THE CENTRAL INTELLIGENCE AGENCY AND OVERHEAD RECONNAISSANCE
The U-2 and OXCART Programs, 1954 - 1974
Gregory W. Pedlow and Donald E. Welzenbach
The Central Intelligence Agency and Overhead Reconnaissance:
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<td>Not releasable to foreign nationals</td>
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<td>NOCONTRACT (NC)</td>
<td>Not releasable to contractors or contractor/consultants</td>
</tr>
<tr>
<td>PROPIN (PR)</td>
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FOREWORD

This History Staff Monograph offers a comprehensive and authoritative history of the CIA's manned overhead reconnaissance program, which from 1954 to 1974 developed and operated two extraordinary aircraft, the U-2 and the A-12 OXCART. It describes not only the program's technological and bureaucratic aspects, but also its political and international context. The manned reconnaissance program, along with other overhead systems that emerged from it, changed the CIA's work and structure in ways that were both revolutionary and permanent. The formation of the Directorate of Science and Technology in the 1960s, principally to develop and direct reconnaissance programs, is the most obvious legacy of the events recounted in this study.

The authors tell an engaging story. The struggle between the CIA and the US Air Force to control the U-2 and A-12 OXCART projects reveals how the manned reconnaissance program confronted problems that still beset successor programs today. The U-2 was an enormous technological success: its first flight over the USSR in July 1956 made it immediately the most important source of intelligence on the Soviet Union. Using it against the Soviet target it was designed for nevertheless produced a persistent tension between its program managers and the President. The program managers, eager for coverage, repeatedly urged the President to authorize frequent missions over the Soviet Union. President Eisenhower, from the outset doubtful of the prudence and propriety of invading Soviet airspace, only reluctantly allowed any overflights at all. After the Soviets shot down Francis Gary Powers' U-2 on 1 May 1960, President Eisenhower forbade any further U-2 flights over the USSR. Since the Agency must always assess a covert operation's potential payoff against the diplomatic or military cost if it fails, this account of the U-2's employment over the Soviet Union offers insights that go beyond overhead reconnaissance programs.

Indeed, this study should be useful for a variety of purposes. It is the only history of this program based upon both full access to CIA records and extensive classified interviews of its participants. The authors have found records that were nearly irretrievably lost and have interviewed participants whose personal recollections gave information available nowhere else. Although the story of the manned
reconnaissance program offers no tidy model for imitation, it does reveal how resourceful managers coped with unprecedented technological challenges and their implications for intelligence and national policy. For this reason, the program's history provides profitable reading for intelligence professionals and policymakers today.

Many people made important contributions to the production of this volume. In the History Staff's preparation of the manuscript, Gerald Haines did the final revision, again demonstrated her high talent as a copy editor, and provided staunch secretarial support throughout. As usual, we are indebted to more members than we can name from the Publications, Design, and Cartography Centers in the Office of Current Production and Analytic Support, whose lively interest in the publication went far beyond the call of duty. Their exceptional professional skill and the masterly work of the Printing and Photography Group combined to create this handsome volume.

Donald E. Welzenbach, who began this study, and Gregory W. Pedlow, who completed it, brought complementary strengths to this work. A veteran of CIA service since 1960, Mr. Welzenbach began research on this study in 1983, when he joined the DCI History Staff on a rotational assignment from the Directorate of Science and Technology. After tireless documentary research and extensive interviewing, he finished a draft manuscript of the history before returning to his directorate. In early 1986, Gregory W. Pedlow, a new member of the DCI History Staff, was assigned to complete the study. A Johns Hopkins University Ph.D. who has served as an Army intelligence officer and University of Nebraska professor of history, Dr. Pedlow undertook important research in several new areas, and reorganized, edited, and revised the entire manuscript before leaving CIA to become NATO Historian in late 1989. The final work, which has greatly benefited from both authors' contributions, is the CIA's own history of the world's first great overhead reconnaissance program. ♦

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April 1992
PREFACE

When the Central Intelligence Agency came into existence in 1947, no one foresaw that, in less than a decade, it would undertake a major program of overhead reconnaissance, whose principal purpose would be to fly over the Soviet Union. Traditionally, the military services had been responsible for overhead reconnaissance, and flights deep into unfriendly territory only took place during wartime. By the early 1950s, however, the United States had an urgent and growing need for strategic intelligence on the Soviet Union and its satellite states. At great risk, US Air Force and Navy aircraft had been conducting peripheral reconnaissance and shallow-penetration overflights, but these missions were paying a high price in lives lost and increased international tension. Furthermore, many important areas of the Soviet Union lay beyond the range of existing reconnaissance aircraft. The Air Force had therefore begun to develop a high-altitude reconnaissance aircraft that would be able to conduct deep-penetration reconnaissance missions over the Soviet Union. President Dwight D. Eisenhower and his civilian scientific advisers feared that the loss of such an aircraft deep in Soviet territory could lead to war and therefore authorized the development of new non-military aircraft, first the U-2 and later the A-12 OXCART, to be manned by civilians and operated only under cover and in the greatest secrecy. Primary responsibility for this new reconnaissance program was assigned to the Central Intelligence Agency, but the Air Force provided vital support.

The Agency's manned overhead reconnaissance program lasted 20 years. It began with President Eisenhower's authorization of the U-2 project in late 1954 and ended with the transfer of the remaining Agency U-2s to the Air Force in 1974. During this period the CIA developed a successor to the U-2, the A-12 OXCART, but this advanced aircraft saw little operational use and the program was canceled in 1968 after the Air Force deployed a fleet of similar aircraft, a military variant of the A-12 called the SR-71.

Neither of these aircraft remains secret today. A great deal of information about the U-2 and its overflight program became known to the public after 1 May 1960, when the Soviet Union shot down a CIA U-2 and publicly tried its pilot, Francis Gary Powers. Four years
later, at press conferences in February and July 1964, President Lyndon B. Johnson revealed the existence of the OXCART-type of aircraft, although only in its military YF-12A (interceptor) and SR-71 (strategic reconnaissance) versions.

The two CIA reconnaissance aircraft have also been the subject of a number of books, beginning with David Wise's and Thomas B. Ross's *The U-2 Affair* in 1962 and then Francis Gary Powers' memoirs, *Operation Overflight*, in 1970. Two recent books give many more details about the U-2 and OXCART aircraft: Michael Beschloss's *Mayday: Eisenhower, Khrushchev and the U-2 Affair* (1986) and William Burrows's *Deep Black: Space Espionage and National Security* (1987). Although well written and generally accurate, these books suffer from their authors' lack of access to classified official documentation. By drawing upon the considerable amount of formerly classified data on the U-2 now available to the public, Beschloss has provided an accurate and insightful depiction of the U-2 program in the context of the Eisenhower administration's overall foreign policy, but his book does contain errors and omissions on some aspects of the U-2 program. Burrows's broader work suffers more from the lack of classified documentation, particularly in the OXCART/SR-71 section, which concentrates on the Air Force aircraft because little information about the Agency's aircraft has been officially declassified and released.

After the present study of the Agency's overhead reconnaissance projects was completed, a new book on the U-2 was published in the United Kingdom. Chris Pocock's *Dragon Lady: The History of the U-2 Spyplane* is by far the most accurate unclassified account of the U-2 program. Pocock has been able to compensate for his lack of access to classified documents by interviewing many former participants in the program, especially former pilots. Pocock is also quite familiar with aircraft itself, for he had worked with Jay Miller on the latter's excellent technical study of the U-2: *Lockheed U-2* (1983).

There has also been a classified official study of the U-2 and OXCART programs. In 1969 the Directorate of Science and Technology published a *History of the Office of Special Activities* by
Helen Hill Kleyla and Robert D. O’Hern. This 16-volume Top Secret Codeword study of the Agency’s reconnaissance aircraft provides a wealth of technical and operational information on the two projects but does not attempt to place them in their historical context. Without examining the international situation and bureaucratic pressures affecting the president and other key policymakers, however, it is impossible to understand the decisions that began, carried out, and ended the CIA’s reconnaissance aircraft projects.

In preparing this study of CIA’s overhead reconnaissance program, the authors drew on published sources, classified government documents, and interviews with key participants from the CIA, Air Force, contractors, scientific advisory committees, and the Eisenhower administration. The interviews were particularly important for piecing together the story of how the CIA became involved in overhead reconnaissance in the first place because Agency documentation on the prehistory of the U-2 project is very sketchy and there are no accurate published accounts. Research on the period of actual reconnaissance operations included the records of the Director of Central Intelligence, the Office of Special Activities in the Directorate of Science and Technology, and the Intelligence Community Staff, along with documents from the Eisenhower Presidential Library in Abilene, Kansas, and additional interviews.

Both authors are grateful for the assistance they have received from many individuals who played important roles in the events they recount. Without their help a good deal of this story could never have become known. The assistance of Agency records management officers in the search for documents on the overhead reconnaissance program is also greatly appreciated.

To ensure that this study of the Agency’s involvement in overhead reconnaissance reaches the widest possible audience, the authors have kept it at the Secret classification level. As a result, some aspects of the overhead reconnaissance program, particularly those involving satellites and related interagency agreements, have had to be described in very general terms. The omission of such information is not significant for this book, which focuses on the Agency’s reconnaissance aircraft.