



ARMS CONTROL AND DISARMAMENT STUDIES

- Nº. 1 *Confidence (and Security) Building Measures in the Arms Control Process: A Canadian Perspective*, by James Macintosh, August 1985 (reprinted November 1992)

ARMS CONTROL VERIFICATION STUDIES

- Nº. 1 *A Conceptual Working Paper on Arms Control Verification*, by F.R. Cleminson and E. Gilman, January 1986 (Reprinted March 1993).
- Nº. 2 *The Role of Astronomical Instruments in Arms Control Verification*, by Chris A. Rutkowski, University of Manitoba, September 1986.
- Nº. 3 *The Sinai Experience: Lessons in Multimethod Arms Control Verification and Risk Management*, by Brian S. Mandell, Norman Paterson School of International Affairs, Carleton University, Ottawa, September 1987.
- Nº. 4 *Verification to the Year 2000*, by Sidney Graybeal, George Lindsey, James Macintosh and Patricia McFate, February 1991.
- Nº. 5 *Constraining Proliferation: The Contribution of Verification Synergies*, by Patricia Bliss McFate, Sidney N. Graybeal, George Lindsey and D. Marc Kilgour, March 1993.
- Nº. 6 *The Converging Roles of Arms Control Verification, Confidence-Building Measures, and Peace Operations: Opportunities for Harmonization and Synergies*, by Patricia Bliss McFate, Douglas A. Fraser, Sidney N. Graybeal and George R. Lindsey, October 1994.
- Nº. 7 *Verification in a Global Context: The Establishment and Operation of a United Nations Centre for Information, Training and Analysis (CITA)*, by Patricia Bliss McFate, F. Ronald Cleminson, Sidney N. Graybeal, and George R. Lindsey, February 1996.

The graphic on the back cover is based on an ancient Egyptian hieroglyph representing the all-seeing eye of the powerful sky god Horus. Segments of this "eye in the sky" became hieroglyphic signs for measuring fractions in ancient Egypt. Intriguingly, however, the sum of the physical segments adds up to only 63/64 and, thus, never reaches the equivalent of the whole or perfection. Similarly, verification is unlikely to be perfect.

Today, a core element in the multilateral arms control verification process is likely to be the unintrusive "eye in the sky," or space-based remote sensing system. These space-based techniques will have to be supplemented by a package of other methods of verification such as airborne and ground-based sensors as well as some form of on-site inspection and observations. All these physical techniques add together, just as the fractions of the eye of Horus do, to form the "eye" of verification. Physical verification, however, will not necessarily be conclusive and there is likely to remain a degree of uncertainty in the process. Adequate and effective verification, therefore, will still require the additional, non-physical element of judgment, represented by the unseen fraction of the eye of Horus.

