Long-Term Deception: The Rearmament of the German Air Force, 1919–39

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In March 1935, British and German officials scheduled a meeting of Adolf Hitler with several members of the British cabinet to discuss London's continuing apprehension over German rearmament. Though Prime Minister Stanley Baldwin had assured his government and the public that the arms restrictions imposed after World War I provided Britain an advantage in aerial capability over Germany, British concerns had exponentially grown as Hitler's foreign policy became increasingly belligerent.

The meeting never took place. The release of a British Foreign Office white paper critical of German policies prompted Hitler to cancel, using the pretext that he had a cold. Shortly thereafter, the German government announced not only that military conscription in Germany had been reinstituted, but that it had rebuilt a functioning and powerful air capability superior to the Royal Air Force. How could the Germans have built up an effective air force seemingly under the nose of the British Empire so quickly and so quietly?

The answer, apparent in hindsight, was that Germany had not. Germany's airpower was neither as cur-

tailed as chancellors of the Weimar Republic claimed in the 1920s nor as formidable as Hitler bragged in 1935. That both claims were plausible can be attributed to policies of deception pursued by successive German governments, beginning immediately after the signing of the Versailles Treaty in 1919 and into the Nazi regime. Frequent public expression of British fears of growing German airpower had revealed to Berlin the vulnerability of its former enemies to such deception.²

Its effects were felt not only in intelligence analysis of German strength but also in the political debates and policy formation partially fed by that analysis. For example, as tensions between Germany and Britain increased with Hitler's rise to power, the Germans repainted Ju-52 transports to appear as if they were newly built and had bomb bays, then flew them in massive aerial demonstrations.³ Joining the transports were impressive He-51 and Ar-65 fighters that exceeded the capabilities of British fighter technology. But unbeknown to British observers. these aircraft did not yet have suitable weapons.4

a. For a more in-depth discussion of frameworks to analyze long-term deception, as well as deception in German rearmament, see: Gordon, Brian J., *Deception in Covert Nuclear Weapons Development: A Framework to Identify, Analyze, and Mitigate Future Long-Term Deception Efforts* (RAND Corporation, 2016). Available at http://www.rand.org/pubs/rgs_dissertatio ns/ RGS D370.html.

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Inflated estimates of German capabilities resulting from these deceptions may have made policymakers reluctant to contemplate the use of force to counter German actions. From the view of the historian, it appears British policymakers and analysts accepted low estimates of German air strength for years and then, seamlessly, accepted inflated estimates in just a matter of months.

As more recent events have shown, long-term deception of the type involved in masking and then exaggerating German military development continues to be common practice, having been seen in efforts to mask nuclear weapons programs, military research and development (R&D), and foreign policy initiatives by multiple governments over the years. This deception is often treated as a series of discrete events, matched to the deceiver's policies and specific goals.

In his definitive research on the case of German rearmament, the late Barton Whaley, a foremost scholar on denial and deception, divided the period between the First and Second World Wars into three distinct phases, each with distinct German foreign policy goals and approaches to strategic deception. For the historian or researcher seeking to understand this period or the qualities of deception better, this is an entirely appropriate approach. But the intelligence analyst cannot afford to be so discriminating in evaluating evidence. A British analyst assessing German airpower in 1938 would have been unwise to look at information only as far

back as Hitler's installation as chancellor, because the actual story of German air force development stretches at least as far back as the Versailles Treaty. Though this type of deception may not always be a coherent or perfectly executed effort, its cumulative effect complicates analysis and can lure governments into incorrect or ineffective action-or no action at all. Recognizing this long-term effort as a distinct type of deception builds upon the work of Whaley and other scholars and can help analysts identify, understand, and mitigate deception in long-term efforts.

Reexamining German Rearmament (1919–39)

The three periods of German rearmament Whaley proposed remain useful, however. But rather than survey broad policies and R&D initiatives in each as Whaley does, this article presents a very brief summary of one particular R&D thread, airpower development, to show how deception can evolve and continue independent of changes in government and foreign policy.

Intent on preventing the German aggression they held to have caused World War I, the Allies in 1919 imposed stringent restrictions on Germany's military capabilities as part of the Versailles Treaty. Most were general in nature, including those limiting conscription and the manufacture of rifles and artillery. But the Allies were particularly concerned about German aviation, as evidenced by the prohibition of

any possession of Fokker D.VIIs.⁵ These biplane fighters were the only category of equipment specifically mentioned in the Versailles restrictions, a testament to Allied fear of German airpower.

Arms Control Evasion (1919–26)

The new post-war government in Berlin was initially assisted in its airpower deception by private interests. Anthony Fokker, the Dutch manufacturer of several successful German WWI aircraft, including the D.VII, was among the first to aggressively circumvent Versailles restrictions. He and his company hid aircraft in barns and buildings throughout the German countryside, covertly put airframes on trains under tarps and rigging that hid the outlines of the aircraft, and created diversions as the trains crossed the German-Dutch border into Holland, all to save 120 D.VIIs, 400 engines, and an estimated \$8 million of material.6 They also left a handful of airframes in Germany for Allied arms inspectors to find, to avoid the suspicion that anything had been removed. Fokker's motivation may have been largely personal in ensuring he could continue his business, but after his departure for the United States in 1923, the German government continued to benefit in air R&D from both planes and design information that should have been destroyed under Versailles.

Those inspectors were from the Inter-Allied Control Commission (IACC), a group of military officers headquartered in Berlin, whom the Allies had designated to ensure German compliance with the treaty restrictions. The inspectors were not idle, conducting more than 800 inspections over a six week period alone between September and

October 1924.⁷ Their efforts and frustrations would be familiar to any who followed arms control inspections in Iraq almost 70 years later. IACC inspectors spent a significant amount of time inspecting facilities that had been warned in advance of their arrival as well as chasing down meaningless rumors, such as that baby carriages were being manufactured that could be reassembled into machineguns.⁸

The Army Peace Commission, a liaison group within the German Defense Ministry, was responsible for much of the work of undermining the IACC's efforts. German officials and the commission's commander, Gen. August von Cramon, had been shocked that the Allies had permitted the formation of such a liaison group, assuming the IACC would just travel and inspect whatever it wished and without warning. The Germans used the peace commission to obstruct and thwart the IACC's efforts at every opportunity.9 Arguably, however, the real story the Allies were interested in

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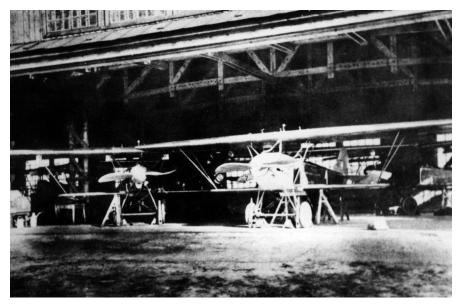
was not in Germany at all, but in an unexpected place the IACC could not reach, the newly established USSR.

In 1922, Germany and the Soviet Union concluded secret military agreements. One agreement established an aircraft testing and training center in Lipetsk, Russia, where German pilots and plane designs would be developed away from the prying eyes of the IACC. The deceptive measures necessary to protect this effort were complex. German officers sent to train there were "discharged" for the duration of their training. A customs office was established at Lipetsk to clear parts and schedule shipments away from normal points of entry in Germany that might be under observation, and aircraft were flown to Lipetsk disguised as "mail planes."10

These efforts complemented bureaucratic actions within the Defense Ministry in Berlin that were not detected by the IACC. The aviation staff was designated the "Army Command Inspectorate of Weapons Schools" and immediately absorbed 120 former army and navy pilots into the newly established state-owned airline, Lufthansa, or into several "advertising squadrons." It did so through false job descriptions and secret training pipelines.

After initial training at a newly established (1922) Commercial Flying School, the new pilots were brought to Lipetsk for specialized military training.11 The entire enterprise was financed through the state budget. Each year the chancellor's office and Defense Ministry would submit budget requests with inflated estimates for items such as parts and labor. When legislators approved this budget, the excess funds were then diverted to secret programs such as air training and the Lipetsk facility.12 This effort, simple in description, must have involved significant work and coordination among the various offices and individuals responsible for budget formulation in the Weimar Republic.

Not all efforts to develop the German air force were so clandestine, and in fact some were taken with the concurrence of the Allies themselves. The Commercial Flying School was established publicly and eventually did feed into Lufthansa. German arguments that they should not be denied the benefits of aircraft for mail delivery, advertising, and sports led to a relaxation on restrictions of limited-performance aircraft. Perhaps even more significant, the Paris Air



Feared Fokker D.VIIs in front of a hangar at the secret Reichswehr flight center in Lipetsk, USSR, 1925. Photo: © Sueddeutsche Zeitung Photo / Alamy Stock Photo

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Agreement of 1926 granted Germany the ability to build high-performance aircraft to compete in air shows and set speed records. ¹³ These aircraft designs would be the foundation for aircraft tested at Lipetsk and other facilities throughout the 1920s and 1930s.

This period of German rearmament came to a close on 31 January 1927, when the Allies officially withdrew the IACC. Any observation of German military development would now rest solely with military attachés, generally controlled and monitored in their travels around the country. The commission's final report stated that Germany had never had any intention of disarming and had done everything in its power to circumvent the work of the commission.14 But with no "smoking gun" proving German deceit, the report apparently fell on deaf ears in London and Paris.

Rearmament (1927–35)

Though the commission was no longer a barrier to rearmament, the German government continued to take steps to ensure its covert buildup would remain undetected. In 1932, the Defense Ministry classified its officer lists for the first time. Two secrets would have been revealed had the Allies been able to review these lists. The first was that the total number of officers in the army and navy exceeded the number permitted under the Versailles restrictions. The second was that through the secret training programs in Lipetsk, fed by the commercial training pipeline, the Germans had managed to train a sufficient number of pilots to man their rapidly expanding air force.15

That air force would be built in factories and based at airfields almost completely unknown to the Allies. British and French officials had a good understanding of the location of German air facilities built during the war, and what little construction occurred immediately following

was likely caught by the IACC as it toured the country. But following the disestablishment of the commission, the Germans were able to rapidly construct airfields and other facilities in parts of the country less frequently traveled and hence unlikely to be toured by military attachés. 16 A budget of 10 million reichsmarks earmarked for the aviation office through what was known as the "blue" budget financed the construction. These funds were diverted from the Defense Ministry's public budget in secret and administered by a special branch of the Reich Audit Office that dealt with these covert programs.¹⁷

The rise of the Nazi Party brought about more aggressive deception to match this increase in activity. Two events are notable. The first is an announcement in 1933 that foreign bombers had flown over Berlin and dropped leaflets. Though no evidence was provided, the German Foreign Ministry insinuated that the bombers were Soviet. In fact, this incident was completely manufactured—no flyover had occurred. But Hitler used it to claim that aggressive and technologically superior adversaries





Heinkel He. 111, in passenger mode, ca. 1940 on the left. In this configuration, the interior was designed in such a way that it could readily be converted from a comfortable passenger compartment, as in the image on the right from another aircraft, into a bomb bay. Photo: © Sueddeutsche Zeitung Photo / Alamy Stock Photo

surrounded Germany and that the country was completely, and unreasonably, defenseless against them. ¹⁸ The second event, far less dramatic, was the quiet formation of the Central Bureau for German Rearmament in 1934. This group was formed to coordinate what were by then numerous complex efforts throughout the Defense Ministry to increase Germany's military capabilities in violation of Versailles restrictions. ¹⁹

Rearmament and Bluff (1935–39)

Hitler's 1935 announcement of the existence of the Luftwaffe is unlikely to have caught the British and French completely by surprise, though they were not certain of the strength of German airpower. The confusion experienced in London and Paris was also felt in the Air Ministry in Berlin, which, judging by its later actions, appeared not to have been ready to go public. To reinforce Hitler's sudden claims of aerial superiority, creativity would be required.

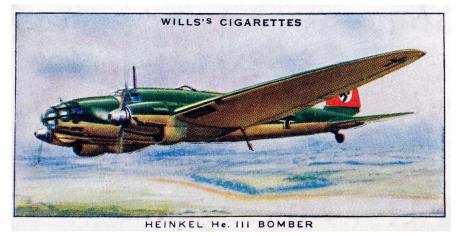
Luftwaffe officials began to conduct large exhibition flyovers to impress both the German population and foreign observers. As previously noted, these demonstrations included large numbers of deceptively painted transport aircraft and fighters that were actually still inoperable as wartime aircraft. Other aircraft were shown more selectively. The Do-17 "Flying Pencil" bomber concerned the Allies because it had outpaced several foreign-built fighters during air trials and shows and presumably would outrun any British or French fighter. But the Germans had constructed the demonstration model by hand, and mass production of that quality was impractical. The follow-on aircraft had smaller engines and considerably less speed.20

Allied military officials had more to fear from the He-111. This aircraft had entered commercial service with Lufthansa and accommodated 10 passengers with a compartment amidships used as a smoking lounge. The lounge's true purpose was to provide space in future military construction for a bomb bay; the military version went into mass production soon after the Luftwaffe announcement.²¹

The German government supplemented this selective showing of new aircraft by targeting certain experts to deliver the message. Among them was Charles Lindbergh, who was granted special permission to tour German facilities and even fly German aircraft. Lindbergh was convinced the Germans had not only designed superior aircraft but that they could mass-produce them. He reported to Allied officials that Germany was strong enough to make any British and French military action against it foolhardy. Prime Minister Neville Chamberlain carried this assessment to the Munich Conference in 1938.²²

The Luftwaffe continued its buildup of highly trained and skilled personnel during this period as well, through training more realistic than that conducted at Lipetsk. Despite the Versailles Treaty's continuing prohibition against committing forces to combat in foreign lands, Germany sent a significant number of "volunteers" from its armed forces to take part in the Spanish Civil War, providing them false papers, Spanish currency with which to travel, and Spanish uniforms. While the participation of Germans in the conflict was well known, perhaps the Allies underappreciated the effects. By Whaley's estimation, 32 months of combat in Spain provided Germany with more than 14,000 pilots with combat experience, validation of aircraft such as the Messerschmitt Bf-109, and practice with such tactics as saturation bombing.23

All this required resources. As in other periods, the German government was compelled to go to extraordinary bureaucratic lengths to disguise the funding of Luftwaffe development. The Nazi bureaucracy was similar to that of the Weimar Republic and in the years leading up to World War II maintained a policy



The He. 111 depicted in its wartime mode on a cigarette card produced during WWII. Photo: © SIconographic Archive/Alamy Stock Photo

of making budget data public. The publicized portion was known as the "white" budget, and it should have provided clues to attentive military attachés about German military R&D and procurement. The white budget steadily rose throughout the 1930s to reach approximately 340 million reichsmarks in 1936. But also mirroring Weimar-era budgets, there was more to the story. A "black" budget, which more accurately reflected government spending, totaled over three billion reichsmarks in 1936.24 The same office within the chancellery compiled and issued these budgets, meaning that numerous individuals were knowledgeable of this deception and likely working overtime to produce the required documents.

By the time of the Munich Conference, the British and French governments found themselves in a seemingly unsolvable policy problem. Having underestimated Hitler's aggressive intentions, they now overestimated the armed force with which he could pursue his policies and deter any efforts to counter him. Their estimates during this period were driven by ignorance of German development in the years following World War I, belief in demonstrations carefully managed by German officials, and Hitler's confidence that he had a force that could back up his policy goals. All of which were supported by long-term deception, albeit by different governments and with different short-term goals.

Analyzing Long-Term Deception

A significant amount of literature and doctrine is focused on the practice and effects of tactical and operational denial and deception. Some authors—including Whaley, Michael Mihalka, and Abram Shulsky, among others—specifically address strategic deception. Others, such as Robert Jervis and Michael Handel, have addressed the effects and policy implications of government manipulation of information. But these studies are primarily theoretical and casestudy driven. They provide agencies and analysts few tangible methods by which to organize the massive amount of data likely to result from investigation of deception efforts that span multiple governments and perhaps decades.

Michael Bennett and Edward Waltz propose a simple but effective

way of categorizing such data using two aspects of deception. ²⁵ First, deceivers must take two types of actions: revealing information or concealing it. Second, there are two types of information: factual and fictitious. These categorizations form the matrix devised by Bennett and Waltz in figure 1, below.

Bennett and Waltz's matrix can be modified in one key area to better address long-term deception. As shown in figure 1, "Conceal Fiction" actions pertain to actions that protect the deception itself. But in cases such as long-term R&D programs, there is an element of coordination that we must consider part of this effort. Though coordination is also

Figure 1: The Deception Methods Matrix²⁵

Reveal Fact

Information:

 Release true information that benefits the deceiver (e.g., the double bluff ruse)

Physical:

 Display real equipment or facilities (e.g., to build a source's credibility)

Conceal Fact

Information:

- Secrecy (clearance programs, physical security, and INFOSEC)
- Withholding information to create a false or misleading impression

Physical:

- Camouflage, concealment, signal reduction (e.g., stealth designs and materials, spread spectrum communications), disguises, dazzling
- · Nonverbal deceit

Reveal Fiction

Information:

 Disinformation, which includes lying or providing information known to be untrue or dazzling (e.g., providing large volumes of information)

Physical:

- Decoys, diversions (feints and demonstrations), duplicates, disguises, dummy positions, equipment, and facilities
- · Nonverbal deceit

Conceal Fiction

Information:

· Suppress a lie

Physical:

· Hide a sham

important in other types of deception, longer term programs such as Germany's rearmament involve significant funds, numbers of participants, and bureaucratic entities. Managing such programs, and the deception protecting them, requires an organization with expertise and clout. The establishment or existence of such an organization, and the coordinating actions required for the deception, may provide vital clues to identifying long-term deception.

Using the sample of data points on German airpower development already presented, a matrix specific to this case might look like figure 2, below.

Employing this framework, the categorization of data points will often be matters of analytical judgment, which will depend on examining the preponderance of evidence for the enterprise as a whole and asking how each data point fits into that story. For example, the Luftwaffe aerial demonstrations were clearly intentional government revelations of information. An analyst would then need to judge whether that information was factual, and thus represented a previously undetected significant capability, or whether the German government had the means and motive to be deceitful about the number of strategic bombers it could field.

In application, this matrix would of course be of significant size and would likely need to be broken up into lines of effort such as diplomatic actions, budget and finance, etc. But sorting data in this manner and moving the data points around as new judgments are made will give an analyst an increasingly coherent picture of potential long-term deception.

Special attention should be paid to any information in the "Conceal Fiction" category. In the example of Germany organizations, the Army Peace Commission and Central Bureau for German Rearmament were established to manage an inspection regime and coordinate illicit activity across the government.

These types of organizations have been seen in other cases of long-term deception as well. In Iraq's pursuit of nuclear weapons, Saddam Hussein established the Oversight Committee ostensibly to coordinate with UN weapons inspectors following the first Gulf War, but in reality it was designed to interfere with UN efforts.²⁶ The Iraqis also established organizations such as the Special Security Organization and elements within the Ministry of Industry and Military Industrialization to manage the nuclear weapons development effort, mirroring Berlin's establishment of the Central Bureau in 1934.27

Such information on the internal workings of a deceiver's bureaucracy may be among the most difficult data to collect, but analysts should be vigilant for any such information and drive collection efforts to determine whether such organizations exist and how they function.

Figure 2: The Deception Methods Matrix-German Rearmament

Reveal Fact

- · Paris Air Show agreement
- Establishment of Lufthansa as a state controlled airline

Conceal Fact

- Establishment of Lipetsk training and development center
- Military training requirement for Lufthansa pilots
- Classification of officer lists starting in 1932
- Construction of new air facilities in remote areas
- Disguising of German air involvement in the Spanish Civil War through use of "volunteers"

Reveal Fiction

- The 1933 overflight of Berlin by "Soviet" aircraft
- Mass aerial demonstrations of bombers and fighters not actually operational
- Appearance that the Do-17 "Flying Pencil" was in mass production and the He-111 was a passenger aircraft
- Information and tours provided to Charles Lindbergh giving the appearance of a more advanced production capability

Conceal Fiction

- Establishment of the Army Peace Commission and its actual mission to hinder IACC inspection efforts
- Creation of the Central German Rearmament Bureau in 1934
- "Blue" budget diversion of funds under the Weimar Republic.
 "White" and "Black" budgets of the Nazi-era government

Recommendations and Conclusion

The recognition of long-term deception as a unique type of deception is of little value without proposing practices to mitigate its effects. Numerous analytic techniques, such as backcasting^a or identification of scenarios and indicators, hold promise to help analysts categorize evidence and assess the likelihood that long-term deception is taking place. The "Reveal/Conceal Fact/ Fiction" framework presented in this article provides another tool for analysts to assess the possibility of deception. But in addition to identifying the likelihood of such deception, these frameworks must also inform practices to mitigate its effects.

The first is the essential practice of intelligence professionals speaking truth to power. A conclusion that a long-term R&D effort is being pursued and concealed will often be a problematic development for a policymaker. The final report of the IACC, stating that Germany had consistently tried to undermine the commission and did intend to rearm, is an example of this. The warning went unheeded and perhaps, though it is difficult to find evidence of this, the practice of arguing that Germany was continuing to violate the Versailles arms restrictions to senior British policymakers was abandoned in subsequent years.

In her work on self-deception, Roberta Wohlstetter points out that British estimates of operable German aircraft were consistently low throughout the 1930s. She offers one very plausible explanation: that placing the estimates higher would have necessitated some form of action on the part of the British government that officials did not want to take.²⁸ Intelligence professionals have no role in the formation of policy, and strategic long-term deception will likely be very difficult to "prove," but using analytic techniques effectively will strengthen one's case that such an effort is taking place. Categorizing and displaying data points to show how the determination was reached will present policymakers with a coherent roadmap of what is known about an R&D program and perhaps a more persuasive argument.

Second, analysts and organizations need to ensure that every available channel of information is utilized and must drive and synthesize the results of collection. The continuous nature of long-term deception means the deceiver will need to consistently coordinate a complex effort throughout a bureaucracy. This will both increase the number of individuals aware of such an effort and necessitate some form of coordinating mechanism, such as the Central Bureau for German Rearmament or Saddam's Special Security Organization. Additionally, the expenditure of resources will need to be done in a surreptitious manner but will still likely result in some detectable signatures. Each of these necessities on the part of the deceiver is an opportunity for analysts willing to perform an exhaustive search of available information. Again, the framework presented in this article provides one way of categorizing information. But it also shows where expected information is not

seen. If long-term deception is suspected, then analysts should be looking for evidence of coordinating organizations and actions. If no such evidence is seen, it may indicate no deception or it may indicate the need to drive collection towards suspected data points.

The final recommendation is less about analytic technique than approach. The deceiver is operating on a long-term schedule but is deceiving perhaps without a clear idea of the target's level of attention. Therefore, though policymakers require timely and relevant assessments of the deceiver's activity, there may be an opportunity to permit teams of analysts the time and space to undertake a systematic review of all available evidence. This is important for two reasons. First, a group—preferably made up of specialists in various intelligence disciplines—can better utilize analytic techniques to review the evidence, judge the likelihood of deception, and attempt to develop a cohesive picture of the effort. Second, temporarily removing analysts from any pressures of immediate production or quick turnaround tasking will permit the intellectual space to do the "deep dive" on the information necessary to see these patterns.

Developments such as international treaties, enforcement regimes, and improvements in intelligence gathering have complicated the effort required to pursue long-term R&D without detection. Programs to enhance military capabilities or develop weapons of mass destruction depend now more than ever on deception to conceal them, or at least make them plausibly deniable for the deceiver. Countering the deception that protects these long-term projects requires

a. Backcasting is an analytical technique to help identify prerequisites to reaching a given (desired or hypothetical) end state.

further research on historical examples of such activities, formulation of lessons learned and best practices, and organizational flexibility to give

analysts the time and tools they need to detect and mitigate these efforts.



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Endnotes

- 1. D. C. Watt, "The Anglo-German Naval Agreement of 1935: An Interim Judgment," *The Journal of Modern History* 28, no.2 (1956): 155–56.
- 2. Michael Mihalka, German Strategic Deception in the 1930s (RAND Corporation, N-1557-NA, 1980), 111.
- 3. Richard Suchenwirth, *The Development of the German Air Force*, 1919-1939, USAF Historical Studies, ed. Harry F. Fletcher (Arno Press, 1968), 57.
- 4. Barton Whaley, Covert German Rearmament, 1919–1939 (University Publications of America, 1984), 57.
- 5. Barton Whaley, "Conditions Making for Success or Failure of Denial and Deception: Authoritarian and Transition Regimes," in Roy Godson and J.J. Wirtz, eds., *Strategic Denial and Deception in the 21st Century* (Transaction Publishers. 2002), 47.
- 6. Whaley, Conditions, 47.
- 7. Whaley, Covert Rearmament, 9.
- 8. Ibid., 35.
- 9. Whaley, Conditions, 44.
- 10. Suchenwirth, 26-30.
- 11. Ibid., 26; Whaley Conditions, 53.
- 12. Whaley, Conditions, 53.
- 13. Mihalka, 45.
- 14. Whaley, Conditions, 57.
- 15. Whaley, Covert Rearmament, 51.
- 16. Suchenwirth, 121.
- 17. Ibid., 20.
- 18. Whaley, Conditions, 63.
- 19. Ibid., 64.
- 20. Whaley, Conditions, 72.
- 21. Ibid., 56.
- 22. Whaley, Conditions, 75.
- 23. Whaley, Covert Rearmament, 62.
- 24. Suchenwirth, 159-60.
- 25. Michael Bennett and Edward Waltz, Counterdeception Principles and Applications for National Security (Artech House, 2007), 52.
- 26. Mahdi Obeidi and Kurt Pitzer, *The Bomb in My Garden: The Secrets of Saddam's Nuclear Mastermind* (John Wiley and Sons, 2004), 144.
- 27. Ibrahim al-Murashi, "How Iraq Conceals and Obtains Its Weapons of Mass Destruction," *Middle East Review of International Affairs* 7, no. 1 (March 2003): 60.
- 28. Roberta Wohlstetter, "The Pleasures of Self-Deception," The Washington Quarterly 2, no.4 (1979): 56.

