Bomber Command and the Cuban Missile Crisis: At the Brink of Armageddon?

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Abstract: In October 1962, the world stood on the brink of nuclear war. This article examines the role of nuclear weapons in the crisis and how new evidence and interpretation has changed our understanding of both high-level political decision-making and the actions of subordinate commanders. The risk of inadvertent nuclear war, arising from incidents at the tactical level, is assessed. The analysis provides context for studying British nuclear preparations. In 1962, the UK could attack the USSR with a nuclear force comparable to that with which the Soviets could attack the USA. The role of Bomber Command is scrutinised, and the significance of its activities and the UK's nuclear deterrent are explored.

Disclaimer: The views expressed are those of the authors concerned, not necessarily the MOD.

Introduction

The Cuban missile crisis was the closest that the world has come to Armageddon. In October 1962 the prospect of cataclysmic nuclear war was very real. Unsurprisingly, the crisis remains one of the most intensively studied events in modern history. Equally unsurprising, the role of nuclear weapons looms large in such enquiries. Historians nevertheless disagree on key issues and many questions about the risk of nuclear war cannot be answered beyond informed speculation.

This essay provides context for the study of nuclear weapons in the crisis and explores the British role. There were three nuclear weapons-states in October 1962: the USA, the USSR and the UK. The RAF's Bomber Command, which at that time served as the principal component of the UK's nuclear forces, posed a threat to the Soviet Union comparable to the threat that the Soviets posed to the United States. While Washington and Moscow were self-evidently the key players in October 1962, the role of the British government and the activities of Bomber Command raise interesting issues for students of the crisis as well as for students of British nuclear weapons.

Debate remains about why Khrushchev decided to deploy Medium Range and Intermediate Range Ballistic Missiles (MRBMs and IRBMs) in Cuba. When the MRBMs were discovered there was immediate discussion within the Kennedy administration about their significance. The US Joint Chiefs of Staff believed that the Soviet deployment would have a significant effect on the strategic nuclear balance. Whitehall reached a similar assessment. Defense Secretary McNamara, however, believed that they would have no affect whatever on the nuclear balance. McGeorge Bundy, then Kennedy's Assistant for National Security, later recalled that the majority of JFK's senior advisers agreed with McNamara, whose analysis reflected the potency of Soviet InterContinental Ballistic Missiles (ICBMs) and long-range bombers to target mainland America.

Yet the nuclear equations of the Cold War were not simple matters of military arithmetic. A successful Soviet deployment in Cuba would have marked a considerable political victory for Khrushchev. The implications for the Cold War were potentially enormous, in particular in relation to West Berlin. Kennedy and Macmillan were deeply exercised over whether Khrushchev's ambitions ultimately lay in Berlin and historians continue to debate whether this was one of his objectives.

Had Khrushchev succeeded in Cuba the implications for NATO could have been extremely serious. If, bolstered by a political victory in Cuba, the Soviets had moved on West Berlin, JFK would have faced a new crisis of much greater proportions. The American commitment to West Berlin was much more problematic than the Soviet relationship with Cuba. The foundation of NATO was that an attack upon one was an attack upon all – its enduring Article 5 commitment to collective defence. The American 'extended deterrence' that lay at the heart of NATO strategy represented both an enormous commitment and a huge risk once the Soviets could strike the United States with nuclear weapons.

The more immediate threat of war created by the Soviet missiles was that their mere presence could provoke an American attack. Indeed, Kennedy's initial response, on 16 October, was that military action was necessary. JFK's subsequent choice of a partial naval blockade (or 'quarantine') was communicated to key NATO allies and then announced to the world on 22 October. The President had been briefed that an air strike would destroy 90% of known missiles, which would risk leaving some means of Soviet retaliation from Cuba intact. No evidence has emerged of any consideration in Washington of using nuclear weapons against the Soviet missiles to prevent such retaliation. The Joint Chiefs consistently advocated military action against Cuba, yet they did not suggest using nuclear weapons pre-emptively (or preventively) against the MRBMs.

What if Soviet missiles had been fired at the United States? In his televised speech of 22 October, Kennedy threatened 'a full retaliatory response' if any missiles were launched from Cuba against the US (or indeed other countries). In retrospect, however, McNamara dismissed the idea that JFK would have acted in this way and suggested that any response would have only involved 'one, two or maybe ten - something like that' (Blight and Welch 1989: 195).

The most obvious risk of escalation lay in Europe, which Kennedy recognised even as he decided to mount a blockade. West Berlin was the principal concern. The 1961 Berlin crisis had brought home the stark options available to the President if conflict broke out. Kennedy like Macmillan recognised that Berlin was militarily indefensible. If the Soviets had moved on West Berlin, Kennedy would face the choice between watching NATO disintegrate and crossing the nuclear threshold.

Questions of whether, or how, either Kennedy or Khrushchev would have used force are as speculative as they are necessary in exploring the risk of war. There remains debate about whether Kennedy would have resorted to military action against Cuba if diplomacy had not succeeded, though many are persuaded that the President would have 'gone the extra mile for peace'. The closer political leaders neared the brink, the more determined they were to draw back. It is now evident that Khrushchev was also increasingly determined to avoid escalation, and, for example, angrily dismissed the suggestion that Moscow should retaliate against West Berlin in response to the blockade of Cuba.

Macmillan travelled a similar trajectory. At the start of the crisis he was minded to recommend an invasion. By 24 October, when Kennedy asked his advice, the Prime Minister counselled diplomacy not force. On 22 October, he had told General Norstad, the Supreme Allied Commander Europe (SACEUR), that mobilisation sometimes caused war. Norstad shared his concerns. The Prime Minister was strongly opposed to taking action in Europe that risked the equivalent of August 1914. At the same time he supported the mobilisation of American forces for an invasion of Cuba as an appropriate instrument of crisis management.

Under what circumstances would political leaders have seriously considered initiating nuclear attacks against the territory of their adversaries? In 1961 Kennedy sought advice from the Joint Chiefs on the feasibility of a first strike against the USSR. Nikita Khrushchev used nuclear threats to bluster and to signal Soviet commitment to Cuba's security. Yet neither contingency planning nor political hyperbole reflected how the two leaders saw the prospect of nuclear war, especially as that prospect grew tangible. For some students of the crisis this reinforces the view that the events of October 1962 were not as dangerous as believed and that mutual restraint was the sturdy twin of mutual devastation.

Tripping Over the Brink

Yet if the risk of a political decision to initiate nuclear war diminished during the crisis, we now know much more about events and incidents at the operational level, including the command and control of nuclear weapons. In the 1990s, new studies examined problems in US command and control, and critically evaluated organisational safety in the American nuclear state (Sagan 1993). Revelations about Soviet tactical nuclear deployments in and around Cuba also appeared (Blight, Allyn and Welch 1993; Gribkov and Smith 1994). Unbeknownst to US intelligence, the Soviets deployed some one hundred tactical nuclear weapons in Cuba. Subsequently, it became known that, as the crisis reached its climax, Soviet nuclear-armed cruise missiles (which American intelligence had failed to recognise) were moved to firing positions within range of the US naval base at Guantanamo Bay (Dobbs 2008).

Assessing the risk that tactical nuclear weapons would be used against an American invasion begs questions about authority to use them and whether they could have been used without authority (as well as whether they would have survived an American attack). Khrushchev did consider giving his commanders in Cuba pre-delegated authority to use tactical nuclear weapons, but eventually decided against. As the crisis progressed he became increasingly exercised about the Soviet military. The decision of subordinate commanders in Cuba to shoot down a USAF U-2 on 27 October reinforced his concern that their action could precipitate disaster.

The fortieth anniversary of the crisis in 2002 also revealed dramatic events concerning deployment of Soviet Project 641 (NATO designation: Foxtrot) diesel-electric submarines (Burr and Blanton 2002; Savranskaya 2005). Each carried a nuclear torpedo with an explosive yield of 15 kilotons, equivalent to the bomb that destroyed Hiroshima. Testimony from Soviet submariners suggested that, on at least one boat, the captain may have considered firing his nuclear torpedo at American warships that were dropping hand grenades and practice depth charges to persuade him to surface.

When that procedure was approved by President Kennedy on 24 October, no-one considered that the submarines might be carrying nuclear ordnance. Kennedy and McNamara were both greatly exercised about the need for political control over military forces. McNamara was clear that any action should be designed as a means of communication with the Soviets.

Yet some Soviet submariners were unaware of the signalling procedures and believed they were under attack.

Much has been made of how Kennedy's own wartime experience equipped him to understand the proclivity of military organisations to malfunction. Yet, here, Kennedy and McNamara set in motion a train of events that could have led to inadvertent nuclear war. The incident that may have generated the greatest risk of nuclear use in October 1962 may also provide the best example of the huge gap between political leaders and those who actually operated nuclear weapons. Here, as in other episodes in October 1962, crisis management looks like a dangerous oxymoron.

Siberian Skies

One of the most potentially dangerous moments came on 27 October when an Alaskan-based USAF U-2, sampling the atmosphere for radio-active debris from Soviet nuclear tests, strayed off course into Soviet air space. There was fear in Washington that Moscow might mistake this as reconnaissance ahead of a nuclear first strike and decide to launch their ICBMs pre-emptively. It is unknown whether the Pentagon took this risk seriously and considered 'pre-empting pre-emption'.

Scott Sagan identified a more immediate risk, arising from the fact that, as Soviet MiGs scrambled to shoot down the U-2, US F-102 fighters took off to defend the aircraft (Sagan 1993: 135-42). Unbeknownst to political leaders in Washington, the prevailing DEFCON alert state meant that the Alaskan-based fighters were armed with air-to-air missiles with sub-kiloton yield nuclear warheads. Sagan maps out five scenarios in which the nuclear threshold might have been crossed.

Khrushchev was greatly worried by the straying U-2 and raised it directly with Kennedy. It has been suggested that the Soviet leader was advised by his generals that the aircraft could be on pre-strike reconnaissance (Lebow and Stein 1994: 139-40). If there was a risk that the Soviets might 'use rather than lose' their limited numbers of ICBMs by launching pre-emptively in the face of what they erroneously believed was an American first strike, then this was the moment when decision-makers came closest to using nuclear weapons against the mainland of their adversary. How seriously Khrushchev considered such a decision is unknown. Had the Soviets launched their ICBMs on the mistaken assumption that they were about to come under nuclear attack, this would have been the ultimate intelligence failure.

Assessing Nuclear Risks

There are those who believe that the 1961 Berlin crisis was more dangerous than the 1962 Cuban crisis and that American regional superiority in the Caribbean mixed with strategic nuclear superiority meant the risk of war was nugatory. At root, this is an argument that American deterrence was robust and successful. It resonates with the view expressed directly to Kennedy by the Chief of the US Air Staff, General Curtis Le May on 19 October, that if

Kennedy moved against Cuba (as Le May wanted), Khrushchev would not act against Berlin through fear of an American nuclear response. How we assess Le May's views now that we have a clearer understanding of Khrushchev's desire to avoid war and his willingness to retreat over Cuba is an interesting issue.

The foundation of what became known as 'mutually assured destruction' was that it could never be rational to strike at the adversary knowing that retaliation was certain. Yet questions remain about whether an American nuclear first strike in 1962 could have crippled the Soviet capacity for retaliation against the United States (though Soviet bombardment of Western Europe would have been far more assured and utterly devastating).

The argument that mutual deterrence prevented war is persuasive for some. Other factors, however, need consideration. First, political leaders drew back from conflict as they found time to manoeuvre and empathize. Time and political space were potentially crucial. If JFK had believed that a decision was necessary on 16 October, for example, military action could well have ensued.

Second, not all political leaders were deterred by the prospect of nuclear war. As the crisis reached its climax on 27 October, a message from Castro to Khrushchev was interpreted as a call for a pre-emptive nuclear attack on the United States. And in 1992 Fidel Castro declared that if he had had control of tactical nuclear weapons he would have used them, even if this invited annihilation of Cuba. Castro's statement seems reckless, if not irrational, in retrospective, and raises worrying questions about how some leaders (and their followers) see national sacrifice in pursuit of ideological causes – it is an issue that has contemporary resonance. Yet initiating nuclear attacks in a conventional conflict remained at the heart of NATO strategy during the Cold War, and certainly underpinned America's commitment to its European allies in 1962.

Third, and most important, is that the risk of nuclear use in 1962 most likely arose from the decisions of subordinate commanders. Scenarios in which the nuclear threshold could have been crossed are, as discussed above, readily imaginable.

Fourth, while nuclear deterrence may have helped resolve the crisis, nuclear deterrence (or at least the deployments, force structures and perceptions of capabilities) helped create the crisis. Soviet strategic inferiority (and American realisation of Soviet strategic inferiority) was clearly a key factor in Khrushchev's decision to throw his hedgehog into Uncle Sam's pants, as he put it. The dynamics of the nuclear relationship between East and West (and, of course, Khrushchev's 'hell of a gamble' as Kennedy described it) helped generate the missile crisis.

Yet it is also worth noting that assessment of the risk of nuclear war in 1962 often takes escalation to a global strategic exchange for granted. But would escalation have inexorably followed? Was the nuclear threshold a Rubicon? Any answer is speculative but nevertheless necessary in assessing risks or drawing lessons.

When lethal force was used in the crisis - when a U-2 was shot down over Cuba on 27 October - Kennedy held back retaliation against Soviet surface-to-air missiles sites. If nuclear weapons had been used by subordinate commanders would there have been a similar response? Imagining a world beyond the nuclear threshold is difficult. Proportionate and discriminate responses would have depended on assessments of what had happened and why. Yet the trajectory of Kennedy's and Khrushchev's behaviour surely points to what would have been desperate attempts to prevent Armageddon, even as the risks of escalation grew.

So where does the third nuclear-weapons state fit into these contexts? The British Defence Secretary at the time, Peter Thorneycroft, later opined that Britain had been nothing more than a 'bystander at the brink' (in contrast to the view of Harold Macmillan). There remain gaps in our knowledge about a range of issues, including the roles of the Royal Navy and of British tactical and theatre nuclear deployments in Europe. Some archival disclosure and testimony from former members of Bomber Command nevertheless provide fascinating insights that generate important questions.

By 1962 the relationship between the USAF's Strategic Air Command (SAC) and Bomber Command was an intimate one, encompassing co-ordinated targeting, the dual-key Thor IRBM deployment, integrated Quick Reaction Alert (QRA), and the provision of American nuclear weapons for British bombers (Twigge and Scott 2000). The pattern of communications between SAC and Bomber Command remains unclear; Air Marshal Cross, Commander-in-Chief (C-in-C) of Bomber Command, revealed, for example, that SAC made no attempt to contact him during the crisis (Madelin 1995: 223-5). It is known, though, that 24 SACEUR-assigned Valiants at RAF Marham were loaded with American Mark V weapons (at variance with the constitutional proprieties of US custodial requirements).

By 27 October, 59 of the 60 Thors, deployed under dual-key UK-US control, were at 15 minutes' readiness. So too were 37 of the 45 Jupiter IRBMs in Turkey and Italy. In practice, the Thors could be launched within 13-14 minutes of the order to fire, although there is evidence that a number of missiles were erected at "Phase-2 hold" of "T minus 8" (Wilson 2008; Scott and Twigge 2000; Wilson 2012). The V-bomber force had an estimated 120 Valiants, Vulcans and Victors available for combat readiness in October 1962, which were moved to higher alert states during the crisis.

Black Saturday

Saturday 27th October 1962 was almost certainly the day when the world has been closest to nuclear war. In Washington, Kennedy grappled to find a diplomatic solution as Khrushchev upped the ante by demanding withdrawal of Jupiter IRBMs from Turkey and as news arrived that the U-2 had been shot down over Cuba. As noted above, another U-2 had strayed into Soviet air-space, American warships dropped explosive devices on nuclear-armed Soviet submarines, Soviet nuclear-armed cruise missiles were forward-deployed within range of Guantanamo Bay and nuclear warheads arrived at one of the MRBM sites. American forces world-wide stood at DEFCON-3 and SAC was at the unprecedented state of DEFCON-2, with

66 B-52s on airborne alert. At the height of its deployment, the US had nearly 1,500 SAC bombers and some 300 Intercontinental and Submarine Launched Ballistic Missiles combat-ready, as well as a panoply of over 4,000 other nuclear weapons including those on aircraft carriers and across NATO Europe.

Harold Macmillan remained opposed to any military action that risked escalation. At 11 am on Saturday 27 October, he summoned the Chief of the Air Staff, Sir Thomas Pike, and was adamant that overt preparations should be avoided. "He did not wish Bomber Command to be alerted, although he wished the force to be ready to take appropriate steps should this become necessary.' (Scott 1999, 146). What Macmillan understood of Bomber Command's alert and readiness states and what he knew of its subsequent actions remain unclear.

The Chief of the Air Staff subsequently contacted C-in-C Bomber Command and then, at 2.30pm, briefed the other Chiefs of Staff on his meeting with the Prime Minister. At 1pm Cross had ordered Alert Condition 3, the Precautionary Alert state. This involved unobtrusive measures and did not include dispersal of the V-force. By contrast, in the United States SAC B-47 bombers (and nuclear-armed interceptors) were dispersed at the outset of the crisis. The whole of the V-force was brought to a state of fifteen-minute readiness.

Cross' actions were within the scope of his authority and consistent with the Prime Minister's wishes. At some point, however, on the afternoon of 27 October Bomber Command moved to '05 Cockpit Readiness', which ensured that the aircraft would be airborne within five minutes of being ordered to start their engines (Woolven 2014). This was maintained during the afternoon of 27 October.

As the Cuban missile crisis reached its climax, Macmillan and his senior colleagues considered what action to take. The Prime Minister later described 'the frightful desire to do something' (Macmillan 1973: 216). He decided on a diplomatic initiative that would offer to 'immobilise' the Thors to help Kennedy's negotiations with Khrushchev. Macmillan was unaware that Kennedy secretly offered Khrushchev to remove the Jupiter missiles from Turkey after the Cuban crisis was resolved, providing that NATO learned nothing about the arrangement. In fact, Khrushchev had already decided to withdraw and told the Presidium on Sunday 28 October that, 'in order to save the world, we must retreat' (Fursenko and Naftali 1997: 284).

On Sunday morning, Moscow Radio broadcast Khrushchev's declaration that the missiles would be withdrawn in return for American assurances not to invade Cuba. In Washington there was huge relief, save amongst the Joint Chiefs who continued to argue for invasion until there was irrefutable evidence of the removal of the missiles. SAC remained at DEFCON-2 until 20 November when formal diplomatic agreement with Moscow was reached (Bomber Command remaining at Alert Condition 3 until 5 November). As political leaders digested the diplomatic breakthrough, there was no attempt to reinstitute 05 Readiness, although on Sunday afternoon it was decided to increase the number of bombers on Quick Reaction Alert the following morning.

Various issues await further clarification though some questions will almost certainly remain unanswered. First, were senior ministers (and particularly the Prime Minister) fully cognisant of what the RAF was doing? The decision not to disperse the V-bombers (which greatly exercised Bomber Command) complied with Macmillan's wishes to avoid any overt action. In normal peacetime conditions, 65% of the Thors and one V-bomber in each squadron on QRA were kept at fifteen minutes' readiness. Alert Condition 3 therefore only changed the numbers involved, not the configuration of the bombers and missiles. Cockpit Readiness, however, was more problematic, as was erection of Thor missiles that could presumably have been observed by Soviet base-watchers (assuming these were in place).

The more important question is how the Soviets saw British action. Here we know very little. Yevgeny Ivanov, erstwhile Soviet military attaché and military intelligence officer in the London embassy in 1962, provided an amusing vignette of when he claimed to have secretly toured British and American bases and saw, 'pilots mindlessly drinking beer and flirting with local girls. I did not detect any alarming signals, and duly reported this to Moscow Centre' (Ivanov 1992: 147).

We do not know what Soviet intelligence picked up during the crisis. Nor do we know how information was evaluated back in Moscow. More broadly, our understanding of Soviet threat perceptions during the Cold War remains one of the principal aspects of the Cold War where our knowledge and understanding is severely limited. In September, Bomber Command conducted a major training exercise that included dispersal of the V-force. If Moscow had sound intelligence on Exercise 'MICKY FINN' they should have better understood that Bomber Command's actions in October 1962 did not signal preparation for war.

We do not know how Moscow assessed the relationship between the British and American air forces, or command and control arrangements such as the dual-key system on the Thors. At the diplomatic level, Khrushchev made no attempt to raise the Thors with either London or Washington at a time when the Jupiters in Turkey were a major issue in the denouement of the crisis.

One important rationale for a British nuclear deterrent, articulated later in the 1960s, was that a second centre of decision-making within NATO could be an additional deterrent to Moscow. There is simply no evidence from 1962 on which adjudication of this idea can be made. Likewise, it is impossible to assess how far, or indeed whether, Moscow considered the notion that Britain might use its nuclear forces when the Americans did not. What if JFK foreswore nuclear retaliation against a Soviet seizure of West Berlin? Robert McNamara stated in 1983 that his advice to President Kennedy (and later to President Johnson) was that they should, 'never initiate, under any circumstances, the use of nuclear weapons': an extraordinary statement that undermined the central foundation of NATO strategy (McNamara 1983: 79). If Kennedy chose humiliation rather than holocaust over Berlin, would Macmillan have chosen differently? Was the security of West Berlin and the cohesion of NATO more of a vital national interest for the British than it was for the US and one that was worth inviting nuclear annihilation?

Conclusion

Had war come in 1962, the United Kingdom would have been in the front-line of nuclear warfare. Whatever the relative Soviet inferiority in strategic forces (which nevertheless amounted to an estimated 42 ICBMs and 160 strategic bombers), they possessed a formidable panoply of nuclear-armed bombers, MRBMs, IRBMs and sea-based weapons that could have wrought devastation on the UK and Western Europe (Norris 2012). What role, militarily and politically, Britain might have played in American counsels of war had diplomacy failed, is a speculative question of considerable importance in debates about the special relationship and about Britain's nuclear weapons.

The argument that deterrence came close to failing, and that there was a largely unrecognised risk of inadvertent nuclear war has grown over the last two decades as the focus of inquiry has extended to operational and organizational levels. Assessing nuclear risks in 1962 involves delving deep into the minds of political leaders to understand how they would sanction the use of weapons of mass destruction on an all but unimaginable scale. Global nuclear war in October 1962 would have killed scores, if not hundreds of millions. Indeed, if theories about the climatic effects of nuclear attacks on cities are correct, life itself could have been extinguished across the northern hemisphere.

The lesson that the best way to manage a nuclear crisis is to avoid having one and that unfettered competition in nuclear armaments breeds mutual insecurity were obvious lessons to draw from October 1962. Subsequent increases in the number of nuclear weapon-states and the continuing (and in places growing) political instability in which future crises may occur raise the fear that reason and, and more importantly, luck will not serve humankind as well as they did in October 1962.

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Section 3:

Air and space power as current and future instruments of deterrence

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