

FOREWORD

This constitutes the final report under Contract No. 21ST-08011-4-2297, Serial OST84-00133, titled "Paxsat Concept for Arms Control and Disarmament Verification in Outer Space".

The contract was carried out by the Satellite and Aerospace Systems Division of Spar Aerospace Limited, with a major subcontract to Philip A. Lapp Limited who in turn were supported by the Canadian Center for Arms Control and Disarmament.

The report is presented in two volumes. Volume I is the main body of the report comprising of sections 1 through 10.0. Volume 2 is the appendix of the report and contains Appendices A through D.

The material on Space Assets and Weapons Analysis presented in Volume 1, section 2.0 and, on the operational aspects of the Paxsat concept presented in section 4.0 of this report, are the effort of Philip A. Lapp Limited. Additionally, the resources of Philip A. Lapp Limited generated the material on the ground based and space based optics capabilities presented in section 6.0. Section 3.0, the Political/Legal context for a Paxsat type mission is the effort of the Canadian Center for Arms Control and Disarmament. Remaining sections of the report including the Artificial Satellite Log of Appendix A were generated by the Satellite and Aerospace Division of Spar Aerospace Limited.

The contract was monitored for External Affairs Canada by Mr. Ron Cleminson and for Supply and Services Canada by Mr. Louis Cloutier. The monthly reviews and reports were made to an ad-hoc committee of DND, DEA, EM&R and DOC personnel chaired by Mr. J. Ray Marchand of the Interdepartmental Committee on Space.