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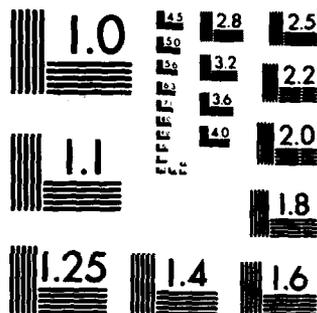
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APPLIED STATISTICS

FINAL REPORT

HERBERT SOLOMON

MARCH 18, 1980

U. S. ARMY RESEARCH OFFICE

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) list the titles of This reports on the 41 Interim Technical Reports issued, during Army visits undertaken, and scientific personnel involved in the research program.		

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FINAL REPORT  
APPLIED STATISTICS  
DAAG29-77-G-0031

January 1, 1977 - December 31, 1979

As the title indicates a wide variety of topics received attention and analysis. The subjects proposed resulted from the interests of the proposed investigators and included topics whose resolution could be helpful in Army programs. This was a continuation of previous efforts along the same lines for the Army.

Over the three year period, 41 Interim Technical Reports were issued. Of these 33 have been published or been accepted for publication. The remaining eight have been submitted and it is anticipated that most or probably all will be published. A listing of titles, authors, dates and journal publication status is given in a subsequent section. The technical aspects of each of these reports has been given in each of the six semi annual Progress Reports and so according to instructions given in "Reporting Procedures" this is not repeated.

The Principal Investigator for the project was Professor Herbert Solomon. However, while he was on a two year leave to serve as Chief Scientist for the Office of Naval Research in London, Professor Bradley Efron served as Acting Principal Investigator. Other scientific personnel who served on the project are listed below. Of this group Andrew F. Siegel received his Ph.D.; the others were all Postdoctoral.

Scientific Personnel

Mark Brown  
Peter Cooke  
Bradley Efron  
Alan Gelfand  
Albert John Petkau  
Leon Pesotchinsky  
Nozer Singpurwalla  
Herbert Solomon  
J. Michael Steele  
Michael A. Stephens  
Howard Weiner

ADDITIONAL TO	
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One feature of this project was an ability to respond to Army problems. In this connection work was undertaken with

Army Procurement Research Office  
Fort Lee, Virginia  
(Quality improvement system)

Walter Reed Institute of Research  
(Randomization schemes)

Army Operational Test and Evaluation Agency  
(Reliability of tank performance)

For other situations, one day meetings sufficed. In addition papers were presented at the Annual Design of Experiments Conferences sponsored by the Army Research Office.

INTERIM TECHNICAL REPORTS AND  
JOURNAL PUBLICATION STATUS

1977-1979

Estimation of parameters of zero-one processes by interval sampling:  
An adaptive strategy, M. Brown, H. Solomon, & M.A. Stephens.  
Technical Report No. 1, 2/28/77.  
Journal of Operations Research Society, 25, 1977, 493-505.

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process, Howard Weiner.  
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Journal of Non Linear Analysis, 3, No. 2, 1978, 229-238.

Management strategies in fixed-structure models of complex organizations,  
Crayton Walker & Alan Gelfand.  
Technical Report No. 3, 3/14/77.  
Behavioral Science, 24, No. 2, 1979, 112-121.

Random space filling and moments of coverage in geometrical probability,  
Andrew F. Siegel.  
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Journal of the American Statistical Association, 72, 1977, 881-885.

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Mark Brown.  
Technical Report No. 6, 6/7/77.  
Annals of Probability, 1980.

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Technical Report No. 8, 7/26/77.  
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Technical Report No. 9, 8/15/77.  
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Management strategies in fixed-structure models of complex organiza-  
tions II, Alan Gelfand & Crayton Walker.  
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Submitted to Behavioral Science

Joint distributions for total progeny in a critical branching process,  
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Approximate solutions for certain optimal stopping problems,  
Albert John Petkau.  
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Annals of Probability, August 1979, 651-661.

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Limit probabilities for critical age dependent branching processes with immigration, Howard Weiner.  
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