

million,⁵³ and about \$2.3 billion has been spent on OTH-B (with only one station operational today).⁵⁴ Authoritative accounts of satellite programmes usually (and wisely) avoid any reference to the costs.

However, for those who insist on some numbers it could be noted that the Canadian RADARSAT is budgeted for about \$CDN 400 million (not including launch costs to be borne by NASA), and that the Swedish Space Corporation estimated the programme cost to provide a single satellite designed for monitoring multilateral agreements from space at over \$US 400 million.⁵⁵ Any military programme is sure to require a constellation of satellites. One assessment of a space-based radar system for continental air defence estimated the cost of each radar satellite to be in the half to one billion dollar range. Continuous worldwide coverage would require a constellation of nineteen satellites, and intermittent worldwide coverage ten, while an experimental version for intermittent coverage of the polar regions could be provided with three.⁵⁶ In order to feel able to verify the INF Treaty and a proposed START agreement, the United States added a five-year programme for modernization of observation satellites costing \$US15 billion.⁵⁷ These are indeed major undertakings.

⁵³ *Continental Air Defense: A Neglected Dimension of Strategic Defense*. Arthur Charo, Center for Science and International Affairs, Harvard, 1990. p. 83.

⁵⁴ *Ibid.* p. 75.

⁵⁵ "The New Hierarchy in Space", Michael Krepon, Chapter 3 in *Commercial Observation Satellites and International Security*, eds. M. Krepon, P. Zimmerman, L. Spector, and M. Umberger. St. Martin's Press, New York, 1990. p. 27.

⁵⁶ *Continental Air Defense. op. cit.*, p. 93.