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Risk Management In International Security Policy Decision Making

- maybe not a slam dunk after all(1).

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INTRODUCTION

1. The author has spent much of the past 15 years in the UK Ministry of Defence (MOD) trying to improve the efficiency and effectiveness with which the Ministry procures new military capability, typically based on complex and technically demanding equipment projects. One of the challenges involved was to improve the effectiveness with which the Ministry assesses, and then manages, the risks inherent in such projects. A variety of techniques and processes have been developed and applied to bring about such an improvement, with some success, though some underlying behavioural and cultural issues, such as ensuring that decision making is driven by analysis rather than advocacy, will need continuing efforts to bring about lasting improvement .
2. It is widely accepted from all accounts of two recent dominating events on international security policy – the 9/11 attacks on the US and the invasion of Iraq in March 2003 – that there were deficiencies in the underlying policy making processes that preceded them. It was apparent to the author that the questions raised over the decision making processes in these two examples, and possibly others, had similarities, particularly the assessment and management of risk, with those arising in defence procurement, that merited further examination. Foreign policy decision making is, of course, a major field of academic study in its own right, but the application of thought processes or techniques derived from another field may bring new perspectives. Nor is it self evident that risk management as applied in defence procurement is part of existing good practice in international security policy making.

3. **The purpose of this study is therefore to examine the relevance of risk management approaches used in major procurement projects to international security decision making.** Subsequent sections of this paper summarise the application of risk management to defence procurement in the UK MOD; outline its possible relevance to international security decision making; examine the application of risk management to six past and current case studies; and draw some conclusions.

RISK MANAGEMENT IN UK DEFENCE PROCUREMENT

4. The *Concise Oxford English Dictionary* (2) defines "risk" as "a situation involving exposure to danger > the possibility that something unpleasant will happen"

Any complex enterprise is likely to involve potential impediments to its success that can be assessed and planned for in advance and mitigated and managed over its course.

5.Complex procurement projects are very difficult to plan and manage effectively because the full scale (cost/time/complexity) of the challenge only becomes apparent after a considerable investment of effort, and then only if that investment has been well directed to scope the overall task. On many occasions in the UK and elsewhere, key commitments (eg political, financial, commercial, industrial) have been made on major projects before such work has been done, leading to disappointment and recrimination later. The UK National Audit Office's most recent report on UK Defence Projects stated (3)that:

" ..we expect there to continue to be problems emerging on existing projects in future, and it may be some years before any trend towards continuously improved performance on newer projects becomes apparent. …Many of the difficulties arose from failure to spend sufficient time and resources in the assessment phase and provide mitigation plans for the potential risks….Projects less than halfway through their procurement are already expected to be delivered later or to cost more than approved."

6. It is therefore necessary to understand how to assess and manage risk, how to make rational choices and when to make them, how to understand and deal with related stakeholder interests, and a host of behavioural and skills issues that bear on outcomes. It is also essential for the project, and the enterprise of which it is a part, to obtain, and maintain, as objective a view as possible of the overall health of the project, which can be hard to do in a competitive and goal- driven environment. A great variety of tools, techniques, and processes have been developed to help address these issues.

7. The UK MOD guidance on the application of risk management to MOD projects (4) describes risk management as an integral and essential part of project management. Managing risk in a systematic way, through life, is the single biggest factor in determining whether a project will be successful. Risk management uncovers the key cost, schedule, and performance drivers and allows actions to be focused where they will be most effective. It aims to put the project team in control of uncertain events that may affect project objectives.

8. The four key steps in effective risk management are :

- *Risk Identification* .This is the activity within the risk management process to find, list, and characterise elements of risk. These elements can include risk source, event, consequence, and context. Opportunities to benefit the project's objectives may also be revealed. It cannot be undertaken effectively unless a project's objectives, strategies, and plans are clearly understood.
- *Risk Analysis* is the activity within the risk management process of prioritising identified risks against agreed criteria. It includes qualitative and quantitative assessments of the probability of identified risks occurring, and the impact of these in terms of time, cost, and performance.
- *Risk Planning* is the activity within the risk management process of selection and implementation of risk handling options, encompassing both mitigation and fallback/contingency plans.
- The *Risk Management* stage involves implementing, monitoring, reporting and reviewing risk management actions against objectives.

And while these four steps are distinct, the overall process is also commonly known as "Risk Management".

9. When implemented properly, risk management:

- Improves the likelihood of success, by encouraging forward thinking, thus minimising sudden shocks and unwelcome surprises
- Increases visibility, involving all stakeholders, thus raising risk awareness and enhancing accountability

- Enhances communication, improving the basis for strategy setting, performance management, and decision making
- and adds realism, providing a better basis for the allocation of resources.

PEER REVIEW

10 . One other key to success in procurement management is peer review. There is always a danger with complex procurement projects in competitive and demanding environments that those desiring the product or managing the process will be driven by advocacy of the benefits rather than analysis of the facts. The regular injection of objective peer review by experienced but disinterested external experts, will maximise the chance of objectively assessing the prospects of a project's success against its stated objectives, and thus benefit both the project's stakeholders and the overall enterprise.

RISK MANAGEMENT IN INTERNATIONAL SECURITY POLICY DECISION MAKING

11. On the face of it, many of these considerations also apply to wider policy issues. For example:

- When faced with international security policy choices how much can be done to identify risks attached to them or the likelihood of dependencies or consequences?

- When faced with a complex series of choices with a clear end in mind, how much more can be done to assess the prospects for eventual success or for a range of possible outcomes?
- When we think we understand the possible risks involved in a proposed course of action, what techniques might be applied to understand the costs and benefits of action to reduce those risks before that course is committed to?
- In light of the above, are there lessons for behaviours and culture that need to be applied in the policy making community?

12. But any consideration of the relevance of risk management techniques derived from defence procurement to international security policy decision making needs to start from a consideration of the decision making process in the international relations field, which has been widely studied.

THEORETICAL APPROACHES TO THE STUDY OF INTERNATIONAL RELATIONS

13. International relations is a major academic field , with a range of competing analytical approaches and supporting literature to match, that this study can only briefly summarise. Elman and Elman (5) set out the key approaches as:

- *Realist* Theory, in which states, as the primary actors in world politics, act to maximise their expected gains in the light of their circumstances, pursuing interests rather than altruism in an essentially anarchic world, relying on the balance of power to provide stability.

- *Institutional* Theory, which accepts much of realism, but argues that international institutions as providers of information for both intelligence and assurance have a major impact on states' behaviour.
- *Power Transition* Theory also accepts much of realism, but argues that (at least since the Industrial Revolution) there is usually a dominant power that achieved its pre-eminence through rapid economic growth, and which shapes the international order. This provides stability until the rise of a new contending state, which may bring about conflict as it nears the strength of the hegemon.
- *Liberal International Relations* theory see individuals and groups as the fundamental actors competing to achieve their ends, for example, by capturing control of the state.
- *Democratic Peace* Theory, which focuses on states as primary actors but assumes that political leaders in democracies are motivated primarily by a desire to remain in power, which leads to important interactions between domestic and international political processes.
- *Operational Code Analysis* theory, which considers individuals rather than states as primary actors, who make decisions under the constraints of environmental uncertainty and biases in their belief and personality systems.

14. All these theoretical approaches address foreign policy decisions made by political leaders, but they vary as how central they regard this process to be for foreign policy outcomes. Another set of analytical tools used are *Rational Choice Models.* According to Stephen Walt (6), formal rational choice theory uses mathematical models to derive propositions (and specific solutions) from a set of basic premises. In security studies, this usually means the use of game theory, which is a set of techniques for analysing individual decisions in situations where each

player's payoff depends in part on what other players are expected to do. This differs from decision-theoretic approaches, which analyse individual utility maximisation against an external, non calculating environment. Rational choice theory views outcomes as the collective product of individual choices, assumes each player seeks to maximise his benefits, and can rank preferences. (It therefore shares similar assumptions to realist theory.)

15. What can be concluded about the relevance of risk management as applied in defence procurement to international security decision making from this summary of International Relations theories? Much, though not all, IR theory (particularly realist approaches) deals with decision making by state leaders as the key determinant of outcomes. And rationalist analytical approaches focus strongly on both decision making, and the information that drives it. In practice, while each of these theoretical approaches to International Relations has its advocates, many observers consider that they each have some merits, and most IR scenarios are best analysed and understood in the light of a mixture of several of them. The reliability of information available to decision makers is therefore a major driver of outcomes according to this analytical approach. And the risks attaching to possible courses of action are a key issue . It therefore seems useful to examine these risk factors in themselves, for what they may reveal about the choices made, and how they might be improved, without attempting to arrive at conclusions about the relative merits of the theoretical approaches set out above. This will be examined in a qualitative, rather than quantitative way, since compared to defence procurement relatively few success criteria can be quantified. And, for similar reasons, risk will be used in a broad sense to also include uncertainty.

DEFINITION OF RISK MANAGEMENT IN INTERNATIONAL SECURITY DECISION MAKING

16 . For the purposes of this study we have therefore adopted a definition of Risk Management in International Security decision making as follows:

The identification, analysis, and management of key assumptions and uncertainties underlying proposed courses of action on international security issues.

CASE STUDIES

METHOD OF STUDY

17.The relevance of risk management was examined by investigating six cases of international security decision making to see to what extent risk management and peer review techniques either had been, or might with benefit have been used, and deriving observations accordingly from each to arrive at proposals for future best practice. To give a reasonably complete picture of options and methods pursued and their consequences, four were drawn from the past, while two look at current issues . The case studies are set out in Annexes to this paper, as follows, and findings derived from them are summarised in the next section :

- Annex A – Cuban Missile Crisis
- Annex B – US Response to India/Pakistan Nuclear Tests in 1998
- Annex C – US Approach to Al-Qaeda before 9/11
- Annex D – UK Approach to Iraqi WMD and the Second Gulf War
- Annex E – Preventing Terrorists Acquiring Nuclear Weapons
- Annex F – Iran’s Nuclear Ambitions

FINDINGS FROM CASE STUDIES

Cuban Missile Crisis (Annex A)

18. This case study examined how the Kennedy administration addressed the threat to US security revealed by Soviet stationing of nuclear missiles in Cuba in October 1962.

The Application of Risk Management

19. Thanks to U2 spy missions over Cuba, Kennedy and his advisors had accurate intelligence about the Soviet threat in Cuba with which to guide US policy. Even more importantly, Kennedy and his advisors carefully weighed the risks associated with the two leading options for removing the Soviet missiles. An informal advisory group, ExComm, provided a forum for the air strike and blockade proponents to aggressively debate the merits and disadvantages of each alternative. These adversarial debates ultimately produced two fully-fleshed out alternatives for Kennedy, enabling him to see that the risks associated with air strikes were too likely to lead to nuclear war between the U.S. and Soviet Union. The successful blockade that the Kennedy administration ultimately implemented was thus the direct result of its thorough risk analysis.

20 .Findings from this case study are:

- Kennedy's success in resolving the crisis was due to his incorporation of risk and uncertainty into his assessment of the various options for removing the Soviet missiles. He picked the course of action with the least dangerous risks and uncertainties, but one that also had a reasonable chance of success.

- Effective risk management was facilitated by adversarial debate within the administration through ExComm, which produced well-developed alternatives for Kennedy to consider.
- Although the administration had a steady stream of accurate intelligence about Soviet missile construction in Cuba, it never assumed that it had perfect information. Kennedy's decision-making process compensated for the limits of intelligence by allowing for unforeseen contingencies.

US Response to India/Pakistan Nuclear Tests in 1998 (Annex B)

21. This case study examined US handling of the risk to global security posed by the 1998 Indian and Pakistani nuclear tests .

The Application of Risk Management

22. Once India and Pakistan had conducted their tests in May 1998, the US clearly identified the consequential risks to international security - primarily more India/Pakistan confrontations ; much worse consequences if these confrontations led to war, and wider nuclear proliferation. There was an early, but very optimistic, assessment of what needed to be done to get nuclear proliferation under control, based on criteria set by the UN Security Council (UNSC) . The US pursued these goals assiduously with both sides, but with very little success on the identified goals. However in the process, the US developed a much deeper dialogue with India than had taken place hitherto. This helped to establish India's sense of being respected in the world, and in turn helped her to find accommodations with both the US and Pakistan.

Findings

23. The process of managing risk can sometimes seem unsuccessful. However, engaging with the other parties involved in them can assist mutual understanding and thereby achieve some of the aims by other means.

US Approach to Al Qaeda before 9/11 (Annex C)

24. This case study addressed US assessments of, and actions in relation to, the risk to US national security posed by Al Qaeda in the lead up to 9/11.

The Application of Risk Management

25. During the 1990s, both Bin Laden and Al Qaeda were identified as terrorist threats to US security. However, even though there was detailed reporting and analysis of individual incidents, the US Government did not undertake an overall analysis of the scope and potential impact of the Islamic terrorist threat after 1997. While some individuals and some organisations made efforts to address the Al Qaeda /Bin laden threat, this was not done in a systematic way that reflected an assessment of its gravity.

Findings

26. As the 9/11 report recognised, the US needs to regularly undertake an objective, strategic assessment of threats to US security, and means of addressing them. This is difficult for a variety of reasons:

- In a fast changing world with many immediate challenges, it is easy for most of the available attention and resources to get swept up in current events.
- Many of the resources required to prosecute these tasks are spread over many US government agencies and are difficult to plan and deploy strategically.
- If it is to be fully effective, strategic analysis of the type needed requires imagination and the ability to step outside bureaucratic conventional wisdom. Bureaucracies will always be tempted to interpret issues and the world in ways that align to their needs and capabilities. They need agents involved in the process with no stake in current ways of doing business who can stand back and ask the difficult questions.

The appointment in February 2005 of a Director of National Intelligence is aimed in part at addressing these issues.

UK Approach to Iraqi WMD and the Second Gulf War (Annex D)

27. This case study examined the degree of confidence that underlay the UK's assessment that Iraq possessed and continued to develop WMD in defiance of UNSC resolutions as the justification for the invasion of Iraq in March 2003.

The Application of Risk Management

28. The risk in question was that the intelligence assessments behind the UK's assessment of Iraq's possession of WMD were not sufficiently reliable to justify the action being pursued. The central UK assessment body, the Joint Intelligence Committee (JIC), made every effort to produce as objective an assessment as it could on Iraqi WMD, based on limited available intelligence. However, in some cases the assessment was on a worst case basis. This was not always made clear in its reporting. Second, while these JIC assessments underlay UK policies of putting more pressure on Iraq to comply with UNSC resolutions on WMD, it is not clear whether any different (presumably higher) standard of proof was consciously applied to this assessment once it became the basis for going to war. This may reflect a UK Government view that Iraqi non-compliance with UNSC WMD resolutions was a chronic problem demonstrated in a variety of ways, only one of which was the deployment of WMD. But the political and legal case for acting militarily depended to a considerable degree on the urgency implied by deployed weapons. From this it seems clear that the risk underlying the assessment of Iraqi possession of WMD as a basis for going to war (rather than for continuing to pursue diplomatic options) was not clearly identified at the start of the process leading up to war, and neither therefore was it assessed, planned against, or managed.

29. Findings from this case study were:

- UK Intelligence assessments (on Iraqi WMD) generally had caveats but made no attempt to quantify or codify the degree of uncertainty. This could have been helpful, if only to prompt further questions.
- Some intelligence assessments reflected worst case bias. This may be appropriate for some purposes but should always be made explicit.
- There was no clear process for relating the confidence of an assessment to the importance of a contemplated decision based on it, and therefore potentially reviewing the assessment or investing more effort/resources in confirming or refining it.
- The political pressures behind advocacy of the possible courses of action seemed to get in the way of a disciplined and well informed process to decide what to do.

The actions taken subsequently by the UK Government in response to the report from Lord Butler on these intelligence deficiencies were aimed in part at addressing these issues.

Preventing Terrorists Acquiring Nuclear Weapons (Annex E)

30. This case study addressed the risk to US security posed by the prospect of Islamic Jihadist Groups such as Al Qaeda obtaining and using nuclear weapons.

The Application of Risk Management.

31. This risk of terrorist attacks using nuclear weapons has been identified by the US as a major concern. It was analysed both at the fall of the Soviet Union, and subsequently (at least by external observers such as Graham Allison), when the threat from Jihadist terrorism has become more apparent. But it is less clear that the planning and management of the effort to address the risk is adequate for the task, primarily because insufficient resources of all types (including financial, political, and diplomatic) are being devoted to it.

32. Findings from this case study were:

- Plans to address risks need to be matched to the likelihood and potential impact of that risk coming about.
- This will sometimes require substantial changes of priority which governments may find it hard to effect.
- This may put a premium on internal risk- review mechanisms by individuals in government but unconnected to individual programmes to advise on how well program priorities are matched to those risks.

While the US has set out its approach to the nuclear terrorism risk in its 2002 National Strategy to Combat Weapons of Mass Destruction, it is not clear how these overall priority issues are being addressed.

Iran's Nuclear Ambitions (Annex F)

33. This case study examined how the risk to US security posed by Iran's nuclear programme is being addressed by the US administration**.**

The Application of Risk Management

34. Although it is not known whether the Bush administration has a formal risk analysis procedure, risk management appears to have played a major role in U.S. policy. Based on the available options for thwarting Iranian nuclear ambitions, the U.S. has elected to pursue the policy with the least amount of risk: supporting the EU negotiations with Iran. The other major options for dealing with Iran—going to the U.N. Security Council without European support, pursuing bilateral negotiations with Iran, launching air strikes, or invading Iran—all carry either enormous risks or a high probability of failure. De facto risk management has enabled the Bush administration to choose a policy for dealing with Iran that has the least risky disadvantages, which may also help to prevent a dangerous escalation of the nuclear standoff with Iran.

35. Findings from this case study were:

- Based on its decision to avoid pursuing policies with high risks of failure, the Bush administration is engaging in de facto risk management, and has pursued the policy with the fewest downsides that has the best chance of succeeding.
- Yet it is unclear whether risk management has been institutionalized within the Bush administration as it was in the Kennedy administration during the Cuban Missile Crisis through ExComm. Adversarial debate about risk can be effective in avoiding missteps. To ensure that it continues to effectively manage risk, the White House

could create a modern form of ExComm to ensure that President Bush is presented with fully-fleshed out alternative policies, setting out the merits and disadvantages of each course of action.

- To mitigate its uncertainty about risk, the Bush administration should continue to reform the U.S. intelligence along the lines laid out by the 9/11 Commission and the Commission on the Intelligence Capabilities of the United States Regarding to Weapons of Mass Destruction.

OVERALL CONCLUSIONS

36. The purpose of this paper was to examine the relevance of risk management approaches used in major procurement projects to international security policy decision making. From the case studies summarised above it seems that while some aspects of risk management have been applied in some cases more widespread application would have been of benefit. In particular:

a) **Governments need to undertake regular strategic assessments of their security risks, to ensure that the urgent does not drown out the important**. The 9/11 Commission pointed out that the failure to do this adequately was one of the contributing reasons for the US being caught unawares on 9/11 . Their recommendation that a Director of National Intelligence be appointed has been implemented and could help provide a remedy, but much depends on how the new DNI approaches his task , and how responsive other members of the intelligence community to a change of approach and focus.

b) **Governments need to regularly examine the risks associated with the policies they are pursuing, and ensure that their understanding of these risks, and their confidence in any relevant underlying assessments , are consistent with the pursuit of those policies .** The Butler Report recognised that one of the causes of the UK going to war in Iraq in March 2003 on what turned out to be a mistaken premise was the failure of the UK system for acquiring, analysing, and assessing intelligence on WMD in Iraq to identify sufficiently clearly the fragile basis of its conclusions on Iraqi possession of WMD. The UK Government has acted to remedy the deficiencies identified. The core message of Graham Allison's thesis on the risk of nuclear terrorism is that the strength of US efforts to addressed this issue – which is acknowledged from the President downwards as the gravest facing America - is not commensurate with that level of risk.

c) Governments need effective internal policy review mechanisms to provide forceful and knowledgeable, but discreet, internal challenge to existing political or bureaucratic conventional wisdom to help them adapt effectively to a rapidly changing world, to not get stuck in bureaucratic mindsets, and to ensure all options are effectively addressed. This might be provided by a policy or peer review staff, provided it was appropriately staffed and supported, or by a Non Executive Director type arrangement at top management board level. The two camps discreetly debating alternative options under the Kennedy administration's handling of the Cuban missile crisis proved an effective means of ensuring that risks in the disputed courses of action were identified and assessed. Such review mechanisms could also have helped question the priority attributed to the Al

Qaeda threat pre 9/11, or loose nukes now, and could have helped identify and question the wisdom of the UK government relying as much as it did on the intelligence assessments of Iraqi WMD in the lead up to the Iraq War.

d) **Intelligence analysis should develop and apply a process for assessing and making clear the confidence levels that can be placed in given intelligence assessments, so that policy customers can more effectively weigh the risks of pursing policy options based on those assessments.** Making such assessments will not be easy and will inevitably require much judgement. But it is better than the alternative under which uncertain assessments can either be assumed to have more certainty than they warrant, or lose inexplicit caveats in the process of policy and political debate. The Butler Report recommended, and the UK Government has accepted, that the intelligence community should review the way it expresses uncertainty or alternative hypotheses in response to the evident failings over the handling of Iraqi WMD assessments**.**

FURTHER WORK NEEDED

37. The observations set out above seem reasonable, but are not very new. They broadly support and reflect the conclusions reached by individual reviews into the events concerned. Nevertheless, they do suggest a pattern of good practice drawing on effective risk management and peer review techniques that can usefully be applied in international security policy decision making. But to test its added value, additional work would be needed:

- to produce more specific recommendations on current and prospective future issues to test added value

- to assess risk management across a realistic range of security policy issues, as difficult policy choices do not come in isolation
- to test the further integration of risk management with non security IR issues, for the same reason.

References

(1) – The Concise Oxford Dictionary defines a "slam dunk" as (N. American informal) " a foregone conclusion or certainty" in addition to the basketball shot down through the basket from which the phrase derives. The then CIA Director George Tenet was asked by President Bush on 21 December 2002 how confident he was about Iraq's possession of WMD, and replied that it was a "slam dunk case" , according to Bob Woodward's book "Plan of Attack" , as reported by CNN on Monday, 19 April 2004.

(2) – Concise Oxford English Dictionary, 11th edition,2004

(3) – National Audit Office Ministry of Defence Major Projects Report , HC 1159-1 dated 10 November 2004

(4) – Risk Management Electronic Brochure @www.ams.mod.uk

(5) - Progress in International Relations Theory, Edited by Colin Elman, and Miriam Fendius Elman, Published in BCSIA Studies in International Security by the MIT Press, 2003

(6) - Rigor or Rigor Mortis? Rational Choice and Security Studies (By Stephen M Walt in International security 23.4)

Annex A

THE CUBAN MISSILE CRISIS

Background

During the famous "thirteen days" of October 1962, the United States and Soviet Union brought the world to the brink of nuclear war in their showdown over Soviet missiles in Cuba. One of the main lessons of the Cuban Missile Crisis is that effective risk management can help policy makers to peacefully resolve crises. **This case study examines how in October 1962 the Kennedy administration addressed the threat to US security posed by Soviet stationing of nuclear missiles in Cuba.**

Factual Assessment and Relation to Key Decisions

On October 14, 1962, an American U2 spy plane photographed SS-4 medium-range ballistic missiles (MRBMs) in Cuba, thereby initiating the crisis by alerting US policy makers to the construction of Soviet missile bases. Though the Soviet Union already had twenty intercontinental ballistic missiles (ICBMs) in Soviet territory capable of hitting the United States, there was little debate about the imperative of removing the Soviet missiles from Cuba. Kennedy and his advisors thought that acquiescing to Khrushchev's gambit would result in an unacceptable loss of American credibility, and only encourage more aggressive Soviet probes in other regions vital to US security, such as Berlin (1).

The Kennedy administration had four basic options to remove the Soviet missiles from Cuba. First, it could pursue negotiations with the Soviets, to be followed by military action if diplomacy failed. Next, the US could launch surprise air strikes. Third, the US could launch a full-scale invasion of Cuba. The second and third options were closely interlinked; should air strikes fail to destroy the missiles, an invasion would become necessary. Finally, there was the blockade, the option Kennedy ultimately adopted (2).

Each option had risks, and during its internal debates the administration successfully identified these downsides.

The disadvantage with the first option was that negotiations would allow Khrushchev to seize the initiative and demand concessions, creating the impression that the US was giving into Soviet aggression. Kennedy ruled out a proposal by Adlai Stevenson to open negotiations on precisely these grounds. According to National Security Council Executive Secretary Bromley Smith, Kennedy apparently "felt that such action would convey to the world that we had been frightened into abandoning our position" (3).

Although the air strike option was formally recommended to Kennedy by the Joint Chiefs of Staff, it had clear drawbacks. Robert Kennedy, who helped to rally a consensus around a blockade, argued that surprise air strikes would be "a Pearl Harbor in reverse" that would undermine the United States' moral leadership of the free world (4). Moreover, there was great uncertainty about whether air strikes would be successful. Secretary of Defense Robert McNamara, a blockade proponent, argued that air strikes would only destroy two-thirds of the missiles (5). He further argued that air strikes might escalate the crisis by provoking additional confrontations

between the US and Soviet Union, which could conceivably escalate to nuclear war. McNamara brilliantly captured the dangerous uncertainty linked to air strikes when he asked rhetorically, “Now after we’ve launched 50 to 100 sorties, what kind of world do we live in? How do we stop at that point? I don’t know the answer to this” (6).

A full-scale invasion carried even bigger risks than air strikes. It was guaranteed to escalate the crisis by compelling American and Soviet troops to fight one another on the battlefield for the first time. As a result, it was considered a last resort (7).

The blockade option also had risks. The main disadvantage was that it gave the Soviets time to finish installing the missiles. Once operational, the Soviet missiles would preclude any military action against Cuba, lest any Soviet missiles survive the attack and destroy a major US city (8).

At the pivotal October 20 National Security Council (NSC) meeting, McNamara sketched out the major advantages to a blockade. It minimized conflict with allies, precluded the need for a politically damaging surprise attack that might be construed as a new “Pearl Harbor,” and avoided inciting Soviet counter-attacks in Cuba or Berlin (9).

Risk analysis was central to Kennedy’s decision to choose the blockade over air strikes, which he explained at the October 22 NSC meeting. In Kennedy’s view, with air strikes “it looked like we would have all of the difficulties of Pearl Harbor and not have finished the job. The job can only be finished by an invasion” (10). He also stressed that air strikes might fatally divide the Western alliance or provoke Khrushchev into aggressive moves elsewhere, like Berlin (11). Kennedy’s uncertainty about how air strikes might escalate the crisis was pivotal to his decision. The potential negative consequences of air strikes were simply too great to risk in a crisis that could escalate into nuclear war. Although the blockade option carried great uncertainty, its drawbacks were less dangerous. It sent Khrushchev a strong message that the US would not tolerate Soviet missiles in Cuba, while simultaneously giving him an opportunity to withdraw the missiles short of war.

Risk management during the crisis was facilitated by extensive internal debate within the administration. Beginning on October 17, Robert Kennedy oversaw a series of meetings attended by a small group of Kennedy’s principal national security advisors that later became known as “ExComm,” or the Executive Committee of the NSC.

ExComm’s chief benefit was that it promoted aggressive debate between the air strike and blockade camps, the two major factions within the Kennedy White House about how to remove Soviet missiles from Cuba. The advantage to this argumentative and competitive approach was that during the key October 20 NSC meeting, President Kennedy had two fully flushed-out alternatives, complete with each option’s advantages and disadvantages. Consequently, each side was able to point out the risks associated with the other side’s plan during the meeting, ensuring that Kennedy understood the drawbacks to each plan before deciding on his course of action. In the end, Kennedy decided that the drawbacks to air strikes outweighed the drawbacks of a blockade (12).

Kennedy's success in resolving the crisis can be attributed in part to his realization that all of the options contained contingencies, or factors out of his control that could develop in unpredictable ways. He could see that the air strikes contained more risky—and therefore more dangerous—contingencies than a blockade. The strength of Kennedy's approach is highlighted by the 1992 revelation of former Soviet General A.I. Gribkov, who was in Cuba during the crisis, that the Soviets had also deployed tactical nuclear weapons to the island. In the event of an American invasion, Gribkov reported that the Soviets might have fired these nuclear weapons on American troops, thus triggering a full nuclear retaliation by the United States (13). Had Kennedy launched air strikes that escalated the crisis to the point where an invasion became necessary, he might very well have triggered a nuclear war.

While Kennedy did not know about the presence of tactical nuclear missiles in Cuba, his appreciation of contingency, uncertainty, and risk enabled his decision against air strikes to reflect the fact that there might be unforeseen circumstances—such as tactical Soviet missiles—that might inadvertently escalate the crisis.

The Application of Risk Management

Kennedy's effective resolution of the Cuban Missile Crisis can be directly attributed to his use of risk management. Thanks to the U2 spy missions over Cuba, Kennedy and his advisors had accurate intelligence about the Soviet threat in Cuba with which to guide US policy. Even more important, Kennedy and his advisors carefully weighed the risks associated with the two leading options for removing the Soviet missiles: air strikes to destroy the missiles, or a blockade to pressure the Soviets into removing the missiles. The aggressive debates of ExComm, a small group of Kennedy's principal advisors, greatly aided Kennedy's decision.

ExComm provided a forum for the air strike and blockade proponents to aggressively debate the merits and disadvantages of each alternative. These adversarial debates ultimately produced two fully-flushed out alternatives for Kennedy, enabling him to see that the risks associated with air strikes were too great considering the possibility of nuclear war between the US and Soviet Union. The successful blockade that the Kennedy administration ultimately implemented was thus no accident, but the direct result of its thorough risk analysis.

Findings

- Kennedy's effective resolution of the crisis was due to his incorporation of risk and uncertainty into his assessment of the various options for removing the Soviet missiles. He picked the course of action with the least dangerous risks and uncertainties, but one that also had a reasonable chance of success.
- Risk management was facilitated by adversarial debate within the administration, which produced well-developed alternatives for Kennedy to consider.
- Although the administration had a steady stream of accurate intelligence about Soviet missile construction in Cuba, it never assumed that it had perfect information. McNamara stressed to Kennedy that they could not guarantee that air strikes would destroy all the missiles or that there were not other missiles on the island, such as the Soviet tactical nuclear missiles that Gribkov revealed, of which the United States was completely unaware. Kennedy's decision making process compensated for the limits of intelligence by allowing for unforeseen contingencies.

Annex A References

(1) – *The Kennedy Tapes: Inside the White House During the Cuban Missile Crisis*, ed. Ernest May and Philip Zelikow, concise ed. (New York: W.W. Norton & Co., 2002), 30-31; Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2d. ed. (New York: Longman, 1999), 92, 111-113.
(2) – Theodore Sorensen, Summary of Agreed Facts and Premises, Possible Courses of Action and Unanswered Questions, 17 October 1962, in *The Cuban Missile Crisis, 1962: A National Security Archive Documents Reader*, ed. Laurence Chang and Peter Kornbluh (New York: The New Press, 1998), 124-125; Allison and Zelikow, 111-118. In addition to these four options, Allison and Zelikow list two additional ones: doing nothing and launching a secret diplomatic mission to Castro to get him to realign himself with the US While these were both legitimate options, neither of them were one of the main options debated by Kennedy and his advisors. As indicated earlier, doing nothing was not a realistic option due to the inevitable loss of American prestige worldwide and domestic political pressures, and sending an envoy to Castro was never seriously considered since they doubted that Castro would break with the Russians.
(3) – Non-verbatim minutes of the National Security Council, 20 October 1962, by NSC executive secretary Bromley Smith, in *The Kennedy Tapes*, 133-134.
(4) – Mark White, *The Cuban Missile Crisis* (London: Macmillan Press, 1996), 139; Allison and Zelikow, 118.
(5) – Robert McNamara, Meeting of the National Security Council, 20 October 1962, in *The Kennedy Tapes*, 130.
(6) – Robert McNamara, Meeting in the Cabinet Room with President Kennedy, 16 October 1962, in *The Kennedy Tapes*, 65.
(7) – Allison and Zelikow, 115.
(8) – October 20 NSC Meeting, in *The Kennedy Tapes*, 128-129.
(9) – Ibid, 124-125, 128-129.
(10) – Meeting of the National Security Council, 22 October 1962, in *The Kennedy Tapes*, 154.
(11) – Ibid, 154.
(12) – White, 139-140.
(13) – The Associated Press, "During Cuba Crisis, US Faced A-Arms with 40-Mile Range," *The New York Times*, 14 January 1992, p. A-10; Don Oberdorfer, "Cuban Missile Crisis More Volatile than Thought," *The Washington Post*, 14 January 1992, p. A-1.

Annex B

US RESPONSE TO INDIA /PAKISTAN NUCLEAR TESTS IN 1998

Background

India and Pakistan were formed in conflict at independence from Britain in 1947 and fought a number of wars subsequently, the most serious of which led to the separation of Bangladesh as a separate country from Pakistan in 1971. India was also concerned at the threat posed by China, with whom she fought a border war in 1962. India's nuclear weapons programme developed slowly from the late 1950s, but was accelerated after China's first test in 1964, (and subsequent adherence to the NPT as a nuclear weapon state). This led to India's test of May 1974, which she referred to as a peaceful nuclear explosion, and her studied ambiguity on nuclear weapons issues and continued striving for status and influence matching the permanent members of the United Nations Security Council (UNSC). This was reinforced by the indefinite extension of the Nuclear Non proliferation treaty in 1995, and in parallel the drafting and US support for the Comprehensive Test Ban Treaty which India saw as making permanent the inequities of post World War 2 power structures. The 1971 war was a prime motivator behind the Pakistan nuclear weapon programme, which was seen as the most effective means of counteracting India's conventional superiority, and received substantial assistance from both China and North Korea.

The US placed sanctions on both countries, but those on Pakistan were waived after 1979 when priority was given to countering the Soviet invasion of Afghanistan. By 1990, it was clear that Pakistan had the means of making nuclear weapons, even if she had not actually completed any, and the US assumed a more active role in ensuring that India/Pakistan conflicts over Kashmir did not spin out of control(1). By the mid 1990s, the US became aware that both sides were preparing for nuclear testing, but US diplomatic efforts succeeded for a period in at least slowing the process down. Indian efforts were spurred by the increased nationalism of the Bharatiya Janata Party (BJP) , which won power in February 1998. Pakistan tested a long range Gauri missile in April of that year. In April 1998, Bill Richardson, US Ambassador to the UN, visited India to prepare for President Clinton's proposed visit that Fall. He was assured that India had no plans for nuclear tests. (2) When India conducted a series of nuclear tests in May 1998, closely followed by Pakistan, the US was taken by surprise (the Indian nuclear establishment had learned to conceal its preparations more effectively than when they had been forestalled by US diplomacy in 1995). The US was then faced with how to address the consequent threat to global security of a nuclear armed confrontation between India and Pakistan, powered by the continuing rumbling conflict over Kashmir. **The purpose of this case study is to examine US handling of the risk to global security posed by Indian and Pakistani nuclear tests in 1998.**

Factual Assessment and Relation to Key Decisions

When India conducted its tests, the US took rapid action to deploy a range of economic and political sanctions, encourage others to do the same, and to dissuade Pakistan from following suit, not least by offering advantage compared to India. These efforts were to no avail. The US then organised meetings at foreign minister level with the five UNSC Permanent Members to decide what action to take. They agreed (in June 98) to urge both parties to conclude a nuclear fissile material cut-off agreement, to avoid installing nuclear weapons on missiles and aircraft, and to agree to no exports of weapon or missile technology, as well as more ritual statements about the Nuclear Non Proliferation Treaty (NPT) and Comprehensive Test Ban Treaty (CTBT).

When President Clinton discussed the issue informally with Deputy Secretary of State Strobe Talbot at Camp David shortly afterwards, he saw the obvious need to head off an India/Pakistan arms race, and possibly something much worse. He also saw an opportunity for America to bring them together, and in particular to engage much more effectively with India as a major democracy of increasing economic importance (3)

This led to the establishment of an informal, exploratory, extended dialogue at deputy secretary of state level (Strobe Talbott for the US, Jaswant Singh for India) to find an effective way forward.

The US aim was to get the Indians to accept the constraints proposed by the UNSC Members. India's aim was to persuade the US to lift sanctions and treat them as equals, including on security needs and entitlements, and to take modest steps on the UNSC proposals as and when they saw them as being in their interest. India felt that the US had been reflexively pro-Pakistan on issues of difference between them. The US dialogue with Pakistan was less effective and less engaged. It was dominated by the insecurity of their political regime and external relations with a range of neighbours.

The Indians and later the Pakistanis also said they believed the nuclear tests they had conducted could well usher in a period of more stable relations such as those between the US and Soviet Union during the Cold War. India's aim was to establish a stronger position and understanding in the world, including comparability with the US on many issues, but also lesser treatment of Pakistan. Both India and Pakistan hinted they might be willing to sign the CTBT as carrots to encourage a visit by President Clinton to symbolise US acceptance of each country's new status. Pakistan's Prime Minister, Nawaz Sharif, also sought US intervention in India/Pakistan issues

By early 1999, the Clinton administration felt increasing pressure from Congress and other nuclear weapon states to lift the sanctions on India. But the Indians were hinting that they might be willing to join the CTBT and nuclear cut off treaty if the five NPT nuclear weapon states and Pakistan did likewise (4). Pakistan was less forthcoming, but there were apparent improvements in her relationship with India, leading to Indian PM Vajpayee's journey to Lahore in Feb 1999, and his meeting with Pakistani PM Nawaz Sharif.

Progress thereafter was slowed by US concentration on Kosovo, and Pakistani incursions at Kargil in Kashmir, instigated by Pakistan's Army Commander , Pervez Musharraf. This led to real worries that the conflict would go nuclear, and Clinton put great pressure on Sharif to withdraw when he flew to Washington at his own request in July. The US administration had detected signs of nuclear preparations by Pakistan, and pointed out how close both sides were to the nuclear brink. Sharif left with no offers of benefits from Kargil, and the Indians, who had been kept in touch, told the US how grateful they were. This established increased trust in India over US motives and intentions.

October 1999 saw Sharif deposed in a coup by Musharraf, Indian publication of a highly provocative draft nuclear strategy, and US Senate rejection of the CTBT. Then in December an Indian airlines plane was hijacked by Pakistani backed militants.

By early 2000, the US top priorities with Pakistan were terrorism and the return to democracy, and negotiations with India on nuclear controls were going nowhere. But Clinton decided to visit India, and perhaps Pakistan, anyway, to apply his political influence. Clinton's visit to India in March 2000, where he made it clear that the issues were for India to decide, but painted a warm picture of the prospects and potential of the country on the economic, trade and cultural sphere, were very well received. This was followed by a brief visit to Pakistan where Clinton made it clear that the US would not mediate on Kashmir, and Pakistan should move forward towards democracy and peaceful solutions.

While the rhetoric changed, Secretary of State Powell in the Bush administration initially continued with much the same aims towards India and Pakistan. After 9/11, priorities changed, as Musharraf was faced with and accepted the US ultimatum to assist in ridding Afghanistan of the Taliban and clamping down on militancy at home.

More crises followed, including the December 2001 attack of Pakistani - based militants on the Indian Parliament in New Delhi, and communal violence in Gujarat, with some complicity of BJP militants. But Vajpayee and Musharraf made attempts to find accommodations, assisted formally and informally by the US(Clinton), leading to the announcement of a joint ceasefire along the line of control in Nov 2003, agreement of a joint roadmap for peace in February 2004, and shortly afterwards Pakistan's reining in of AQ Khan's nuclear supplier network. The Indians felt less engaged by the US, however, and resented Powell's announcement that Pakistan was a major non - NATO ally in early 2004.

Overall, while none of Talbott's explicit objectives for reining in India's nuclear weapons programme had been achieved, India/Pakistan relations had developed more favourably than had been feared, and US/Indian relations were on a better footing than had been the case for decades.

<u>The Application of Risk Management</u>

Once India had conducted its test in May 1998, the US clearly identified the consequential risks to international security – primarily more India/Pakistan confrontation; much worse consequences if this led to war, and wider nuclear proliferation. There was an early, but very optimistic, assessment of what needed to be done to get nuclear proliferation under control, based on the UNSC criteria. The US pursued these goals assiduously with both sides, but with very little success on the identified goals. However in the process, the US developed a much deeper dialogue with India than had taken place hitherto, which helped to establish India's sense of being respected in the world, and in turn to for India to find accommodations with both the US and Pakistan.

Findings

The process of managing risk can sometimes seem unsuccessful, but engaging with the other parties involved can assist mutual understanding and thereby achieve some of the aims by other means.

Annex B References

(1) – Engaging India – Diplomacy, Democracy and the Bomb, by Strobe Talbott, published by Brookings Institutional Press 2004 , page 21.
(2) Ibid – pages 47, 48.
(3) Ibid – page 79
(4) Ibid – page 145

Annex C

US APPROACH TO AL QAEDA BEFORE 9/11

Background

The 9/11 attacks were an unprecedented shock to an unprepared nation. While considerable efforts had been invested by a range of agencies and individuals from presidents downwards on dealing with the threat posed by Al Qaeda prior to that date, they were clearly inadequate. **This case study therefore addresses US assessment of, and actions in relation to, the risk to US national security posed by Al Qaeda in the lead up to 9/11.** In doing so it draws on the 9/11 Commission Report (1), which covers this ground comprehensively.

Factual Assessments and Relation to Key Decisions

The 9/11 Commission Report characterised four types of failure in not preventing the attacks : imagination, policy, capabilities, and management. Before 9/11, Al Qaeda and its affiliates had killed fewer than 50 Americans, including the East Africa embassy bombings and the *USS Cole* attack. The US government took the Al Qaeda threat seriously, but not to the extent of mounting a major national effort to confront it.(2) Nor had terrorism been a major public policy or political issue in the preceding 18 months or so. A National Intelligence Estimate (NIE) distributed in 1995 predicted future terrorist attacks on and in the US, including the types of targets used on 9/11, and described loosely affiliated transnational groups as the greatest danger. The intelligence community first described Al Qaeda in 1999, though it was formed in 1988, and it had information in 1996/97 that Bin Laden was leading his own terrorist group. A 1997 update of the 1995 NIE repeated the earlier assessment of the terrorist danger but did not mention Al Qaeda and did not say much about Bin Laden. There was no further NIE on the terrorist danger before 9/11. A range of briefings and papers were produced over the next four years on Bin Laden and his associates, but a strategic assessment capability against Al Qaeda was only in the process of forming on 9/11. Much effort at top level meetings was focussed on trying to pin down Osama bin Laden, but only in the context of attacks to date, rather than a new assessment of what might be in store. Overall, the key US actors from the presidents downward accepted that Bin Laden and Al Qaeda represented serious dangers, but they were uncertain as to whether this was a new and more venomous version of the threat America had lived with for decades, or something radically new. A new NIE might have provoked such a debate (3).

A variety of US agencies and individuals had postulated a suicide attack aircraft in New York or Washington, but there had been no systematic attempt to think about how such attacks might be launched, to identify tell tale indicators of the most dangerous possibilities, to collect intelligence on them, and to adopt appropriate defences – though such processes and procedures were available(4). Neither the Clinton nor Bush administrations mounted the political and military effort that would be needed to disrupt Al Qaeda by attacking its bases in Afghanistan(5). Nor were the CIA, Pentagon, or other agencies well organised of focused to address the Al Qaeda threat and cooperate effectively on means of disrupting it. Furthermore, while the Director of Central Intelligence was theoretically charged with coordinating

intelligence efforts, including longer term strategy, across the government, in practice he had few means of doing so. There was thus no management strategy for a war with Islamic terrorism pre 9/11(6).

The 9/11 Commission made a number of recommendations which would address these deficiencies. The main relevant ones are:

- Page 367: "The US Government must identify and prioritise actual or potential terrorist sanctuaries", and for each "have a realistic strategy for keeping terrorists… on the run".

- Page 391: "The US government should identify and evaluate the transportation assets that need to be protected, set risk-based priorities for defending them..and then..implement the effort".

- Page 396: "Federal Homeland security assistance should be based strictly on an assessment of risks and vulnerabilities".

- Page 403: (The) "National Counterterrorism Center should be a center for joint operational planning and joint intelligence..."

- Page 411: (The) " National Intelligence Director …(should) …oversee national intelligence centers … manage the national intelligence programme and oversee the agencies that contribute to it".

- Page 415: "The CIA Director should emphasize .. rebuilding the CIA's analytic capabilities".

- Page 417: "Information procedures should provide incentives for sharing….".

- Page 428: "The Department of Homeland security …should regularly assess the types of threats the country faces to determine… the adequacy of the government's plans" (to address them).

US Administration's Response

The Bush administration welcomed (7) the report and said that its conclusions were similar on the vast majority of key policy issues. The actions being taken included intelligence reform to vastly improve cooperation and information sharing among the intelligence, law enforcement, and homeland security communities, such as the expansion of the collection and analytical capabilities of the CIA, and the creation of the Terrorist Threat Screening Center.

The Application of Risk Management

During the 1990s, both Bin Laden and Al Qaeda were both identified as terrorist threats to US security, but after 1997, while there was detailed reporting and analysis of individual incidents, the US government did not undertake an overall analysis of the scope and potential impact of the Islamic terrorist threat. Some individuals and

organisations made efforts to address the Al Qaeda /Bin Laden threat but not in a systematic way that reflected an assessment of its gravity.

Findings

As the 9/11 report recognised, the US needs to regularly undertake an objective, strategic assessment of threats to US security, and means of addressing them. This is difficult for a variety of reasons:

- In a fast changing world with many immediate challenges, it is easy for most of the available attention and resources to be swept up in current events.
- Many of the resources required to prosecute these tasks are spread over many US government agencies and will be difficult to plan and deploy strategically.
- If it is to be fully effective, strategic analysis of the type needed requires imagination and the ability to step outside bureaucratic conventional wisdom. Bureaucracies will always be tempted to interpret issues and the world in ways that align to their needs and capabilities. They need agents involved in the process with no stake in current ways of doing business who can stand back and ask the difficult questions.

The US Congress has now enacted legislation to create a Director of National Intelligence to provide overall oversight on these issues, and President Bush has appointed John Negroponte to take this role.

References to Annex C.

(1) – Final Report of the National commission on Terrorist Attacks upon the United States (The 9/11 Commission Report).
(2) – ibid page 340.
(3) – ibid pages 341 - 343.
(4) – ibid, pages 346 - 348.
(5) – ibid, pages 348 – 350.
(6) – ibid, pages 350 – 358.
(7) – White House statement of 30 July 2004

Annex D

UK APPROACH TO IRAQI WMD AND THE SECOND GULF WAR

Background

On 20 March 2003, the US, UK and some other allies began combat operations in Iraq with the aim as stated by the UK Government of enforcing Iraq's disarmament obligations under United Nations Security Council (UNSC) Resolutions to give up all its Weapons of Mass Destruction (WMD) and the means of delivering them. This followed a more urgent and energetic campaign by those same powers and others after 9/11 to achieve that end by diplomatic means or, in the case of those powers, military means if need be. In Sep 2002 the UK published a dossier setting out its case on Iraqi possession of WMD. In Nov the UNSC approved a resolution requiring Iraq to take a number of steps to this end and threatening serious consequences if it did not. In parallel the US and UK began further substantial military deployments to the Gulf. Over the following months Iraq took some inadequate measures to respond to the UNSC resolutions. After further discussion between UNSC powers, the US, UK and other allies declared their intention to enforce the UN resolution militarily.

The military operations that followed rapidly removed the Saddam regime from power, though subsequent steps to establish peace and security and a democratic successor regime have proved harder than some on the US side expected. Neither in the military campaign, nor in subsequent investigations by the Iraq Survey Group were the WMD cited before the war as the prime reason for military intervention found. In February 2004, Lord Butler was commissioned to investigate the intelligence the UK's Iraqi WMD assessments and to make recommendations for the future gathering, evaluation and use of intelligence on WMD.

While the presence of WMD, the practicality of the military campaign, and the approach to what would follow were all substantial issues discussed before the war, in the US, the UK, and elsewhere, **this case study is confined to UK assessments and actions in relation to the WMD issue, and specifically on the degree of confidence that underlay the UK's assessment that Iraq possessed and continued to develop WMD in defiance of UNSC resolutions**. It therefore draws heavily on Butler's conclusions.

Factual Assessment and Relation to Key Decisions

The UK's classified assessment of Iraq's WMD capability was set out by the Joint Intelligence Committee (JIC) on 9 Sept 2002(1) and publicly in the UK Governments

Dossier on Iraqi WMD (2) . The dossier's purpose was "to promote domestic and international understanding of, and gain support for, the general direction in which Government policy had been moving since the early months of 2002, away from containment to a more proactive approach to enforcing Iraqi disarmament." (3)

The JIC assessment was that Iraq had a chemical and biological weapons capability and Saddam was prepared to use it (4). It concluded that, following decisions to do so, Iraq could produce significant quantities of chemical agents within weeks, and more biological agents within days. It stated that Iraq had a variety of delivery means available for both chemical and biological weapons, some of which were very basic (5). It also said that CB weapons could be with military units and ready for firing within 20–45 minutes. The published dossier used different formulations but gave a similar message. These broad conclusions of the UK intelligence community (though not some particular details) were widely shared by other countries(6).

The JIC assessment set out several uncertainties. It stated that intelligence on Iraq's WMD and ballistic missile programmes was sporadic and patchy. Iraq was well practiced in the art of deception, such as concealment and exaggeration; a complete picture of the various programmes was therefore difficult. The dossier was less explicit about the uncertainties, but stated that intelligence could not explain everything, and rarely offered a complete account of activities which are designed to remain concealed.

The UK assessments were based largely on a small number of human intelligence resources, whose information subsequent analysis after the war proved to be invalid or subject to doubt (7). One reason for this was that because of the scarcity of sources and urgent requirements for intelligence, more credence was placed on untried agents, or agents commenting outside their direct knowledge, than would normally be the case. Internal review within the Secret Intelligence Service (SIS, also known as MI6) was also inadequate. And some recently received intelligence was not distributed to all those who could have helped assess its validity (8).

Iraq submitted a declaration on 7 December 2002 on the status of its prohibited programmes in response to UNSC Resolution 1441 passed in November . The JIC produced an initial assessment of the Iraqi response on 18 December, and received over the period Sept 2002 to Mar 2003 a significant stream of intelligence reports about attempts by the Iraqi regime at concealment, as well as other reports via UN sources, but did not report further beyond its initial assessment.

Butler Report Conclusions

The Butler Report concluded that, while JIC assessments of Iraq's nuclear capabilities were thorough, balanced, and measured, their assessments on CBW were less assured, tended to be over cautious and in some areas, worst case. Where there was a balance of inference to be drawn, it tended to go in the direction of inferring the existence of

banned weapons programmes. In some cases, JIC assessments had consciously and explicitly done this for good reason; for example in relation to assumptions underlying armed forces going into battle. But in subsequent assessments there was a tendency for the basis of calculation not to be made clear, and for worst case assessments , shorn of their caveats, to become the prevailing wisdom(9).

The Butler Report expressed surprise that, despite the generally negative results of the UNMOVIC inspections , the intelligence community did not re-evaluate the quality of intelligence in early 2003 (10).

The report also commented that the JIC should review the way uncertainties are expressed in order to help readers understand the basis on which judgements are made. It noted the practice sometimes adopted of giving confidence limits to assessments, or expressing minority opinions (11). It observed that the informality of much of the decision making process in the Government reduced the scope for informed collective political judgement (12). And it concluded that the JIC's not making its warnings on the limitations of the intelligence underlying its judgements sufficiently clear in the dossier was a serious weakness(13).

The report considered various models for governments to publish intelligence-derived material. It concluded that the most effective would be for JIC clearance to be obtained for the intelligence content of government policy documents, but to publish the document saying that it draws on intelligence material, but without ascribing it to the JIC. It also stated that future use of intelligence in public debates must clearly explain its uses and limitations. It was essential that clearer and more effective lines between assessment and advocacy were established when doing so (14).

UK Government Actions

The UK Government accepted Butler's conclusions, and in March 2005 (15) set out the actions it was taking in response. These included: new procedures to improve the evaluation of intelligence reporting, and to clarify the use of terminology, improved priority setting across all intelligence agencies, improved professionalism and development for intelligence analysts, strengthened central assessments staffs with internal review and challenge functions, and a requirement to produce warning papers on near and medium term threat issues.

The Application of Risk Management

The risk in question here was whether the intelligence assessments behind the UK's assessment of Iraq's possession of WMD were sufficiently reliable to justify the action being pursued. From the above it seems clear that the JIC made every effort to produce as objective an assessment as it could on Iraqi WMD, based on limited available intelligence. However, the JIC did not always make it clear that in some cases its assessments were on a worst case basis.

Second, while these JIC assessments underlay UK policies of putting more pressure on Iraq to comply with UNSC resolutions on WMD, it is not clear whether any different (presumably higher) standard of proof was consciously applied to this assessment once it became the basis for going to war. This may partly be because the informal decision making process used by the UK Government did not have a clear point at which the decision to apply military force to remove the Iraqi regime was

considered until the point where hostilities were imminent. It may also reflect a UK Government view that Iraqi non-compliance with UNSC WMD resolutions was a chronic problem demonstrated in a variety of ways, only one of which was the deployment of Chemical or Biological weapons. But the political and legal case for acting militarily depended to a considerable degree on the urgency implied by deployed weapons.

From this it seems clear that the risk underlying the assessment of Iraqi possession of WMD as a basis for going to war (rather than continuing to pursue diplomatic options) was not clearly identified at the start of the process leading up to war.

The public case for going to war included advocacy that both tended to omit the caveats and uncertainties behind the intelligence assessment, and to place additional focus for psychological impact on the specifics of weapons believed to be deployed. When these specific claims were not supported by subsequent discovery in Iraq, the case as made for going to war was thus undermined more than the underlying rationale would suggest.

Findings

- UK Intelligence assessments on Iraqi WMD generally had caveats but made no attempt to quantify or codify the degree of uncertainty. Such caveats could have been helpful, if only to prompt further questions.
- Some intelligence assessments reflected worst case bias. This may be appropriate for some purposes but should always be made explicit.
- The Government had no clear process for relating the confidence of an assessment to the importance of a contemplated decision based on it, and therefore potentially reviewing the assessment or investing more effort/resources in confirming or refining it.
- The political pressures behind advocating possible courses of action seemed to get in the way of a disciplined and well informed process to decide what to do.

The actions taken subsequently by the UK Government in response to the Butler Report (and summarised above) have addressed these problems.

References to Annex D

(1) – Review of Intelligence on Weapons of Mass Destruction – Report of a Committee of Privy Counsellors chaired by Lord Butler, published by House of Commons on 14 July 2004, HC 898, (Butler Report), page 72, para 290.
(2) – UK Government's dossier on Iraq's Weapons of Mass Destruction, published on 24 September 02
(3) – Butler Report, page 78, para 319

(4) – ibid, para 334.
(5) – ibid, para 336.
(6) – ibid, paras 338 and 456.
(7) – ibid, para 432.
(8) – ibid, paras 438 -452.
(9) – ibid, para 458
(10) – ibid, para 472.
(11) – ibid, para 600
(12) – ibid, para 611
(13) – ibid, paras 330 and 465.
(14) – ibid, paras 467,468.
(15) – Ministerial Statement by the Foreign Secretary in the House of Commons, 23 March 2005.

Annex E

PREVENTING TERRORISTS ACQUIRING NUCLEAR WEAPONS

Background

Ever since the invention of nuclear weapons, the issue of how to control their proliferation has been a central international security concern . At the state level, these efforts have been more successful than originally expected in the early 1960s, when it was commonly suggested (eg by President Kennedy in 1962) that there would be 20 or more nuclear weapon states within 20 years, rather than the current de facto total of 8 (US, Russia, China, UK, France, Israel, India, Pakistan – but 9 if you include North Korea), thanks largely to international efforts based on mutual self-interest and enshrined in the Nuclear Non Proliferation Treaty (NPT) of 1968. More recent concerns have focused on Iraq (until the removal of the Saddam regime), Iran, and North Korea.

Another enduring concern has been the prospect of nuclear weapons getting into the hands of terrorists. Two sets of events have strengthened this concern: the collapse of the Soviet Union (though the US and other NPT states persuaded the newly independent states emerging out of the collapse of the Soviet Union that only Russia should be a successor nuclear state), and the rise of unscrupulous trading in nuclear technology by quasi governmental groups such as the A Q Khan network out of Pakistan. Since 9/11 and subsequent discoveries about the intentions, abilities, and motivations of Islamic Jihadist groups linked to Al Qaeda have increased the level of concern over the ability and intention of such groups to use such weapons. **This case study therefore addresses the risk to US security posed by the prospect of Islamic Jihadist groups such as Al Qaeda obtaining and using nuclear weapons.**

Factual Assessment and Key Decisions

Several actions have been taken to address the issue. Congress passed the Nunn–Lugar Soviet Nuclear Threat Reduction Act in 1991, which allowed the US to provide funding for secure containers, rail cars, and equipment needed to move tactical nuclear weapons from their storage depots on the old Soviet periphery back to Russia. But the funding level for this is low, and progress slow.

In January 2001, the Baker-Cutler report on proliferation risk from the ex-Soviet stockpile said that “The most urgent unmet national security threat to the United States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen, sold to terrorists or hostile nation states and used against American troops abroad or US citizens at home” (1). The single most effective way of preventing such an outcome is to prevent such groups gaining access to fissile materials. And President Bush in September 2002 identified the gravest threat the US faces as the crossroads of radicalism and technology represented by terrorist access to WMD (2).

In 2002, the US also established the Global Partnership against the spread of weapons and materials of Mass destruction to help fund the Nunn-Lugar activities, and the

Proliferation Security Initiative to intercept and search vehicles suspected of transporting WMD cargo.

The Bush administration issued its National Strategy to Combat Weapons of Mass Destruction (3) in December 2002. Its three pillars are Counter proliferation to Combat WMD use (preparation by US armed forces and civilian agencies to deter and defend against WMD use); Strengthened Non-proliferation (including multilateral treaty compliance and export controls); and Consequence Management (to reduce the effect of any attacks.

However, many things are not being done, or pursued with adequate vigour. Graham Allison has listed 10 actions (4) needed to adequately address the issue:

- Make dealing with nuclear terrorism as an absolute national priority
- Set a gold standard for the protecting of nuclear weapons and materials
- Establish a global alliance against nuclear terrorism
- Conduct a global clean –out of all fissile material that cannot be protected to the gold standard
- Stop new national production of fissile material
- Shut down nuclear black markets
- Block the emergence of nuclear weapon states
- Comprehensively review the non-proliferation regime
- Revise nuclear weapon states postures and pronouncements to marginalise nuclear weapons from any role in international politics
- Prosecute the war on terrorism to eliminate masterminds and groups that would conduct nuclear terrorist attacks

Allison also comments that the current level of proposed spending on Ballistic Missile Defence ($10 B per annum) would probably be adequate to address the funding required for such a programme (5).He concludes that if the US and other governments continue on their current course on these issues, a nuclear terrorist attack on America is more likely than not in the decade ahead (6).

<u>The Application of Risk Management</u>.

This risk of terrorist attacks using nuclear weapons has clearly been identified as a major concern. It has been analysed both at the fall of the Soviet Union, and subsequently (at least by external observers such as Allison) when the threat from Jihadist terrorism became more apparent. But it is less clear that the planning and management of the effort to address the risk is adequate for the task, primarily because insufficient resources of all types (including financial, political, and diplomatic) are being devoted to it.

<u>Findings</u>

- Plans to address risks need to be matched to the likelihood and potential impact of that risk coming about.

- This will sometimes require substantial changes of priority which governments may find it hard to effect.
- This may put a premium on internal risk-review mechanisms by individuals in government who are unconnected to individual programmes, to advise on how well program priorities are matched to those risks

References to Annex E

(1) – United States Department of Energy, Howard Baker and Lloyd Cutler, co chairs, Russia Task Force, "A Report Card on the Department of Energy's Non-proliferation Programs with Russia" 10 January 2001, reported in " Nuclear Terrorism, the Ultimate Preventable Catastrophe" by Graham Allison published by Times Books 2004 , page 9.
(2) – National Security Strategy of USA published by the White House on 17 September 2002
(3) – – US National Strategy to Combat Weapons of Mass Destruction, published by the White House in December 2002.
(4) – Ibid, page 205
(5) – ibid, page 201
(6) – ibid, page 203

Annex F

THWARTING IRAN'S NUCLEAR AMBITIONS

Background

Confronted by mounting evidence that Iran is actively pursuing nuclear weapons, the Bush administration has stated that it is determined to prevent the rise of a nuclear Iran. Iran's nuclear ambitions will be an ongoing challenge to American policy makers, and scrutinizing US policy toward Iran will illustrate how risk analysis can be applied to a foreign policy problem that is unfolding in "real time." **This case study therefore examines how the risk to US security posed by Iran's nuclear programme is being addressed by the US Administration.**

Factual Assessment and Relation to Key Decisions

Iran recently admitted that it has converted 37 tons of uranium into UF-4 gas, which can eventually be transformed into highly enriched uranium, a key ingredient for nuclear weapons (1). Though Iran claims that it solely wants to construct civilian power plants, the US argues that a country with such natural energy reserves has no need for nuclear power. The International Atomic Energy Agency (IAEA) has been investigating Iran since 2002 and has uncovered evidence of surreptitious nuclear research (2).

The imminence of Iran's ability to construct a nuclear weapon is the subject of heated debate. In his summit with President Bush in mid-April, 2005, Israeli Prime Minister Ariel Sharon told Vice President Dick Cheney that Iran's nuclear program was nearing a "point of no return." Following the summit, the US made a rare disclosure of its intelligence on Iran. According to State Department spokesman Richard Boucher, Iran was at least five years away from a nuclear bomb: "The intelligence community has used, in the past, estimates that said Iran was not likely to acquire a nuclear weapon before the beginning of the next decade. That remains the case" (3).

The Bush administration's assessment that the Iranian nuclear threat remains long term may be the reason why it has opted to support lengthy European negotiations with Iran, rather than the aggressive approach it adopted toward alleged Iraqi WMD programs. In March 2005, the US announced that it would support the British, French, and German effort to entice Iran into abandoning its pursuit of nuclear weapons in exchange for economic incentives, including membership in the World Trade Organization (WTO) and access to spare parts for its civilian aviation industry. In return, the Europeans have agreed to support an American proposal to enact United Nations Security Council sanctions against Iran should the talks break down. While Iran has temporarily halted its uranium enrichment since last November to enter into talks with the Europeans, it has thus far refused to accept the new deal proposed by Europe and the United States (4).

Indeed, the European talks with Iran appear to be breaking down. In mid-May, after months of stalled negotiations with the Europeans, Iran threatened to lift the freeze on its nuclear activities. In response, the foreign ministers of Britain, France, and Germany warned that such action "would bring the negotiating process to an end…The consequences could only be negative for Iran" (5). If Iran carries through on its threat, Europe will probably support the Bush administration's long-standing

proposal to haul Iran before the UN Security Council and implement punitive economic sanctions (6).

The Bush administration clearly regards the prospect of a nuclear Iran as a serious threat to US national security and American interests in the Middle East. In a recent press conference, President Bush argued that a nuclear Iran "would create incredible instability" (and) "wouldn't be good for world peace." He voiced his support for the European negotiations, but cautioned Iran that unless it permanently abandons uranium enrichment and reprocessing, the US and Europe will refer the matter to the UN Security Council. Summarizing his administration's policy, he said, "I hope they realize the world is clear about making sure they don't end up with a nuclear weapon" (7).

Bush has viewed Iran as a potential threat to US security since taking office, which was highlighted by his denunciation of Iran as a member of the "Axis of Evil" in 2002. The advancement of Iran's nuclear program has greatly exacerbated his administration's concerns. A nuclear Iran would pose a significant threat to Israel, a close American ally in the Middle East and a state which Iran's religious mullahs have vowed must be destroyed. A nuclear Iran might also increase the risk of nuclear terrorism because of Iran's links to dangerous terrorist groups. The US blames Iran for the 1996 Khobar bombings in Saudi Arabia and for letting many of the 9/11 hijackers cross its territory while plotting the terrorist attacks on New York and Washington, D.C. In addition, the US believes Iran is harboring senior Al Qaeda members near the Caspian. Finally, CIA director Porter Goss calls Iran one of the world's "obvious sponsors of state terrorism" due to its financial support of Hezbollah (8).

Since the crisis with Iran is unfolding, the Bush administration's internal debates about how to deal with Iran are not entirely known. Based on its actions and rhetoric over the past year, however, it can be inferred how the administration has weighed the risk associated with each of the five options for ending Iran's nuclear program.

The first option open to the US is to call for the UN Security Council to impose economic sanctions on Iran as punishment for its nuclear brinkmanship. The Bush administration could unilaterally send Iran's case before the Security Council, but it views such course of action as likely to fail, at least in the short term. Under the new agreement with the Europeans, the US has agreed to wait until negotiations with Iran have been exhausted before calling for UN sanctions, which may be very soon. Without strong European support, the US proposal would be dead on arrival, since France, Britain, China, and Russia all oppose immediate sanctions (9).

The second option is to open direct negotiations with Iran and forge what John Kerry described during the fall campaign as a "grand bargain," in which the US and Iran would complete a diplomatic rapprochement by ending twenty-five years of hostility. The US has consistently rejected Iranian overtures for direct talks, most likely since it feels that such a policy has an extraordinarily high risk of failure. For a rapprochement to occur, Iran would have to not only give up its nuclear program, but also cease sponsoring terrorism, improve its human rights record, and recognize Israel—none of which seem very likely as long as the conservative mullahs maintain their grip on power (10).

The third option would be for the US to use military force. Because war games are highly classified, the Bush administration's views of military action against Iran are unknown. Recently, however, *The Atlantic Monthly* facilitated a war game of an American attack against Iran, an exercise that may shed light on the administration's war games. The exercise was facilitated by Sam Gardiner, a retired Air Force colonel who conducted war games at the National War College, and it produced sobering results (11).

Gardiner's war game illuminated several obvious risks should the US launch air strikes on Iran. The biggest is that Iran might respond by retaliating in Iraq, either by inciting Iraqi Shiites to revolt against American forces or by an outright invasion. Second, there is no guarantee that air strikes would destroy Iran's nuclear program, which may be spread out at hundreds of different sites. At best, air strikes are only a temporary solution, and Iran would eventually complete its nuclear program several years later (12).

Israel is a potential wild-card. In 1981, it bombed Saddam Hussein's Osirak nuclear rector to prevent Iraq from developing nuclear weapons, and Israel has publicly stated its opposition to a nuclear Iran (13). But Gardiner's war game suggests that Israeli air strikes might be even more risky than American strikes. Israel would have a harder time targeting Iran's nuclear sites than Iraq's program, because the Iranian program is not concentrated at one site like Osirak, but is spread out across the entire country. Moreover, an Israeli strike would provoke outrage across the Arab world at a time when the US is struggling to win Arab hearts and minds for its reconstruction of Iraq (14).

The fourth option is "regime change," or an Iraq-style American invasion of Iran to overthrow the religious mullahs who are driving Iranian nuclear policy. The advantage of "regime change" is that it is a permanent military solution to Iranian nuclear ambitions by removing from power the regime that is driving Iranian brinkmanship. Yet Gardiner's war game indicates that an American invasion is simply not practical as long as the US is reconstructing Iraq. The US simply does not have sufficient troops to reconstruct both Iraq and Iran, a country with three times Iraq's population, at the same time. Preparations for a major assault would also be difficult to hide from Iran, thereby removing any incentive for restraint on its part and giving it every reason to launch an all-out effort to destabilize Iraq (15). Iran's potential responses range from meddling in Iraq to inciting terrorist groups like Hezbollah or Al Qaeda to attack US targets.

The final option is the policy being pursued by the Bush administration: supporting European negotiations with Iran. If negotiations succeed, then the Iranian nuclear problem will be solved. If they fail, at the very least the US will have European backing at the UN Security Council.

Extent to which Action was Taken to Mitigate Risk/Uncertainty

The New York Times recently reported that the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction (CWMD) concluded that US intelligence on Iran's nuclear program is inadequate (16). The CWMD's findings on Iran are classified, but it incorporated those assessments into its overall conclusions about how to reform US intelligence. Among the CWMD's most pertinent recommendations were proposals to improve human intelligence and to integrate intelligence collection to ensure that the nation's strategic priorities are being focused on. Furthermore, the CWMD seconded the 9/11 Commission's call to centralize power under the Director of National Intelligence (DNI) to ensure that the decentralized US intelligence community coordinates its intelligence collection and analysis (17). Following the recommendations of both the 9/11 Commission and the CWMD should help ensure that US policy makers are equipped with the best possible intelligence on Iran's nuclear program.

US Action to Solve the Problem of Iranian Nuclear Brinkmanship

The Bush administration is taking several practical steps to thwart Iran's quest for nuclear weapons, and its main efforts are currently focused on supporting the European Union negotiations with Iran. On March 11, 2005, Secretary of State Condoleezza Rice announced that the United States would support Iran's application to join the World Trade Organization (WTO) if it abandoned its nuclear program, and that it would also sell spare parts to Iran's civilian aircraft industry. On May 19, the State Department summarized the US policy toward Iran in testimony before the Senate Foreign Relations Committee: "President Bush and Secretary Rice have made clear publicly that we support a peaceful, negotiated settlement of the Iranian nuclear problem. That is why we support the EU3 process. Our message to Tehran today is: Adhere to the Paris Agreement, maintain suspension of all nuclear-related activities, and negotiate in good faith the eventual cessation and dismantling of all sensitive nuclear fuel cycle activities" (18).

The Application of Risk Management

Although it is not known whether the Bush administration has a formal risk analysis procedure, risk management appears to play a major role in US policy. Based on the available options for thwarting Iranian nuclear ambitions, the US has elected to pursue the policy with the least amount of risk: supporting the EU negotiations with Iran. The other major options for dealing with Iran—going to the UN Security Council without European support, pursuing bilateral negotiations with Iran, launching air strikes, or invading Iran—all carry either enormous risks or a high probability of failure.

The Bush administration seems to be factoring risk into its policymaking. Though current US policy is not ideal, supporting the EU negotiations is far better than adopting a policy that is certain to fail, such as one that would immediately catalyze a grave crisis like air strikes or full-scale "regime change." De facto risk management has enabled the Bush administration to choose a policy for dealing with Iran that has the least risky disadvantages, which will hopefully help to prevent a dangerous escalation of the nuclear standoff with Iran. But further reform of US intelligence gathering is needed to ensure that American policy makers have accurate intelligence about Iranian's nuclear programs, as current intelligence on Iran has been described as inadequate.

Findings

- Based on its decision to avoid pursuing policies with high risks of failure, the Bush administration is engaging in de facto risk management. Bush appears to be incorporating risk and uncertainty into his decision-making process by choosing the policy with the least dangerous drawbacks. It is unclear whether the new joint American-European initiative will succeed, but Bush is pursuing the policy with the fewest downsides and the best chance of succeeding.
- However, it is unclear whether risk management has been institutionalized within the Bush administration as it was in the Kennedy administration during the Cuban Missile Crisis through ExComm. Adversarial debate about risk is crucial to avoiding missteps. To ensure that it continues to manage risk effectively, the White House could create a modern form of ExComm to ensure that President Bush is presented with fully-flushed out alternative policies, replete with the disadvantages inherent to each course of action.
- To mitigate its uncertainty about risk, the Bush administration should continue to reform the US intelligence along the lines laid out by the 9/11 Commission and the CWMD. Every possible effort should be made to reduce any unnecessary uncertainty about Iran's nuclear program.

References to Annex F

(1) – The Associated Press, "Iran Acknowledges Work toward Enriched Uranium," *The Washington Post*, 10 May 2005, p. A-15.
(2) – John Bolton, "Iran's Continuing Pursuit of Weapons of Mass Destruction," Testimony before the House International Relations Committee Subcommittee on the Middle East and Central Asia, 24 June 2004, text available from US Embassy in Japan at http://tokyo.usembassy.gov/e/p/tp-20040630-04.html, Internet, accessed 19 April 2005; James Phillips and Baker Spring, "Iran's Latest Nuclear Charade," *The Heritage Foundation*, 24 November 2004, available at http://www.heritage.org/Research/MiddleEast/em951.cfm, Internet, accessed 19 April 2005; Robin Wright and Keith Richburg, "Powell Says Iran is Pursuing Bomb," *The Washington Post*, 18 November 2004, p. A-1.
(3) – Richard Boucher quoted in Nicholas Kralev, "US Doubts Tehran Nukes are Imminent," *The Washington Times*, 14 April 2005, p. A-19.
(4) – Robin Wright, "US, Allies May Have to Wait Out Iran's Presidential Vote," *The Washington Post*, 13 March 2005, p. A-16.
(5) – Quoted in Dafna Linzer, "European Officials Warn Iran: Nuclear Activity would Mean End of Talks, Letter Says," *The Washington Post*, 12 May 2005, p. A-1.
(6) – Dafna Linzer, "Europeans Agree to Meeting with Iran on Nuclear Program," *The Washington Post*, 17 May 2005, p. A-14.
(7) – Transcript of Press Conference with President Bush, *The New York Times*, 17 March 2005, p. A-15.
(8) – Michael Rubin, "Will Washington Support Democracy in Iran?," Issue Brief from the Jerusalem Center for Public Affairs, Vol. 4, No. 17, 13 February 2005, available at http://www.jcpa.org/brief/brief004-17.htm, Internet,

accessed 19 April 2005; Bill Gertz, "Syria, Iran Aiding Iraq Insurgents," *The Washington Times*, 18 March 2005, p. A-6.

(9) – Elaine Sciolino, "Board Accepts Nuclear Vow by Iranians," *The New York Times*, 30 November 2004, p. A-3; "Still Failing, Still Defiant-Iran," *The Economist*, 11 December 2004; Reuel Marc Gerecht, "The Struggle for the Middle East," *The Weekly Standard*, Vol. 10, No. 16, 3 January 2005.

(10) – "Still Failing, Still Defiant-Iran," *The Economist*.

(11) – James Fallows, "Will Iran Be Next?," *The Atlantic Monthly*, Volume 294, No. 5, December 2004, 100.

(12) – Ibid, 110.

(13) – David Sanger, "Sharon Asks US to Pressure Iran on Nuclear Arms," *The New York Times*, 13 April 2005, p. A-1; Laura King, "Israel May Have Iran in Its Sights," *The Los Angeles Times*, 22 October 2004, p. A-1.

(14) – Fallows, 103-104, 110.

(15) – Ibid, 107, 110.

(16) – Douglas Jehl and Eric Schmitt, "Data is Lacking on Iran's Arms, US Panel Says," *The New York Times*, 9 March 2005, A-1.

(17) – The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, Report to the President of the United States, 31 March 2005, pgs. 305, 351-352, 387, 539, available at http://www.wmd.gov/report/wmd_report.pdf; Internet; accessed 18 April 2005.

(18) – Testimony by R. Nicholas Burns, Under Secretary for Political Affairs, Statement before the Senate Foreign Relations Committee, 19 May 2005, available online from http://www.state.gov/p/2005/46528.htm; accessed 28 May 2005.