

# British Aircraft Corporation Limited

100 PALL MALL · LONDON · SW1

TELEPHONE · WHITEHALL 1020

9th May, 1961.

Dear Miss Field,

As you know, English Electric Aviation, which is one of our subsidiaries, has been working on the Blue Water missile for the British Army for the last year or so. We are now able to show this missile in public and it will be demonstrated at the Paris Air Show later this month.

Before sending it across to Paris we are arranging to stage a demonstration at the School of Artillery at Larkhill, Wiltshire, on May 16.

I now write to extend to you a cordial invitation to come along to this demonstration which will be given by the same army crew who will be on duty at Paris.

We are arranging a special coach on the 9 a.m. train from Waterloo on May 16 returning on the 3.15 p.m. from Salisbury arriving at Waterloo ~~4.15~~ 5.34.

Will you please let me know whether we may expect the pleasure of your company on this occasion and, if possible, the name of your representative. We can then arrange to let you have the necessary tickets.

Photographers will, of course, be welcome on this occasion and special facilities will be given to them during and after the demonstration at Larkhill. I should point out that the demonstration will not include a firing - these are done only on the rocket ranges both in this country and in Australia.

Yours sincerely,

A.C. Brothers  
Press Officer.

*J. Galdwater*

(for your late information)

x-405001

**British Aircraft Corporation Limited**

**100 PALL MALL · LONDON · SW1**

**TELEPHONE · WHITEHALL 1020**

11th May, 1961.

Dear Sir,

*on behalf of Mr. Goddard*

We thank you for accepting our invitation to attend a demonstration of the Blue Water missile at the School of Artillery at Larkhill, Wiltshire on May 16.

A special coach has been reserved on the 9 a.m. train from Waterloo and a return railway ticket is enclosed for the journey.

We look forward to seeing you on this occasion.

Yours faithfully,

FOR: A.C. Brothers  
Press Officer.

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NEWS RELEASE

ENGLISH ELECTRIC AVIATION LIMITED

## BLUE WATER REVEALED

The English Electric Blue Water surface-to-surface tactical guided weapon system which is under development for the British Army, will be demonstrated for the first time in public at the 24th Salon International de L'Aeronautique at Paris from May 26 to June 4. It will be operated by a British Army detachment from the Royal Artillery.

Blue Water is a simple system which meets the NATO requirement for a replacement for the Corporal missile. It has full cross-country mobility and can be carried in the new Argosy transport aircraft.

With its solid fuel motor Blue Water can be kept for long periods at instant readiness under cover, and be brought into action to engage a target with the response time of a gun, using normal artillery procedures. These are to be demonstrated throughout the Paris show. To engage a target the Blue Water fire unit, consisting of a computer in a small Land Rover vehicle and a missile carried on a combined launcher and transporter mounted on a standard three-ton lorry, need be in the open for only ten minutes. By the time the missile arrives on target, the firing position has been completely cleared, and the computer has moved off to join up with another missile on its launcher, ready to engage a further target. The original launcher may be rapidly sent back to be re-loaded, a process which is carried out swiftly under cover by artillery personnel using the launcher only. This performance cannot be equalled by any other known system.



The missile uses inertial navigation methods which are independent of control from the ground and are immune to counter measures by the enemy. The range of the missile is classified, but it can be stated that the Blue Water system provides a commander in the field with a weapon delivery system unique in its flexibility and accuracy.

The highly sophisticated guidance system is self-checking during the final check-out before launch and is operated by artillery personnel who need only a minimum of special training. Repair in the field is by replacement of the faulty component and this requires little equipment in addition to that normally fitted on the launcher.

The whole Blue Water system has been so designed that its very high standard of reliability can be maintained anywhere in the world.

The British Aircraft Corporation have had very considerable experience in designing, developing and producing mobile weapons which are rugged enough to stand up to the exacting requirements of operation in forward areas. Over the past years the Corporation has been responsible for Thunderbird Mark I, Mark II, and Vigilant, and the experience gained on these weapons is now being put to good advantage in Blue Water. The Royal Artillery are already equipped with the Thunderbird ground-to-air anti-aircraft missile system and this has already proved its remarkable reliability in service. Blue Water is of course being developed with the close co-operation of the War Office and the Ministry of Aviation.

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May 1961.

From: A.C. Brothers, Press Officer, British Aircraft Corporation Limited, 100 Pall Mall, London S.W.1.  
Telephone: WHItEhall 1020.

## BLUE WATER - FIRING PROCEDURE

Only two vehicles are required to prepare and launch the Blue Water surface-to-surface tactical missile. They are the launcher/transporter mounted on a standard 3-ton chassis and a long wheel base Land Rover, carrying a ground computer. This produces the necessary information to enable the missile's inertial guidance system to navigate the missile to, and detonate the warhead at, the correct point.

When a Blue Water troop is ready for action the launcher, computer, radio and detachment vehicles are normally camouflaged and hidden away in a preliminary position close to the actual firing site which has already been accurately surveyed. A theodolite is set up over the surveyed point and oriented. Its co-ordinates are set in the ground computer.

Immediately target information is received "Take Post" is ordered and the firing troop double to their duties. The target co-ordinates are set into the ground computer which immediately produces a rough bearing to the target. The reciprocal of this bearing is telephoned to the theodolite operator who sets it on his theodolite. Under his direction marker posts are set out on this bearing as a guide for the launcher driver. The launcher then moves out from cover into the launching position.

By now the ground computer has worked out an accurate target bearing and the theodolite telescope is set at 90° to this. The launcher is driven into position, the driver aligning himself with the marker posts, so positioning the launcher with its rear towards the target. Under the direction of the theodolite operator the launcher is halted opposite the theodolite and a remote control box is laid out. The rear of the launcher is jacked up and levelled transversely.

The computer vehicle drives up alongside the launcher and is connected to it by a multicore cable. The computed flight information is then quickly transferred to the missile and stored for flight use.

The travelling clamps on the missile are released, the stabilised platform of the inertial guidance system is unlocked and the firing cable laid out. The firing circuits are checked and the ignitor fitted to the rear of the motor.

Meanwhile the theodolite operator, looking through the theodolite into the window in the skin of the missile uses the remote control box switches to align accurately the stabilised platform and null its drift.

All marker pegs and other unwanted gear is stowed away and, with the two minutes to go before firing, the remote control box is stowed and the theodolite packed up. The firing troop, except the officer and sergeant, clear the firing area. The officer operates the warhead safety switch and the sergeant arms

firing circuits and they both double off to the firing box laid out 50 yards or so away.

The officer operates the firing switch to initiate the missile's own power supplies. When the missile has changed from external to internal power supplies the launcher boom automatically elevates to the firing position. The firing switch is then operated a second time and the missile takes-off.

The time from the receipt of target co-ordinates to the missile firing is only ten minutes and the launcher is only exposed on the firing site for this time.

After firing, the launcher boom is lowered, jacks placed in the travelling position, firing box stowed and the site cleared within two minutes.

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