going to make sure we have plenty of cheese and fresh fruit available for you instead." The little things that mean so much. In those days, the strapline of BA advertising campaign was, "We'll take more care of you." We certainly did our best.

I hope you have enjoyed reading my step back in time to when our airline was the envy of the world, and the jewel in our crown was Concorde. I was blessed to be a part of the Concorde family, and it's a part of my career of which I will be forever proud.

Behind the scenes

The round-the-world trips demanded careful preparation by the engineers of British Airways and Air France, as well as meticulous plans for servicing Concorde en route and dealing with any problems. BA engineers Pete Comport and Bill Burrige look back at the situations that they encountered in this task.

Planning and executing a world tour

Pete Comport

Testament to the ground and flight crews' professionalism was the successful, timely completion of the multi-sector world tours. Needless to say, much planning and support was needed in selecting and operating the aircraft.

The issue of selecting specific spares for the 'just in case' scenarios in advance of the tour, choosing to send them with the aircraft or position to far-flung locations, was always a dilemma as it would deplete spares for the Heathrow departures. At least one fully certified Concorde engineer would travel with world tours in support, necessary to guarantee timely operations from far-flung airports; however, this was a real loss for the engineering teams departing the Heathrow aircraft. Concorde Engineers were a rare breed.

Precision planning

The chosen aircraft's engineering plan needed to be precise. Avoiding complex specialised engineering maintenance work in remote airports meant that engineering effort would be scheduled and completed in advance of the departure date from Heathrow, effectively clearing the decks for the complete world tours flight schedule. This took time and valuable hangar space, and had to be fitted in with all the other maintenance for the rest of the fleet.

Alpha Fox or Alpha Golf were generally selected for world tours, as both these aircraft had some weight and performance considerations that could be advantageous.

Concorde liked flying, and keeping her powered up and warm generally worked in the engineers' favour – her technology was challenged at some of the world tour destinations, and equipment cooling tested to the limit in hot climates to maintain optimum conditions for analogue computing and indication systems. Generally, on tour she behaved, testament to the team on board.

The delamination incident

There was just the one exception – the delaminated rudder incident into Sydney. (See p.8.) Captain David Leney, operating the tour, phoned Concorde Tech after landing from Auckland, reporting that he felt minor rudder flutter when the event occurred on deceleration between Mach 1.7 and Mach 1.3; thereafter Dave said the aircraft handled completely normally. He said he was genuinely surprised when Sydney tower told him he had less than a full set of rudders! Testament to Concorde's flight control design team's superb work.

Concorde Tech's response was to identify and send over 150 parts plus tooling, slings, and even special

paint identified, plus manuals and illustrated parts catalogues. All were made ready for shipping on the B747 flight later that day by Ron Rogerson, whilst his team of engineers took over departing the 001 to JFK (thanks to Phil Cairns, John Dunlevy, and Ricky Bastin). Shipping preparations followed by Concorde's material controllers were no mean feat, involving 150 customs clearance forms and heavy crates of parts and specialist equipment. Concorde Major Check Airframe and Engine Engineer Bob Hodgkinson flew to Sydney with a few hours' notice to take charge of repairs.

Senior development engineer Concorde structures Jim Kinross was key to ensuring special safety-critical non-destructive testing was completed on the replacement rudder dispatched to Sydney.

A fully engineered support package was dispatched within 8 hours of the incident. Work on replacing the rudder was completed efficiently, with excellent support from Qantas and the Australian authorities. Disruption to the world tours schedule was minimal. Concorde's excellent reputation exemplified.

Rudder repair

A repair done after a rudder failure similar to the one in Sydney. No prizes as to where the leased replacement came from.
Photo: David Macdonald



Maintenance down-route

Bill Burrige, Overseas Engineer for British Airways

I was the Engineer responsible for Concorde G-BOAF on the Goodwood Travel World Air Cruise, 7 to 24 March 1987.

As a British Airways Overseas Engineer (OSE), I was one of several people qualified on BA aircraft types to be responsible for the safety and continuing airworthiness of the aircraft when operating away from the main operating base at London Heathrow (LHR).

It was normal for OSEs to be qualified on several aircraft types in the fleet. Those qualifications spanned all of the aircraft systems and enabled an individual to certify an entire aircraft for airworthiness through the Certificate of Release to Service (CRS). In the early to mid 1980s a small number of us were qualified on the Concorde type as part of our overall suite of approvals.

With the increasing number of Concorde charters in the 1980s, I became more involved on Concorde operations to destinations other than the scheduled New York (JFK) and Washington Dulles (IAD).

Planning the trip

My introduction to the World Air Cruise (see also pp.5–7) was through my work schedule for February/March 1987, which was published in the month before. The trip would visit ten destinations and cover more than 27,000 miles. It would carry 95 fare-paying passengers.

Whilst some of the planned destinations were on the BA routes for other aircraft types, none of them except JFK and Barbados (BGI) had any experience of handling Concorde, so local engineering support was non-existent. To ensure that the operation was not compromised, Concorde would need to be managed down-route by an OSE and the aircraft would carry an on-board

flight spares pack. In common with most other types, Concorde was designed to make use of standardised ground support equipment (GSE) such as passenger steps, ground power units, air start units, and air conditioning units, and to accept standard servicing equipment couplings for refuelling, potable water, and toilet waste.

Having operated many Concorde charters (including the Halley's comet charter to Auckland in 1986) I was familiar with operating at long distances from London with the aircraft and felt reasonably comfortable with the support I could draw upon if need be.

As always with BA aircraft, OSEs were encouraged to resolve any technical issues locally and from their own skill set; however, in the event of needing help, the first point of contact was through the Operations and Maintenance Control centres at LHR. In addition, with the Concordes being a small fleet, I also had a group of engineers, most of whom I knew personally, which I could call on for support.

Pre-departure briefing

On the day of departure, I checked in at Operations Control at LHR and met the rest of the operating crew, which, for the first sectors to Hong Kong (HKG), was under the command of David Leney. I had known Dave for a long time and always respected his approach, so I knew the trip was already off to a good start. Dave advised us that he would be handing over to John Chorley in HKG, who would be in command for the remaining sectors back to LHR. I had also flown with John before so was familiar with his operating approach.

During the Ops briefing I also learned the aircraft allocated for the trip was G-BOAF. Clearly some-



The chosen aircraft

Concorde G-BOAF in the maintenance bay at Heathrow.

Photo © Steve Fitzgerald

body in fleet planning had done their homework as that was one of the lightest aircraft in the fleet, which would be very useful for the long sectors over the Pacific, where something close to maximum fuel loads were going to be the order of the day. Having checked the aircraft records whilst in Ops for history, it was clear of any significant defects and had been clear of repetitive defects for a reasonable period of time.

It was now time to go and meet my new charge for the next 18 days, Concorde G-BOAF.

Sector 1: Heathrow to Moscow (LHR – SVO)

After a walk-round of the aircraft and a little banter with some of my ex-London-based colleagues I boarded and prepared for our first destination, Moscow (SVO).

Once we were under way, my thoughts turned to how I should best manage the aircraft, which was going to be parked overnight in forecast temperatures of -20°C to -30°C. As a start I would need to dump any unnecessary freezable fluids and secure all the pitot static covers and blanks properly. I decided to carry out an 'enhanced' post-flight check to be as certain as possible that all the aircraft systems were operating as they should. I would also need to fix an annoying front galley water supply problem that had manifested itself during the flight.

Sector 2: Moscow to Cairo (SVO – CAI)

Normally, I would arrive at the aircraft 2 hours before the scheduled time of departure (STD). However, because of the overnight weather forecast I decided to give myself an additional hour. This proved to be prudent because when I arrived at the aircraft it looked a bit like a delta-shaped igloo. Apparently it had snowed overnight and the aircraft was solid with frozen snow. I asked for the aircraft to immediately be de-iced and ordered a second de-ice for departure time.

When I gained access to the cabin it was clear that I needed to get it heated as a matter of urgency. I spoke with our handling agent, who had obviously had plenty of experience with this type of problem, and he ordered the biggest cabin heater I have ever witnessed. Within 10 minutes the aircraft started to normalise. My next job was to power up the aircraft and energise all the flight systems. One by one they came to life and the inertial navigation units (INUs) were brought on line, which in turn powered the flight instruments. We now had an aeroplane that looked as though it would fly in an hour or so.

The fuel load was calculated and loaded and the galleys were loaded just in time for the rest of the crew to arrive and carry out their respective checks. With all the passengers on board it was now a simple matter to have the second de-ice carried out and get the engines started.

All four engines were a little reluctant to turn on initialisation (probably because of the cold soak), but once running the aircraft was ready to move. Thank goodness that was the one and only cold weather stop on this trip!

The flight down to Cairo was uneventful, with the forward galley water supply fixed and a Mach 0.99 run across Europe followed by a short burst of supersonic flight across the Mediterranean and into

Cairo. After the previous night, the warmer climate in Cairo was welcome and the aircraft appeared (like me) to appreciate the warmer weather as it behaved impeccably.

A day to the Pyramids followed our previous day's flight – which left me wondering why modern-day Egyptians have apparently stripped the cladding from the Pyramids to build churches.

Sector 3: Cairo to Delhi (CAI – DEL)

After a 36-hour stopover it was time to prepare the aircraft for the next sector to Delhi. Having established the aircraft electrical power and carried out the pre-departure checks, all that was left was to load the fuel for the 2,400 nautical mile (nm), 5-hour subsonic trip.

The aircraft flew at Mach 0.99 in the cruise; however, it displayed a lane failure on the number 1 engine air intake control unit (AICU), which was strange because at this Mach number the AICU was simply shadowing the aircraft performance and not in control of the engine intake. On arrival at DEL the AICU was down-powered and 'built-in test' (BIT) checked, which proved to solve the problem.

This part of the trip was to visit the Taj Mahal at Agra. Unfortunately the airport at Agra isn't long enough to take a Concorde, so we had to land at Delhi and then travel to Agra and back.

Sector 4: Delhi to Hong Kong (DEL – HKG)

The trip to HKG was to be a mix of subsonic and supersonic cruise. Arrival was interesting, with the use of the 'checker board' into Kai Tak airport the highlight of the day. On the post-flight checks I noticed the left nose wheel tyre had a cut that was close to limits and I was not happy to carry it into the next phase of the trip, primarily because of the heavy weights at which we would be operating while travelling across

the Pacific islands. The wheel was changed and that, thankfully, was the last tyre problem of the trip.

The two days in HKG gave the passengers and us a great chance to see the sights and to visit the Great Wall – albeit the latter of course involved a flight into mainland China.

Sector 5: Hong Kong to Guam (HKG – GUM)

Having prepared the aircraft in the normal way for our departure from HKG, I found one of the INUs had decided it wasn't going to align itself in the normal timeframe. Not wishing to use the spare, I elected to re-rack and check the connector pins/sockets. Having done so it was now simply a case of re-aligning the delinquent unit. Fortunately it worked; it was probably rectified by the simple movement of the pins/sockets against each other, which often cures electronic equipment. Obviously two-day lay-overs don't always suit complex aircraft and their systems.

Sector 5: Guam to Honolulu (GUM – HNL)

The next sector was interesting due to the fuel load required to achieve the 3,252 nm while accounting for the ambient temperatures and pressures. Much calculating and recalculating confirmed that we could do it, but we must leave no later than the STD and I would need to use the fuel quantity computer shorting plug to squeeze the last legal drop of fuel into the aircraft.



Commemorative photograph
A photograph of Concorde G-BOAG, included in the passengers' pack.
Image: Bill Burridge

After what seemed an eternity, we lifted into the air in the prescribed time and distance. The aircraft was now really getting into her stride. This was the thoroughbred doing what she does best – flying at Mach 2 over open oceans. We arrived in HNL with nothing more than a couple of niggling issues, which were very quickly sorted out.

The highlight for me on this stop-over was a visit to the very poignant USS *Arizona* Memorial, which marks the entry of the USA into WW2 on 7 December 1941.

Sector 6: Honolulu to Mexico City (HNL – MEX)

Another long sector, but once we had loaded the fuel and got under way the aeroplane behaved itself beautifully and landed at Mexico City without incident.

We always tried to oblige with things like photo shoots when in foreign destinations, and Aero-mexico were very keen to have a lot of their new ground equipment photographed next to a beautiful aeroplane. It paid dividends because we got the most secure overnight parking at the airfield.

Preparation for the next sector, to Barbados via Kingston, was routine, and we were now back to standard fuel loads. The aeroplane seemed to be loving this part of the world and seemed to sense she was now homeward bound.

Sector 7: Mexico City to Barbados via Kingston (MEX – KIN – BGI)

We were now into a little bit of island hopping, with our destination of BGI being interspersed with a fuel stop at KIN. The need for the fuel stop was created because of the high-altitude departure from MEX, making the destination into BGI in a single hop a little marginal.

Arrival into BGI saw a problem with a fault on the Captain’s pitot head and no spare available. Fortunately luck was on our side; there was a spare available at JFK, which was shipped overnight to BGI, and we had a two-day stop-over planned. The pitot head was changed and checked out, and we were ready to go. Concorde operations had become fairly routine out of BGI, so our departure for the last two legs of the trip was straightforward.

Sectors 8 & 9: Barbados to New York to London (BGI – JFK – LHR)

The last two sectors of the Goodwood Travel World Air Cruise got under way with the departure out of BGI leaving on time, destination JFK. The relatively short supersonic sector was uneventful, the pitot defect had been cured, and we were now heading into ‘bread and butter’ Concorde operations: i.e., flying over the North Atlantic at Mach 2.0.

A routine turnaround in JFK once again saw us back in the air and heading east towards LHR.

In a little over 3 hours we were on final approach into LHR, having completed a little under 28,000 nm in just over 32 flying hours. We had achieved this arms-length Concorde operation without a single technical delay, with the most beautiful aircraft ever built, and despite flying overland for some of the early legs we never cruised at speeds of less than Mach 0.99. For the most part, this fantastic piece of aeronautical engineering was never happier than when it was doing what it was designed to do – flying at 60,000 ft, Mach 2.0, 1,325 mph.

Goodwood Travel World Air Cruise 7–24 March 1987: itinerary

Sat 07/03	London – Moscow	Night stop – Bolshoi Ballet
Sun 08/03	Moscow – Cairo	2-day stopover; visit to Pyramids
Tues 10/03	Cairo – Delhi	2-day stopover; visit to Taj Mahal
Thurs 12/03	Delhi – Hong Kong	2-day stopover for passenger activities
Sun 15/03	Hong Kong – Guam	
Tues 17/03	Guam – Honolulu	
Mon 16/03	Honolulu	Gain a day in Honolulu due to crossing International Date Line
Tues 17/03	Honolulu	2-day stopover for passenger activities
Thurs 19/03	Honolulu – Mexico City	2-day stopover for passenger visits
Sat 21/03	Mexico City – Kingston – Barbados	2-day stopover for passenger activities
Tues 24/03	Barbados – New York – London	



CONCORDE WATCH

Concorde G-BBDG

British pre-production aircraft

Location: Brooklands Museum, Weybridge, UK

Reporter: James Cullingham

Date: 27 July 2020

It has been the best part of 13 years since the last serious painting effort was conducted on G-BBDG. The majority of the paintwork has fared pretty well over that period, but the nose and visor were parts that were not done with the rest of the aircraft as their condition at the time was great. The radome was a factory-fresh spare, which still has a lovely shine to this day.



Nose and visor, 2 July 2005

DG's nose awaits refitting in the tent.
Photo: James Cullingham

The paintwork, especially over the top surface of the nose fairing (see photo, top right), was rapidly degrading and was at the point where it needed resolving. The museum's closure and the increased availability of a few of DG's team meant that once the lockdown had started to ease it was the perfect opportunity to get this project started.

The nose fairing

The nose fairing is not actually G-BBDG's original nose; in fact, it belongs to Concorde 216 (G-BOAF). A hangar door accident towards the end of service necessitated a swap, and DG's nose was overhauled and fitted to 216. The orange flight test



Half and half

Above: the top surface's deterioration can be compared to the condition of the radome and the 'sanded' side of the nose fairing.

Photo: James Cullingham

bracketry and mounting points can still be seen inside the nose fitted to 216. At the time of Concorde's retirement, 216's nose was undergoing repair and was partially complete. Repairs had been made to the exterior, but the interior support structure still had minor damage, all pipework was missing, and the wiring was only partially replaced.

The first stage was to sand the old paint back, exposing corrosion and removing loose paint – much the same as you would do at home. Any corrosion was removed and the bare metal was treated with Alodrom, which gives the aluminium a layer of protection. Drainage holes were inspected and cleaned out, and treated with Alodrom.

The Alodrom was then wiped off with water, the entire surface was de-greased, and the first undercoat was applied. To get a good finish we have done two off-white undercoats,



Alodrom treatment

Top: With sanding completed, the nose fairing is ready for the Alodrom.
Above: The nose fairing with Alodrom treatment completed.

Photos: James Cullingham

sanding between them. We plan on doing two top-coats, again sanding between coats before hopefully finishing with a final layer of original gloss-white CA8000 paint, which was the paint used in service.



Second off-white undercoat completed

Photo: James Cullingham

As we are unable to spray out-doors, we use flock rollers, the same as were used on the rest of DG. While this does not provide the same gloss finish as spraying would do, the finish is still great.

The visor is a bit more tricky; however, thankfully, there is no evidence of corrosion. Thus, a comprehensive sand is not required – and would be very difficult to accomplish without damaging the priceless visor glass, anyway. We intend to cover the glass first with some form of protection, followed by cleaning up the rusted bolts, before a light hand-sand of the metal. In this case we are going to find a suitable can of gloss-white spray.

Fin and rudders

Whilst giving the nose time to dry between coats, our attention has turned to the vertical fin. Other than semi-regular cleans, which double as an opportunity for the team to inspect the airframe, it has not been touched since the time of the original restoration back in 2005–6. The fin and its leading edges, along with the PFCU covers and rudders, were all painted on the ground. The final touches, such as adding the blue segment to the upper rudder, were completed once the fin and rudders had been re-fitted to the aircraft.

During the last clean in February, we had noticed a few areas of corrosion, primarily the VOR/LOC

antennas and on the top of the lower rudder PFCU cover. This is due to a combination of bird excrement (the top of the fin is the perfect perch!), wind, rain, and time. Further closer inspections revealed the beginning of a number of spots of corrosion in other locations, so it was decided to also tackle all of this over the summer – no small task!

The first job, on what was a very warm day, was to remove the VOR/LOC antennas followed by the rudder PFCU covers. As we were

Removal of VOR/LOC antennas

Dave removing the left-hand VOR/LOC antenna. The right-hand antenna was removed shortly afterwards.

Photo: James Cullingham



Removal of rudder PFCU fairings

Access conditions made the removal of the rudder PFCU fairings tricky!

Photo: James Cullingham



unable to move the rudders due to their being fixed in place, access to the two retaining bolts was limited. Light corrosion, along with being 40 feet up in the air, added to the trickiness of removal; however, after some persuasion the forward and aft rudder PFCU covers were removed from both rudders.

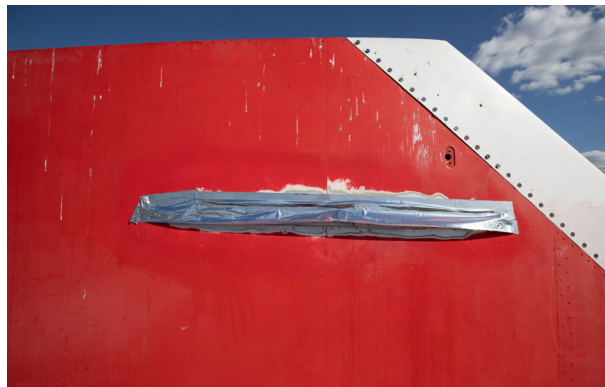
To aid in the removal of the PFCU covers on the fin itself, the bolt heads were cleaned out before we attempted to remove them. Around 60 bolts were removed, with only five requiring the use of a 'Ez-Out' tool, which had been recommended by one of our resident ex-BA Concorde engineers.

The forward lower rudder PFCU fairing corrosion had also progressed to the internal aluminium honeycomb. Fortunately, the rudder PFCU fairings are one of the few external components for which we have spares; therefore, in order to progress the project faster and allow for a complete repair of the removed PFCU fairing, one spare was retrieved from storage and prepared for fitting instead.



VOR/LOC antenna removed

Left-hand antenna mounting point after initial clean-up.
 Photo: James Cullingham



Mounting point protected

Right-hand mounting point with speed tape 'cover'.
 Photo: James Cullingham

Once off the aircraft, all the parts are subjected to the same treatment as described earlier: i.e., sanding, corrosion removal, Alocrom. This process is also applied to the internal surfaces if any corrosion is found.

In parallel the VOR/LOC antenna mounting points on the fin itself were also cleaned up (see above) before a speed tape cover was made to divert water away whilst allowing air to circulate. A final detailed clean-up will be conducted, followed by Alocrom and then an undercoat. The sanding also shows how the red has faded over the last decade.

Regarding the interior of the fin itself, all the panels that can come off will be removed for internal inspections. The interior will then be sprayed with ACF-50, a corrosion inhibitor and protection layer that needs to be applied on a yearly basis.

The next area of concern was the lower rudder, where a number of holes through the thin aluminium skin had been found. Sanding of the area exposed the spots of corrosion, which can be seen as dark grey spots (see images, right).

The corrosion will be drilled out, again followed by an Alocrom treatment and then an undercoat. As per the Structural Repair Manual procedure for the repair of holes, thin aluminium patches shall be made up and, using aerospace-grade adhesive sealant, will be used to cover the holes. This will then be

Corrosion on lower rudder

Close-up view of the corroded areas on the lower rudder, visible here as dark spots within the silver (bare metal) patches.

Photo: James Cullingham



Ready for repair

Three of the corroded spots have been drilled out. The holes will be patched according to the procedure specified in the Concorde Structural Repair Manual.

Photo: James Cullingham



Temporary covering

The exposed areas have been covered with speed tape until they can be repaired – not pretty, but required, especially due to the UK weather!

Photo: James Cullingham



left to set, prior to undercoating and finally painting with the blue top coat. Temporary speed tape covers have also been created to cover these holes while the patches are created.

What happens next?

The nose fairing and panels will be given the first top coat. We use thinners to improve the application, which should leave a much smoother, shiny surface. Another benefit is that a better surface will not trap dirt and is easier to clean. We plan to do two top-coats before using the CA8000 paint, also slightly thinned. The panels shall then be re-attached to the aircraft using new bolts that have been sourced. Given that the nose operates on DG, and given the necessity for regular inspections, we do not want to paint the panels while they are on the airframe as we do not want the paint filling the bolt heads, which would make removal and installation more difficult and raises the risk of stripping the heads.

The work on the tail will continue with the aim of getting the top red segment, as well as the blue segment, completed by the end of the summer. This includes all necessary corrosion work. After the corrosion treatment, each segment will have a key-sand over the entire surface, followed by a fresh coat of paint. We shall then look at doing the lower red 'stripe' segment as well as the white, which will be done last.

Finally, all the antennas and PFCU covers will be re-fitted. We intend on re-fitting the antennas with a small gap between the fin and the antenna to allow for airflow, as well as a bead of sealant along the top edge. This will prevent water getting in, but allow water to escape from the bottom edge if it does in time start to leak. The problem is not necessarily getting wet, but staying wet. A similar method shall be used for the PFCU covers: a bead of sealant will be applied between the top of the PFCU covers and the fin. To

prevent birds from sitting on the top of the fin, bird spikes will be fixed to the entire top of the fin and upper rudder, as well as the antennas, potentially painted in red to minimise the visibility from the ground.

Other projects we would like to achieve include adding the large-format 'G-BBDG' registration to the lower left and upper right wing surfaces, along with all the wing edge decals such as the dotted 'Do Not Walk' line.

Ultimately all this work, not just on G-BBDG but on her brothers and sisters too, is completed by volunteers using funds either through your visits to their respective museums, direct donations, or donations to Heritage Concorde.

For the latest news on the Concorde restoration projects at Brooklands and elsewhere, please see the Heritage Concorde website: <https://www.heritageconcorde.com/latestnews>



G-BBDG ready for the next stage of work

Photo: James Cullingham