

ARCHIVES COLLECTION #2

NAVY FIRE CONTROL

Archives Collection No. 2
Servomechanisms Laboratory
Electronic Computer Division
Massachusetts Institute of Technology

Navy Contract: N5ori-06002 (Project NR-232-001)
DIC Project 6782 - Naval-Fire Control

Contract N5ori-06002, Project NR-232-001, was awarded to MIT's Servomechanisms Laboratory by The Computer Branch Office of Naval Research. Work under this contract was performed from July 1950 through June 1951 by Supervisor R. A. Nelson, and Research Assistants, J. M. Dodd, Jr. and A. Katz under the general direction of R. R. Everett.

Known as DIC Project 6782, the group studied the possible application of digital techniques to the naval fire-control problem. With the use of the Whirlwind I computer, enough programming was done to demonstrate that digital computer techniques could perform the functions performed by analog fire-control equipment, such as the Mark 47 system .

Work performance of the contract may be found in the Project Bi-Weekly and Quarterly Progress Reports. The complete report of work performed, and the conclusions and recommendations may be found in R-231.

On 20 June 1951, Dr. J. W. Forrester, Director of MIT's Servomechanisms Laboratory proposed an extension of this contract. The proposal was accepted by the Office of Naval Research, and the work period was extended to June 1952.

Under the direction of Professor W. K. Linvill, the project was primarily concerned with the programming problems related to the Computer's ability to make decisions, and use of the digital computer in simulation of other equipment

Collection microfilmed June 1985

October 1963

REFERENCES

<u>Author</u>	<u>Title</u>	
Katz, Abraham	Computation Book #1 - March to September 1951	AC-3
	M-1213 - "Masters Thesis Proposal - The Linear Filtering of a Sampled Quantized Signal dated 15 May 1951	AC-4
	Thesis - Computer Program Synthesis Based on Statistical Communication Theory - dated 1951	AC-4
Nelson, R. A.	Computation Book #9 - June 1950 - February - 1951	AC-3

ARCHIVES INVENTORY

SUBJECT	IDENTIFICATION	DATE	TITLE	AUTHOR	CLS.	COPY NO.
1950	L-20	2 Mar 50	Proposal for the Study of Digital Computation for Naval Fire Control	MIT (6345)	U	
	M-1065	7 Jul 50	Bi-Weekly Report, July 7, 1950	R. A. Nelson	U	
	M-1069	21 Jul 50	Bi-Weekly Report, Project 6782, July 21, 1950	R. A. Nelson	U	
	M-1078	4 Aug 50	Bi-Weekly Report, Project 6782 August 4, 1950	Project 6782	U	
	M-1089	18 Aug 50	Bi-Weekly Report, Project 6782 August 18, 1950	Project 6782	U	
	M-1093	1 Sep 50	Bi-Weekly Report, Project 6782 September 1, 1950	Project 6782	U	
	M-1100	15 Sep 50	Bi-Weekly Report, Project 6782 September 15, 1950	Project 6782	U	
	M-1106	29 Sep 50	Bi-Weekly Report, Project 6782 September 29, 1950	Project 6782	U	
	M-1118	Jul - Sep 1950	Quarterly Report, Contract N5ori-06002 July to September 1950 (Project NR232-001: DIC6782	R. A. Nelson	U	
	M-1114	13 Oct 50	Bi-Weekly Report, Project 6782 October 13, 1950	Project 6782	U	
	M-1120	27 Oct 50	Bi-Weekly Report, Project 6782 October 27, 1950	Project 6782	U	
	M-1126	10 Nov 50	Bi-Weekly Report, Project 6782 November 10, 1950	Project 6782	U	

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SUBJECT	IDENTIFICATION	DATE	TITLE	AUTHOR	CLS.	COPY NO.
1951	M-1132	24 Nov 50	Bi-Weekly Report, Project 6782 November 24, 1950	Project 6782	U	
	M-1137	8 Dec 50	Bi-Weekly Report, Project 6782 December 8, 1950	Project 6782	U	
	M-1142	22 Dec 50	Bi-Weekly Report, Project 6782 December 22, 1950	Project 6782	U	
	M-1169	Oct - Dec 1950	Quarterly Report, Contract N5ori-06002 October through December 1950 (Project NR-232-001: DIC 6782	R. A. Nelson	U	
	M-1148	5 Jan 51	Bi-Weekly Report, Project 6782 January 5, 1951	Project 6782	U	
	M-1155	19-Jan 51	Bi-Weekly Report, Project 6782 January 19, 1951	Project 6782	U	
	M-1161	2 Feb 51	Bi-Weekly Report, Project 6782 February 2, 1951	Project 6782	U	
	M-1170	16 Feb 51	Bi-Weekly Report, Project 6782 February 16, 1951	Project 6782	U	
	M-1176	2 Mar 51	Bi-Weekly Report, Project 6782 March 2, 1951	Project 6782	U	
	M-1184	16 Mar 51	Bi-Weekly Report, Project 6782 March 16, 1951	Project 6782	U	
	M-1193	30 Mar 51	Bi-Weekly Report, Project 6782 March 30, 1951	Project 6782	U	
	M-1212	Jan - Mar 1951	Quarterly Report, Contract N5ori-06002, January through March, 1951 (Project NR-232-001: DIC 6782)	R. A. Nelson	U	

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SUBJECT	IDENTIFICATION	DATE	TITLE	AUTHOR	CLS.	COPY NO.
	M-1201	13 Apr 51	Bi-Weekly Report, Project 6782 April 13, 1951	Project 6782	U	
	M-1209	27 Apr 51	Bi-Weekly Report, Project 6782 April 27, 1951	Project 6782	U	
	M-1214	11 May 51	Bi-Weekly Report, Project 6782 May 11, 1951	Project 6782	U	
	M-1220	25 May 51	Bi-Weekly Report, Project 6782 May 25, 1951	Project 6782	U	
	M-1229	8 Jun 51	Bi-Weekly Report, Project 6782 June 8, 1951	Project 6782	U	
	L-28	20 Jun 51	Proposal for the Extension of Contract N5ori-06002, DIC Project 6782	J. W. Forrester	U	
	M-1234	22 Jun 51	Bi-Weekly Report, Project 6782 June 22, 1951	Project 6782	U	
	R-231	1 Jul 51	Contract N5ori-06002: Work Through June 1951	R. A. Nelson J.M. Dodd - A. Katz	U	30
	M-1408	Jul - Sep 1951	Quarterly Status Report, Contract N5ori-06002: July Through September 1951	W. K. Linvill	U	
	M-1577	Oct - Dec 1951 4 Aug 52	Quarterly Status Report, Contract N5ori-06002: October Through December 1951	W. K. Linvill	U	
1952	M-1584	Jan - Mar 1952	Quarterly Status Report, Contract N5ori-06002: January Through March 1952	W. K. Linvill	U	

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SUBJECT	IDENTIFICATION	DATE	TITLE	AUTHOR	CLS.	COPY NO.
1953	M-1578	4 Aug 52 Apr - Jun 1952	Quarterly Status Report, Contract N5ori-06002: April Through June 1952	W. K. Linvill	U	
	R-222	3 Jul 53	Design of Sampled-Data Systems by Extension of Conventional Techniques	W. K. Linvill R. W. Sittler	U	