

Editor's Note

This publication represents the first unclassified issue of *National Reconnaissance, Journal of the Discipline and Practice*, formerly entitled the *CSNR Bulletin*. *National Reconnaissance* is NRO's counterpart publication to our mission partners' scholarly journals: CIA's *Studies In Intelligence*, NGA's *Geospatial Intelligence Review—An Analytic Tradecraft Journal*, and NSA's *Cryptologic Quarterly*. The CSNR publishes *National Reconnaissance* for the education and information of the NRO community, and it supports the CSNR mission by promoting the study, dialogue, and understanding of the discipline, practice, and history of national reconnaissance. In addition to information, *Journal* articles provide NRO leaders with an analytical and historical context for their programmatic and policy decisions. Combining historical research and documentation with analysis of current practices and trends, this journal aims to create a scholarly forum to examine pertinent issues, and to educate and inform the national reconnaissance community. Although this issue contains only unclassified articles, CSNR also publishes a classified edition of *National Reconnaissance*, to provide a discussion forum for sensitive topics not approved for wider release.

The CSNR publishes this issue at a critically important stage in the transformation of the intelligence community. Oversight authorities, particularly the House Permanent Select Committee on Intelligence (HPSCI), debate continuously the intelligence budget priorities, with much discussion centering on national reconnaissance—often termed “technical systems” in open source literature—programs. While the committee's chairman stresses, in a statement quoted in the *New York Times*, that there are “overlapping and duplicative technical programs, and we believe we're coming up short on HUMINT [human intelligence],” other committee members argue that too drastic cuts to satellite systems would “cause a gap in our capabilities and diminish the industrial base so critical to fielding the technology against current and future threats.” Even while it votes

to reduce funding for a few satellite programs, the committee recognizes the need of continuing space-based reconnaissance. This debate reflects a reconnaissance community accepting of necessary change, but also protective of capabilities. The articles within explore these themes of transformation and continuity that remain relevant to a changing leadership environment and that illustrate the evolving relationships among intelligence collectors and analysts, the customers of finished product, and the oversight authorities that control acquisition and development funding. A few of these pieces address the challenges facing national reconnaissance policymakers as they try to transform intelligence institutions at a time when more data is demanded by more customers than ever before. One article recounts how the inherent risk present in procuring, acquiring, and developing satellite systems has been managed, and postulates that the current low tolerance for cost overruns and delays will doubtless affect future decisions taken by program managers, and will inform budget discussions between the Director and Congress. Still other articles examine the accomplishments and lessons of the past, and comment on whether these lessons remain valid. There are also prescriptive suggestions in two or three pieces, that recommend steps to improve the NRO, and these will hopefully generate discussion and debate throughout the community.

In the first article, the Deputy Director of the National Reconnaissance Office, Mr. Dennis Fitzgerald, discusses the evolution of risk in national reconnaissance programs from the NRO's inception in 1960 until the first years of the twenty-first century. He identifies four distinct periods within this time frame and analyzes the differing approaches to managing program risk. For each period, Fitzgerald compares management's relative willingness to take risks, and oversight authorities' willingness to tolerate program failure. He examines programmatic risk from a funding, technical, and operational context. Mr. Fitzgerald stresses the high-risk nature of space-based reconnaissance, while noting that management's willingness to take risks is directly proportional to the funding environment and oversight authorities' tolerance for failure. In conclusion, he offers eight risk-mitigation rules for managing and building national reconnaissance programs.

From one piece examining the reconnaissance environment of risk, we move to a story on the NRO's people. The second article recounts some accomplishments of the pioneers of national reconnaissance, with examples from the NRO's formative years. In "National Reconnaissance Leadership for the 21st Century: Lessons from the NRO's Heritage," CSNR Senior Analyst Patrick Widlake extrapolates the NRO Pioneers' lessons that remain relevant to national reconnaissance leadership as it confronts high-risk program management within the intelligence community and worldwide geopolitical landscapes of the early twenty-first century. Though operational systems and programs in development are managed and overseen differently in 2005 than systems produced during the Cold War, the best practices and most important lessons of that earlier era remain valid, and might be adapted to meet current leadership's objectives.

With the ideas expressed in the first two pieces as a backdrop, we next present an ongoing intellectual debate between a Pioneer and a current NRO leader. Mr. Robert Kohler, named a Pioneer of National Reconnaissance in 2000, and Deputy Director, NRO (DDNRO) Mr. Dennis Fitzgerald, each articulate their positions in four separate articles, two published previously, and two that appear here in print for the first time. In order to give context and relevancy to the updated observations, we start with the earlier exchange published in two issues of CIA's *Studies in Intelligence*. Mr. Kohler authored "One Officer's Perspective: The Decline of the National Reconnaissance Office" for *Studies in Intelligence*, Volume 46, Number 2, 2002, while Fitzgerald's response, entitled "Commentary on 'The Decline of the NRO—The NRO Leadership Replies,'" appeared in *Studies in Intelligence*, Volume 46, Number 4, 2002. Both articles are reprinted here with the permission of the Center for Intelligence Studies (CIS). Taken together, the two pieces articulate a lively debate on the NRO's present status and future outlook. While Fitzgerald maintains that the NRO's current civilian and military personnel mix constitute the smartest engineering workforce that has ever been assigned to the organization, and that the best days lie ahead, Kohler insists that the old NRO, with its multiple program structure, managed its separate programs more efficiently, and developed more revolutionary technology on time, and within budget, with greater consistency than the present consolidated structure.

Continuing the dialogue, we next present Kohler's update to his prior assertions, a follow-up piece entitled "Recapturing What Made the NRO Great: Updated Observations on 'The Decline of the NRO,'" along with Mr. Fitzgerald's reply to this latest critique. Kohler suggests that the NRO needs to regain end-to-end responsibility and fund programs realistically, and that the DNRO should be a full-time position, not a "dual-hat" title along with Undersecretary of the Air Force. While conceding many of Kohler's points, Fitzgerald puts the funding criticisms in proper context, concluding that what the NRO really lacks following the forward funding crisis is the flexibility to manage its programs effectively.

Since the publication of the last issue of the CSNR Bulletin, several important national reconnaissance figures have passed away, and we conclude this issue with tributes to each of them: John Parangosky, Dr. Mark Morton, Gen. Andrew Goodpaster, and Gen. Bernard Schriever. Mr. Parangosky, named in 2000 a Pioneer of National Reconnaissance, contributed greatly to some revolutionary national reconnaissance systems, including the U-2 and A-12/SR-71 high-altitude reconnaissance aircraft, and Corona, the first photoreconnaissance satellite.

Also a national reconnaissance Pioneer, Dr. Mark Morton supervised engineering teams that designed, fabricated, and tested the satellite recovery vehicle (SRV) for Corona. As White House staff secretary during the Eisenhower administration (1953-1961), Gen. Andrew Goodpaster proved indispensable as a liaison between the President and the developers of the first high-altitude and space-based reconnais-

sance systems. Finally, Gen. Bernard Schriever must be considered the father of US military space and missile forces. As head of the Air Force Air Research and Development Command's Western Development Division (WDD), Schriever oversaw production of four major missile systems—the Thor intermediate range ballistic missile (IRBM), and the Atlas, Titan, and Minuteman ICBMs—years ahead of schedule, and furnished the national reconnaissance community with the space launch vehicles used for boosting the world's first reconnaissance and communication satellites into orbit.

We design the *Journal* to provide readers with facts and insight into the many technical, operational, and management challenges—past, present, and future—that together constitute the enterprise of national reconnaissance. While we intend to engender dialogue and debate, this publication does not necessarily reflect the official views of the NRO, the Intelligence Community, or the Department of Defense. Please contact me if you have comments or questions concerning *National Reconnaissance*, or if you would like to submit an article to be considered for publication.

Robert A. McDonald, Ph.D.

Editor