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The briefing given to the PM on the Watson Pact. DEFENCE Proposal to give Ministers a briefing on the Military capabilities of Warson MAY 1979 Pad countries

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10 DOWNING STREET

From the Private Secretary

19 January 1983

The Prime Minister has noted the contents of your letter of 17 January about the status of our laser and non-nuclear electro magnetic pulse weapons.

A. J. COLES

Richard Mottram, Esq., Ministry of Defence.

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COPY NO OF 6 COPIES PAGE 1 OF 4 PAGES

MINISTRY OF DEFENCE WHITEHALL LONDON SW1A 2HB

TELEPHONE 01-218 9000
DIRECT DIALLING 01-218 2111/3

MO 15/3

17th January 1983

Prime Minister

To note

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Dring Shirit

In his letter of 30th December, your private secretary said that you had seen JIC(82)12 about improvements in Warsaw Pact low level air defence and had asked about the status of our own laser and non-nuclear electro-magnetic pulse (NNEMP) weapons.

Dealing first with laser weapons, the first UK studies of such a weapon were started more than 20 years ago. Since 1972, when the Americans revealed a major breakthrough in high power laser technology, there has been a continuous information exchange between the US and the UK in areas of direct interest to us - and we have also been able to keep in touch with developments, e.g. space and related applications, not formally covered by the exchange agreements. In 1974 a British programme was started on damage and propagation effects. By the end of 1979, it had become evident to us that British interests lie less with weapons used in high energy lasers than with those using medium power lasers directed against relatively softer targets such as eyes, optics and electro-optic sensors. It was then assessed, as the JIC Report confirmed, that the Russians could be in a position to field such weapons by the mid-1980s (in fact, the Russians may already have deployed a laser weapon on the cruiser Kirov). Since 1980 therefore our programme has been re-structured to give priority to the consideration of laser sensor damage weapons, covering studies and



PAGE 2 OF 4 PAGES

research both on low power lasers and their applications as sensor damage weapons and on vulnerability, hardening and protection of materials, electro-optic sensors and optical systems and eyes.

The present position is that British operational analysis and battlefield simulation studies have confirmed American conclusions that the deployment of laser sensor damage weapons (LSDW) by the attacking Warsaw Pact forces would confer a benefit to them, in particular by enhancing the effectiveness of the attacking armour. The studies also show that countermeasures can assist the defenders and tactics are possible which minimise the effects. The studies are not yet completed; more work is being done on countermeasures and to consider the threat to our helicopters.

British research has concentrated on countermeasures and there are complementary research and development programmes proceeding at high priority. The research programme, known as "RAKER", aims to think up every possible way of protecting sensors. The development programme, known as "SHINGLE", aims to capitalise on any practical solutions arising out of the "RAKER" work. 19 projects have so far been approved and 7 contracts placed under the SHINGLE programme. Industry have been given several briefings on the threat and our programme and are fully alerted to the problem and contributing effort wherever possible. The British programme is regarded very highly by US workers and we believe that we are as far advanced as they are in achieving methods of hardening and protection. Nevertheless, the task of providing protection for the thousands of sighting systems in service will be a massive one and we are not yet sufficiently advanced with adequate methods of protection to have started the actual process of modification.

So far as offensive weapons are concerned, the major effort is being undertaken in the United States but we are keeping in close touch. At the moment we have no specific programme for procurement



PAGE 3 OF 4 PAGES

of a UK LSDW. We plan to start studies in 1984 on the value of ownership of laser weapons to our forces, initially to assist the Army in defence against attacking armour and helicopters. We believe it important, however, to keep the LSDW in perspective: it cannot replace existing weapons because its use is restricted to good weather and line of sight, in which circumstances existing weapons are likely to be as effective against the target as a whole. Hence we believe that priority must continue to be given to our air defence and anti-tank guided weapons and the case for LSDW will have to be considered at the time in the light of the resources available. You may recall, however, that we developed and deployed with very great urgency a naval laser weapon, designed to dazzle low flying Argentine pilots attacking ships, to the Task Force in the South Atlantic. This weapon was not used in action and knowledge of it has been kept to a very restricted circle.

The position on NNEMP weapons is less clear. Russian R & D work seems to have concentrated on two basic types of weapons. The first type is a radio frequency (RF) weapon which consists primarily of a very high power microwave radio frequency generator aimed at a target; the second type is a true electro-magnetic pulse weapon in which an explosion, for example chemical, can be made to generate a very high power short duration electro-magnetic pulse, similar in characteristic to but not so powerful as that produced during a nuclear explosion and effective against electronic systems.

As we see it at the moment, these weapons pose a rather less immediate threat. The radio frequency weapon would, like an LSDW, have an instant reaction, which could be used against the electronics of low flying aircraft, though over relatively short range, that is 10 or so kilometres. There is some evidence of Russian interest in the use of an RF weapon in an anti-personnel mode, acting with a debilitating effect against the central nervous system. It is assessed that an effective device could be mounted on a large truck. The EMP weapon, deployed, as the JIC Report suggests, in the form of an artillery shell or missile, might pose a threat to NATO radars and communications systems but probably less to aircraft - since the warhead would have to get within the sort of range where you might just as well shoot the aircraft down - though it might have a useful



PAGE 4 OF 4 PAGES

capability against the guidance, target illumination and perhaps fuzing systems of NATO missiles. There is no evidence of a Russian production programme for weapons of this kind.

Fortuitously, all our electronic equipments have for many years been designed against stringent electro-magnetic compatibility standards to prevent them interfering with each other, and these features will also help to protect equipment against radio frequency attack. Furthermore, our more vulnerable equipments are now required to be hardened against the effects of nuclear weapons, including electro-magnetic pulses. If these techniques are applied, it will greatly reduce the vulnerability of the equipment to non-nuclear effects though the application of these techniques undoubtedly does add to costs and thus affects saleability to countries which will not face these threats. Trade-offs have therefore to be carefully considered in every case.

The Americans are regarding with concern the recent information about Soviet capabilities in this field. There is a considerable US effort under way and following a recent technical interchange between US and UK, a very small amount of experimental and theoretical work is being carried out at AWRE on both microwave and EMP pulse generators. The work in the US and the UK is too early to allow formulation of Service requirements and hardware.

I am sending a copy of this letter to Sir Robert Armstrong.

my

Michael Heseltine

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10 DOWNING STREET

From the Private Secretary

30 December 1982

The Prime Minister has seen JIC(82)(12) about improvements in Warsaw Pact low level air defence. She is particularly concerned at the developments discussed in paragraphs 34 and 35 of that Report and has enquired about the status of our weapons in this area. I should be grateful if you could provide a report on the position as soon as possible.

I am sending a copy of this letter to Richard Hatfield (Cabinet Office).

Tim Flesher

Nick Evans, Esq., Ministry of Defence.

Commental MINISTRY OF DEFENCE MAIN BUILDING WHITEHALL LONDON. SW1 Telephone 01-28007032 218 2111/3 MO 15/36th March 1980 WARSAW PACT CAPABILITIES: INTELLIGENCE BRIEFING Brian Norbury wrote to the Private Secretaries to Cabinet Ministers on 20th February to extend my Secretary of State's invitation to Cabinet Ministers, and to Ministers at the Treasury and Foreign and Commonwealth Office, to attend a briefing by the Director General of Intelligence (MOD)(Air Chief Marshal Sir John Aiken) on the military capabilities of Warsaw Pact countries. Since then we have rung round Private Offices; the largest number of Ministers were available on 18th March, and my Secretary of State has therefore agreed that the briefing should be held on that day. I attach at Annex a list of those Ministers who are likely to be available to attend the briefing on that day together with a list of the principal officials who will also expect to attend. I should be grateful for confirmation by 13th March from the Private Secretaries to those Ministers and officials listed that their principals can attend; other Ministers who now find themselves likely to be available would also be welcome then, subject to some advance notice. We hope that a further opportunity will be available in due course to make a presentation on Warsaw Pact Capabilities to those Ministers who will be unable to attend the session on 18th March. As for timings, I suggest that Ministers and officials arrive at the Ministry of Defence Main Building (Richmond Terrace entrance) a few minutes before 1500. They will then be escorted to the briefing room. We expect that the briefing should last for about three quarters of an hour with an opportunity for questions afterwards. In addition to the Intelligence Briefing, there will be a short briefing on Soviet Political Intentions which will be given by Mr Julian Bullard (Foreign and Commonwealth Office). J A Chilcot Esq COMFIDENTIAL



I am copying this letter to the recipients of Brian Norbury's letter, as well as to Private Secretaries to other Ministers at the Foreign and Commonwealth Office and the Treasury; a copy also goes to the Private Secretaries to Sir Michael Palliser, Sir Brooks Richards, Sir Anthony Acland and Peter Maxey (Cabinet Office), and

to Julian Bullard (FCO).

(J D S DAWSON)
Private Secretary

MINISTERS

Mr Whitelaw

Sir Geoffrey Howe

Mr Heseltine

Mr Younger

Mr Edwards

Mr Nott

Mr Howell

Mr Carlisle

Mr Biffen

Mr Maude

Mr Fowler

Mr Hurd

Mr Ridley

Mr Blaker

Mr Lawson

OFFICIALS

Sir Robert Armstrong
Sir Anthony Acland
Admiral of the Fleet Sir Terrence Lewin
Air Marshal Sir John Aiken
Sir Frank Cooper
Mr K Gooderham

Mr J Bullard

Mr P Maxey

Ottonis-



MO 15/3

20 February 1980

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KWLJ 20-

WARSAW PACT CAPABILITIES: INTELLIGENCE BRIEFING

My Secretary of State wishes, with the concurrence of the Prime Minister, to suggest that the Director General of Intelligence in the Ministry of Defence should give a briefing to members of the Cabinet on the military capabilities of Warsaw Pact countries. The briefing would cover Soviet strategic doctrine, the Russians' defence budget and their production capability, and the areas and growth of Russian nuclear and general purpose forces.

The plan would be for the briefing to be given in this building, on one, or two, occasions; it would be extended to include all Ministers at the Treasury, the FCO and this Department, in addition to members of the Cabinet. The Secretary of the Cabinet, the Intelligence Coordinator and the head of Assessments Staff in the Cabinet Office would attend, as would the Chief of the Defence Staff.

We shall be ringing round to seek to fix a convenient date for this briefing or briefings, and the purpose of this letter is to give you advance notice of a telephone call.

I am sending copies of this letter to the Private Secretaries to the other members of the Cabinet; and to David Wright in the Cabinet Office.

Brian.

(B M NORBURY)

J A Chilcot Esq Home Office



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10 DOWNING STREET

From the Principal Private Secretary

SIR ROBERT ARMSTRONG

Warsaw Pact Capabilities: Intelligence Briefing

I have shown the Prime Minister your minute A01406 of 13 February about the intelligence briefing on the military capabilities of the Warsaw Pact countries.

She is content with the arrangements which are being made but she does not propose to be present at the briefing herself, since she had a similar presentation last year.

IG. A. WHITMOO

KRIZ

14 February 1980

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Alkamp you have as for miningering thorny open Fahring opening I miagning thorny open fahring opening to allow this secretary of the lyon to be so, or you happy for the lyon to table the chair ? 13 "

Ref. A01406

MR. WHITMORE

Warsaw Pact Capabilities: Intelligence Briefing

In your minute of 17th January, you conveyed the Prime Minister's agreement that Cabinet Ministers and junior Ministers in the Foreign and Commonwealth Office, Treasury and Ministry of Defence should be given a briefing on the military capabilities of the Warsaw Pact countries.

- The Ministry of Defence have now proposed that the briefing should be chaired by the Secretary of State for Defence and held in the Ministry of Defence. Mr. Pym would be assisted by the Permanent Under-Secretary, the Chief of the Defence Staff, the Chairman of the JIC, the Director General of Intelligence and three of the latter's staff. I would also be present.
- 3. The briefing would be classified Secret and would use sensitive sources. It would last 30-40 minutes with a further 30 minutes for subsequent discussion. It would follow the form set out in the attached synopsis.
- I have consulted those concerned in the Cabinet Office, particularly the JIC, and they are content with the arrangements outlined by the Ministry of I should be glad to know whether they are acceptable to the Prime Minister, and whether she wishes to attend along with the other members of her Cabinet who will be present. If she wishes to attend, would the Prime Minister be content that Mr. Pym should be in the chair?

(Robert Armstrong)

13th February, 1980

PINCERS DIMISTERS THE SOVIET THREAT - SYNOPSIS Introduction 1. Soviet strategic doctrine. Growth in Soviet military power, qualitative and quantitative; emphasis on offensive capability. The Military District as a mobilisation tool: how it worked for Afghanistan. Soviet Military Expenditure and Production 2. Annual military expenditure. Expected future pattern. Percentage of GNP devoted to defence. Percentage expended on R and D. Examples of Soviet military production. Increases in Soviet Nuclear Threat 3. Strategic a. New ICBMs (SS-17/18/19): MIRVs, reliability, survivability, b. New SLBMs: (SS-N-18 and "TYPHOON"): MIRVs, greater accuracy and range; less vulnerable. 4. Theatre a. New dual-capable systems (BACKFIRE, tactical aircraft, missiles, artillery, naval systems). b. SS-20 (MIRVs, improved accuracy, road-mobile). 5. - Soviet Employment of Nuclear Weapons Increased Capability of Soviet General Purpose Forces 6. Naval Forces Strength and ORBAT Nuclear-powered cruise missile and attack submarines Aircraft carriers - KIEV class

- d. Missile armed cruisers
- e. Soviet Naval Air Force
- f. Naval Infantry
- g. Strengths and weaknesses.

7. Ground Forces

- a. Strength and ORBAT
- b. Quantitative increases in men and equipment in Bastern Europe since 1960; equivalent of pre-10-3 tiv alons.
- Aleria; prince air delence.
- d. Strengths and wecknesses.

Courtier

fir Farmen a. Strength and ORBAT b. Tactical aircraft - dual capable, improvements in range and payload c. Assault helicopters: role in close support operations d. Long Range Air Forces Transport forces - VTA/AEROFLOT f. Paratroops g. Strengths and weaknesses 9. Diversionary Brigades 10. Electronic Warfare Receives a high priority in all branches of the Soviet forces - Soviet concept of integrated approach known to us as 'Radio Electronic Combat Support'. 11. Chemical Warfare Extensive capability, defensive capability regularly and frequently exercised in training. 12. Varning Time Factors affecting warning we might get of impending attack by WP. 13. The Position of the Non-Soviet KP Countries Organised and equipped on similar lines to Do. ict forces. Train with Soviet forces but operational control in war would remain with Soviet commanders. 14. A Look into the Future Long term aims of any new leadership will follow present pattern. Forthcoming problems of allocation of resources to military versus domestic economies. Continued exploitation of Third World. Conclusion 15. The Soviet Union is acquiring a massive military capability which allows them the widest range of options. Although overall economic growth subject to constraints in next few years no evidence that shere of GNP allocated to defence will decline. Nevertheless they are not omnipotent and have a number of deficiencies and shortcomings that are exploitable by the Wast.



Defence JS

10 DOWNING STREET

From the Principal Private Secretary

SIR ROBERT ARMSTRONG

The Prime Minister has seen your minute A01148 of 16 January about the proposed briefing for Ministers on the military capabilities of the Warsaw Pact countries. She agrees that Ministers should be given such a briefing. As regards attendance, she shares your view that it should be sufficient to brief Cabinet Ministers and Junior Ministers in the Foreign and Commonwealth Office, Treasury and Ministry of Defence. If, however, the Defence Secretary's briefing for Conservative Backbenchers goes ahead, the Prime Minister agrees that the Ministerial briefing would need to be extended to other Junior Ministers.

tas.

CONFIDENTIAL melining your Muisters in the fee for Defence has proposed that the Director General Ref. A01148 MR. WHITMORE The Secretary of State for Defence has proposed that the Director General of Intelligence, Ministry of Defence, should be invited to give Ministers a briefing on the military capabilities of the Warsaw Pact countries. The briefing would cover Soviet strategic doctrine, their defence budget, their production capability, and the areas and growth of Russian nuclear and general purpose forces. It would deal with subjects such as electronic and chemical warfare; and it would touch on the position of the Warsaw Pact allies. When this proposal was first mentioned to me last year, I thought it would be useful if a briefing on Warsaw Pact military capabilities could be accompanied by a briefing on Soviet political intentions. I still think that that would be useful; but in the light of recent events in South West Asia there will have to be a reappraisal of Soviet political intentions, and I do not think the briefing on military capabilities need or should wait. Indeed, recent events would make such a briefing very timely. It is for question which Ministers should receive such a briefing. 3. possibility is to give it to all Ministers; but that would certainly require at least two sessions, and I am inclined to think that it would be sufficient to brief Cabinet Ministers, and other Ministers in the Departments directly concerned (Foreign and Commonwealth Office, Treasury and Ministry of Defence). Prime Minister should be aware, however, that the Secretary of State for Defence has already committed himself to a briefing on this subject for Conservative backbenchers. If that is to go ahead, presumably it would be inappropriate to exclude junior Ministers. _ aparel (Robert Armstrong) 16th January, 1980

SECREI. Defence Copy on: Defence, May 1979 (SALT etc.) 10 DOWNING STREET From the Private Secretary 7 June 1979 Intelligence Briefing: C.T.B. and Chemical Warfare As you know, the Foreign and Commonwealth Secretary and the Lord Privy Seal attended the first part of the intelligence briefing arranged for the Prime Minister by the Ministry of Defence (Roger Facer's letter of 5 June to me, copied to you) at No. 10 on 6 June at 1500. As the briefing started late, however, they were obliged to leave halfway through and consequently missed the concluding discussion. During the course of that discussion, following Sir John Aiken's illustrated account of those sectors of the Soviet Union's military capability in which the Russians are believed to have achieved parity with or superiority over N.A.T.O., the Prime Minister recalled her concern over certain aspects of the C.T.B. negotiations. You will remember (my letter of 23 May to George Walden) that the Prime Minister voiced these concerns, centering in particular around the possibility that the Soviet Union could decouple underground nuclear explosions and that a C.T.B. treaty could inhibit essential stockpile testing, to Mr. Cyrus Vance when they discussed nuclear and strategic matters at No. 10 on 23 May. Mr. Vance commented that

the Prime Minister's anxieties were not shared by the U.S. scientific community and offered to put U.S. scientific experts in touch with their U.K. counterparts in order to discuss the matter. I should be grateful if you would let me know whether there is any sign of this offer bearing fruit; the Prime Minister will wish to see the summary of the whole spectrum of expert opinion on this issue before making a final judgement.

There was also some reference in the discussion following Sir John Aiken's briefing to Soviet preparations for chemical warfare. The Prime Minister's attention was drawn to the fact that the U.K. had put forward, in 1976 in Geneva, a draft convention on the banning of chemical weapons. The Prime Minister asked for more information about this: I should be grateful if a note could be prepared on the progress of the U.K. proposal. The note should cover, in particular, the question of whether the West might lose rather than gain from a convention on chemical weapons which the Soviet Union might violate without detection.

I am sending copies of this letter to Roger Facer (MOD) and Martin Vile (Cabinet Office).

B. G. CARTLEDGE

Paul Lever, Esq., Foreign and Commonwealth Office. SECRET Paul Lever, Esq.,



MINISTRY OF DEFENCE
MAIN BUILDING WHITEHALL LONDON SW1

Telephone 01-988 702 22 218 2111/3

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MO 15/3

5th June 1979

Dea Bryan.

Von had arked the Min y Stap (o be Mere. Whell you also be wrent with "X"?

INTELLIGENCE BRIEFING

As you already know, my Secretary of State would like to be present at the briefing of the Prime Minister by Sir John Aiken arranged for tomorrow at 3 pm; and in the absence of the Chief of Defence Staff on leave, and the Chief of General Staff on duty, the Chief of Naval Staff, the Chief of Air Staff and the Vice Chief of General Staff will be in attendance.

If you have no objection Sir Frank Cooper would like to attend also; and Sir John Aiken would like to bring the Director of Scientific and Technical Intelligence, Dr Johnson and the Director of Economic Intelligence, Mr Rudkin, to be available to answer questions.

I am sending copies of this letter to Paul Lever (Foreign and Commonwealth Office) and Martin Vile (Cabinet Office).

Ves ans

(R L L FACER)

B G Cartledge Esq No 10 Downing Street



Foreign and Commonwealth Office

London SW1A 2AH

5 June 1979

Dear Byan,

Intelligence Briefing

This is to confirm my telephone conversation with Mike Pattison this afternoon. Lord Carrington would like to be present at the Prime Minister's intelligence briefing on 6 June at 15.00 and proposes to be accompanied by Sir Antony Duff.

I am sending copies of this letter to Roger Facer (MOD) and Martin Vile (Cabinet Office)

Yours was

P Lever

B G Cartledge Esq 10 Downing Street

Defence 10 DOWNING STREET Bylean Intelligence lucefung FCO asked whether Lord C was criviled or summoned. On Ken's advue, I said summoned. He will be accompanied ly Soi A Duff. I said 1 Chought it not gyrgniate for bronge Walden to come; but you may want 6 my instincts



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10 DOWNING STREET

From the Private Secretary

1 June 1979

INTELLIGENCE BRIEFING

I am writing to confirm that, as I informed John Gutteridge on the telephone this morning, the Prime Minister would like to take up the Defence Secretary's suggestion in his minute (MO15/3) of 21 May that she might be briefed by the Director General of Intelligence on the Warsaw Pact Forces.

The Prime Minister would be grateful if this briefing could be arranged on Wednesday, 6 June, at 1500 in No. 10. The Prime Minister understands that the briefing will not last more than thirty minutes. She would welcome the presence of the Chiefs of Staff on this occasion.

I am sending copies of this letter to Paul Lever (Foreign and Commonwealth Office), Michael Richardson (Lord Privy Seal's Office) and Martin Vile (Cabinet Office).

B. G. CARTLEDGE

R.L.L. Facer, Esq., Ministry of Defence.

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10 DOWNING STREET

PRIME MINISTER

Briefing on Warsaw Pact

Would you like to arrange to have this briefing, which could take place in the Cabinet Room and would last for rather less than half an hour?

Chiefs of Staff could be present if you wished.

1. Cus

Mrs plant

22 May 1979

15.00 - 15.30 June



MINISTRY OF DEFENCE WHITEHALL LONDON SW1A 2HB

TELEPHONE 01-218 9000
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PRIME MINISTER

INTELLIGENCE BRIEFING

The Director General of Intelligence in the Ministry of Defence, Sir John Aiken, has prepared for me a comprehensive briefing on the Warsaw Pact Forces, using material drawn from all available intelligence sources. I should be very happy to arrange for Sir John Aiken to give the briefing to you and some of your colleagues if you would like to have it.

2. I am copying this minute to the Foreign and Commonwealth Secretary, the Lord Privy Seal and Sir John Hunt.

7.

21st May 1979

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