



# PIONEERS OF NATIONAL RECONNAISSANCE

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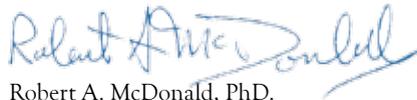


*The* National Reconnaissance Pioneer Program recognizes and honors individuals who have made significant and lasting contributions to national reconnaissance—pioneering contributions that were innovative and have changed the direction and scope of the discipline and its practice. It is the highest honor in the field of national reconnaissance.

This year, Director of National Reconnaissance, Ms. Betty Sapp, selected Mr. William Montgomery and Dr. Donald Simkins, whose innovations in pointing accuracy and geo-location processing, respectively, represented major breakthroughs that dramatically improved the accuracy of intelligence targeting from space.

Their complimentary “pointing” work is a model for how to use imagination to overcome technical challenges. It also is a metaphor for how the National Reconnaissance Office (NRO), over the past twenty-five years, has been able to focus U.S. space intelligence assets more precisely on the country’s most critical national security targets. This year’s Pioneers, like those inducted in previous classes, have employed creative techniques and processes to accomplish the NRO’s essential mission.

This booklet summarizes the specific contributions of Pioneers Montgomery and Simkins. In Pioneer Hall you will find their medallions, which serve as permanent acknowledgement of their enduring contributions to the discipline of national reconnaissance. These two new medallions join the other medallions that commemorate those Pioneers we recognized in previous years. When you visit Pioneer Hall, I encourage you to read about Mr. Montgomery and Dr. Simkins and the other Pioneers to learn how their contributions have made a lasting impact on the NRO and the nation’s security.

A handwritten signature in blue ink that reads "Robert A. McDonald". The signature is fluid and cursive, with the first name "Robert" and last name "McDonald" clearly legible.

Robert A. McDonald, PhD.

Director, Center for the Study of National Reconnaissance

NATIONAL RECONNAISSANCE PIONEERS  
2013

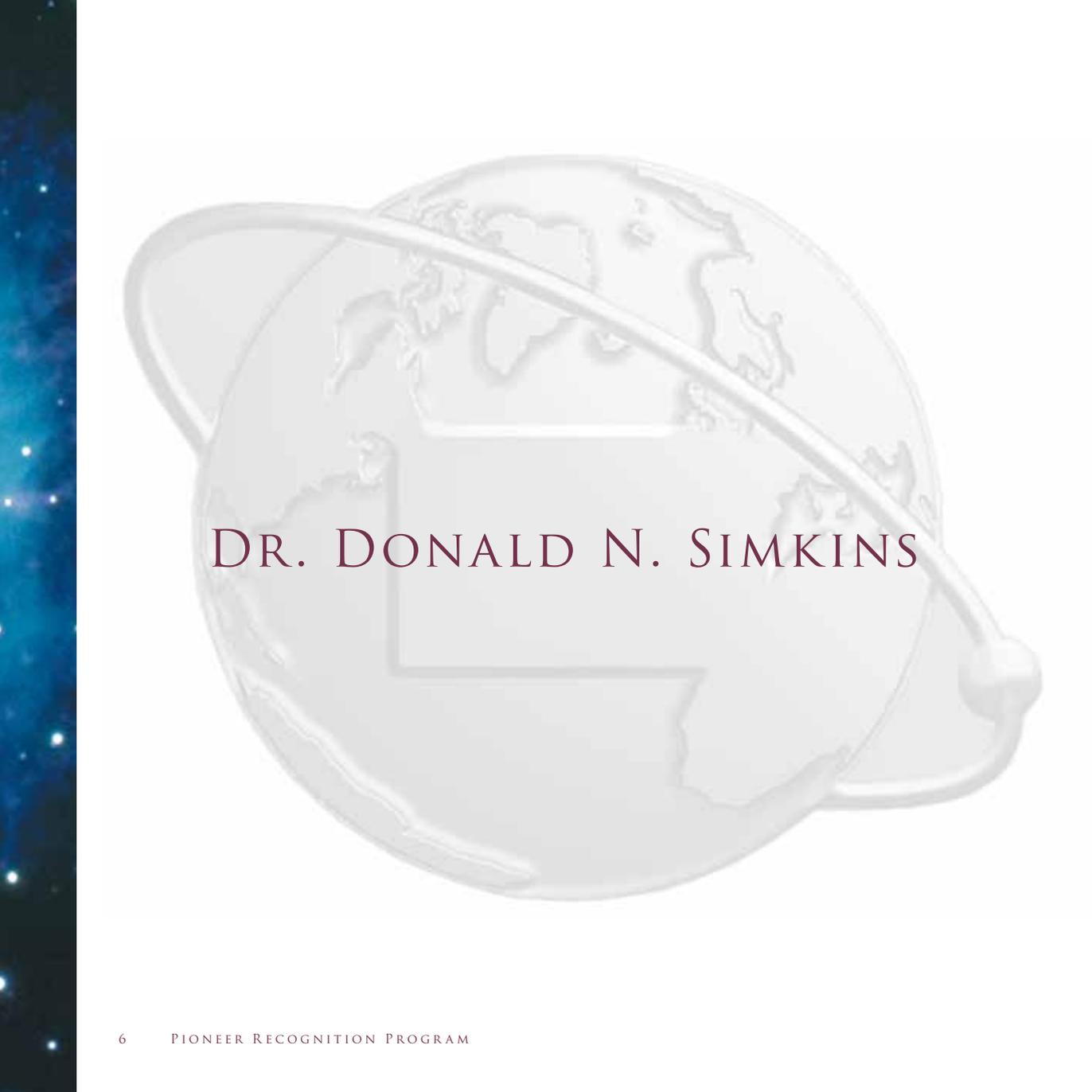




MR. WILLIAM G. MONTGOMERY

Mr. William G. Montgomery pioneered precision control and pointing accuracies for a new generation national system that enhanced volume, resolution, and accuracy in imagery intelligence collection for the USG. He also led the application of precision sensing and control instruments and advanced systems engineering methods to balance performance contributions from multiple space and ground segments.

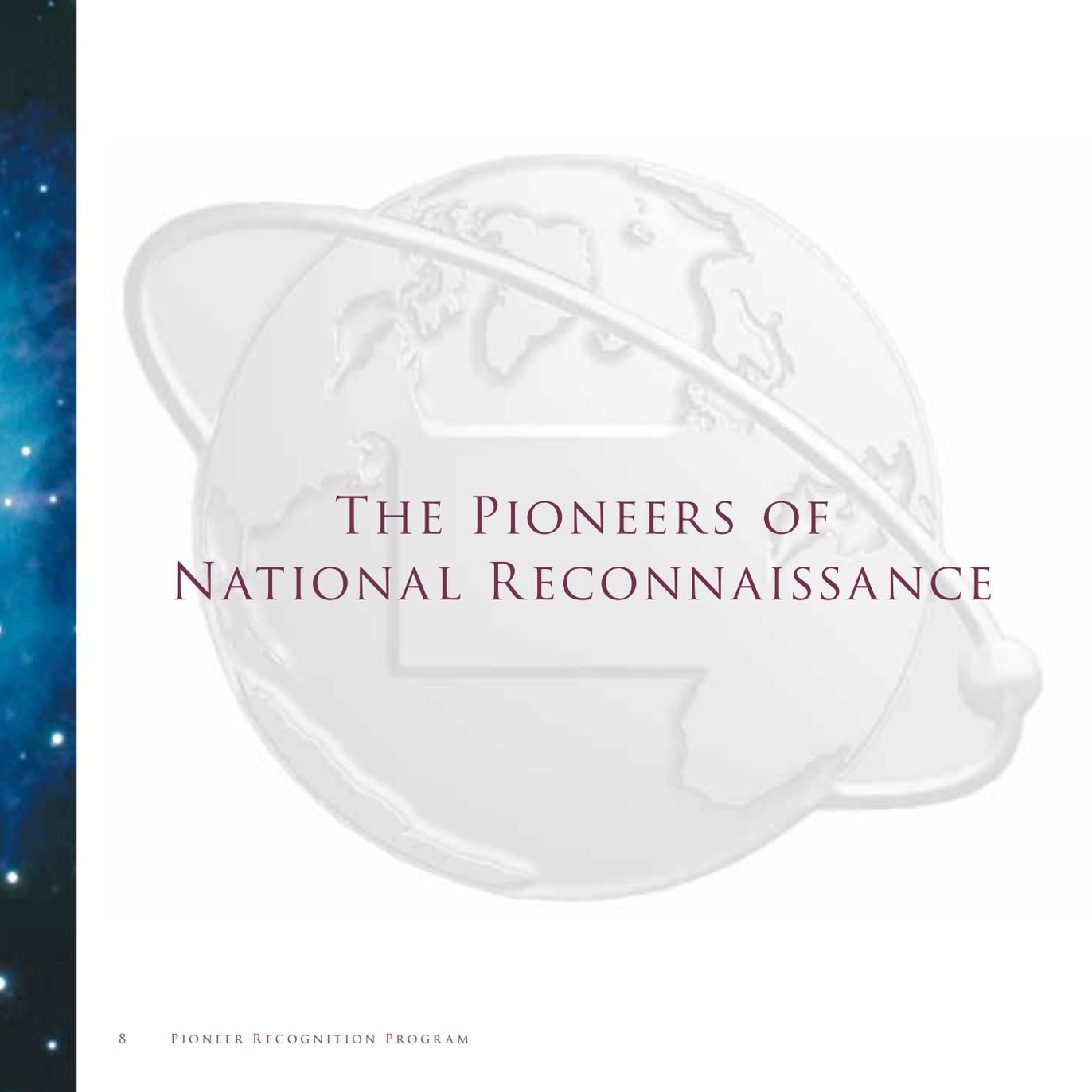
Career in National Reconnaissance: 1968 - 1992

A stylized globe with a satellite orbiting it, set against a starry space background on the left. The globe is light gray and features a map of the world. A satellite with a circular dish and a spherical antenna is shown in orbit around the globe. The background on the left is a vertical strip of blue and black space with white stars.

# DR. DONALD N. SIMKINS

Dr. Donald N. Simkins pioneered the development of processing techniques that allowed the dramatic advancement of geo-location algorithms. His accomplishments include the first precise model of the signal path, long-term coherency, and automated techniques that expanded and improved the collection, exploitation and display of target information.

Career in National Reconnaissance: 1975 - Present



THE PIONEERS OF  
NATIONAL RECONNAISSANCE

## 2012

Dr. Robert P. O'Donnell

## 2011

Thomas A. Brackey  
Joseph J. Eash III, Col, USAF (Ret)  
Michael N. Parker, Ph.D.  
John W. Shipley, Ph.D.  
Richard C. Van Wagoner

## 2010

Robert H. Dumais  
Jack A. Gibbs, Brig Gen, USAF (Ret)  
Richard J. Randazzo, Col, USAF (Ret)

## 2009

James P. Campbell, Ph.D.  
Lacy G. Cook  
Michael F. Maguire

## 2008

Raymond E. Anderson, Col, USAF (Ret)  
Howard G. Brotherton  
Hilliard W. Paige, Sr.

## 2007

Paul G. Kaminski  
Sun Yet Wong

## 2006

Ingard M. Clausen  
Fred V. Hellrich  
David L. Klinger, Ph.D.  
Jane A. Wood

## 2005

Robert E. Eisenhower  
Roger C. Marsh

Edward A. Miller, Ph.D.  
Wayne L. Proffitt

## 2004

M. Sam Araki  
Harvey Cohen, Lt Col, USAF (Ret)  
Robert G. Kaemmerer  
James W. McAnally

## 2003

Carl L. Ferdensi, Jr.  
David Rasket, Col, USAF (Ret)  
James W. Stoner, Ph.D.  
Charles C. Tevis

## 2002

Vance D. Coffman, Ph.D.  
Lee M. Hammarstrom  
Robert L. Paulson, Col, USAF (Ret)

## 2001

Donald L. Cromer, Lt Gen, USAF (Ret)  
A.J. (Tony) Iorillo  
Vincent S. Rose  
John Walton

## 2000

James G. Baker, Ph.D.  
C. Lee Battle, Jr., Col, USAF (Ret)  
John T. Bennett  
John W. Browning, Col, USAF (Ret)  
Jon H. Bryson, Col, USAF (Ret)  
A. Roy Burks  
Frank S. Buzard, Col, USAF (Ret)  
Cornelius W. "Connie" Chambers  
John O. Copley, Col, USAF (Ret)  
Robert H. Crotser  
John J. Crowley

James C. de Broekert  
Gary S. Geyer, Col, USAF (Ret)  
Thomas O. Haig, Col, USAF (Ret)  
Frederick H. Kaufman  
Robert J. Kohler  
Ellis E. Lapin  
Lloyd K. Lauderdale, Ph.D.  
Richard S. Leghorn, Col, USAF (Ret)  
Walter J. Levison  
Howard O. Lorenzen  
Frank J. Madden  
James T. Mannen, Col, USAF (Ret)  
Paul W. Mayhew, Ph.D.  
Reid D. Mayo  
James E. Morgan  
Mark N. Morton  
Alden V. Munson, Jr.  
Charles L. Murphy, Col, USAF (Ret)  
Frederic C.E. "Fritz" Oder, Col, USAF (Ret)  
John Parangosky  
Julius P. "Val" Peline, Ph.D.  
Robert M. Powell  
Edward H. Reese  
Osmond J. "Ozzie" Ritland,  
Major General, USAF (Ret)  
Lee W. Roberts, Col, USAF (Ret)  
Charles R. "Charlie" Roth  
Robert W. "Rob" Roy, Col, USAF (Ret)  
Charles P. Spoelhof  
Forrest H. Stieg  
Marvin S. Stone, Ph.D.  
Don F. Tang  
Albert D. "Bud" Wheelon, Ph.D.  
Peter G. Wilhelm  
Roy H. Worthington, Col, USAF (Ret)  
Robert W. Yundt, Col, USAF (Ret)



*National Reconnaissance Office (NRO Launch, NROL-39,  
11:14 PST, 5 December 2013*

## NROL-39

“The NROL-39 was the second of two National Reconnaissance (NRO) launches in 2013. The photograph shows the United Launch Alliance Atlas V rocket lifting off from Space Launch Complex-3E, Vandenberg Air Force Base, California. In addition to the main, classified, NRO payload, the rocket carried into orbit the Government Experimental Multi-Satellite (GEMSat) rideshare payload on a specially designed Aft Bulkhead Carrier, located on the aft section of the Atlas V Centaur upper stage. The GEMSat deployed 12 experimental CubeSats, or “nano-satellites,” seven sponsored by the NRO and five sponsored by the National Aeronautics and Space Administration.”

*Pioneer Hall  
National Reconnaissance Office  
Chantilly, Virginia*









