DOE/IS/503/6--T DPRC Grant # DE-FGO1-95IS50316 **Annual Progress Report** Report # 8 September 26, 1996 - to - September 25,1997

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Introduction

This report describes the progress achieved by the Declassification Productivity Research Center (DPRC) during the second year of operations under DOE Grant # DE-FG01-95IS50316. This report is submitted in lieu of a forth quarterly performance report as the Grant continues into its third year. The intent of this report is to address progress against the statement of work (SOW) of the Grant. Accordingly, its format follows that of the SOW, and describes the DPRC research activities this past year and the resulting products

Background

The DPRC was established at GWU as an independent, world-class research capability and computer facility to support the DOE Declassification Productivity Initiative (DPI). The goal of DPI is to increased the flow of unrestricted government information to the public. To this end, the work at GWU involves both basic and applied research in the areas of (1) system-level declassification process analysis and modeling, (2) development of computer systems to automate declassification processes, including text analysis and interpretation, (3) coordination/ integration of new technology among into the processes, and (4) development and promulgation of inter-operability and document transfer standards.

Accomplishments of the DPRC in 1996-1997

SOW Element # 1. Coordination of On-going Research: Carry out activities in regard to the research programs sponsored by the Agencies to promote cross fertilization of results and progress, and to reduce redundancy between their development programs, including: research review meetings, annual research planning meetings, and progress reports.

- 1. The DPRC continued to host and attend meetings of the Automation Working Group (AWG) of the multi-agency Declassification Productivity Management Council (DPMC) at the GWU Virginia Campus this past year. Our Virginia facility is adequately equipped and conveniently located for this service. We will continue to support this function in the coming year.
- 2. The DPRC attended, and was an active participating organization in the Third Annual Intelligence Community Information and Classification Management Conference, held at NARA's ARCHIVE II facility on June 2 and 3,1997. A DPRC booth, manned by graduate fellows and faculty member affiliates of the DPRC, distributed information about the center and its on-going projects during the conference. Jeffery Long, Senior Research Associate and Deputy Director of the DPRC also presnted a paper on "Ultra Structure-Theory and Practice"

SOW Element #2. Identify, Evaluate and Select: Work with appropriate technologies and new research initiatives which have applicability to document declassification: attend

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national conferences, conduct independent assessments, develop analytical models and establish and maintain Internet World Wide Web sites, etc. for knowledge exchange

- 1. The DRPC continued a doctoral level effort to develop a dynamic simulation model involving (1) current and future declassification processes within DOE and (2) interactions among several agencies engaged in FOIA and EO 12598 declassification reviews of documents with multiple equities. One of our <u>uncompensated</u> fellows (Sameer Hussian) is investigating the implications of the recommendations made by Senator Moyniham's Commission on Secrecy in Government in regard to government-wide declassification performance, security and cost. This study is being carried out by Mr. Hussain for his doctoral dissertation and should be completed next spring.
- 2. The DPRC greatly improved its Internet Web Site at (http://128.164.20.200/) this past year. It is intended to serve as a communication site for the following communities:
 - □ Federal agencies involved in declassification
 - □ Academic researchers and commercial enterprises working on technologies useful in declassification
 - □ The general public with an interest in declassification-related activities and technologies.
- 3. The DPRC also continued to operate the Internet List Serve System (AWGlist@seas.gwu.edu) on behalf of the AWG to support interactions and convenient communications among the AWG members, especially between scheduled AWG meetings. Unfortunately, the AWG/declassification community has been very slow to date in adapting to and making good use of this tool.

SOW Element #3. Carry out Research Activities: Involve both state-of-the-art (advanced) and enabling (in place) technologies/ approaches to declassification processes: support MS and Ph.D. thesis and faculty research projects of relevance to declassification.

- 1. The research project described above under SOW #2, item #1, is a doctoral-level research activity. This activity has clear relevance to declassification, and I especially to the political forces confronting the declassification community
- 2. Research was continued on an "Ultra Structure." approach for development of a computer-base document redaction system. The Document Redaction System (DRS) based on this model was developed by Jeffrey Long and in currently being tested for use by declassification community

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SOW Element #4. Evaluate Existing and New technologies: For both state-of-the-art (advanced) and enabling (in place) technologies, by means of analytical models and/ or prototype demonstrations: conduct evaluations, verify and validate theoretical models, and develop and test prototype models.

- 1. Further work was carried out on the DPRC Declassification Research Facility (DDRF). The concept is to install a computer network at the GWU/DPRC Virginia facility to host hardware and software systems elements from the various agencies, and to use this network as a test bed. The DDFR is intended to represent the systems of the agencies in the declassification community for the purposes of (1) testing interoperability of system components among the agencies, (2) optimizing document interchanges, (3) studying document equity and interchange issues, and (4) declassification personnel training and cross-training.
- 2. A system design concept was developed, including components and architecture, for a Previously Released Information Management System (PRIME) to serve as a one-stop shopping point to the Public (or other qualified users) for locating and accessing "released" government information PRIME would provide access to both FOIA and EO 12958 information databases available in the various agencies. A (descriptive) presentation was also prepared for communication purposes.

SOW Element #5. Disseminate (Evolving) Technology: Specifically, for technologies that related to the declassification processes and associated activities: develop and offer graduate-level courses, and special training; publish and present research results, host colloquia and invited guest lectures, and publish and distribute technical reports.

- 1. No special courses have yet been developed at GWU. However, the concept of a Master's program in Declassification Management is under consideration in the Engineering Management Department. The next steps for this initiative involve a market study to determine community interest levels and anticipated number of enrollments for such a program. This will be carried out this coming year.
- 2. The DPRC Internet Web Site was also expanded to provide for dissemination of technologies and other information of relevance to the declassification community. Several technology reports and project results, from DPRC projects as well as from other research centers, are available on the DPRC web site.
- 3. The four issues of the DPRC newsletter, The Communicator, were published this past year. The Communicator is now sent in paper form to over 350 persons. It is now also available for reading and downloading on the DPRC web site.

SOW Element # 6. Develop Inter-Operability and Declassification Standards: For use within the Agencies for declassification systems and processes and for document format and file specifications.

1. The DPRC, working with the active participation of the AWG, developed a draft Electronic Document Interchange Standard (EDIS) to facilitate the exchange of documents among the Agencies, especially for documents with equities from multiple agencies. Several iterations of the EDIS were conducted through out the year, involving comments, modifications and improvements from the AWG members, before agreement was reached on this draft version. The next step is to attempt to use the EDIS, to verify its effectiveness. A detailed "test plan" will be developed to support realistic verification of the EDIS this coming year. Further,

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the effort to develop the EDIS has drawn attention to other issues of importance to the community, including an electronic document storage standard, also be on the AWG agenda this year.

Participants

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The above accomplishments involved the joint efforts of the following group of nine (9) individuals at GWU :

Professor Richard Scotti, Principal Investigator (PI) and DPRC Director

Professors Hermann Helgert, and Robert Harrington, Co-principal Investigators

Mr. Jeffery Long, Senior Research Associate and DPRC Deputy Director

Ms Carol Lilly, Ms Jana Hayes, and Mr. Youngsuck Oh, and Mr. Nadir Khan, Graduate Fellows of the DPRC

Mr. Sameer Hussain, Graduate Researcher

Future Projects at the DPRC

The program at the DPRC for its third year will pick up from the above accomplishments and move forward on all fronts to increase the service and utility of the DPRC to the declassification and academic communities, and to the general public.

The DPRC research program for the 199671998 contract year is described in our grant renewal request letter to the DOE Administrative Officer, Ms. Mary Wideman (HR-561.1), dated July 24, 1997.