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The United States Army Space and Strategic Defense Command

COMPUTER ENGINEERING RESEARCH LABORATORY

Georgia Institute of Technology

Atlanta, Georgia 30332-0540

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1. OVERVIEW

The original contract began September 28, 1989 and was scheduled to terminate September 27, 1994. A no-cost extension was approved extending the termination date to September 27, 1996. This final report covers all the technical work done under this contract.

The contract began with seven tasks; (1) Digital Emulation Facility, (2) FPA Seeker Emulator Development, (3) Special Studies, (4) Software Development, (5) Automated Input, (6) PFP Technology, and (7) GN&C Processor Development. These tasks were developed through the first two years of the contract when virtually all funding was removed. Two Annual Reports, consisting of 7 volumes each, report on the technical work during these two years [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]. These reports were delivered to USASSDC as AR-90-0142-001 and AR-91-0142-002. No additional reporting on these tasks is given in this report.

Two additional tasks were implemented after the funding cut. The first was a speed test on the rad-hard FPU chip developed by Harris. A summary of this testing is given in the Special Technical Report, STR-93-0142-015 [17].

The second task was the development of an FPA Test System. This task was completed January 31, 1996 with a demonstration of the two units at Georgia Tech to USASSDC representatives. The two units were accepted by the government and are to be delivered to the government in accordance with their shipping orders. The work on these two systems was documented in a Special Technical Report, STR-96-0142-018 [18].

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