

Mulberry - D.P. + J.W.T.

**MOST
SECRET**

TO BE KEPT UNDER LOCK AND KEY.

**It is requested that special care may be taken
to ensure the secrecy of this document.**

Room 666,
The War Office,
Metropole Buildings,
Northumberland Avenue,
W.C. 2.

8th March, 1940.

Dear *Bruce White,*

I have asked our personnel branch to call you up. You will probably be offered the appointment of Staff Captain (Transportation) but as soon as you get here I want you to take over the appointment of D.A.D. Transportation.

I have just got a further big new job authorised which I think will interest you and be very much in your line.

As you held the rank of Major in the last war and you are going to take over a major's appointment you should wear major's badges of rank and not captain's.

Yours sincerely,



Major Bruce G. White,
Reydon,
Midway,
Walton-on-Thames.

COPY

MOST SECRET

10

PRIME MINISTER'S PERSONAL MINUTE

Serial No. D.46/3

GENERAL INQUIRY FOR COS COMMITTEE
CHIEF OF COMBINED OPERATIONS
DIRECTOR OF TRANSPORTATION

This matter is being much neglected. Dilatory experiments with varying types and patterns have resulted in our having nothing. It is now nearly six months since I urged the construction of several miles of piers. Was Brigadier Jefferis consulted? If the conditions for "HUSKY" are much easier than in the Channel, what proposals have you got for them? I was hoping to reduce the strain on landing-craft by the rapid building of these piers. I am very much disappointed.

Let me have now plans for having four miles of piers ready to take part in "HUSKY" without prejudice to what will have to be done for a "SLEDGEHAMMER" operation.

W.S.C.

10.3.43.



1st June 1944.

My dear White

I must thank you again for the very interesting and pleasant day which you arranged for us yesterday. We were all tremendously impressed with all that we saw. I believe that your achievement is one of the most remarkable engineering feats of the war, and I am sure this opinion is shared by all who realise what you have accomplished.

Yours very sincerely
John Hume

Brigadier B.G. White, C.B.E.,
D.D. Tn.,
The War Office.

Mr. Alpin
Mayfair 8234

*80, Park Lane,
London, W.1.*

PERSONAL.

2nd June, 1944.

**Brigadier Bruce G. White,
Room 468,
Metropole Buildings,
LONDON, W. C. 2.**

Dear Bruce White,

I should have liked to have written you immediately after enjoying your hospitality on Tuesday, but have been spending a little time on one of our Aerodrome Contracts in the country and only returned to London to-day.

I find it difficult adequately to express my appreciation of your extraordinarily kind thought in giving me a day which will always remain in my memory, and I know that your other guests were all equally impressed and appreciative. It has given me a full picture of the whole scheme and, to my mind, the one outstanding feature is not only the inventive genius which has been brought into play to make the scheme possible, but the fact that any man has been able to do what you have done:- i.e., to select, one by one, individuals who had sufficient knowledge and experience to enable them to be the right unit or gearwheel and, by an accumulation of these separate gearwheels, each capable of fulfilling its own function and each interworking with the others, to build up a complete machine. I should like to congratulate you most heartily on the result you have achieved and, with the knowledge I have gained, I have complete confidence in the attainment of the desired object.

With all good wishes, and again many thanks,

Yours sincerely,

Malcolm Tr. Alpin

MMCA/BAP.

TOP SECRET

PRIME MINISTER'S
PERSONAL MINUTE

SERIAL NO. M.692/4.

MINISTER OF PRODUCTION
FIRST LORD OF THE ADMIRALTY
SECRETARY OF STATE FOR WAR
MINISTER OF SUPPLY

I am glad to hear that the production of
MULBERRY was successfully completed in time. This was
a fine feat. The final operational requirement for
PHOENIX had been met by May 23 and the minimum
operational requirement for WHALE by the following day.
As a result, the whole of the equipment is now in the
hands of the Admiralty and was ready and waiting in
the assembly areas on D Day.

The production of this novel and complicated
equipment and its towing to the final erection sites
and thence to the assembly areas, has been a very
considerable undertaking. I feel that all the
Departments concerned are to be congratulated on the
completion of the work.

W.S.C.

7.6.44.

PRIME MINISTER

10, Downing Street,
Whitehall.

TOP SECRET

To whom it may concern

Brigadier Bruce White has been sent over by the War Office with several experts on Ports to find out what has happened to the "WHALES", "PHOENIXES", etc., and any damage which may have been done to them by "BOMBARDONS". He is to report personally to me on Tuesday.

He should be given every facility as it is necessary to consider immediately what scale of replacements must now be set up in England to make good all damage.

The matter is especially urgent and the personnel in England must not be dispersed till the scale of the continuing effort is known.

I am also receiving a report from the Admiralty.

(Sgd) WINSTON S. CHURCHILL

23.6.44.

EM/D. Ports/37

TOP SECRET

D. In.

The Prime Minister instructed me, when I saw him at the War Cabinet Office on 27th June, 1944, to place on order 50 of the new design of PHOENIX units as he is sure that we cannot have too many.

He said that if necessary he would speak to the Minister of Labour about the labour force required.

In view of the recent decisions regarding MULBERRIES A and B, we are now assessing the number of units of all types required, including a liberal supply of spares, following which it will be possible to place a demand on the Ministry of Supply.

(Sgd.) Bruce G. White.

Victoria 6622/260
28/June/44

Brigadier.
D. Forts and I. W. T.

Copy to Brigadier Rolfe ✓
Major Hodge.

5.29/6

5130

TOP SECRET

File

Anson

Supreme Headquarters
ALLIED EXPEDITIONARY FORCE
Office of the Supreme Commander

29 June, 1944

Dear Prime Minister:

On Monday we discussed the action to be taken to make good the gale damage to the MULBERRIES. I have now taken the following decisions:-

MULBERRY A

No attempt will be made to rebuild MULBERRY A on the original plan: but the still existing CORNCOB breakwater will be strengthened to provide a two-fathom shelter for small craft. No WHALE piers will be built in MULBERRY A.

MULBERRY B

MULBERRY B will be completed and strengthened as far as possible on the original plan, with the object of providing a harbour until the 1st October at least and, if possible, through the winter. One WHALE pier for the discharge of LST and one for Stores discharge will be constructed.

CHERBOURG

Sufficient WHALE pier equipment will be allocated for use within the CHERBOURG breakwater with the object of increasing the capacity of that port to the maximum.

BOMBARDONS

BOMBARDONS will not be used in connection with MULBERRIES.

I...

I understand that the reports of the technical experts confirm that it should be possible to carry out this programme: but that it is impossible to guarantee the survival of MULBERRY B after the 1st October.

I wish to emphasize, and to ask your assistance on, three points:-

- (a) It is essential that MULBERRY B should be complete and the last additional PHOENIX placed by 1st September at the latest. I ask therefore that additional PHOENIX and WHALE equipment required to make good the damage be given top priority for production.
- (b) The technical experts from Admiralty and War Office should apply all their energies to strengthening the design of any further units to be constructed and to devising means of strengthening units already in position.
- (c) When a detailed examination of the CORNCOBS now in position has been completed, it may well be that there will be a need for additional blockships over and above the twenty just allotted, but I am anxious to avoid asking for further ships if possible.

Sincerely,

(Sgd.) DWIGHT D. EISENHOWER.

M of P
 M of S
 Brigadier
 Bruce White

} Please report by night of 30th.
 This seems to me vital. WSC.

The Rt. Hon. Winston S. Churchill, P.C., M.P., 29.11
 10, Downing Street, London, SW.1.

S.P. J.W. y

TOP SECRET.

30th June, 1944.

Minister of Production.

Dear Mr. Rowan,

As my Minister is out of London this evening, he has asked me to let you know that he has consulted with the Ministry of Supply and the War Office about General Eisenhower's letter to the Prime Minister of the 29th June about MULBERRY equipment, and to request that you will let the Prime Minister know that:

1. Thirty or more of the largest PHOENIXES are likely to be required beside the 20 spares which are now becoming available from production. These will have to be of a strengthened design which the War Office expect to have cleared with the Admiralty and the United States Naval authorities within the next three days. The Ministry of Supply have placed provisional orders for the material for these 30 but cannot go ahead until the design is cleared. It is unlikely that 30 additional PHOENIXES could be produced in sufficient time to reach MULBERRY B. by the 1st September.

2. The final requirements for strengthening the PHOENIXES now at MULBERRY B. have not yet been assessed, but it is already clear that 5,000 tons of steel troughing will be required which the Ministry of Supply hope to start delivering next week and to complete at the rate of 1,000 per week. This will be in sufficient time for the War Office to fit it at MULBERRY B. before 1st September.

3. Sufficient WHALE pierheads are now being delivered to provide for the needs of Cherbourg and MULBERRY B. As regards the balance of WHALE equipment, this must depend upon the report of experts who have been sent to Normandy and who should return here tomorrow. In the meantime, 100 steel beetles and 50 erection tanks have been ordered besides conversion of 50 Mark I bridge spans to the Mark II type, from stocks at present on this side of the Channel.

Mr. Lytton will send the Prime Minister a further report once the design of the new PHOENIX has been finished and the damage to the WHALE equipment now in Normandy is known, and further requirements for this gear can thus be gauged.

T.L. Rowan Esq.,
10, Downing St.,

Yours sincerely,

(Sgd.) ? Adam.

301330

ON HIS MAJESTY'S SERVICE

TOP SECRET

Brigadier B.G. Bruce White, C.B.E.,

Room 468,

Metropole Buildings,

Northumberland Avenue, S.W.1.

PRIME MINISTER





BRIGADIER BRUCE WHITE

With the compliments

of

Mr. T. L. Rowan.

10 Downing Street,

S. W. 1.

11th July, 1944.

TOP SECRET

The proposal to reduce the number of units is satisfactory. The immediate requirements could be treated as the first batch (25 AXs and 10 BXs), to be followed by the balance of the units up to the full requirements, as the second batch, under less priority.

I would like to make the point that the reduction in the size of the harbour agreed to in order to meet the deficiency of units, would result in the deep water area of the harbour to be used by Liberty ships being reduced, whereas for working later in the year Liberty ships would be taking the place of Coasters.

It is preferable before the decision is reached that the lay-out should receive consideration in the light of the number of units which would be now available, taking into account both MULBERRIES A and B, and having regard to engineering data of the MULBERRY B Site. Every step should be taken by ingenious contrivance and otherwise to ensure that the reduction in units involves no reduction in the size of the harbour.

July, 1944.



BERKELEY SQUARE HOUSE,

W.1

15th August, 1944.

Dear Bruce White,

When you came over to show the Minister the photographs of Mulberry etc., you kindly offered to arrange for the models etc. which you have in the War Room to be seen by a few senior officials in the Ministry.

This offer is very much appreciated by a few of my colleagues to whom I have mentioned it, and I would like to bring a party of, say, six to see the models at some time convenient to you and your staff.

I have myself just come back from a week's holiday, otherwise I would have followed up your offer earlier.

If it is still convenient to you, could we fix some time next week, say Tuesday 22nd at 4 p.m., or Wednesday 23rd at 5 p.m., and then I will collect half a dozen heads of Divisions who have been specially concerned with Overlord and who would like to see the models.

Yours sincerely,

W. G. Hynard

W. G. HYNARD.

Brig. B. G. White, C.B.E.

*Dear Hynard
May I thank you for your
offer of the 15th inst. I am so
glad that you propose to
bring a party of senior officials
to see the models etc. I will
be present myself - I will
be very in the early part of
the week as I shall
be returning to the office
on the 15th and you
will not be able to see me*

*a date later in the week
my Monday or Tuesday evening?
My flat has been empty for some time
I will be in the city.*

Ex 3844
3845



**BERKELEY SQUARE HOUSE,
W.1.**

18th August, 1944.

Dear Bruce White,

Thank you for your letter of 17th instant. It is very good of you to give our people a chance of seeing the models, and we shall, of course, be very interested in seeing the film.

It will be quite convenient for us to come on Friday 25th instant at 4 p.m., and I will bring my small party of half a dozen along then. Please do not trouble to confirm if this day and time remain convenient to you.

Yours sincerely,

W.G. HYNARD.

Brigadier Bruce White, C.B.E.

Ami Hari.
Big up D. Hynard's see
say all i' ad. Also give
re e note a day. No

Confirmed
19/8.

Vic. 6622/260

From: Brig. B.G. White, C.B.E., D.P. & I.W.T.

Metropole Buildings,
Northumberland Avenue,
London, W.C.2.

22nd August, 1944

BM/DR&IWT/21

Dear

Reference our conversation this morning.

I am now sending you, by hand, two further small
models of Phoenix and Whale which I understand the Prime
Minister is anxious to have.

Yours

J.R. Colville, Esq.,
10, Downing Street,
S.W.1.



22/viii/44

10, Downing Street,
Whitehall.

Dear Brigadier White

The Prime Minister with, I know, be
most grateful for his further set of models of
Phoenix and Whale, which he proposes
sending to President Roosevelt.

Thank you very much for his

promptitude with which you sent them

over

Yours sincerely

John Cowills

X

2.

The main difference between the contents
of the Bulletin & of the paper is that
of the economic reports it is necessary
to write for the countries a greater
quantity of reports & compare that
is necessary and report to the labor
the rate by means of these data.
Analysis & review of a Bulletin of
the state of the world
Obviously the main interest is the
that it will be necessary for the
Bulletin of the state of the world
national cooperation chiefly in the name
of the state of the population of the
during the economic

Metropole Buildings,
Northumberland Avenue,
London, W.C.2.

BM/D.P. & IWT/ 21

17th August, 1944

Dear

Many thanks for your letter of the 15th instant, from which I am so pleased to see that you propose to bring a party of senior officials to see the models, etc.

Under present arrangements I will be away in the early part of next week and as I would particularly like to show you the models could you possibly make a date later in the week, say Thursday or Friday? I can fit in almost any time in the afternoon. Perhaps you will get your secretary to telephone to fix an appointment.

Another possible benefit of delaying the visit is that I may be able to show you a very excellent film which I have had taken on the other side, if you and the party are able to spare a little additional time.

Yours sincerely,

(Sgd.) Bruce G. White

W.G. Hynard, Esq., C.B., C.B.E.,
Assistant Director General of Shipping,
Ministry of War Transport,
Berkeley Square,
London, W.1.

Vic. 6622/260

From: Brig. B.G. White, C.B.E., D.P. & I.W.T.

Metropole Buildings,
Northumberland Avenue,
London, W.C.2.
17th August, 1944

BM/DP & IWT/21

Dear

I was glad to meet you again today and to have a talk, as a great deal has happened since we met.

The scheme upon which you gave such valuable assistance in the early days as a member of my Committee has passed through the drawing board and building stages to actual fact. The harbour is a most impressive sight, with its prefabricated breakwaters and I have been thinking back to the day last year when you came into my office with a scheme for the rapid building of just such structures. Little did we think so much would be done.

Yours

KSG

Sir Malcolm McAlpine, K.B.E.,
The Compleat Angler,
Marlow,
Bucks.

METROPOLE BUILDINGS,
NORTHUMBERLAND AVENUE,
LONDON, W.C.2.

2nd September, 1944.

Dear Prime Minister,

You asked me to let you know if I thought things were not going as they should.

At your request I arranged for the models of MULBERRY to be packed for despatch. Now I have been asked to nominate an officer to go and demonstrate the models and am arranging accordingly.

If the models are required for other than purely demonstration purposes, then representation of what is one of the most important sides of the Army's activities would fall to an officer adequate for demonstrating purposes, but not competent to represent fully the many sides of Port Construction, Operation and Inland Water Transport.

Army Transportation, of which my Branch is the larger part, has always been a "Cinderella". If decisions are to be reached omission of adequate representation in the early stages of planning might well result in what is a complicated yet necessary part of the operation, not receiving due consideration.

I feel that you should know of this matter.

Yours sincerely,

The Rt. Hon. Winston S. Churchill,
C.H., M.P.,
10, Downing Street.

Telegrams : (Shipping) "SHIPMINDER, WIRE, LONDON"
(Inland Transport) "TRANSMINRY, WIRE, LONDON"
Telephone : ABBEY 7711

Any further communication
should be addressed to :

THE DIRECTOR GENERAL,
and the following reference
quoted.....

Your reference
PRIVATE.....

MINISTRY OF WAR TRANSPORT,
BERKELEY SQUARE HOUSE,
BERKELEY SQUARE,
LONDON, W.1.



4th October, 1944.

My dear

One of these days I think I have to say a few words to some of my Southampton friends about the invasion arrangements - nothing more, of course, than what has already appeared in newspaper articles.'

I am wondering whether you could kindly tell me what was the approximate length of the Phoenix units and a rough idea of their total weight; I understand each unit was about 7,000 tons.

Have you some spare copies of photographs, showing the Mulberry, which you would have no objection to lending me for a few days? If you could do this it would be most helpful.

Kind regards,

Yours sincerely,

Reg Seade
Shiphouse Place
10/10

Brigadier Bruce White, C.B.E.,
Tn. Division,
War Office,
Metropole Buildings,
Northumberland Avenue, W.C.2.

MULBERRY

It can be said with assurance that the design, production and building of the MULBERRY harbours, was one of the greatest engineering achievements of this country.

History will record what was done, but it is not sufficient to leave it at that. In this great work it is considered that there is a "dividend" for the Nation and that in a field where the inventativeness and engineering skill of this country has not always received the recognition which it deserved.

Engineers who have been concerned with the carrying out of large schemes overseas know only too well of the attitude of foreign countries, and even our Dominions and Colonies, whereby they consider the Americans the best people to carry out big schemes. Thus work which might be brought to this country is lost.

In the engineering story of MULBERRY, taken apart from all its Service connections, is something the like of which we, in the past, have not had as a selling point. Why not, with its story of thrilling interest, big conception, inventativeness and overcoming of difficulties and production in a big way, use it to the fullest extent for the benefit of this country? How can this best be accomplished?

It is suggested that an engineering exhibition of models, (working and fixed), and photographs on the lines of that now showing in London at the Institution of Civil Engineers, should be sent as soon as possible and before interest flags to:-

- (a) those countries whose interest it is desired to stir;
- (b) the main engineering manufacturing centres in this country.

In connection with (a), the most profitable field might be the South American Countries, Canada, Australia, India, South Africa, Turkey and the Colonies.

As regards (b), it may not be at once apparent why our people require showing what has been done in this field of engineering. They are the people who will have to go and get the work and carry it out in their particular spheres and the fact remains that whilst they have the skill, their outlook in these matters is inclined to be too parochial. The object of the Exhibition then would be to show them what can be done in a big way and, by suitable lectures and technical discussion, to get their "tails up". This showing then may be taken as complementary to the telling of the story overseas.

The present intention is for M.O.I. to tour three small scale Exhibitions of the MULBERRY to cities and towns in this country. The proposals made above should be treated as being additional to such tours and, in order to evoke the greatest interest in engineering centres, the Exhibitions should be full of technical detail. It is also for this reason that this additional Exhibition should be called "The Engineering Story of MULBERRY".

D.P. & I.W.T.
2/March/45.

DIRECTORATE OF PORTS AND INLAND WATER TRANSPORT,

WAR OFFICE,
METROPOLE BUILDINGS,
NORTHUMBERLAND AVENUE,
LONDON, W.C.2.

Victoria 6622
Extension 260

2nd March, 1945.

Dear Prime Minister,

I understand that you desire particulars of attendance at the MULBERRY Exhibition. A graph showing attendances as also photographs of some of the features of the Exhibition are attached.

It is gratifying to know that public interest is growing as evidenced by the increase in attendance. We are all impressed by the unusual interest in the details displayed by the public, and the number of people who see in the achievement a hope for the future for British engineering.

On 6th March, 1945, I understand the President of the Board of Trade is paying a visit to the Exhibition. Taking a long view, I wish to put before him an idea for enabling this country to benefit from what has been done on MULBERRY. I propose to talk to him in the sense of the attached memorandum, which, in view of your interest, you may care to see.

Yours sincerely,

(Sgd.) Bruce G. White

The Rt.Hon.Winston S. Churchill,
C.H., M.P.
10, Downing Street,
London, S.W.1.

WESTERN 1617.

28, HYDE PARK GATE,
LONDON, S.W. 7.

6 June, 1947.

My dear Sir Bruce,

Thank you so much for sending
me a copy of your article on the Mulberry
Harbours. I shall read it with the
greatest interest.

*With kindest regards
Yours sincerely
Winston Churchill*

Brigadier Sir Bruce G. White, K.B.E.



10, Downing Street,
Whitehall.

TOP SECRET.

To whom it may concern.

Brigadier Bruce White has been sent over by the War Office with several experts on Ports to find out what has happened to the "WHALES", "PHOENIXES", etc., and any damage which may have been done to them by "BOMBARDONS".

He is to report personally to me on Tuesday.

He should be given every facility as it is

necessary to consider immediately what scale of replacements must now be set up in England to make good all damage.

The matter is especially urgent and the personnel in England must not be dispersed till the scale of the continuing effort is known.

I am also receiving a report from the Admiralty.

Ernest S. Moonbell

23.6.44.



10, Downing Street,
Whitehall.

10 August, 1944

Dear Brigadier White,

I was delighted to receive the charming silver models of "Whale" and "Phoenix" which you presented to me, and the realistic model of the Arromanches Mulberry which you gave to my Map Room. I understand that these fine models were constructed by members of your staff during their spare time which makes me appreciate your kindness all the more. Please accept yourself and convey to all those who have contributed my very warm thanks.

Yours sincerely,

Winston Churchill

Brigadier B.G. White, C.B.E.,
War Office.

**MOST
SECRET**

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