

including SLAR⁵ with a slant range of 100 km and SAR for high-altitude night imaging.

Other aircraft mentioned in connection with CFE verification are specially modified Boeing E-3 Sentry AWACS (Airborne Warning and Control System) and extended-range turbo-prop aircraft such as the Boeing Dash 8 Series 300. In December 1989, a consortium of three Canadian companies (Canadair, INTERA Technologies and MacDonald Dettwiler) briefed senior government officials in Ottawa on the technical capabilities of the "Surveillance Challenger" — an airborne surveillance package combining the Canadair Challenger aircraft and MacDonald Dettwiler IRIS (Integrated Radar Imaging System) synthetic aperture radar. The consortium maintains that the "Surveillance Challenger" can provide wide-area coverage in a short period of time; for example, three-SAR equipped aircraft can cover three million km² in 12 hours.⁶

Notes

1. See, for example, John A. Adam, "Verification: Peacekeeping by Technical Means," *IEEE Spectrum* (July 1986): 42-56; and, Kosta Tsipis, "Arms Control Pacts Can Be Verified," *Discover* (April 1987): 79-93.
2. Hugh De Santis, "Commercial Observation Satellites and Their Military Implications: A Speculative Assessment," *The Washington Quarterly* 12 (Summer 1989): 185-200; and, Johan Swahn, "International Surveillance Satellites — Open Skies for All?" *Journal of Peace Research* 25 (September 1988): 229-44.
3. Development of the PAXSAT concept by Spar Aerospace in co-operation with the Verification Research Unit of External Affairs and International Trade Canada made use of data produced under the RADARSAT project as well as those from other Canadian space-related activities.
4. For a description of fixed-wing reconnaissance aircraft, see *Airborne Remote Sensing for C.F.E. Verification: The Platform*, SER-8-2295 (Toronto: Boeing Canada, de Havilland Division, 1989); Jeffrey Richelson, "Technical Collection and Arms Control," in *Verification and Arms Control*, ed. William C. Potter (Lexington, Massachusetts: Lexington Books, 1985): 169-216; and, "Verification: Peacekeeping by Technical Means," pp. 42-56.
5. SLAR may use either synthetic aperture or real aperture radars.
6. *Airborne Surveillance: A National Sovereignty Requirement*, Presentation given by INTERA, Canadair and MacDonald Dettwiler representatives, Ottawa, Canada, December 1989.