King's Research Portal

DOI:

[10.1080/16161262.2014.943996](https://doi.org/10.1080/16161262.2014.943996)

Document Version

Peer reviewed version

[Link to publication record in King's Research Portal](#)

Citation for published version (APA):

Dylan, H. (2015). Operation TIGRESS: deception for counterintelligence and Britain's 1952 atomic test. *Journal of Intelligence History*, 14(1), 1-15. <https://doi.org/10.1080/16161262.2014.943996>

Citing this paper

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

Take down policy

If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Operation TIGRESS: Deception for Counterintelligence and Britain's 1952 Atomic Test

This is an Accepted Manuscript of an article published by Taylor & Francis in Journal of Intelligence History on 14 August 2015, available

online: <http://www.tandfonline.com/doi/full/10.1080/16161262.2014.943996>

Abstract

Britain tested its first atomic weapon on the Montebello islands, off Western Australia in October 1952. This test, known as HURRICANE, was supported by an elaborate deception operation, one designed to deceive the Soviets about the date and the true nature of the test. This article examines this deception. It introduces Britain's post war deception organisations, the London Controlling Section, later the Directorate of Forward Plans, and how they worked closely with Britain's atomic scientists from early in the Cold War. Their plans were complicated both by the Soviets' success in gathering intelligence on Britain's nuclear programme, and by the West's difficulty in gathering intelligence on Soviet dispositions. Nevertheless they utilised a broad range of channels, both open and secret, to implement their scheme. The manner in which they operated suggests that the deception and intelligence machinery had clearly adapted their methods to the Cold War environment, but that the task was considerably more difficult than the one they faced in wartime.

Key words

London Controlling Section, Directorate of Forward Plans, Deception, Hurricane

Introduction

The successes of Britain's wartime deception organisations, the London Controlling Section (LCS) and the Double-Cross Committee, in deceiving the Axis about Allied plans and activities provide some of the most compelling stories of the Second World War. The successes of deceptions such as FORTITUDE were built on a great deal of creativity and secrecy, but primarily on the successes of the broader intelligence community. The Secret Intelligence Service (SIS) and the Security Service (MI5) created what was to all intents and purposes an intelligence vacuum for the Germans in Britain, which the LCS could fill, and the Government Code and Cypher School's (GC&CS) success in breaking German codes allowed the deception planners to determine whether or not their plans were working. Deception, practised in this manner, must be considered the purest form of intelligence led operation. The British were masters of the craft by the end of the war, as the wealth of literature on the Double-Cross system demonstrates. But what happened next? Very little has been published about how the deception planners attempted to utilise their skills and experience against the Soviets. But, as one would suspect, there is no reason to believe that they lost the inclination or the skills to practice deception in the Cold War. Documents recently released into The National Archives reveal that this is indeed the case. This article presents one Cold War operation, the use of deceptive means to support the test of Britain's first atomic bomb in October 1952, the test known as Operation HURRICANE. It examines why deception was used, how the scheme was planned and implemented, and suggests that this operation highlights clearly the uses and limits of deception in a Cold War context.

The British Bomb and the Deception Organisation

The atomic bomb was central to all aspects of British defence planning after the Second World War. The successful detonations of weapons over Japan left politicians and planners in little doubt that a new age of warfare had begun, and that Britain was especially vulnerable. Clement Attlee, Prime Minister since July 1945, noted how it rendered practically all facets of civil defence 'just a futile waste'.¹ 'The only answer to an atomic bomb on London is an atomic bomb on another great city.'² Both the Prime Minister and the Chiefs of Staff were in little doubt that if Britain wished to wield such a deterrent it needed to develop its own atomic weapon rather than depend on the goodwill of allies. And, of course, if Britain was to retain any pretention of being a great power, of maintaining any influence over American foreign policy, it could not be seen as a second rate military power, without the most modern weapons. As the Foreign Secretary, Ernest Bevin, famously noted 'We've got to have the bloody Union Jack on top of it.'³ The matter, although largely settled, was formalised at a meeting of the GEN.163 Committee on 8 January 1947; Britain would have its own atomic bomb.⁴

Developing the bomb was initially a process shrouded in confidentiality. Attlee was reportedly obsessed with secrecy: he feared compromising international negotiations over control of atomic weapons; he feared an unhelpful American reaction; he feared a public outcry over the cost; and of course he wanted to deny the Soviets any information about British plans.⁵ But total secrecy was impossible, and aspects of the long process of research and development culminating in the test in October 1952 would inevitably leak. Indeed, Chapman Pincher and his colleagues at the *Daily Express* were threatening to expose the project as early as the beginning of 1948.⁶ As the George Strauss, the Minister of Supply, dryly noted, total secrecy carried the risk of total exposure.⁷

The solution was a limited amount of exposure combined with control of the press via the D-Notice committee. On 12 May 1948, the existence of the British atomic project was revealed in a low-key parliamentary announcement, and received muted press coverage. The Americans had been notified a short while previously, somewhat ironically given Attlee's fears of Soviet spying, by Donald Maclean, then the diplomat primarily responsible for atomic matters at the Washington embassy, and long-time Soviet mole.⁸ The relative relaxation of secrecy regime doubtlessly made the work of designing the bomb and coordinating the tests much easier. But key personalities, such as the architect of Britain's atomic weapons programme and head of High Explosive Research (HER), Dr. William Penney, became minor public figures, and the infrastructure surrounding the endeavour proved impossible to disguise, in Britain or abroad. Indeed, by the time Penney was ready to test his

¹ Peter Hennessy, *The Secret State: Whitehall and the Cold War* (Penguin: London, 2003) p.46.

² Ibid.

³ Hennessy, *The Secret State*, p.48.

⁴ Brian Cathcart, *Test of Greatness: Britain's Struggle for the Atomic Bomb* (John Murray, London, 1994) pp.23-24.

⁵ Cathcart, *Test of Greatness*, p.86. For the Soviet's success in atomic espionage, See Michael Goodman *Spying on the Nuclear Bear* (Stanford: Stanford University Press, 2007).

⁶ Cathcart, *Test of Greatness*, p.87.

⁷ Ibid.

⁸ Ibid, p.88.

creation on the isolated Montebello islands, off Western Australia, the government had realised that there would have to be a public announcement concerning the event – the British press could be controlled with D-notices; the international press could not. Codenamed HURRICANE, the test would inevitably attract massive international attention, including that of the Soviet intelligence services. With this attention came a pronounced security risk, risk that could not hope to be mitigated by flawed attempts at secrecy, but which might be mitigated by deception.

The wartime deception machinery had been cut severely in 1945 but had been rejuvenated by the time the plan for operation HURRICANE was being drawn. Atomic weapons, and the threat they posed to Britain, was largely responsible for this. The London Controlling Section lay largely dormant, concerning itself with chronicling the history of wartime deception, until the 1946 Tizard Report on 'Future Development in Weapons and Methods of War' advocated the use of deception in war and the maintenance of a deception staff in peace.⁹ Thereafter the LCS received more resources, and enjoyed a closer link with the policy and military machinery through its management committee, the Hollis Committee. It was given responsibility for planning and implementing deceptions in peace, and for formulating plans for deception in the event of war. In 1950, it was renamed the Directorate of Forward Plans (DFP), and headed by wartime deception veteran John Drew.

Given the link between the rejuvenation of the LCS and the threat of atomic weapons it was natural that deceivers would devote considerable energy to examining the question of deceptions linked to weapons of mass destruction. Many of the LCS's early plans and concepts were concerned with either exaggerating Britain's lead in weapons of mass destruction related research, exaggerating Britain's willingness and capability to deliver such weapons to the Soviet Union in the event of war, or exaggerating the degree to which British industry, and other strategic targets, could be dispersed.¹⁰ Indeed, deception to facilitate deterrence was the LCS's highest peacetime priority.¹¹ This activity brought the LCS and the DFP into close contact with Britain's senior atomic scientists. Cold War deception would be intimately related with the most advanced military and civilian technologies. And plots had to be plausible. The deceivers were not scientists, so in 1948 the Hollis Committee invited a committee to work with the LCS to examine the feasibility of plans. Led by Henry Tizard, chief scientist to the Ministry of Defence, the committee included the chief scientist to the Ministry of Supply, the Chair of the JS/TIC and his scientific consultants, and the scientific advisers to the Service Ministries.¹² Scientists from the British Atomic Energy Establishment at Harwell also worked with the LCS from very early in the Cold War. Sir John Cockcroft, then Director of Harwell, and Professor Otto Fricke, the eminent physicist who had worked on the Manhattan project and the head of nuclear physics at Harwell, advised the LCS on the scientific aspects of various schemes, including deterrence-by-deception schemes managed by the mysterious HOUSE PARTY committee.¹³

⁹ Julian Lewis, *Changing Direction: British Military Planning for Post-War Strategic Defence, 1942-47* (London: Frank Cass, 2003), p.lxxvi.

¹⁰ The British National Archives, Kew. All subsequent references are from Kew unless stated otherwise. DEFE 28/76, LCS(47)4, 'Overall deception Policy – 1947', 19 June 1947. See also CAB 81/80 LCS (47) 4 (Final), 'Overall Deception Policy – Immediate Future', 29 July 1947.

¹¹ DEFE 28/76, LCS (47)10, 'Overall deception policy – immediate future', 3 November 1947.

¹² DEFE 28/76, CO/580/4-45 'Scientific Committee', 18 June 1948.

¹³ DEFE 28/102, 'First meeting with Professor Otto Fricke' 30 December 1948.

Deception and Operation HURRICANE

Given the close working relationship between Britain's atomic scientists and the deception staff it is not surprising that HURRICANE came to the DFP's attention at a relatively early stage. Indeed, they may have begun planning deceptive components over eighteen months before the tests.¹⁴ At this preliminary stage, they outlined four different directions that deceptive operations could take: misleading about the nature of HURRICANE; misleading about the time and location of the test; obscuring the real causes that necessitated the trials; and disguising the fact that it was a British test.¹⁵ Which direction the plan would eventually take depended on a variety of factors, not least the degree of publicity the British government wished to generate around the test. But the DFP wished to be able to proceed rapidly once the situation was clearer; even at this early stage in April 1951, Colonel H. Wild, representing the LCS, stressed the importance of a firm plan, a clearly defined objective, and the embedding of the deception staff in the planning process.¹⁶

The ultimate outcome of this initial activity has received brief exposure in several studies of Britain's Cold War. Indeed, it is one of the most discussed Cold War deception operations in the literature, but nevertheless, as the time of writing it occupies barely half a dozen pages. Peter Cathcart unearthed a fragment of the plot in his ground-breaking study *Test of Greatness* in 1994, over a decade before LCS files became available.¹⁷ He presents how the 'Apex Committee', established by Churchill in March 1952 to oversee the management of the test – although largely redundant, as the day to day management of preparations was already managed by the Hurricane Executive (Hurex) – noted its concerns that the test may invite Soviet sabotage, and that deceptive measures would mitigate this.¹⁸ Beyond a cursory description of one aspect of the operation, he offers no detail. Since then other authors have presented some aspects of the plan and the Prime Minister's reaction to it, most notably Richard J. Aldrich and Peter Hennessy. In his study of the office of the British Prime Minister, Hennessy summarises one aspect of the deception and how, strangely, it came to concern Churchill. One of the key components of the plot was to plant a story in the *Sunday Express*, designed to mislead its readers, which presumably included the Soviets. Irrked that he had not been consulted until it was too late to prevent the publication of the article, Churchill complained to his officials, who gently reminded him that he had been informed that a deception would take place in concurrence with the test. He then expressed his ambivalence over the entire matter of peacetime deception, asking 'but it is a nice question how far this weapon should actually be used in times of peace...'.¹⁹ Hennessy offers a little more on the broad contours of the plan in his study of 1950s Britain, *Having it So Good*, but little detail on its implementation.²⁰ Richard Aldrich confirms that the

¹⁴ The earliest date the deceivers became involved is slightly unclear. In DEFE 28/133 the earliest document is dated 1951, twice. However, it is somewhat out of kilter with the rest of the evidence in the file. Indeed, a timeline beginning almost precisely a year later is also plausible. However, minds had begun to focus on the matter of testing since summer 1949, so April 1951 is by no means improbable. Cathcart, *Test of Greatness*, p.146.

¹⁵ DEFE 28/133, DFP/74, Wild, 'Operation HURRICANE': Possibilities of Cover and Deception', 25 April 1951.

¹⁶ Ibid.

¹⁷ Cathcart, *Test of Greatness*, p.173.

¹⁸ Ibid.

¹⁹ Peter Hennessy, *The Prime Minister: The Office and its Holders Since 1945* (Penguin: London, 2000).

²⁰ Peter Hennessy, *Having it So Good: Britain in the Fifties* (Penguin: London, 2007).

deception was deemed necessary for reasons of security and counter-intelligence. Britain and the US had learned much about the Soviet bomb through aerial sampling and preventing the Soviets from reciprocating was deemed a worthwhile endeavour, one that should employ physical protection from the Royal Navy, and deceptive protection from the DFP.²¹ But he reveals little more detail. Hitherto, then, research has uncovered the most public aspect of the deception, but the plan was broader and deeper than the *Sunday Express* article that caught Churchill's attention.

Little appears to have come from Wild's initial report. There is a gap of some eleven months in the record, until March 1952, when Wild once again raises the matter of deception, this time following a conversation with General Sir Frederick Morgan, who had succeeded Lord Portal as the Controller of Atomic Energy, seemingly because of an administrative error, and was now in charge of delivering Britain's bomb.²² The letter underlines that not much thought had been given to the possibility of deception outside the confines of the DFP, despite the fact that Attlee had been so concerned with secrecy and security; Wild stressed that time was running short if the matter was to be considered. In an attached note he highlighted the very real security concerns that surrounded the tests, not only on-location in the South Seas but also in the transportation phase there and back. MI5 were managing the security, but were doing so only in a defensive or a negative manner. This was not to his liking, he noted 'all security measures are being taken but no action to provide cover, let alone deception is being considered.' In a similar manner to the allies' deceptive operations supporting OVERLORD and D-day there were ample opportunities to deceive the Soviets about the time and location of the tests.²³ By neglecting the DFP's plans not only was the HURRICANE Executive neglecting an important element of protective physical security, but they were also doing very little to prevent the Soviets gathering valuable intelligence.

Wild's appeal and Morgan's support generated more interest in the potential use of deception. Subsequently Drew met with some of the senior managers of HURRICANE, Admiral Torlesse, agent to the Chair of Hurex, Admiral Evans-Lombe, Dr. Penney, and his deputy Vice-Admiral Patrick Brooking.²⁴ He briefed them on the uses and limits of deception, clearly noting that although it was practically impossible to disguise the fact of the tests and their approximate location, there were various things that could be done to decrease their usefulness to Soviet spies. The most promising approach would be to feign technical problems in Britain, thereby persuading the Soviets that the test had been delayed by some two months. This could be done by feeding intelligence through secret channels, and also through the publicising false travel plans for important individuals who would be expected to attend any trials. As Drew noted, 'if we succeed we might catch him unprepared either for sabotage operations or for intelligence operations designed to obtain knowledge about the results'.²⁵

The merits of using deception to facilitate counterintelligence should have been clear to senior policy makers whose knowledge of the Soviet's atomic developments was based upon a remarkable

²¹ Aldrich, *The Hidden Hand*, pp.374-376. For British atomic intelligence see Goodman *Spying on the Nuclear Bear*.

²² The job was apparently to be offered to Sir William Morgan, who was probably better qualified, see Cathcart, *Test of Greatness*, p.170.

²³ DEFE 28/133, Wild to Morgan, 12 March 1952, & attached note "Operation HURRICANE: Possibilities of Cover and Deception".

²⁴ DEFE 28/133, Drew, 'Deception in Support of Hurricane', 22 March 1952.

²⁵ Ibid.

programme of airborne sampling, searching for evidence of recent radioactive debris. This was how western intelligence agencies had learned of the first Soviet test.²⁶ Monitoring the Soviet programme in this manner they learned valuable details about the location and timing of the tests, the nature of the weapon being tested, and clues to its yield. They were determined not to provide the Soviets with the same opportunity. The Americans had taken extensive precautions to protect their test series, TRINITY, denying the Soviets access to the surrounding space. And British atomic intelligence men were in no doubt that Britain should follow suit; Eric Welsh, head of atomic intelligence, was convinced of the merits of denying the Soviets accurate information about the time and location of the British test, noting that for some time 'there will still be radio active evidence of intelligence interest available on the site'.²⁷ Muddying the water for the Soviets was certainly a worthwhile endeavour.

A little over a week after Drew's briefing, the DFP submitted a more detailed report to the HURRICANE Executive, which they discussed, with Drew present, on March 31. The report suggested two deceptive components, one a development of the DFP's original plan, and another to disguise the reason for conducting the trial aboard HMS Plym rather than on land. The first component of the deception would ideally obscure four key factors, which the DFP outlined after consultation with atomic scientists. They were technical details about the bomb's design; the efficiency and yield of the explosion; measurements relating to the performance of detonators and fuses; and the type of burst.²⁸ The Soviets had a chance to gather vital intelligence on all these aspects by air sampling, which would be much easier if they were aware of the precise time and date.

The second component of the deception was disguising the real reason for conducting it aboard a ship; a land test would have made it much easier to gather data about the explosion. But HURRICANE was not merely about testing the British bomb, it was also an experiment to gather information about the results of detonating an atomic weapon aboard a ship in shallow waters, with a view to understanding more clearly what would occur if the Soviets detonated a device in a British port. The danger of the Soviets attacking in such a manner had been noted by the Joint Intelligence Committee in July 1950, prompting Penny to suggest a test that would kill two birds with one stone.²⁹ There was little point in trying to disguise that the test was on a ship; too many people were involved and some leakage was inevitable. So the DFP sought cover in the mundane, suggesting that the most promising solution was to inform those involved that the test that it was being conducted on HMS Plym because all the necessary power generators and electrics were readily available on board, building the infrastructure on a desert island was expensive and unnecessary. This information was to be circulated as 'confidential' to ensure it was 'thoroughly disseminated'.³⁰ The HURRICANE Executive took note and recommended to the Minister of Defence, A. V. Alexander, that deceptive measures be employed.³¹

The DFP's general plans were approved at the highest levels of government. This appears to have been unprecedented for a peacetime deception operation. The Minister of Defence, was briefed by

²⁶ Goodman *Spying on the Nuclear Bear*, p.36.

²⁷ Aldrich, *The Hidden Hand*, p.375.

²⁸ DEFE 28/133, HUREX (52)5, 'Forward Planning in Support of Operation Hurricane' 31 March 1952.

²⁹ Cathcart, *Test of Greatness*, p.147.

³⁰ DEFE 28/133, HUREX (52)5, 'Forward Planning in Support of Operation Hurricane' 31 March 1952.

³¹ DEFE 28/133, HUREX (52) Seventh meeting, 8 April, 1952.

Richard. R. Powell, his permanent under-secretary, on 9 April, and Prime Minister Churchill was consulted in soon thereafter (he approved, and promptly forgot having done so).³² The matter was considered delicate, so The Apex Committee was given but a cursory summary.³³ But the all parties involved in the senior management of HURRICANE were left in little doubt by April 1952 that conventional security measures could not in of themselves prevent the Soviets from gathering intelligence on the trials, or worse, attempt to sabotage them by some clandestine means.

Sabotage and counterintelligence notwithstanding, the primary reason for requiring such high political clearance for the operation was the potential for embarrassment on the international stage. Publicity about technical delays and troubles would be deeply troubling in the short term, even if corrected by a test conducted to schedule. The DFP was prepared for this: ideally only the Soviets would truly be taken in by the deception. As Alexander noted, 'the deception experts feel that they can feed in their false material through covert channels to a sufficient extent to ensure that all the pieces in the jig-saw will be in the possession only of the Russians.'³⁴ As for the Australians and the Americans, both of which were very likely to get wind of the 'delay' through their intelligence services, the DFP initially judged they should be given an idea of the operation to prevent them overreacting or compromising the deception. But, as was almost inevitable, the Australians would soon play an active part in the scheme. But, mysteriously, the Chiefs of Staff were wary of involving the Americans in any deception operation. Powell, Alexander and Drew thought this unnecessary, as Drew noted 'it would be most unfortunate for our relations with CIA (always a sensitive matter) if we succeeded also in deceiving them.'³⁵ Powell wrote to the Chiefs, reiterating Drew's arguments and noting that all that was planned was to inform General Walter Bedell Smith, the Director of Central Intelligence, who might then prevent any American move that could undermine the deception.³⁶

After April 1952 the DFP was integrated more closely into the planning of HURRICANE. The Hurex, the Prime Minister, the Minister of Defence, and the Chiefs of Staff had endorsed the concept of deception in support of the test. Detailed planning could now begin. The DFP circulated their first detailed plan on 28 April. This summarised the problem and the solutions they had devised: 'to upset the Russian plans to sabotage the experiment or fain intelligence from it, by indicating that a postponement has been necessary because of a technical hitch.'³⁷ It was to have three primary components: the notional problem and the subsequent delay; the cover for the true nature of the explosion; the return to the UK of dummy components and personnel. The first part was reliant on controlling the movement of significant individuals, using deceptive radio transmissions, and feeding false information through channels. Having approved of this component, Churchill was left with the potentially awkward task of deciding which dignitaries' travel plans needed to be managed to sustain the illusion of delay. Luckily, the Chiefs of Staff facilitated matters in this regard. They approved of the DFP's scheme, and told Drew that 'the fewer VIPs who go the better.'³⁸ And they were happy that certain key personnel's movements be manipulated if necessary. Dr. Penney for example could be called back to Britain or the US to engage in public events; others could be sent to

³² DEFE 28/133, R. R. Powell to Drew, 18 April 1953. See also Hennessy, *The Prime Minister*, p.201.

³³ DEFE 28/133, Prime Minister 'Deception in Support of Operation "Hurricane"', 9 April 1952.

³⁴ Ibid.

³⁵ DEFE 28/133, Drew to R. R. Powell, 22 April 1952.

³⁶ DEFE 28/133, R. R. Powell to McLean, 29 April 1952.

³⁷ AB 16/945, 'HURRICANE', 28 April 1952.

³⁸ DEFE 28/133, R. R. Powell to Drew, 'Security Arrangements for Operation "Hurricane"', 18 April 1952.

Perth on 'leave'; VIP's genuine travel plans could be cancelled; some scientist could return to Harwell where activity would be arranged to dispatch notional parts to Australia. Radio traffic could be managed to give the impression of a pause in preparation owing to the technical fault. The second component, as discussed, rested upon the story that the weapon was tested on a ship purely for reasons of convenience. The crews would be briefed accordingly and the story could be reinforced by rumour, and possibly by an 'inspired press article'.³⁹ Much to Drew's irritation, as the DFP designed its first detailed plan in April 1952 it did not have enough information about the travel arrangements of the HURRICANE equipment to give details about how they might disguise the transfer, the third element of the plan.⁴⁰ But the crucial factor was that the whole operation was to be kept as secret as possible. There was no doubt that the Soviets would expect a cover plan and the DFP sought to capitalise on this by leaking an insecure cover plan to the Soviets in Australia. This plan would be designed once the DFP was in full position of all the details about HURRICANE. Eventually the word was spread that the flotilla of British ships that had set sail from Southampton in February 1952, carrying the components for the test, were heading to the Montebellos to install equipment to monitor rocket tests at Woomera. It proved, indeed, insecure cover.⁴¹ Finally, all deceptions in support of the HURRICANE tests would now be referred to under a single codename: TIGRESS.⁴²

TIGRESS

The major challenge for the DFP as they moved from planning to implementation was coordination. Creating and maintaining the illusion of a delayed test or a technical problem required knowledge of the activities of a significant range of agencies in Britain and Australia, as well as monitoring of the press' activities. A single loose thread could easily compromise the deception. For an organisation as small as the DFP was initially very trying; as Drew noted 'the situation is very much more complicated than one would like, for the reason that HURRICANE is being carried out in a thoroughly British, democratic fashion, which means to say that responsibility can be dodged by everybody provided he side-steps quick enough.' 'As is customary nowadays, we are all hoping that everything will be all right on the night.'⁴³

The most important foreign partners were the Australians. Some were reluctant to share any aspects of the plan with them but it seemed impossible to sustain the fiction of a delay without their involvement. Obviously, their armed forces could indulge in no movements or exercises that would undermine the deception, so Powell and Drew worked with the Admiralty to manage any issues.⁴⁴ Vice-Admiral Collins, the Chief of the Australian Naval Staff, was briefed on the plan by the British Service Liaison Staff's naval representative in Melbourne.⁴⁵ Their political masters were informed by early June. Robert Menzies, Australian Prime Minister, was given a detailed briefing on the plot

³⁹ AB 16/945, 'HURRICANE', 28 April 1952.

⁴⁰ AB 16/945, Drew to Frederick-Morgan, 29 April 1952.

⁴¹ Cathcart, *Test of Greatness*, p.177.

⁴² AB 16/945, 'HURRICANE', 28 April 1952.

⁴³ DEFE 28/133, Drew to Frederick Morgan, 3 May 1952.

⁴⁴ DEFE 28/133, Drew to Powell, 30 April 1952.

⁴⁵ DEFE 28/133, Admiralty to UKSLS Melbourne, undated.

during a conveniently timed visit to Britain.⁴⁶ Expanding the number of people aware of the plan was clearly of concern to Drew, but he recognised that it was necessary. He was certain though that more people mean less security, noting 'we can only rely on Mr. Menzies keeping the nature of the plot to himself.'⁴⁷ It appears that the Australians were responsible partners; the LCS sent a representative to Australia to aid with coordination and implementation without incident.⁴⁸

Ultimately, the Americans had to be brought into the scheme. In a clear example of common sense overcoming institutional stubbornness, Drew and Powell overcame the CoS's initial reluctance to include them. On Drew's suggestion, Sir Stuart Menzies, 'C' informed the DCI, Walter Bedell Smith, on 26 May that a deception operation was being undertaken, and that it would be possible 'that some reflections of the deception may reach you through your sources and if any intelligence on these lines does come your way we would be grateful if you would check back through this channel before giving credence to it'.⁴⁹ As Drew suspected it might, this elicited a positive reply. Allen Dulles replied on behalf of the DCI thanking 'C' for informing them of the operation, that the information had been shared with 'two or three of the top people concerned in atomic energy matters and that they will guard the security of the operation most carefully.' 'C' was assured that he would be notified if any part of the deception plot reached the CIA.⁵⁰

Domestically the DFP developed good working relations with the armed services, the atomic scientists and the Security Service. The latter was crucial to maintaining security, but it also had a part to play in the deception. Its observations of the Australian Communist party noted their interest in the test and their attempts to discover the precise timing. This presented the DFP men with another channel through which they might feed deceptive information to manipulate the Soviets.⁵¹ Britain's atomic scientists also entered into the spirit of the operation. Their movements were key to the success or not of TIGRESS, and they consulted Drew before taking any trips that could have significance. Lt. Gen Sir Frederick Morgan, for instance, informed Drew of his plans to go fishing in Wales, late August, and enquired whether or not this affected the plan.⁵² Drew replied that this was entirely in keeping with the timeline they intended to create.⁵³ And their continued correspondence over the matter of Morgan's movements to Canada and the US demonstrate that he was very willing to have his schedule amended to fit the requirements of the project. Indeed, Drew felt he had access to all the people who could help him with the real plan.⁵⁴

Despite the inter-agency and international cooperation, TIGRESS was amended not long after the original concept was circulated. There were constant adaptations to the methods of implementation as various opportunities arose or disappeared. MI5's intelligence on Australian Communists, mentioned above, provided one opportunity. Another potential adaptation involved plans to utilise the royal family. Prince Philip was known to have an interest in science and he was engaged in a series of visits to various factories and laboratories. Drew wondered whether or not this could be

⁴⁶ DEFE 28/133, MoD to UKSLS Australia, 6 June 1952.

⁴⁷ DEFE 28/133, Drew to Powell, 27 May 1952.

⁴⁸ DEFE 28/133, MoD to UKSLS Australia, 6 June 1952.

⁴⁹ DEFE 28/133, Drew, draft signal from 'C' to Bedell Smith, 8 May 1952.

⁵⁰ DEFE 28/133, Drew May 1952

⁵¹ DEFE 28/133, E. M. Furnival Jones to Drew, 12 May 1952.

⁵² DEFE 28/133, Morgan to Drew, 14 May 1952.

⁵³ AB 16/945, Drew to Morgan, 24 May 1952.

⁵⁴ AB 16/945, Drew handwritten note, undated.

harnessed and manipulated. Writing to Powell, he wondered whether the Prince would be willing to help in two ways: by paying a visit to the ships set to transport the test components to Australia, the Plym and Campania, before they sail; and, more significantly, by cancelling his engagements for three weeks from 10 November and giving no reason. As he proceeded to explain, the first element was to establish a link between the Prince and the tests. They would be the foundation for the second element, cancelling his engagements and generating speculation that he was attending the trials, this at a time very convenient to TIGRESS. To avoid any suggestion in Whitehall or the Kremlin that the Prince had been involved in a deception it was suggested that he 'follow through' with the three week gap in any case, possibly by taking an unadvertised holiday. Drew remained confident that 'it would go a long way to establish our deception, and beyond providing Prince Philip with three weeks to himself I cannot see that it would have any repercussions.'⁵⁵ It remains unclear how far or energetically this aspect of the plan was pursued.

The more channels the DFP had at its disposal the better. But even the best links were unlikely to persuade the Soviets if the concept behind TIGRESS was unsound. As the event neared the DFP began to question the original idea, and the plan underwent significant changes. The first of these was a refinement designed to minimise the chance that the USSR might hedge its bets and monitor the test area despite hearing of the supposed technical fault. The simulated technical problem would have to be introduced into the process fairly late in the day, so there was a danger that the Soviets would have already established the monitoring infrastructure. The DFP believed that this scenario was less likely if it was advertised that the test infrastructure was to be ready earlier, would run for a number of weeks on a supposed test phase, and that the real explosions would take place at the end of November or early in December. This would facilitate the deception in several regards, but most significantly it would make the manipulation of key individuals' movements much easier to manage. Rather than making travel plans and then cancelling them, the relevant people could quite openly travel to Australia to take part in the preparatory phase, having booked a return journey and another outward journey for the supposed test date. All the channels planned for the original operation remained relevant to the amended plan.⁵⁶

The second major amendment was an additional component to the deception. This became necessary because it became clear that Klaus Fuchs, the atom spy who had worked at Los Alamos, had provided the Soviets with enough intelligence about Britain's plutonium infrastructure to undermine the cover plan for the movement of fissile material to Australia.⁵⁷ DFP judged that this made it much more difficult to plausibly deceive the Soviets about the nature of technical delays in plutonium production. Instead, they needed to focus on undermining Soviet capacity to gather intelligence from the test. Again, this would be based on persuading the Soviets that the test was due to take place at a later date.

TIGRESS now involved a story that two explosions were being planned, one underwater, one airburst. They would occur within a week of each other, the first on the 1 or 2 of November.⁵⁸ In order to introduce the delay the DPF would let it be known that for technical reasons the tests

⁵⁵ DEFE 28/133, Drew to Powell, 19 May 1952.

⁵⁶ DEFE 28/133, 'Deception Operation Tigress', 10 May 1952

⁵⁷ DEFE 28/133, 'Operation HURRICANE', 20 May 1952. (This documents refers to the 'information given by Fuls', this is extremely likely to be a misspelling of 'Fuchs'.)

⁵⁸ DEFE 28/133, 'Operation HURRICANE', 20 May 1952.

needed to take place one after the other, with no more than a week passed, but that the underwater explosion was delayed because of problems with the production of the airburst device.⁵⁹ The fiction would be maintained through manipulated movement of key personnel. Most significant was Dr. Penney. He was to be seen travelling to Australia with the notional second bomb; in reality his transport was to contain the actual plutonium for the Montebello test (the bulk rest of the components were shipped on the rest of the components had set sail in February 1952). Upon their arrival at Singapore the plutonium would secretly be transferred to an aircraft that would transport it to Montebello. Penney would continue his journey to Woomera, taking with him dummy packages. He would be based there as he supervised the preparations for the air-burst test. It would then be arranged for bomber aircraft to arrive at Woomera early in October, where they would be based under heavy guard ready for the airburst test.⁶⁰ As Drew explained, ideally this new plan would catch the Soviets 'by surprise with incomplete plans for sabotage or espionage, and also 'confuse him for as long as possible about the real nature of the test.'⁶¹

Oddly, the Australian Prime Minister was aware of this development in the plan before Mr Churchill. Powell briefed Menzies during his visit to Britain over the late-May early-June period, but it seems that Churchill had not been given a briefing since being made aware of TIGRESS in April.⁶² Drew resolved this with a short note for the Minister of Defence to pass to the Prime Minister, outlining the developments in the plan and the reasons behind them.⁶³ There can be little doubt that this note was brought to Churchill's attention and that he did not object.⁶⁴

This seems to have been the final major amendment to the concept. Over the following months TIGRESS proceeded by increment, with the DFP coordinating the various stands of the deception from their bases in London and Australia. The documentary evidence suggests that they continued to enjoy a good level of cooperation from most agencies involved in the test and the deception, both in Britain and abroad. This included the RAF, whose cooperation was vital in the updated TIGRESS plan; there could be no simulated hurried transport of delayed vital components by air, or indeed a simulated airburst test, without aircraft. Fortunately, the RAF agreed to provide all necessary air transport in Britain, Singapore, and between Woomera and Montebello.⁶⁵ Coordination with the Australians remained smooth. The Australian Security Intelligence Organisation (ASIO) hosted a representative of the DFP, when it became clear that the military representatives based there could not coordinate both the false and the real plan. In London, Drew requested that the Forward Planning Section (Far East) despatch an officer to help.⁶⁶ And with the approval of Hurex Chair, Admiral Lombe, they dispatched Lt Cdr Alistair William Maxwell Matthew, a naval officer on secondment to the DFP. Arriving in Melbourne in August, he was to liaise with the UK SLS and the ASIO.⁶⁷ He busied himself with coordinating the security of TIGRESS by reacting to any unhelpful reporting of the preparation for the test, and looking for opportunities to support the deception by

⁵⁹ DEFE 28/133, Drew to Elliot, 8 September 1952.

⁶⁰ DEFE 28/133, 'Operation HURRICANE', 20 May 1952.

⁶¹ DEFE 28/133, MoD to UKSLS Australia, 6 June 1952.

⁶² DEFE 28/133, Drew to Minister, 6 June 1952.

⁶³ DEFE 28/133, 'Deception in support of operation HURRICANE', 6 June 1952.

⁶⁴ Hennessy, *The Prime Minister*, p.201.

⁶⁵ DEFE 28/133, Drew to Brooking, 16 June 1953.

⁶⁶ DEFE 28/133, MoD to GHQ Far East Land Forces, 21 May 1952.

⁶⁷ DEFE 28/133, MoD to UKSLS, 20 June 1952.

providing the press with deceptive stories that would help the Soviets draw the 'correct' conclusions about the tests.⁶⁸

Indeed, the careful management *of*, as well as cooperation *with*, the press was probably the vital component in the successful implementation of TIGRESS. This was true to a greater or lesser extent in most peace-time deceptions, but the publicity that inevitably surrounded HURRICANE only magnified the danger of exposure. Newspapers had to be monitored on what was essentially a global basis: in Britain, Western Europe, Australia, Singapore and beyond. Given the number of people involved in HURRICANE it was almost inevitable that someone would leak something detrimental to TIGRESS. Media interest from as early as April 1952 brought this fact into sharp relief for the DFP: it seems that some journalists had been promised access to Montebello before the test. Clearly disturbed by such a development, Drew wrote to Powell urging more control of the press, noting 'what horrors lie in wait for us if this kind of access to the islands is allowed to go on I shudder to think!'⁶⁹

Of course, blanket denial was a blunt weapon. The DFP realised from the outset that the press needed to be manipulated or co-opted; there was no doubt that the Soviets would gain much of their intelligence from open sources. The plan to simulate an extended preparatory phase, a technical hitch, and two tests rather than one depended largely, although not exclusively, on manipulating the movements of key personnel. Three individuals were of particular concern, Frederick Morgan, John Cockcroft, and William Penney each of whom was contacted by the DFP early in the planning process (note the correspondence with Morgan above). As was explained to Cockcroft in May, the premise was to let it be known that their October travel plans were strictly for the purpose of supervising the preparatory phase of the test, tickets would be booked and publicity generated for their supposed return journey in November for the tests.⁷⁰ Like Morgan, he was happy to help with the deception.⁷¹ Penney's movements remained a core component of the airburst story, so managing the publicity surrounding him was the crucial element. Given the press demand there were plenty of opportunities; Penney gave relatively frequent television and press interviews. These provided the DFP with the channels it needed. There appears to have been little direct press complicity in disguising the scientist's movements. For example, Penney retreated from an arranged interview with the New York Times because he learned that his interviewer was to be Chapman Pincher, the investigative reporter. Presumably he feared giving the dogged Pincher any hint of a story. But his refusal was much to the regret of the DFP who considered it an opportunity missed.⁷² The DFP and MI6 were perfectly willing to feed convenient stories to the press when possible. One of the Maurice Oldfield's, SIS man in Singapore and future 'C', contacts was 'a fairly unscrupulous Reuters representative in Australia' who would 'accept without question anything that was passed to him'.⁷³ Such men were useful channels in maintaining the illusion surrounding travel plans.

Obviously matters did not progress entirely smoothly. Matters such as the one that prompted Drew's rather dramatic missive above occurred relatively frequently. Penney required shielding from

⁶⁸ DEFE 28/133, Drew to Lombe, 15 July, 1952.

⁶⁹ DEFE 28/133, DFP to Powell, 30 April 1952.

⁷⁰ DEFE 28/133, Drew to Cockcroft, 21 May 1952.

⁷¹ DEFE 28/133, Cockcroft to Drew, 3 June 1952.

⁷² DEFE 28/133, 'Hurricane', 4 July 1952.

⁷³ DEFE 28/133, DREW to Matthew, 13 August 1952.

the press as the real test approached. And his wife felt somewhat under siege, leading to discussions at the Hurricane Executive as to whether or not it would be possible to provide her with police protection without compromising the deception.⁷⁴ Unwelcome stories also occasionally featured in Australia. One example occurred in early September, commenting on the movements of the scientists and suggesting that the tests were to take place earlier than advertised and prompting Matthews to contact Drew from Australia asking whether or not there was anything the DFP could do to neutralise the story.⁷⁵ Clearly there was not. Nor was there anything the DFP could do about the material they were feeding the press that did not get picked-up and reported.

However, the operation achieved one crucial success that compensated for all the minor irritations: the cooperation of editors in Britain with the deception plan, resulting in front page coverage for the deception. The paper in question was the Sunday Express. It published a story on Sunday 17 August playing the DFP's exact choice of tune. Indeed, a copy of the forthcoming article was forwarded from the DFP to Downing Street on Friday 16 August. It stated that it was likely that Britain was to test a tactical weapon as well as the main device which was already in Australia (in fact it was not, the main components of the plutonium core would arrive with Penney over a month later); it drew attention to the key persons who would observe the tests, notably Penney and Cockcroft, who would be in Australia the following month 'for a visit of inspection of the preparation'.⁷⁶ Describing the piece as 'an inextricable mixture of the true and the doubtful the idea being that the true facts – all of which are harmless – should give weight in the minds of the other side to the points we are trying to put across to them' Drew echoed how Churchill himself had thought of deception in the last war.⁷⁷ Also emulating the wartime spirit were the features writer of the Sunday Express, Mr John L. Garbutt, and the Editor, Mr Keeble. The former having been known to the DFP for a period of time, considered trustworthy, and indeed aware of the general purpose of the article he penned; the latter 'also a reliable individual' who was 'aware that the article was put in for official reasons'. Both newspapermen were apparently very willing to assist, their only concern being that they might be accused of a breach of security by some branch of government not privy to TIGRESS.⁷⁸ Their contribution ensured that the speculation regarding the tests was very much to the DFP and the Hurricane Executive's liking.

Surprisingly, the only audible voice criticising this aspect of TIGRESS was Churchill. He had been informed twice that the DFP were conducting a deception operation, but the briefings appear to have slipped his memory. The Sunday Express story came to his attention a short while before its publication; the DFP thought it best to do so to reassure him that no leak had taken place. But he recoiled at the idea of using such deceptive techniques in peace. Discussing the matter with Alexander, the Minister of Defence, he noted that the techniques and experiences of the war should certainly be preserved, but 'it is a nice question how far this weapon should actually be used in times of peace – at any rate for peacetime purposes'.⁷⁹ Its use in war and in maintaining the empire was, on the other hand, perfectly permissible. Alexander reassured him that most deception was closely related to military matters and was, in any case, a very necessary weapon in fighting the Soviet

⁷⁴ DEFE 28/133, Drew to Brooking, 19 September 1952.

⁷⁵ DEFE 28/133, Matthews to Drew, 3 September 1952.

⁷⁶ DEFE 28/133, Text of Sunday Express article 'Atom Bomb', 15 August 1952.

⁷⁷ DEFE 28/133, Drew to Colville, 15 August 1952.

⁷⁸ DEFE 28/133, Note to Norman Brook, 18 August 1952.

⁷⁹ Hennessy, *The Prime Minister*, p.202.

intelligence services which were mounting a 'continuous and vigorous attack' against British interests.⁸⁰

The *Sunday Express* story, Churchill's reaction, and the very public deception has hitherto been the main focus of the authors who have studied the deception. But it is clear that this was only the tip of a significantly larger iceberg. As Drew explained to Downing Street officials, 'the article is only part of a campaign which we are conducting mainly by covert means.'⁸¹ The covert side of TIGRESS was impressive in its scale and ambition, reminiscent of the great deceptions of the Second World War. As has been described above, TIGRESS relied on the cooperation of a significant number of people and organisations, not least the RAF, Britain's atomic scientist, the ASIO, the Secret Intelligence Service. There were others too. In Melbourne, Matthews attempted to feed stories to the Australian press, but appears to have failed to gain any real purchase.⁸² Forward Planning Section B, in the Middle East, attempted to use a number of correspondents based in Nicosia to spread the story about Penney's movements.⁸³ As well at the RAF, the Royal Navy, the Australian Navy and Air Force cooperated in creating the illusion of preparation for a tactical weapons test. There was discussion of extending the period of life insurance coverage for the troops, sailors and airmen taking part in the test, lest a little detail leak and undermine the plan.⁸⁴ And it seems that the DFP utilised some of its covert channels to pass material directly to the Soviets. In a 'Top Secret' message to Matthews in Melbourne Drew explained how the DFP had 'put over through a covert source in Holland the suggestion that the production of plutonium for the second bomb is likely to be delayed until some time in October'.⁸⁵ The Dutch source would suggest that Penney was taking with him precision engineering equipment during his early antipodean travels, rather than the plutonium core. Another European channel existed in Switzerland. In June Drew briefed one M Vomecourt on information he was to convey to his contacts during his travels there, again this involved the development of a tactical bomb.⁸⁶ In Australia, the DFP's main contact with the ASIO, Spry, also had a line of communication with the Soviet embassy which Drew remained keen to exploit.⁸⁷ TIGRESS was a large operation, skilfully coordinated by the DFP.

Deception for the Cold War

The question of its success or failure can be considered in two ways. One relates to the manner in which the operation was conducted; the other concerns the effect it had on the designated target. As illustrated above, there can be little doubt that the plan was well designed and executed. The concept developed into a plausible story; the necessary inter-agency and international cooperation was forthcoming; and the press cooperated, wittingly and unwittingly. There was a concern that the loose ends of the incomplete travel itineraries of Penney and Cockcroft would unravel. Press conferences in the aftermath of HURRICANE provided the ideal opportunity for exposure or

⁸⁰ Hennessy, *The Prime Minister*, p.202. See also Aldrich, *The Hidden Hand*, pp.375-376.

⁸¹ DEFE 28/133, Drew to Colville, 15 August 1952.

⁸² DEFE 28/133, Matthew to Drew, 9 September 1952.

⁸³ DEFE 28/133, MoD to GHQ Middle East Land Forces, 27 August 1952.

⁸⁴ DEFE 28/133, Drew to Powell 'Security arrangements for operation Hurricane', 22 April 1952.

⁸⁵ DEFE 28/133, Drew to Matthew, 4 September 1952.

⁸⁶ DEFE 28/133, Drew to Garton 20 June 1952.

⁸⁷ DEFE 28/133, Drew to Hollis, 16 July 1952.

compromise. But Drew was confident that this could be handled without difficulty, although he warned that they 'should be prepared for questions from people at the press conference like Chapman Pincher.' The DFP set a relatively straightforward cover story for the scientists, stating that the tickets had been booked tentatively some time ago and that circumstances had changed. Nothing further seems to have come from this particular loose end.⁸⁸ Drew certainly believed that TIGRESS had been implemented successfully and that it foreshadowed more cooperation with the Australians in deception.⁸⁹

The impact on the Soviets is more difficult to gauge. Aldrich judges that the intelligence provided by spies such as Fuchs undermined any attempt to deceive the Soviets with regards the date of the first test.⁹⁰ However, a cloud of suspicion had hung over Fuchs since late in 1949, and by January he was removed from any sensitive position.⁹¹ Out of the loop over two years before the test it is unlikely that his espionage compromised the logistics of Hurricane or TIGRESS in anything more than a general way. Christopher Andrew, in one of the fullest available accounts of Soviet intelligence in the Cold War, reminds us that the Soviets had ample other sources on the British bomb; Stalin appears to have been far better briefed on it than most British ministers.⁹² Nevertheless, he makes no mention of TIGRESS. The DFP proceeded with their operations fully aware that Fuchs and others had betrayed aspects of the atomic programme to the Soviets. Clearly they and the Hurricane Executive judged that even if the USSR possessed a significant amount of technical information there was no merit in letting them gather any more intelligence from the tests, if it could possibly be avoided. Other DFP documentation also suggests that they believed they had managed to convince the Soviets that Britain was making significant progress in developing tactical nuclear weapons. The DFP's 'Global Deception Strategy', penned in response to the 1952 Global Strategy Paper, highlights that the Soviets' belief in the existence of a tactical British bomb could be exploited.

TIGRESS also encapsulates the difficulties the DFP faced in operating in the Cold War. The impulse to use deception was certainly understandable, given the legacy of success in the Second World War. But the Soviets were an altogether more challenging adversary. Many of the crucial factors that allowed the wartime deceivers to achieve such success were absent, or at least severely curtailed. Primarily, the Cold War deceivers had little access to Sigint, and with it an insight into the minds of those they were deceiving. Without this, there was practically no means of truly gauging whether or not the operation was effective. They were, of course, all too aware of this, Drew noted upon taking charge of the London Controlling Section that one of the challenges they faced was designing operations that created distinct enough ripples to be felt back in London.⁹³ There was no guarantee that any operation would generate these ripples, nor that they would be received in a timely manner if they came. The relatively minor danger of negative fallout from deception for counter-intelligence operations, and the potential benefit of denying the Soviets vital intelligence, suggests that the DFP was perfectly justified in its enthusiasm for TIGRESS. But for all the press stories, convoluted travel plans, and the manipulation of secret channels, operations like TIGRESS were far more shots in the

⁸⁸ AB 16/945, Drew to Morgan, 10 October 1952.

⁸⁹ DEFE 28/133, Drew to Spry, 8 October 1952.

⁹⁰ Aldrich, *The Hidden Hand*, p.376.

⁹¹ Goodman, *Spying on the Nuclear Bear*, p.60.

⁹² Christopher Andrew, *The Mitrokhin Archive: The KGB in Europe and the West*, (London: Penguin, 2000), pp.518-519.

⁹³ DEFE 28/1, Confidential Annex to COS (50) 72nd meeting, 8 May 1950.

dark than the DFP would have liked. It is highly likely that this would have been the case for a great deal of the DFP's Cold War work against the USSR; the organisation's glory days were behind it.