On the 11th May 1969 a Royal Navy Phantom of 892 Squadron, competing in the Daily Mail Air Race, set a new world air speed record between New York and London with a time of 4 hours 46 minutes. The aircraft's Observer, Lieutenant Commander Peter Goddard, achieved the fastest overall time in the Race getting from the top of the Empire State Building to the top of the Post Office Tower in 5 hours 11 minutes.

It was the third time during the 8 days of the race that this point to point transatlantic record had been broken by a Naval Phantom.

Those contributing to this item were the "planners and the participants".

892 Naval Air Squadron would later embark in the aircraft carrier HMS ARK ROYAL (as shown above with an 892 Phantom being launched from the "waist" catapult.

THE STORY OF THE RACE.

The late Lieutenant Commander Brian Davies, the Commanding Officer of the Squadron, has left on record his account (BD) of these remarkable flights which so captured the imagination of the Country and gave the Royal Navy such a resounding victory in the Air Race. Some of his original script has been adjusted in a very minor way without destroying the impact of his words to give the story its chronological merit.

One of the planning group and team, Commander David "Shorty" Hamilton RN (D"S"H) contributes his memories as does Lieutenant Commander Paul Waterhouse RN (PW), one of the contestants, Lieutenant Commander "Robbie" Roberts RN (RR), the New York co-ordinator and Lieutenant "Al" Hickling RN (AH) who is the last surviving Phantom Pilot from the Race.

BD: In June 1968, the Phantom squadron at the Royal Naval Air Station at Yeovilton, Somerset, submitted a proposal to enter the Daily Mail Transatlantic Air Race. The initial plan envisaged 5 in-flight refuellings between New York and London, giving six supersonic legs at 1100 miles an hour and flight time of about 4 hours 20 minutes.

During the next six months the plan progressed no further and very little was heard about it. However, in January of 1969, the project leapt back into life, when the Flag Officer Naval Air Command directed us to research further the possibilities of entering for the race and to look into the logistic support requirements. The participation of the Fleet Air Arm would be used for operational training.

PW: In reality it was never strictly an 'Aircraft Race' as such but was to be the time it took for an individual ('a runner') to travel from the top of the Empire State Building in New York to the top of the Post office Tower in London or vice versa but the chosen mode on getting from A to B or B to A for some competitors had to have an element of air travel in it. This is where different 'categories' of air travel/aircraft applied. Later there would be minor disputes about the actual flight times, broken records and all that, but these were almost incidental at the end of the day! The winners were 'the runners' for their personal times from tower top to tower top being what counted. The categories of aircraft used to transport these 'runners' were supersonic, subsonic, scheduled airliners, single engine, multi-engine, light aircraft etc.

D"S"H: I had decided to leave the Service and emigrate to Australia having returned to the United Kingdom in September 1968 from an exchange appointment out there and as I was not to be released for about a year I was an ideal odd job man. I was thus one of the team charged with the overall organisation of the Navy's participation in the Race.

The Head of the Team was the then Captain Ray Lygo who was between appointments and he was allocated the task of overseeing the operation and I was made his 'chief-of-staff'. He did the political work and I did the rest!

The first matter had already been decided, which of the Navy's fixed-wing aircraft was to be used, and that was obvious, McDonnell Phantoms of 892 squadron, (I had commanded the squadron when it flew the Sea Vixen). The aircrew were still working up with the new aircraft so it was a race to get them fully operational in time.

The team was formed: Front row: Captain Raymond D Lygo RN

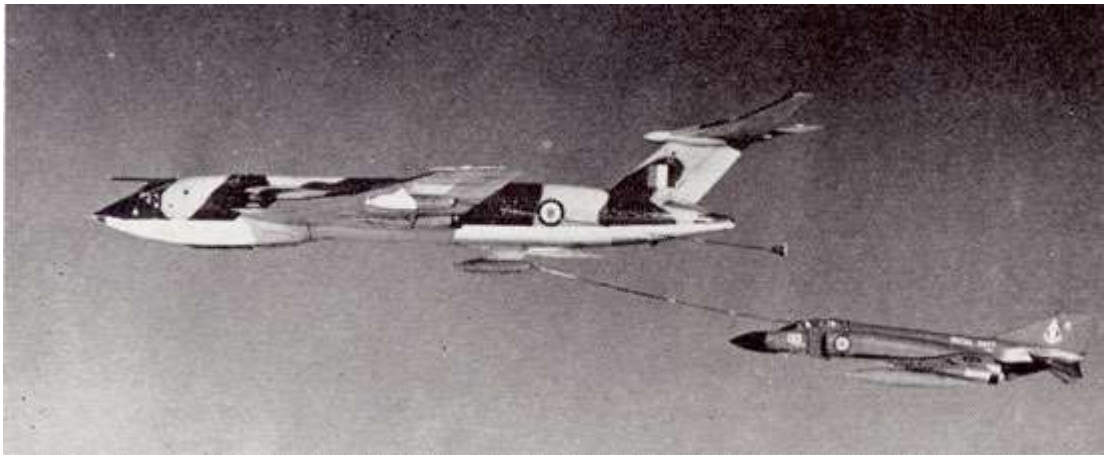
Second row: Lieutenant Commander Robbie Roberts RN and Commander David "Shorty" Hamilton RN

Third row (the flyers) Lieutenant Paul Waterhouse RN (Observer) and Lieutenant Commander Doug Borrowman RN (Pilot) (Team 3) - Lieutenant Commander Peter M Goddard RN (Observer) and Lieutenant Commander Brian Davies AFC RN (Pilot) (Team 1) - Lieutenant Hugh Drake RN (Observer) and Lieutenant Al Hickling RN (Pilot) Team 2)

Back row: Lieutenant Commander D E Fairweather RN (Public Relations Officer)

For the purists the aircraft on display are those from the Phantom Intensive Flying Trials Unit (700P) at Royal Naval Air Station Yeovilton which would become the front-line Naval Air Squadron, 892. All the flight crews would join 892 Naval Air Squadron.

BD: Between the time of the proposal and our deployment to New York on the 24th April, life became hectic. The plan shifted through several phases and our initial flight profile involving 5 refuellings became impracticable since it required too much support and there were disadvantages from a flight safety point of view. After hours of planning and calculations we decided on 3 air to air refuellings, using Victor tankers of 55 Squadron from RAF Marham.



Practice refuelling with a Victor tanker.

BD: Having settled this aspect we now had to refine the profile. Our initial planning had been based on limited performance figures calculated from one or two supersonic flights, and from data obtained during our fuel consumption work carried out for the Phantom trials.

February and March saw us flying out into the Atlantic to the South of Ireland between 40 and 50,000 feet at speeds well above Mach One to really pin down the fuel consumption figures and then meeting up with another Phantom to formulate a technique of accurately rendezvousing with a tanker at these high speeds.

Fortunately both the Phantom and the Victor have range and direction finding equipment to assist joining up. In addition we depended on ground or ship radar to control the aircraft during rendezvous in the event that the airborne equipment failed.

Two procedures had to be devised to allow for supersonic and subsonic rendezvous, and after formulating them, Phantom against Phantom, we found that the Victor tankers were able to fit perfectly with our ideas. We eventually got the whole thing down to a fine art and were able to adjust the tankers holding pattern, and to turn them onto our track to fit in with the fuel requirements at each rendezvous.

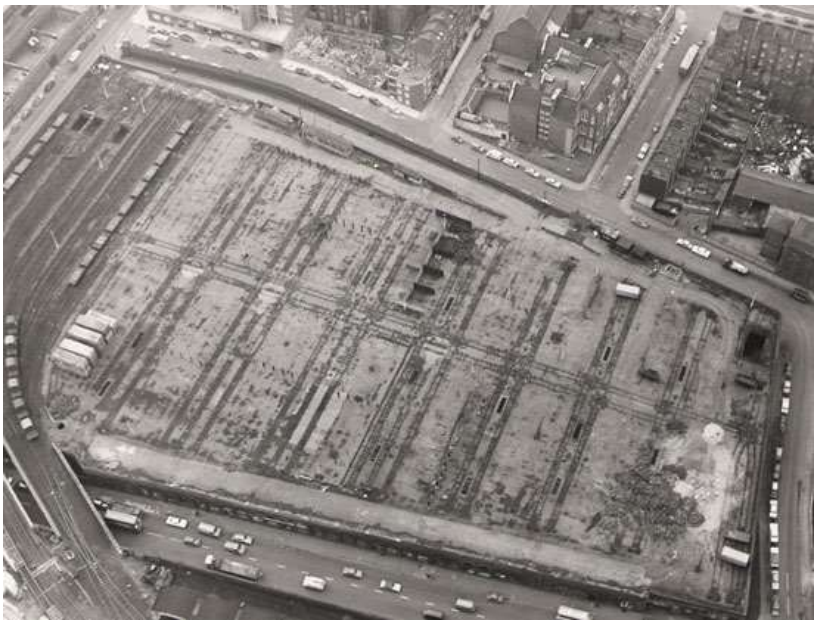
D"S"H: The landing site was the next big question, how when and where.

There was also some discussion as to the ground mode of transport and it was generally agreed that the final phase of the journey to the PO Tower would be riding pillion on the back of a Royal Marine despatch riders motorbike.

There was a bit of practicing carried out and the Observers who would be actually running the Race were unanimous in their agreement that they would choose a night deck landing as an alternative every time. Also the Phantoms had to land somewhere as close as possible to the Post Office Tower and Captain Lygo obtained permission to use Wisley, a satellite airfield owned by BAE (and a name made famous because of the Royal Horticultural Gardens). This had the advantage that there would be no hold up by other air traffic, and a straight in approach was possible.

Having had a look around for a suitable helicopter landing site it became obvious that most were a motor cycle ride away and one of the nearest, the railway yards at St Pancras, was knee deep in coal dust and quite unsuitable.

D"S"H: There was, however a building site right by the Tower and if we could get permission to use it and the helicopter pilot said he could do it, all our problems were solved. I approached the site manager and, luckily he was a progressive type and said he thought it would be great and would contact his boss. I suggested that we could arrange some positive advertising for his Company.



The railway yard at St Pancras - rejected!

The Moss building site adjacent to the Post Office Tower - chosen!

A closer view of the site - the actual hover point for the helicopter, coming in from Wisley, was over a platform specially built next to the derelict building at top left of photograph.

D"S"H: In the meantime Captain Lygo arranged for the helicopter aspect and we were allocated the machine and a pilot Lieutenant John Dines RN from the Royal Naval Air Station Lee on Solent. He had operated out of jungle clearings during the Borneo troubles and was a top notch pilot for the event. He felt the site was fine so it was agreed that the Phantoms would land at Wisley where the chopper would be waiting with rotor turning, which would then fly the Observer direct to the building site. He would jump out, run across the street and up to the Tower lift. So the end part of the Race was decided!

THE FLIGHT PLAN - Teams would fly in reverse order with Team 3 setting off first.

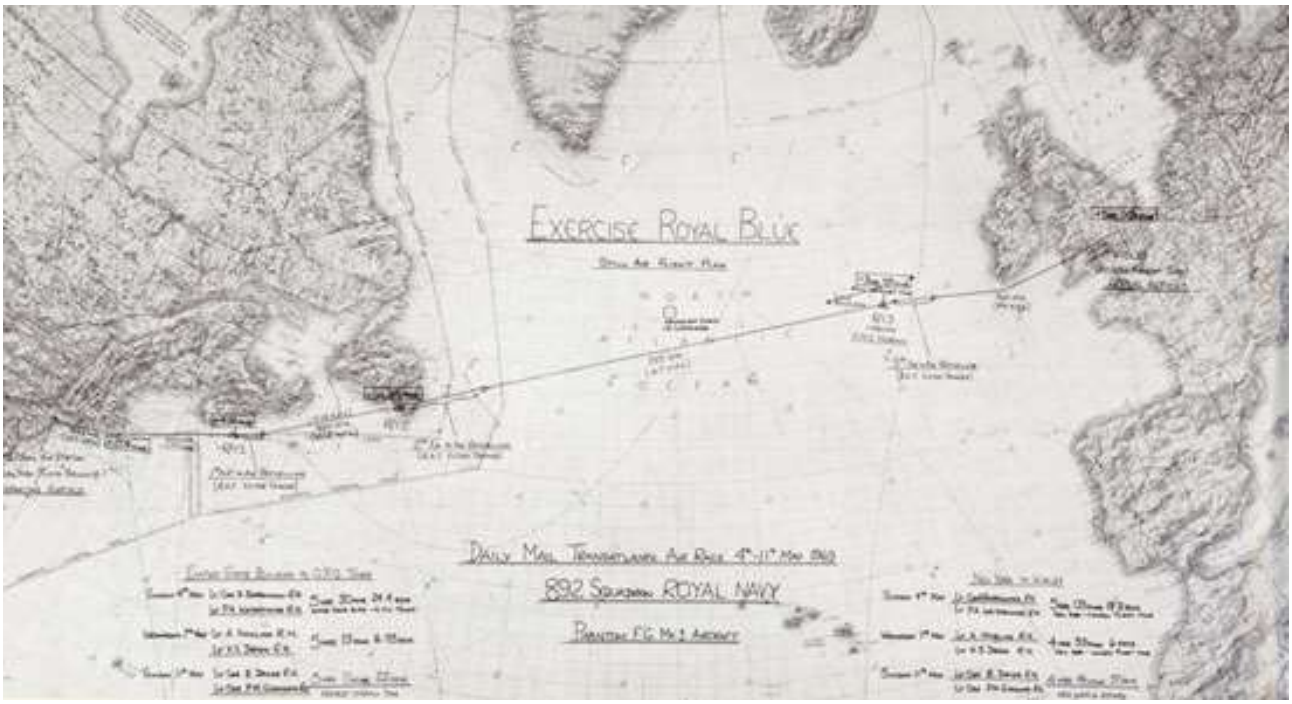
BD: The profile finally selected would take us out of New York on a maximum power climb to 33,000 feet, where we would cruise at 650 mph to Nantucket Island. Here we were to accelerate to 1100 mph and climb to 45,000 feet or the first supersonic leg to our refuelling point 60 miles South of Nova Scotia. Having refuelled at reduced speed, we then planned to accelerate for our second supersonic leg to Newfoundland. At this point we were to effect a subsonic rendezvous with the tanker, top up, climb to 39,000 feet and settle down to a 650 miles an hour cruise across the 'pond' using the great circle route to 52 deg N 20 deg W and our third rendezvous. This was to be the longest, most boring and yet, most anxious leg, since it involved 900 miles of Dead Reckoning navigation and accuracy depended on the forecast winds.

The last join up with the Victor tanker was to be made under the surveillance of HMS NUBIAN'S radar, to enable us to change altitude from 39 to 33,000 feet in the busy North Atlantic airline routes.

HMS NUBIAN - the CO of the ship was Commander Bobby Leathes RN and he was charged with overseeing the radar controlled rendezvous of the Phantoms and RAF tankers and would also act as rescue ship in the event of a disaster.

BD: From this point onwards we planned to fly around the South of Eire at up to 1100 mph, decelerating to subsonic speeds 45 miles West of Lundy Island. From here to Wisley, the terminal airfield, we would fly at 700 miles an hour, finishing up with a straight in approach to the runway.

The total still air time for this profile was calculated at 5 hours one minute. The upper wind forecast for this route during the second week of May was a 50% chance of a mean tail wind of 50 knots, which indicated our flight time would be around 4 hours 40 minutes, but more of this later.



BD: Meanwhile, a great deal of planning was underway by the team headed by Captain Lygo.

RR: I was on my last few months in the Fleet Air Arm having just relinquished Command of 849 Naval Air Squadron.

As luck would have it, I was selected to become Team Manager (New York) for the Phantom entry in the Great Air Race. I suspect I was chosen by Captain Lygo because I had good knowledge of the United States, having been on the British Navy Staff some two years previously.

I arrived in New York and met up with a great team who were to fly the Teams across the Atlantic. My first and most important job was to arrange for unlimited supplies of duty free from the Embassy in Washington. Easy if you knew how but quite beyond some of the other non-RN competitors in the Race. Despite seeking an extension of my Service their Lordships reminded me that I was due to retire on the 5th April but I would now be required to retire two days after the completion of the Air Race.

BD: Suitable helicopter sites were now also surveyed in New York to determine the optimum procedures to use between the Empire State Building and NAS Floyd Bennett. These culminated in the selection of the 30th Street West Heliport on Manhattan Island.

Motorcycles were to also be used from the Empire State Building to the Manhattan Heliport, and the race runners, the Observer aircrew, underwent a quick PT course for the 85 yard sprint from the Moss site to the GPO Tower.

FINAL PREPARATIONS

BD: The last ten days prior to our deployment to Naval Air Station Floyd Bennett were busy ones. We flew each flight leg profile individually to double check the performance data. RNAS Yeovilton became used to seeing the Phantoms diving at the runway, stopping as quickly as possible and the eager Observer leaping out of the back seat as the aircraft came to a halt. A final practice of this phase was staged just prior to our departure for the USA involving the Wessex helicopter we were to use in London, flown by Lieutenant John Dines.

Thursday 24th April provided us with the suitable weather to fly the three Phantoms to New York. The flights were more or less uneventful, and with one refuelling per aircraft, we stopped off at Argentia, Newfoundland, before carrying on to NAS Floyd Bennett, NY.

The flying teams:
From the left: Peter Goddard; Paul Waterhouse; Doug Borrowman; Brian Davies; Al Hickling and Hugh Drake

In New York we were welcomed by our small maintenance team, with the Air Engineer Officer, Lieutenant Commander Alan Ducker, in charge and set about organising a programme of terminal practices between the Empire State Building and the airfield. The maintenance team did a superb job on our aircraft and we were able to fly one last minute check flight each and to exercise our departure profile with the New York Air Traffic Control organisation.

The Maintenance Team.
Back Row left to right: Al Wickes, Ron Bridgeman, Keith Abnett, John Ricketts, Charlie Kunz, Andy Crouch, Colin Yarwood, Bernie Frankland.
Front Row left to right: Tony Bridgeland, Tony (Buggsy) Breed, Ralph Wintle, Nick Carter, Doug Mitchell (DAEO), Graham (Charlie) Probert, George Barrass, Les Sturgess, Bert Kimber.

A point here about the operation of the race which was controlled by Captain Lygo and his team at RAF Strike Command Headquarters. Although we were obviously looking for a favourable wind, the decision to go or not to go basically depended on the forecast weather in London, Goose Bay (the tanker base) and at our diversion airfields in Nova Scotia, Newfoundland and at Shannon. We needed 3 miles of visibility and a cloud base of 1500 feet at all these places.

RACING THE PHANTOM

The decision to go on the 4th May, the first day of the race, was made at 8 pm (New York time) the night before.

Although there was a slack weather system giving a mean tail wind of 9 knots, the excellent weather conditions could not be ignored. At 4 am the 'go' was confirmed and our first crew, Lieutenant Commander Doug Borrowman and Lieutenant Paul Waterhouse made preparations to depart. Their main objectives were to get to Wisley adhering to the basic plan, while at the same time finding out where we might be able to save time on the subsequent two flights.

Paul Waterhouse clocked out at 0800 Sunday from the top of the Empire State Building. Unluckily he slipped up on the marble floored foyer loosing seconds and on the way to the helipad his BSA motorcycle hit every red light on 33rd street. Yet he leapt into the cockpit at 0815 and Phantom 002 roared down the runway, turned left and rapidly disappeared out of sight.

Number one away - wheels coming up

The first section to Nantucket Island was uneventful. However, the equipment giving the range between the Phantom and tanker did not lock on at the first rendezvous, but using bearings and ground control radar, the refuelling was successfully completed. The leg to Newfoundland ran smoothly and Doug and Paul managed to pick up 2 minutes on the planned flight time, but again the rendezvous was hampered by lack of ranges between aircraft. On the transatlantic leg some time was lost due to cold temperatures and an inability to maintain the planned true air speed. Bearings from HMS NUBIAN were obtained at about 300 miles and the final rendezvous went well.

It was not until they set out for the last leg that they hit their first real problem. Temperatures at 40 to 45,000 feet were 12deg C above standard, resulting in an inability to fly at 1100 miles an hour while keeping abreast of the required fuel consumption.

The arrival at Wisley was spectacular, as Doug unintentionally burst both tyres during the landing run trying to stop quickly.

Yet the flying time beat the existing world record by 26 minutes and Paul Waterhouse's top to top time of five and a half hours was certainly not going to be easy to beat.

Race Serial No. 654

Daily Mail
Transatlantic Air Race

Official Time Card

Competitor's Details (Block letters)

Mr/Mrs Messrs LT. P. WATERHOUSE

Read 'Notes' sent with this card carefully.

*Do not lose this card. If not produced at check points it will invalidate your entry.

A sign at control centre before start

B sign just after finish

Exact location of Check Points

LONDON
Post Office Tower

Use RESTAURANT entrance in Maple Street, W.1. (24 hours) Take elevator to 33rd floor. On exiting follow signs clearly indicating Check point.

NEW YORK
Empire State Building
34th Street and Fifth Avenue

Between 7 am—7 pm (local time) use any entrance. From 7 pm—7 am use western-most entrance on 34th St. only. Take elevator to 80th floor and transfer to elevator serving 86th floor observation platform. On exiting turn right. Check point clearly indicated.

Starting race time

START

Your starting time—
Insert this end up to red line in the Omega time recorder and PRESS BUTTON 'D' when instructed by official time keeper.

Date of departure to be inserted by control centre official here and signed by him.

PHASE 1

Date 4 MAY 1969 (Sgd.)

Reminder:
Do not lose this Time Card

Actual travelling time to be recorded at finishing point by air race official

Hours	Mins.	Seconds	Initials
5	30	24.43	

Date of arrival to be inserted by check point official here and signed by him.

PHASE 2

Date 4 MAY 1969 (Sgd.)

Your finishing time—instantly on arrival at FINISH check point insert this end up to red line, PRESS BUTTON 'A' and give card to timekeeper.

FINISH

Finishing race time

Air race time: 5 hours 3 minutes and 18 seconds

The race to the top by Paul Waterhouse

Rightly so, the First Sea Lord Admiral LeFanu pours the drinks. On the left Flag Officer Naval Air Command, Vice Admiral Sir Richard Janvrin waits for his share.

BD: We learned a great deal from the first flight, but in particular it showed us that to better this time, we would have to look for warmer temperatures on the subsonic leg across the Atlantic, and colder temperatures on the last leg to achieve better true air speeds.

On Tuesday the American global weather system was forecasting a slight improvement in the mean tail wind for the next two days but also a progressive deterioration in the diversion airfields in Nova Scotia and Newfoundland. Within the light of this information it was decided to launch the second aircraft on Wednesday with a forecast mean tail winds of 19 knots.

All went well with the New York terminal procedures and Hugh Drake, the Observer, managed to knock one and a half minutes off the time. Alan Hickling, the pilot, took off in Phantom 003 at 0814. At the first rendezvous, 003 was having radio troubles. Difficulties arose during the hand over from the Boston air traffic radar to Moncton Military Radar. This and a series of other minor difficulties resulted in the refuelling being conducted 4 minutes late. After a somewhat hectic manoeuvre to join up with the tanker, the rest of the flight went smoothly.

AH: The particular event that I remember most was the missed tanker connection. After leaving the mainland USA we accelerated to Mach 1.6 with a designated spot and time to meet up with the Tanker. The RAF (as it happened unfortunately) were being particularly helpful by heading our way so they could top us up earlier. You can imagine my shock when we saw the Tanker doing say 400 knots passing us two miles abeam while we proceeded at 1500kts (or so) up the designated track - this caused a little bit of a hassle and time getting plugged in - resulting in less fuel at the destination.

The 1000 miles (more or less) needing Dead Reckoning over the Atlantic must seem strange now with HF and GPS, and INS. Apart from DR the only help came from the sun - we glued a black cotton thread to the canopy from the starboard canopy rail over to the port rail. And pre-planned that on our heading, when the shadow of the thread on the starboard side fell over that on the port then we would be at such-and-such a longitude. On back-tracking after landing we reckoned we were within 25 nm of our sun shadow estimate - all you need for a little comfort half-way across the Pond.

BD: Alan and Hugh were able to maintain a high true air speed in mid Atlantic in warmer temperatures and they achieved a very fast final leg. Touch down at Wisley was 4 hours 53 minutes after take-off. Hugh Drake, saved seconds by side stepping the Customs man and the Wessex, superbly handled, made the hop to the GPO Tower in 11 minutes.

The second crew: Hugh Drake and Al Hickling

The second of the contestants: The Phantom arrives at Wisley

Phantom stopped and Observer on his way

The second of the contestants arrives at the Moss Building site.

Air race time 4 hours 53 minutes and 6 seconds.

. . . AND THE LAST SHALL BE FIRST

BD: Meanwhile, back at NAS Floyd Bennett, Peter Goddard and I were looking rather anxiously at the forecast weather for Thursday and Friday. A frontal system was approaching the New York area from South West and was forecast to continue up the East Coast of U.S.A. and Canada progressively blotting out Nova Scotia and Newfoundland. Also I was halfway through a head cold. Captain Lygo, on the transatlantic phone call, suggested the best way through was for me to turn in with 3 aspirins, lots of blankets and sweat it out. I was fit to fly by Friday, but the weather was not! Peter and I began to despair of ever managing to race the last aircraft at all.

While we were waiting to go, we digested the information received from the second aircraft. They had been able to find more favourable temperatures and with the extra tail wind, they had 'made' fuel throughout the trip, indicating that we would be able to go faster in the last aircraft.

Needless to say on Saturday we received the 'go' for Sunday, the last day of the race. The day dawned rather miserably in New York, but thank goodness the weather was reasonable elsewhere. Our mean tail wind for the flight was forecast as 23 knots.

The New York terminal arrangements were good and Peter Goddard clipped another 2 minutes off Hugh Drake's time. Phantom 001 climbed out as planned.

The first refuelling went smoothly. We had expected layered cloud and turbulence but luckily there was no sign of this, and we completed the refuelling without snags. It was encouraging to see the enthusiasm of Flight Lieutenant Jock Carroll in the Victor at this Newfoundland rendezvous. His aircraft had been suitably decorated with a two foot high dayglo 'FLY NAVY' right across the port side.

The Atlantic crossing went well although we lost two minutes on the planned time. However, we managed to push the third rendezvous eastwards, thus cutting down the refuelling time. On the last lap, we really made up time. We planned to stay at 40,000 feet to get the most favourable true air speed and with the aid of a 50 knot tail wind we hoped to stay abreast of the distance gone/fuel remaining problem. All worked well and with the occasional climb to 45,000 feet to recover from excessive fuel consumption we averaged 960 knots, true air speed (1100 mph) to Lundy Island.

Finally on towards Wisley and here again, by remaining lower than planned altitude, we managed to pick up an extra 80 knots and landed in 4 hours 46 minutes, luckily without bursting any tyres.

Slick helicopter flying and a great effort by Peter gave us a top to top time of 5 hours 11 minutes.

Peter Goddard rushes on to the winning time - maybe he had heard about the champagne for the earlier runs.

Air race time 4 hours 46 minutes and 57 seconds
New world speed record for the flight: 723.8 mph

The successful teams and the fastest aircraft XT858 - the Phantom F2 of 892 Naval Air Squadron

BD: Looking back, let me say that without the administration of Captain Lygo and his team, the enthusiastic support of our home base Yeovilton, the close co-operation of the RAF and their Victor tankers, the assistance of the United States Navy and many other people who helped us, we would not have accomplished anything.

THE AFTERMATH

The prominent words - ROYAL NAVY - on all the aircraft did much to emphasise the Navy's air arm and its capabilities to a very wide audience. The event was very closely followed by the British public.

All helpers received the thanks of the flyers - this D"S"H's useful present.

Few get to ride on a gun carriage (when alive)

Few get to be interviewed by Cliff Michelmore.

Few have a Royal Marine band wheeled out to do the honours.
Brian Davies: Vice Admiral Sir Richard Janvrin: Peter Goddard

D"S"H: A set of commemorative first day letters were sent to the First Sea Lord and he passed the copies on to the Palace.

BUCKINGHAM PALACE

7th August, 1969

Dear Commander Hamilton

I am commanded by The Queen to thank you very much for sending, through the First Sea Lord, three first day covers for the Transatlantic Air Race which you wish to present to Her Majesty on behalf of the Royal Navy. The Queen is delighted to accept these first day covers for the Royal Philatelic Collection.

Yours sincerely

Martin Charteris

Commander D.M.A.H. Hamilton, R.N.

VICKERS TROPHY GOES TO THE ROYAL NAVY

Sir Leslie Rowan presented the Vickers 'Alcock and Brown' trophy and a cheque for 1000 GBP to Lieutenant Commander Peter M Goddard RN whose time of 5 hr. 11 min. 57 sec. was the fastest overall West-to-East in the Daily Mail Transatlantic Air Race 1969. The occasion was a celebration dinner at the Royal Garden Hotel, Kensington on Wednesday, 14th May when trophies and prizes were awarded to winners in the 21 categories of this Air Race.

HRH Prince Philip was at the Reception beforehand and met and talked with winners and sponsors. He discussed flight details of the record Navy Phantom flight with Lieutenant Commander Goddard, Senior Observer of 892 Squadron (which flight also won the Daily Mail 5000 GBP prize).

Mr. Dennis Healey, Secretary of State for Defence was present and the guest list contained names of many personalities well known in flying, past and present.

The Daily Mail commissioned a painting of the winning aircraft/team and Jane Allcock, great niece of the pioneer flyer, presented the picture to Lord Rothermere, the owner of the Daily Mail.

AND TODAY?

Of the flying crews only Alan Hickling and Hugh Drake are still complete. Two of the Pilots, Lieutenant Commander Brian Davies AFC RN and Captain Doug Borrowman RN are deceased. Their Observers, Captain Peter Goddard RN and Lieutenant Commander Paul Waterhouse RN, whilst both retired, are in healthy spirits.

Of the supporting team, Commander David 'Shorty' Hamilton RN enjoys sound health. Admiral Ray Lygo and Lieutenant Commander Robbie Roberts RN are deceased.

This article compiled by Lt Cdr Paul Waterhouse RN. (Amended 7 May 2014)