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**ARMED SERVICES TECHNICAL INFORMATION AGENCY
DOCUMENT SERVICE CENTER**

**REPORT
OF
PERSONNEL AND FINANCIAL REQUIREMENTS**

31 DECEMBER 1958

Produced by
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INTRODUCTION

In the following pages are summaries of detailed studies of personnel and financial requirements and workload at the Armed Services Technical Information Agency (ASTIA) Document Service Center (DSC) at Dayton, Ohio. These studies are based on known workload for FY 1952 for the purpose of arriving at unit costs which may be applied to predicted workloads to determine personnel and financial requirements in subsequent years.

Personnel and financial requirements for three plans of operations are shown in this study:

Plan "A" represents a study of operation at the Document Service Center at the time these detailed studies were begun in July 1952. It reflects the former Central Air Documents Office operations as they were at the time these operations were transferred to the management of ASTIA.

Plan "B" represents operations at the Document Service Center as they are contemplated under ASTIA with important improvements in service (entailing additional functions) and reduction or elimination of other former services believed by the ASTIA management to be non-essential to the hard core of ASTIA's mission at this time. Plan "B" also reflects requirements without integration of DSC activities with those of the Office of Naval Research under contract with the Library of Congress.

Plan "C" represents operation of the Document Service Center under the RDB-approved plan of integration with the Navy-sponsored activity at the Library of Congress.

One of the really important advantages to the Department of Defense in the formation of ASTIA is the extension of the best of the previous separate technical documents services to all agencies of the Department of Defense and their contractors. An equally important advantage is the elimination of duplication of activity where it existed.

The financial requirements to achieve both objectives are contained in Plan "C." Plan "B" reflects only a partial achievement of these objectives, namely, in the adoption of certain highly desirable services of the Library of Congress by ASTIA for extension to those agencies and contractors served by the Document Service Center.

Under Plan "C," the most substantial burden of extension of service falls upon the Document Service Center. For example, the Technical Information Division (TID) of the Library of Congress now issues a reports availability announcement bulletin and distributes microcard copies of its documents - services not rendered by DSC. Under Plan "C," DSC will be responsible for rendering these services not only to those formerly served by TID but to those served by the Document Service Center as well. On the other hand, DSC prepares and disseminates facsimile copies of its reports upon demand, while the Library of Congress activity renders loan service when duplicate copies are unavailable. Under integration, facsimile copies will be made available by DSC to all Defense Department agencies and their contractors.

The cost of TID microcard service is borne entirely by the Office of Naval Research apart from the Library of Congress contract. The cost of this important service must henceforth be carried by ASTIA. A continuation of the ONR microcard contract with a commercial firm would cost ASTIA in excess of \$130,000 annually under Plan "C." However, by fabricating microcards in DSC's own facilities, the direct cost will be \$72,885 - a savings of nearly \$60,000 based on FY 1952 workload, but still a substantial addition to ASTIA's financial requirements.

Under Plan "B," a net dollar saving of \$22,000 is realized over Plan "A." At the same time a net addition of four positions is required. Actually, the elimination of certain Plan "A" services and streamlining of procedures in Plan "B" result in a reduction of 24 positions and a gross annual savings of \$156,000, or roughly 14%. These

reductions are offset, however, by the inauguration at DSC of the highly desirable and useful microcard and announcement bulletin services.

Since there is a very small overlap in the list of those served by the Document Service Center and the Library of Congress activity, the combination of lists and extension of service with integration (Plan "C") substantially increases the personnel and financial requirements of the Document Service Center. The summary tables (I and II) and subsequent sections of this report, particularly Section II, show why this is true.

Directly following are summary tables (I and II) showing the computed personnel and financial requirements of ASTIA under Plans "A," "B," and "C" based on the known workload for FY 1952 and the projected workload for FY 1953. These tables are derived from the detailed exhibits and computations included in Sections I, III, and IV of this report.

The marked rise in the volume of business as indicated in the analysis of workload in Section I clearly shows that personnel and financial requirements for ASTIA will continue to rise at least until after the research and development activities of the Department of Defense begin to level off. In this connection, too, there is in progress a study of the potential "market" for ASTIA services which strongly indicates that a number of Defense agencies and their contractors are still unaware of the reports services available to them. ASTIA requirements will necessarily increase as knowledge of its existence spreads and more demands are made upon it for service.

TABLE I

SUMMARY OF TOTAL ASTIA ANNUAL REQUIREMENTS BASED ON FY 1952 WORKLOAD

	PLAN "A"		PLAN "B"		PLAN "C"	
	Personnel	\$ in Thousands	Personnel	\$ in Thousands	Personnel	\$ in Thousands
DSC Direct Personal Services	205	\$ 779.4	210	\$ 793.8	242	\$ 916.1
DSC Other Direct Charges	-	181.2	-	149.1	-	224.6
Subtotal - DSC Direct Charges	205	\$ 960.6	210	\$ 942.9	242	\$1,140.7
DSC Overhead and Administration	32	194.4	31	190.2	31	190.6
Total DSC Operations	237	\$1,155.0	241	\$1,133.1	273	\$1,331.3
ASTIA Headquarters Personnel	12	85.5	12	85.5	12	85.5
ASTIA Headquarters - Other Charges	-	25.6	-	25.6	-	25.6
Regional Offices Personnel	4	15.6	4	15.6	4	15.6
Regional Offices - Other Charges	-	8.1	-	8.1	-	8.1
ASTIA Research Contracts	-	69.0	-	69.0	-	69.0
Special Equipment Purchase	-	50.0	-	50.0	-	50.0
Library of Congress Contract	-	-	-	-	-	638.5
Total ASTIA Requirements	253	\$1,408.8	257	\$1,386.9	289	\$2,223.6

TABLE II

SUMMARY OF TOTAL ASTIA ANNUAL REQUIREMENTS BASED ON FY 1953 WORKLOAD*

	PLAN "B"		PLAN "C"	
	Personnel	\$ in Thousands	Personnel	\$ in Thousands
DSC Direct Personal Services	230	\$ 846.6	265	\$ 992.3
DSC Other Direct Charges	-	204.7	-	300.0
Subtotal - DSC Direct Charges	230	\$1,051.3	265	\$1,292.3
DSC Overhead and Administration	33	192.8	33	196.2
Total DSC Operation	263	\$1,244.1	298	\$1,488.5
ASTIA Headquarters Personnel	12	85.5	12	85.5
ASTIA Headquarters - Other Charges	-	25.6	-	25.6
Regional Offices Personnel	4	15.6	4	15.6
Regional Offices - Other Charges	-	8.1	-	8.1
ASTIA Research Contracts	-	69.0	-	69.0
Special Equipment Purchase	-	50.0	-	50.0
Library of Congress Contract	-	-	-	673.5
Total ASTIA Requirements	279	\$1,497.9	314	\$2,415.8

- * Estimates based on assumption that 1/2 increased workload over FY 1952 can be absorbed without increase in personnel.

SECTION I STUDY OF ASTIA WORKLOAD

This Section contains statistical information on workloads experienced by DSC and TID during the fiscal years 1950, 1951, and 1952, with projections to 1953 and 1954 for the purpose of forecasting personnel and financial requirements for these two years.

With increasing attention being brought to the available services of ASTIA through establishment of field offices, and with contractor and project officer participation in the ASTIA program becoming a matter of contract obligation, there is no reason to believe that the upward trend of reports received by ASTIA or requested will level off in the next two or three years.

In Section III of this report, the basis for determining financial requirements is to be found in the form of a detailed cost analysis predicated on FY 1952 workload. Direct unit costs are derived for each workload area which are applicable to the workload charts contained in this Section. Table III shows the relationship between the workload charts of Section I and unit costs developed in Section III. Every going organization has a certain ability to absorb more workload without increase in personnel. Therefore, a direct application of historical unit costs to predicted increased workload would result in higher-than-needed budget estimates. Determination of this "workload absorption ability factor" in advance is most difficult. It varies almost from month to month and is most accurately determined by hindsight rather than by foresight. Nevertheless, this factor is included in this report based largely on the optimistic feeling of the ASTIA management that improved efficiencies are possible within the next two years, and that research in documentation methods will return substantial dividends. Therefore, an assumption is made that one-half the increased workload for 1953 can be absorbed without an increase in personnel requirements.

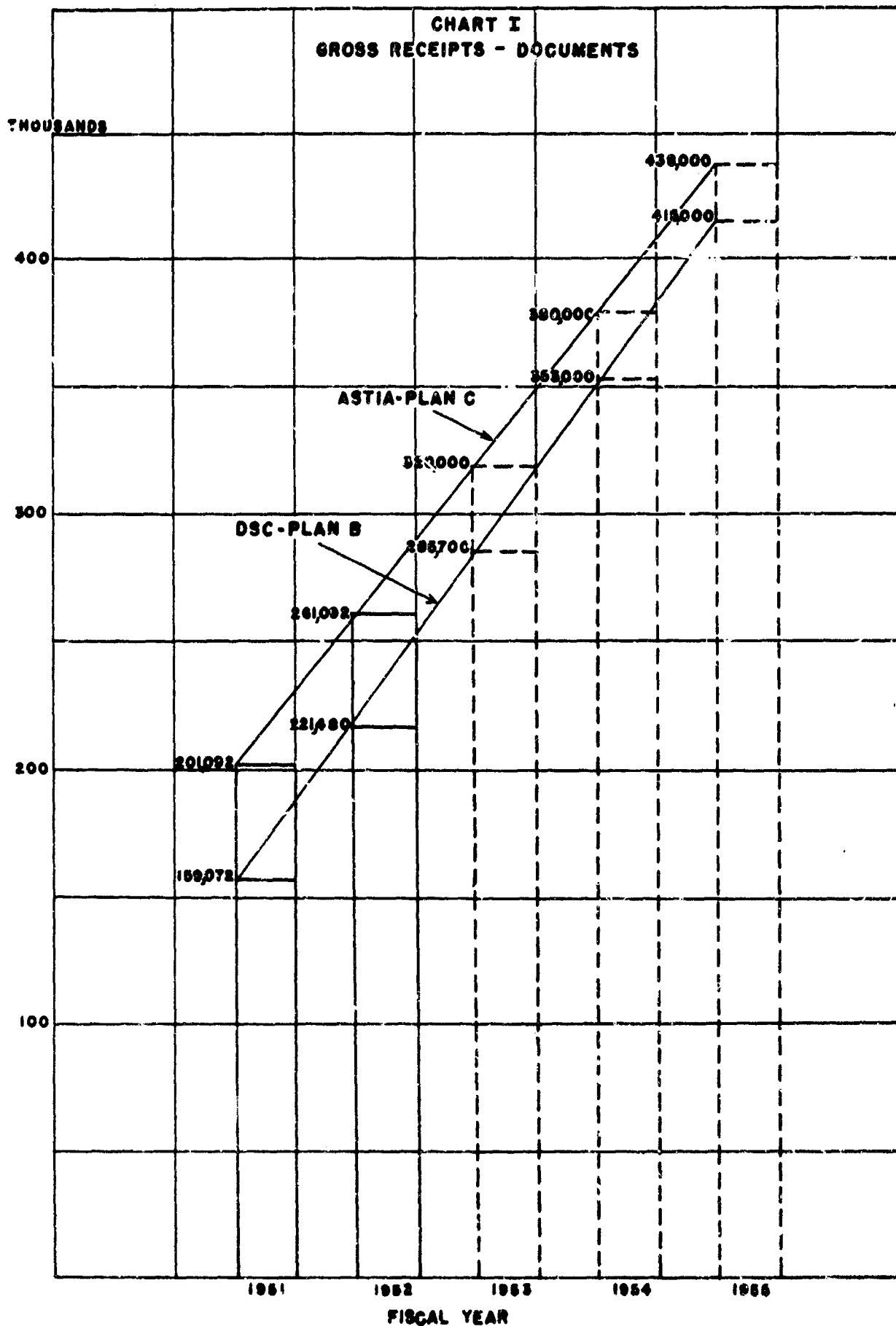
ASTIA workload may be roughly divided into two parts:

1. Workload associated with receipt, control, and storage of reports (input).
2. Workload associated with dissemination of information (output).

This division has proved to be significant in determining the combined workload of DSC and TID. Careful study shows that on the input side, approximately 50% of the report titles received and processed by TID had already been received and processed by DSC. Therefore, in this report the combined ASTIA input workload is considered to be that of DSC plus one-half that of TID. On the output side, no significant duplication is apparent. The "customers" of the two organizations are almost entirely different and the services rendered differ markedly. Therefore, output workload for ASTIA is considered to be the sum of that of the two organizations. These workload combinations are used in developing Plan "C."

TABLE III
CORRELATION OF UNIT COSTS AND UNITS PRODUCED
PLANS "A," "B," & "C"
BASED ON FY 1952 WORKLOAD

FUNCTIONAL AREAS	PLAN "A"		PLAN "B"		PLAN "C"	
	Unit Cost	Units Produced	Unit Cost	Units Produced	Unit Cost	Units Produced
Receiving	.088	221,480	.087	221,480	.088	221,092
Duplicate Check			.117	161,327	.119	185,826
Document Storage Maintenance			.224	161,327	.246	185,826
Descriptive Cataloging	1.807	50,925	1.250	50,925	1.251	59,552
Subject Cataloging	.786	34,195	.740	34,195		
Distribution Classification	.810	34,195	.846	34,195	.929	42,077
Abstracting	.975	14,468	1.060	14,468		
Microfilming			2.567	34,195	2.466	42,077
Catalog Card Preparation:						
AD	.010	4,638,720	.016	2,531,900	.006	4,559,999
AD No Abstracts	.014	2,369,520	.009	3,452,225	.004	5,520,001
PB	.023	1,500,000	.021	1,500,000	.023	1,500,000
Catalog Card Distribution	.005	4,178,829	.004	3,793,700	.004	6,614,758
TAB Preparation (Titles)			2.716	24,250	2.794	31,750
TAB Preparation (Copies)			.562	117,520	.581	152,776
TAB Distribution			.177	117,520	.146	152,776
Microcards (Titles)			4.408	12,000	4.702	15,500
Microcards (Copies)			.088	600,000	.094	775,000
Reclassification Bulletin Prep. (Titles)			.744	782	.543	1,179
Reclassification Bulletin Prep. (Copies)	.244	12,000	.046	12,000	.040	16,200
Reclassification Bulletin Distribution			.184	12,000	.081	16,200
Request Processing	5.856	24,448	4.089	24,448	4.033	38,588
Document Supply Storage	.939	37,581	.870	37,581	.759	52,581
Document Supply Reproduction	5.597	42,832	2.580	42,832	2.321	95,462
Document Supply Acquisition	1.742	9,313	2.628	4,656	2.933	3,104
Demand Bibliography	32.423	1,312	32.808	1,312	33.464	1,605
Local Library Service			1.765	12,042	2.256	12,042
British Accession List	.834	2,600				
Translation List	14.580	500				
Technical Data Digest	.738	59,425				



CHAPTER
DUPLICATE CHECK-DOCUMENT

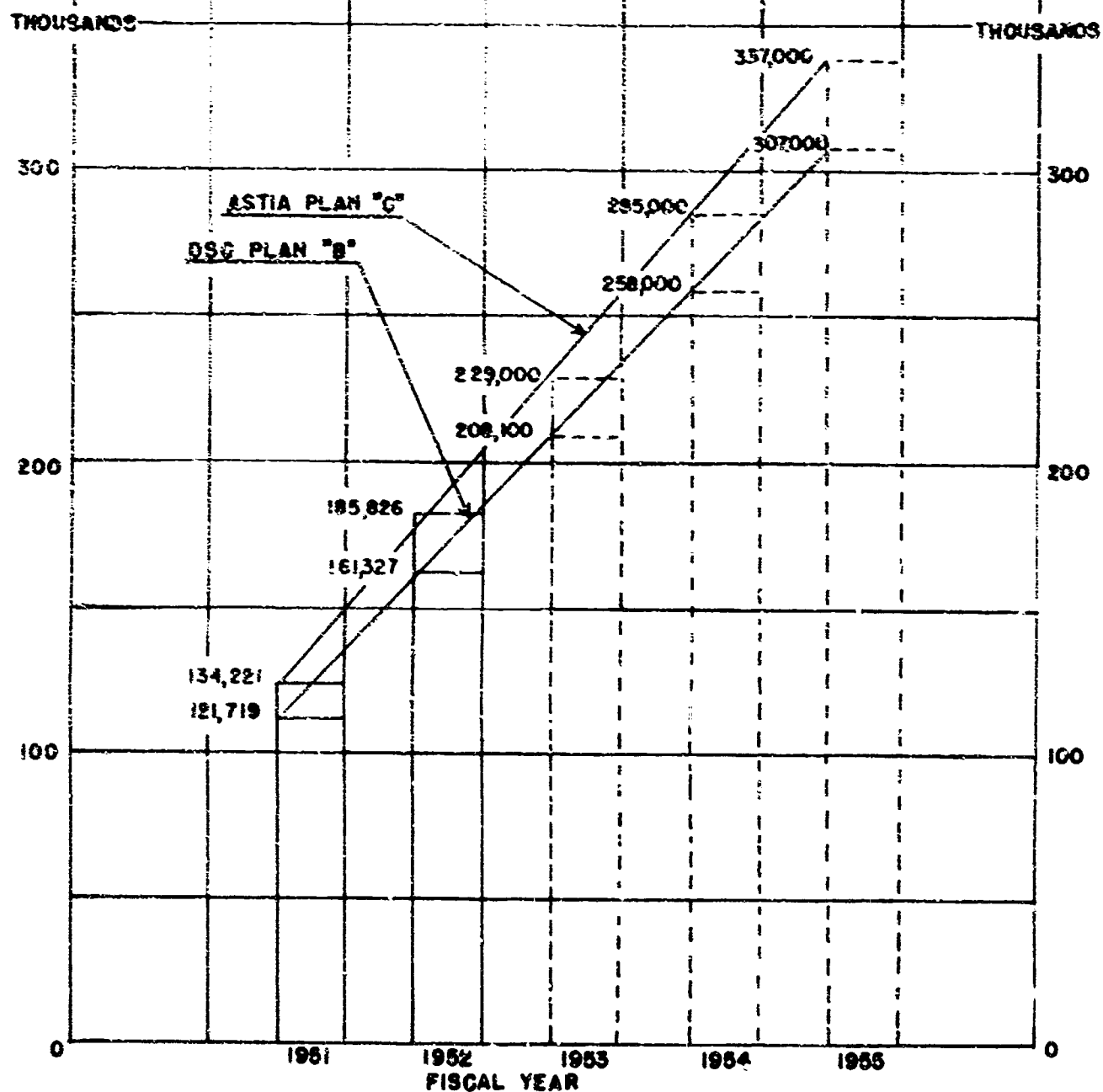
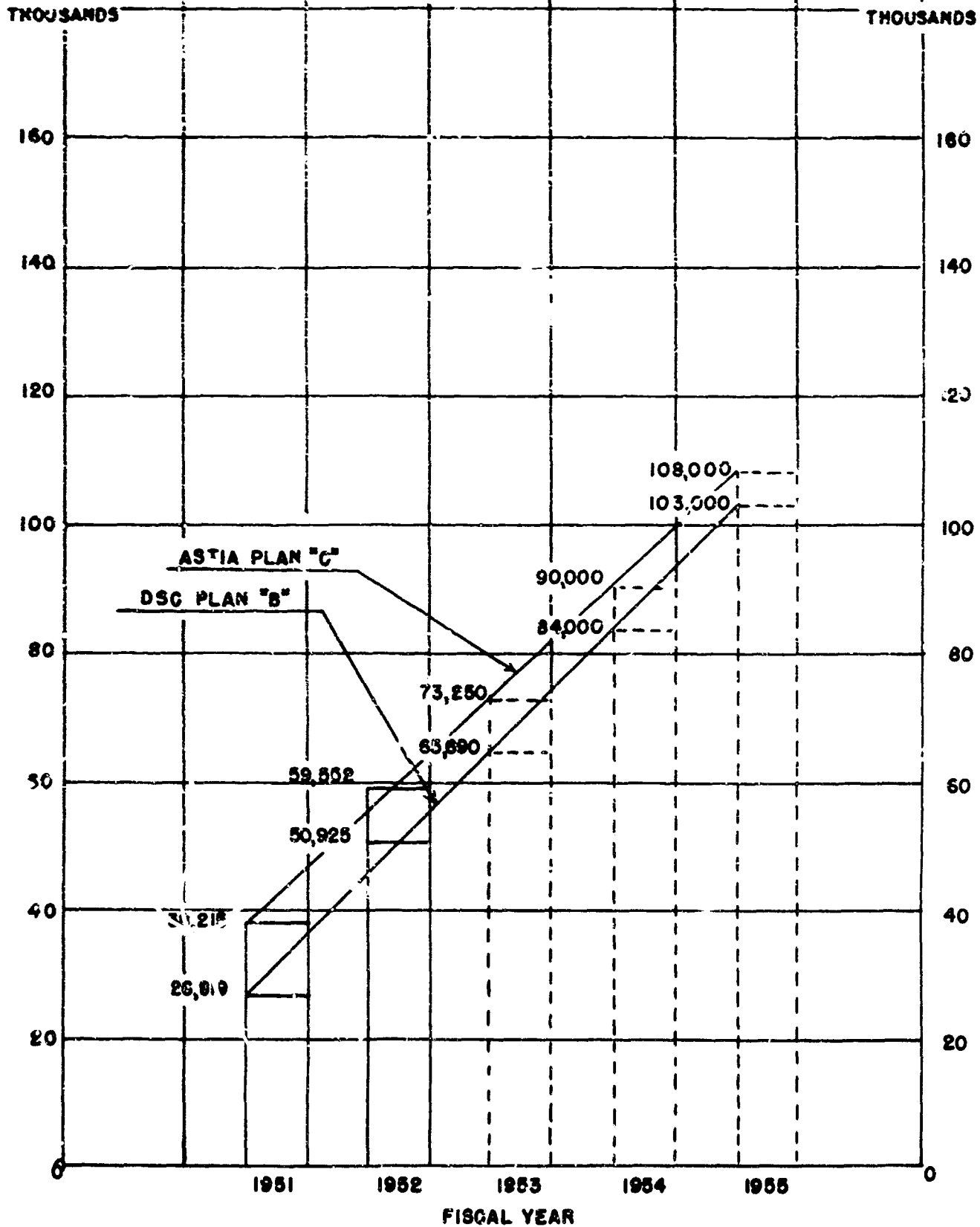


CHART II
DESCRIPTIVE CATALOGING-TITLES



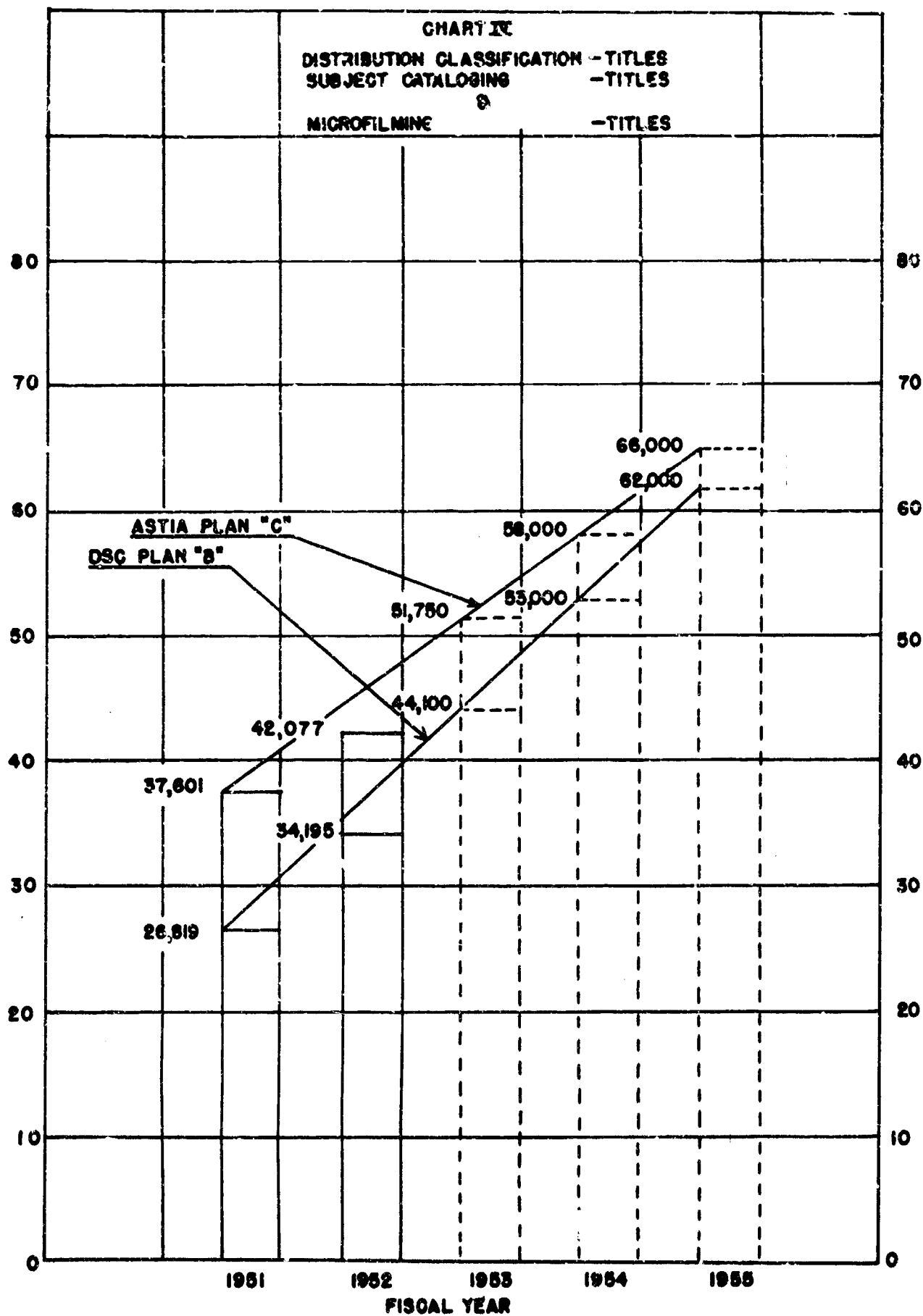


CHART V
ABSTRACTING - TITLES

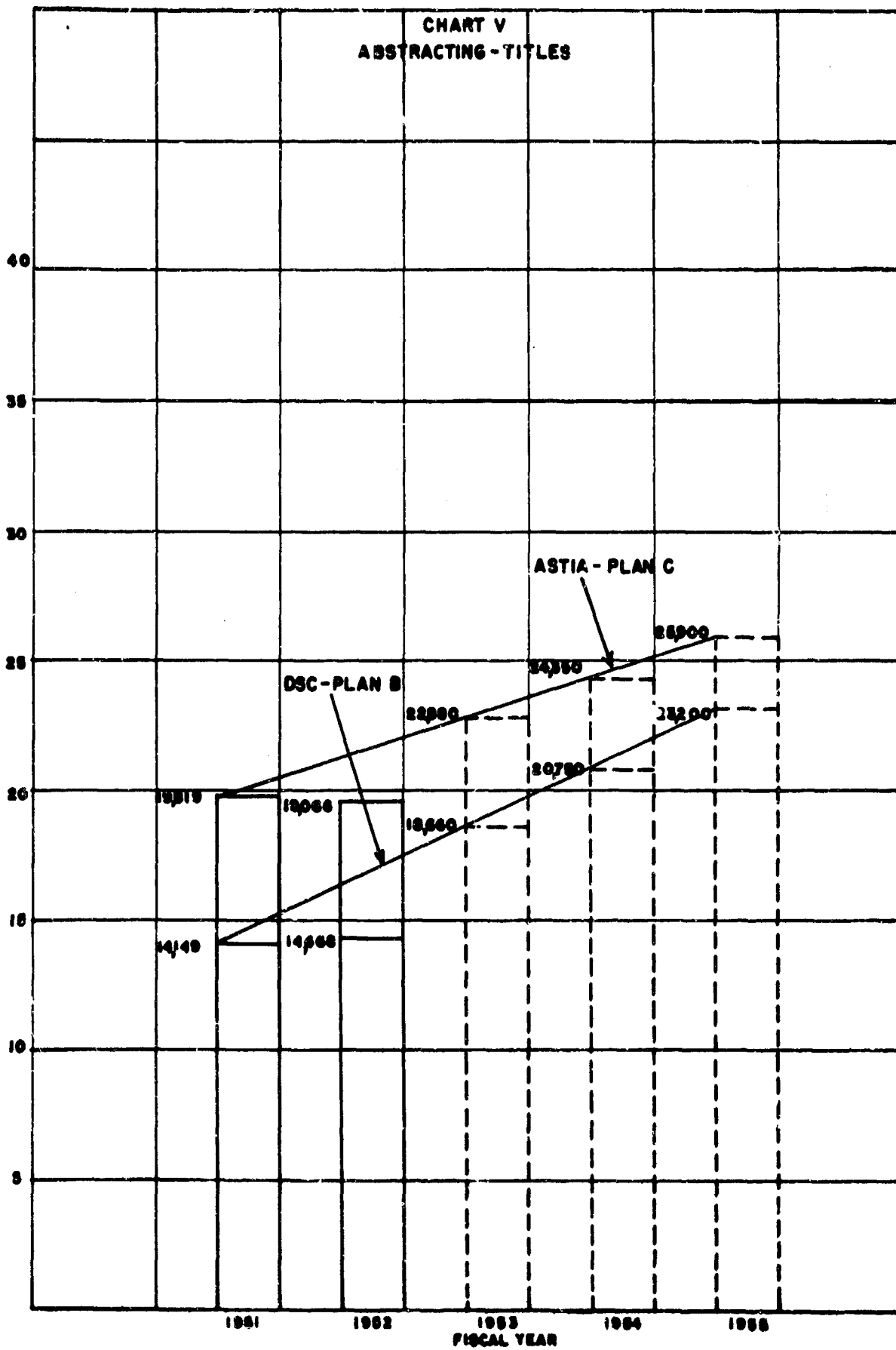


CHART VI
MICROCARDS-TITLES

THOUSANDS

THOUSANDS

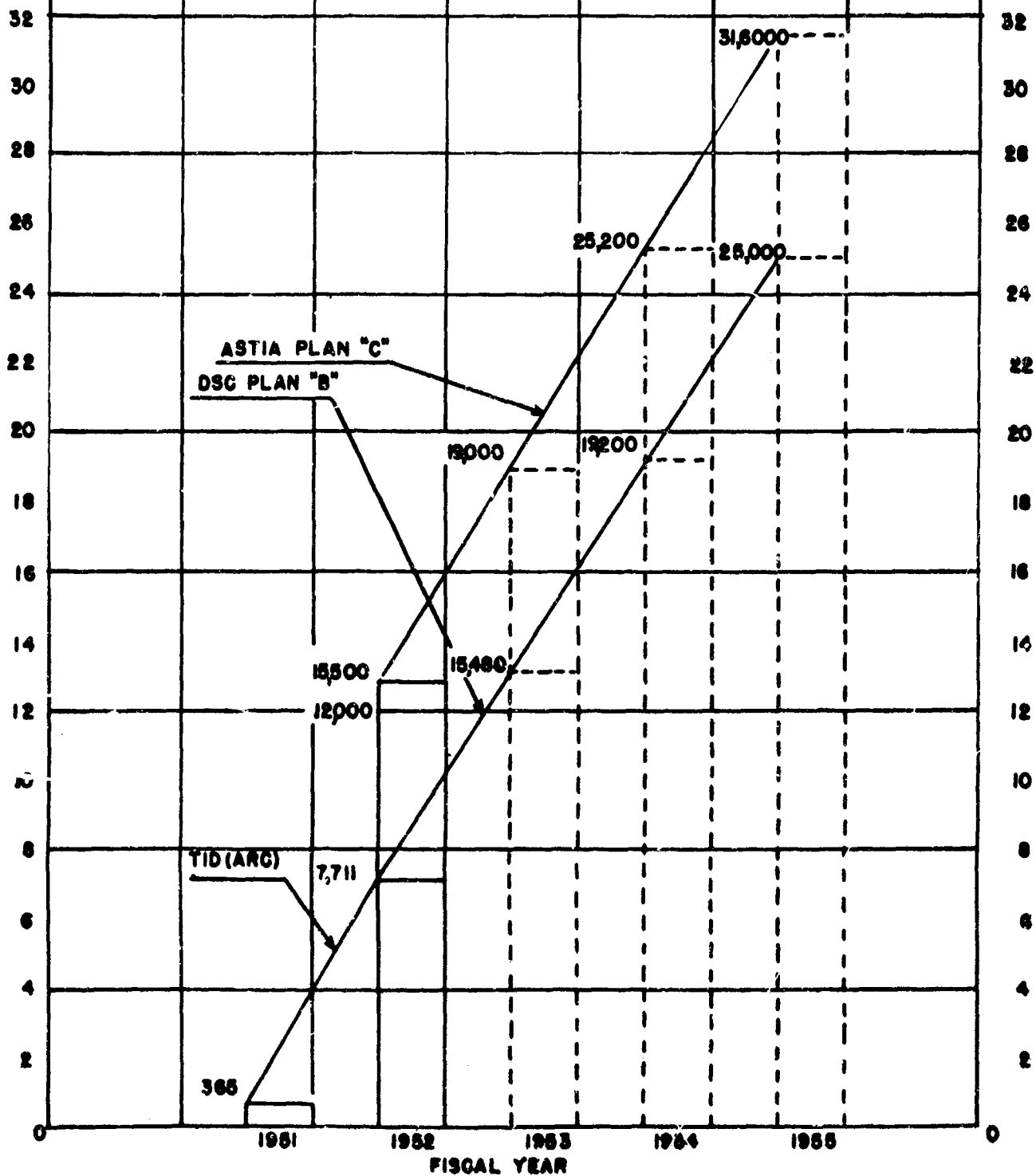


CHART VII
REQUEST PROCESSING-REQUESTS

THOUSANDS

THOUSANDS

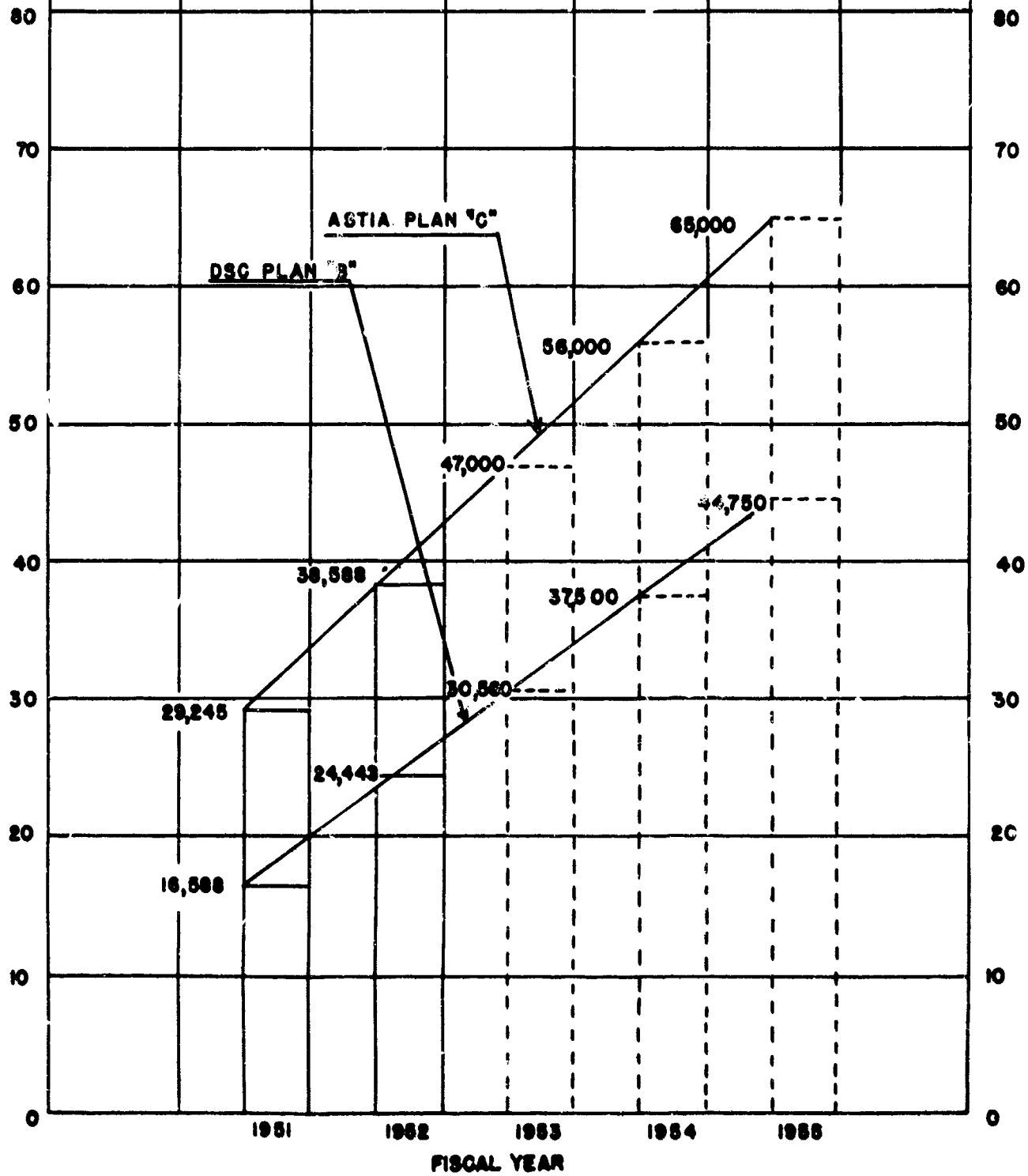


CHART VIII
DOCUMENT SUPPLY - DOCUMENTS

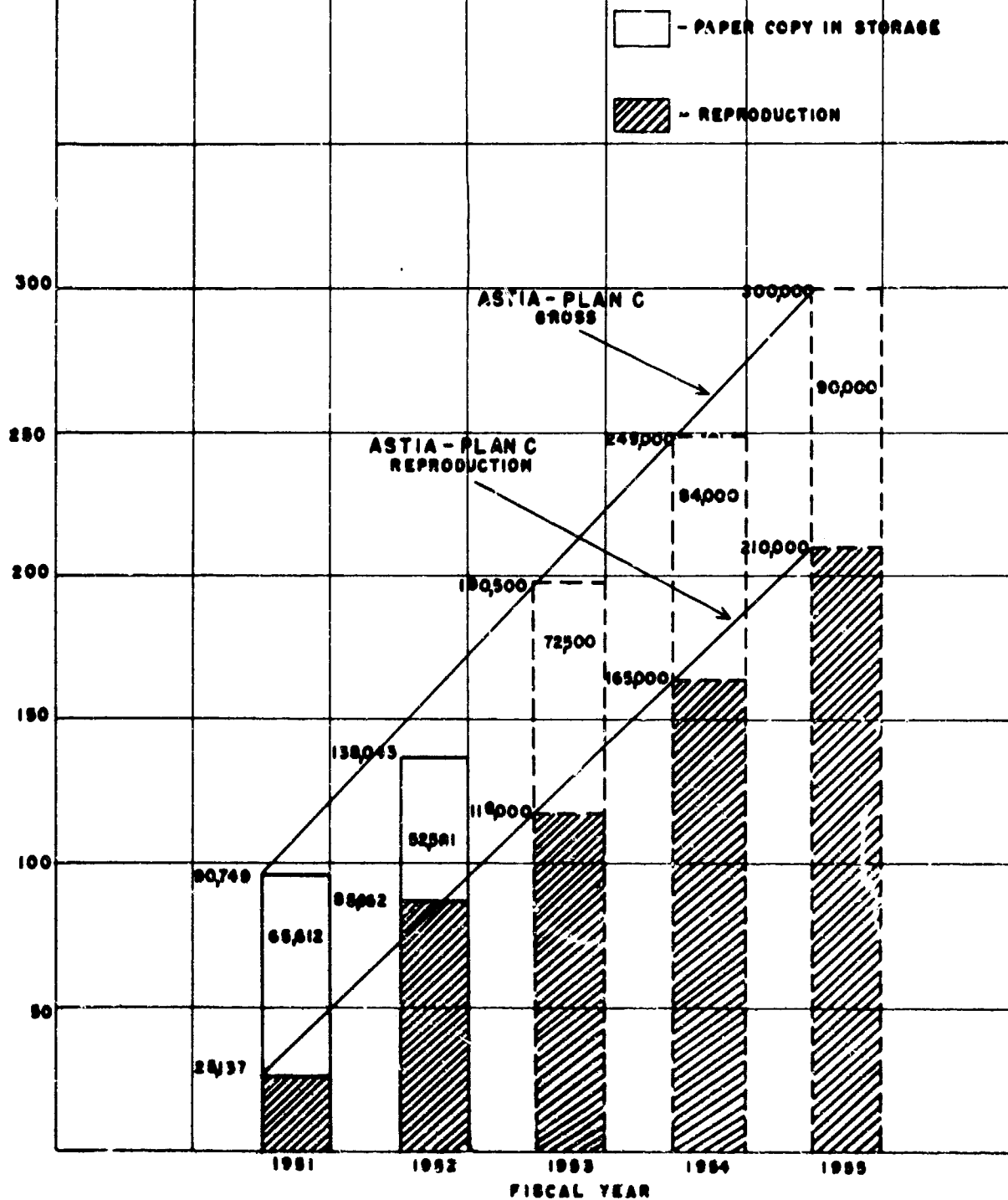


CHART VIII-A
DOCUMENT SUPPLY-DOCUMENTS

PAPER COPY IN STORAGE
REPRODUCTION

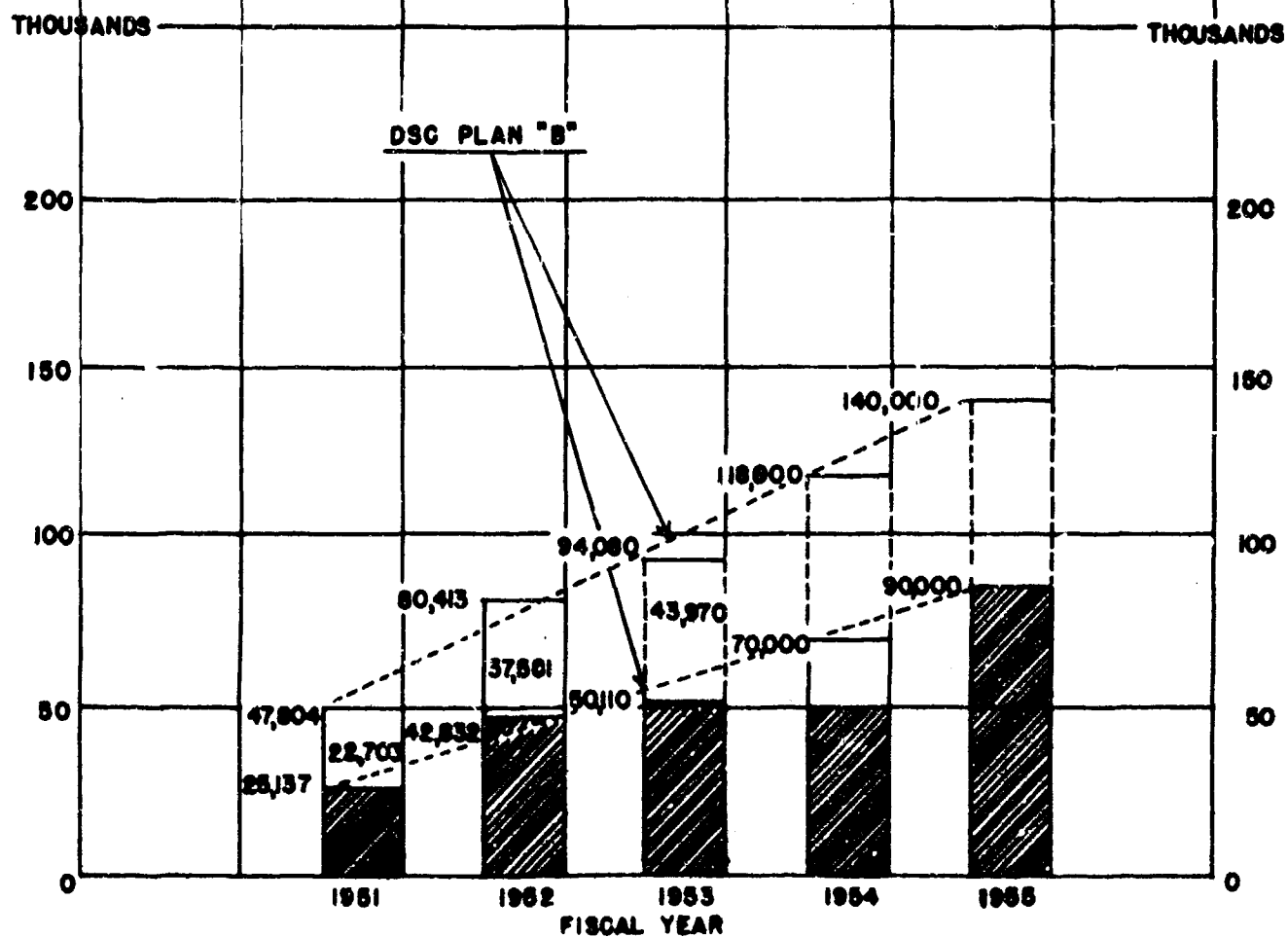


CHART IX
DEMAND BIBLIOGRAPHY

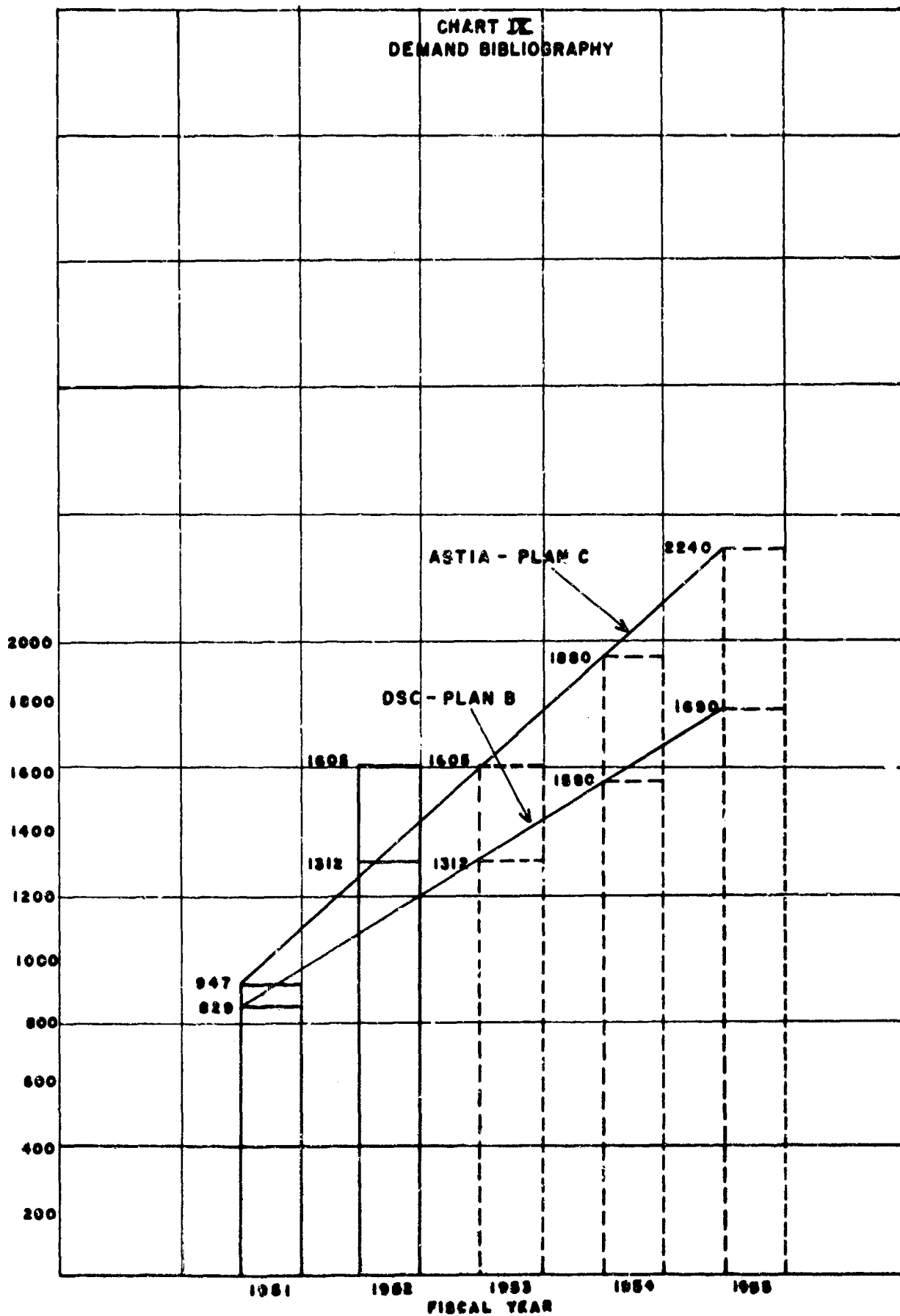
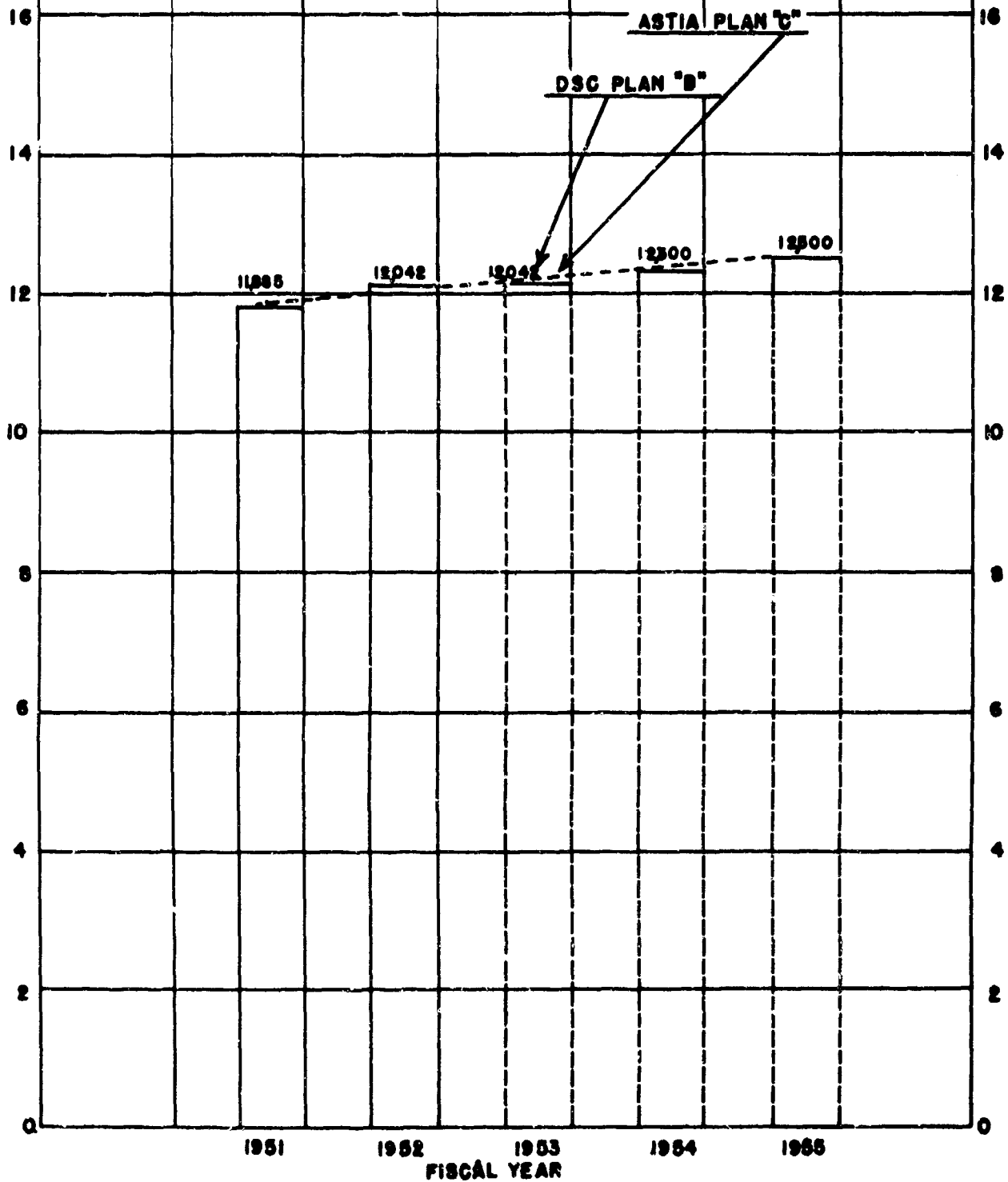


CHART 2
LOCAL LIBRARY SERVICE-
REFERENCE QUERIES

THOUSANDS

THOUSANDS



SECTION II
PERSONNEL REQUIREMENTS FOR DSC

An exhaustive study was made of manpower requirements for the Document Service Center. Details of this study are included in Section IV of this report. The method used was to define carefully each area of activity of the Center in terms of the end product. Based on 1952 statistics, the workload of each activity was determined; the productivity rates of personnel established; and the productive man-years required to accomplish this workload computed. The resultant man-years were adjusted according to the Air Force standards for leave, etc. The actual man-years required were used in computing personnel services financial requirements under Plans "A", "B", and "C".

Table IV shows a comparison of personnel requirements for each activity at DSC under Plans "A", "B", and "C". It is here that the effects of procedural changes in Plan "B" over Plan "A" can readily be seen, as well as the effects of the large amount of workload absorption by DSC as a result of integration with TID. Minute changes in man-year requirements result from spreading of supervisory personnel charges from one plan to the next. In the following paragraphs, significant changes in requirements are explained.

Receiving (of documents). Increase in Plan "C" over Plan "B" is caused by DSC becoming the receiving point for documents formerly sent to TID.

Descriptive Cataloging. Reduction of Plan "B" over Plan "A" is result of decision to reduce activity in foreign language documents. Increase in Plan "C" over Plan "B" caused by receipt of new titles formerly cataloged descriptively by TID.

Distribution Classifying. Increase in Plan "C" over Plan "B" due to handling of former TID documents.

Subject Cataloging. Elimination in Plan "C" due to transfer of function to TID.

Abstracting. Transfer of function to TID.

Catalog Card Preparation. Plan "B" is less than Plan "A" because of anticipated lower required number of cards with advent of Title Announcement Bulletin (TAB). Reduction in Plan "C" over Plan "B" because TID is to prepare reproducible copy for the catalog cards.

Catalog Card Distribution. Plan "B" less than Plan "A" due to TAB. Plan "C" greater than Plan "B" because of DSC's responsibility for service to former TID customers.

British Accession List. Eliminated in Plans "B" and "C". Information to be included in TAB.

Translation List. Eliminated in Plans "B" and "C".

Request Processing. Reduction in Plan "B" over Plan "A" due to streamlining of procedures. Increase in Plan "C" over Plan "B" due to transfer of entire TID load to DSC.

Document Storage. Under Plan "B", the library loan function to be transferred to this group. Personnel shift is reflected here over Plan "A". Increase in Plan "C" over Plan "B" is result of transfer of TID documents and all new receipts by DSC under integration.

Document Reproduction. Plan "B" less than Plan "A" due to decision to request return of facsimile copies. Estimated reduction in requirements based on 20% success in returns. May be modified with experience. Increase in Plan "C" over "B" based on absorption of TID customers.

Acquisitions. Reduction in requirements of Plan "B" over Plan "A" based on decision to acquire documents not in ASTIA collection only after customer has stated that service is essential. Plan "C" reduced over Plan "B" because of transfer of function to TID except for special acquisition from Wright-Patterson Air Force Base.

Demand Bibliography. Reduction in Plan "B" over Plan "A" due to streamlining of procedures. Increase in Plan "C" over Plan "B" due to extension of service to TID customers.

Local Library Service. Decrease in Plan "B" over Plan "A" due to shift of loan personnel to Document Storage group. Increase in Plan "C" over Plan "B" due to extension of visitor reference service to TID customers.

Technical Data Digest. Eliminated in Plans "B" and "C".

Microfilming. Increase in Plan "C" over Plan "B" due to receipt of documents formerly sent to TID.

TAB. An important new documents availability announcement service.

Microcards. Another important new DSC service borrowed from TID practice because of increasing customer demand. This service is expected to decrease requirements for facsimile copies of reports although effects cannot be predicted at this time.

TABLE IV
COMPARATIVE STATEMENT OF PERSONNEL REQUIREMENTS
PLANS "A," "B," & "C"
BASED ON FY 1952

	Plan "A"	Plan "B"	Difference "B" over "A"	Plan "C"	Difference "C" over "B"
Direct Man Years					
Receiving	5.33	5.36	+ .03	6.03	+ .67
Duplicate Check		4.98	+ 4.98	5.73	+ .75
Doc. Storage Maintenance		9.25	+ 9.25	11.27	+ 2.02
Descriptive Cataloging	25.32	16.75	- 6.57	19.26	+ 2.51
Distribution Classification	5.64	5.78	+ .14	7.47	+ 1.69
Subject Cataloging	5.15	5.06	- .09		- 5.06
Abstracting	3.05	3.57	+ .52		- 3.57
Microfilming	22.99*	22.99		27.50	+ 4.51
Catalog Card Preparation	26.53	24.65	- 1.88	18.84	- 5.81
Catalog Card Distribution	8.07	4.05	- 2.02	5.73	+ 1.68
British Accession List	.61		- .61		
Reclassification Bulletin Preparation	.17	.15	- .02	.17	+ .02
Reclassification Bulletin Distribution	.63	.63		.38	- .25
Translation List	1.64		- 1.64		
TAB Preparation		12.73	+12.73	16.94	+ 4.21
TAB Distribution		4.22	+ 4.22	4.59	+ .37
Microcards		10.63	+10.63	13.26	+ 2.58
Request Processing	33.91	24.64	- 9.27	38.50	+13.86
Doc. Storage Supply	9.59	8.75	- .84	10.04	+ 1.29
Doc. Reproduction	12.93*	11.97	- .96	19.57	+ 7.60
Doc. Acquisition	4.56	2.97	- 1.59	2.26	- .71
Demand Bibliography	16.77	11.19	+ .42	12.91	+ 1.72
Local Library	13.53	6.00	- 7.53	7.19	+ 1.19
Technical Data Digest	5.00		- 5.00		
Total Direct Man Years	191.42	196.37		227.64	
Indirect Man Years	5.87	4.65	- 1.32	4.75	+ .10
Administrative Personnel	26	26		26	
Total Man Years	223.39	227.02	+ 3.63	268.32	+31.37

* In Exhibit "A," Plan "A" Microfilming 22.99 man years was charged against Document Reproduction for a total of 35.92 man years. It is broken down on this table to permit comparison of requirements.

SECTION III FINANCIAL REQUIREMENTS

In this Section, financial requirements for operation of the Document Service Center are presented in the form of a detailed cost analysis based on 1952 workload. For each of Plans "A," "B," and "C" there is a principal exhibit (Exhibit "A") showing financial and personnel requirements for each end item as contributed by the main organizational divisions of DSC. Added to this are other costs such as supplies and maintenance. Direct costs are derived first, to which are added administrative and overhead costs. Unit costs are based on direct costs for purposes of application to workload trends.

Supporting Exhibit "A" are a number of schedules showing details of personnel requirements and spread of allowable costs to the various end items.

The following are pertinent explanatory notes in connection with Exhibit "A" and supporting schedules:

- a. Basic man-days were determined by workload for each operating section and were converted to man-years on the basis of 216 work days (days on the job) per man-year. (See Section IV.)
- b. Dollar requirements (Schedule I) are based on the third salary step of each grade for all employees.
- c. Administrative costs include salaries of all personnel other than those directly chargeable to specific end items. They also include all travel and the cost of 15 guards.
- d. Basic man-year requirements are rounded out to full positions required with corresponding dollar requirements added to the total.
- e. Overtime costs are estimated at one percent of total salaries.
- f. Supply requirements for all these plans are worked out in detail in Schedule III in Plan "C." Supplies for Plan "A" are computed at 68% of Plan "C," and for Plan "B," 63% of Plan "C."
- g. Machine maintenance and rental are service contract obligations.

Document Service Center
Summary of Costs and Man Years, Plan "A"
In Whole Dollars and Man Years

Exhibit A

	Subject Analysis						Catalog Card Service	
	Total	Receiving	Descript. Cataloging	Subject Cataloging	Distribution Classific.	Abstracting	Catalog Cards	Card Distribu.
<u>Direct Operating Costs:</u>								
<u>Personal Services</u>								
Document Processing	158,857	18,650	87,956	25,714	26,537			
Man Years	39.44	5.33	23.32	5.64	5.15			
Request Services	184,125							
Man Years	47.01							
Library	78,900							
Man Years	23.00							
Editorial & Copy Preparation	89,025					13,500	46,023	1,683
Man Years	24.17					3.05	13.94	.51
Reproduction	175,533						46,883	819
Man Years	48.96						12.59	.22
Shipping	29,551							17,823
Man Years	8.21							5.34
Total Personal Services	716,291	18,650	87,956	25,714	26,537	13,500	92,906	20,325
Total Direct Man Years	191.42	5.33	23.32	5.64	5.15	3.05	26.53	6.07
Overtime, Lump Sum Leave, FICA	16,753	438	2,057	601	622	316	2,161	494
Operating Supplies	137,734	300	1,419	415	428	217	17,706	452
Maintenance & Machine Rental	4,748	132	579	140	128	76	659	151
Printing	22,000							
Total Direct Costs	897,526	19,520	92,011	26,870	27,715	14,109	113,432	21,422
<u>Administrative & Overhead Costs:</u>								
Personal Services	138,096	3,590	16,958	4,958	5,110	2,596	17,911	3,922
Man Years	31.96	.83	3.92	1.15	1.20	.80	4.15	.91
Overtime, Lump Sum Leave, FICA	3,190	83	392	115	1.8	.80	416	90
Travel & Guard Service	53,100	1,386	6,515	1,907	1,970	1,004	6,918	1,502
Total Administrative & Overhead Costs	194,386	5,059	23,865	6,980	7,198	3,660	25,245	5,514
Total Costs	1,091,912	24,579	115,876	33,850	34,913	17,769	138,677	26,936
Total Man Years	223.38	6.16	27.24	6.79	6.35	3.65	30.68	6.98
Positions Required	237	7	29	8	7	4	32	7
Additional Dollar Requirements	63,113	3,350	7,486	6,032	3,572	1,702	5,963	75
Total Dollar Requirements	1,155,055	27,929	123,362	39,882	38,485	19,471	144,640	27,011
<u>Unit Costs, Direct Costs Only:</u>								
Units Produced		221,480	50,925	34,195	34,195	14,468	2,508,210	4,178,629
		Documents	Titles	Titles	Titles	Titles	Cards	Cards
Unit Costs		.088	1.807	.786	.210	.975		.005
						7,008,240	4,658,720	ATI at .01
							2,369,520	UTI at .01
							1,500,000	IB at .02

eng	Catalog Card Service		British Acc. List	Reclass. Bulletin	Transla. List	Request Process.	Document Supply Service			Demand Bib.	Local Lib. Service	Tech. Data Digest
	Catalog Cards	Card Distribu.					Storage	Reproduction	Acquisition			
						108,449 25.7 26,593 7.94	29,303 8.35		15,470 4.56	31,003 8.13 4,863 1.43	47,133 13.53	20,907 5.00
	46,023 13,94 46,883 12.59	1,683 .51 819 17,823 3.54	1,404 .41	202 .06 412 .11 2,136 .63	5,306 1.20 1,464 .37 232 .07			121,290 34.51 4,710 1.41		4,665 1.16 156 .05		
	92,906 26.53 2,161 17,706 659	20,325 6.07 494 452 151	2,046 .61 48 34 15	2,750 .80 87 63 27	7,002 1.64 141 113 34	135,242 33.91 3,166 3,910 840	34,466 9.59 797 785 243	126,000 35.92 2,938 109,889 888	15,470 4.56 385 250 121	40,687 10.77 933 656 263	47,133 13.53 1,079 760 328	20,907 5.00 490 337 124 22,000 43,858
	113,432	21,422	2,143	2,927	7,280	143,158	35,291	239,715	16,226	42,539	49,300	
	17,911 4.15 416 6,018 25,245	3,322 .91 90 1,502 5,514	400 .09 9 134 563	525 .12 16 276 817	1,353 .31 27 146 1,826	26,073 6.03 603 10,036 36,712	6,449 1.49 152 2,527 9,128	24,305 5.62 560 9,310 34,175	2,983 .69 75 1,221 4,277	7,844 1.82 178 2,957 10,979	9,087 2.10 205 3,420 12,712	4,032 .93 93 1,551 5,876
	155,677 30.68	26,936 6.98	2,706 .70	3,744 .92	9,116 1.95	179,870 39.94	44,419 11.08	273,890 41.54	20,503 5.25	53,518 12.59	62,012 15.63	49,534 5.93
	32 5,963 114,640	7 75 27,011	1 1,150 3,356	1 325 4,069	2 234 9,350	42 9,263 189,133	12 3,687 48,106	43 9,624 283,514	6 2,924 23,427	13 1,739 55,257	17 5,432 67,444	6 585 50,119
	8,508,240 Cards	4,176,629 Cards	2,600 Copies	12,000 Copies	500 Copies	24,448 Requests	37,581 Documents	42,832 Documents	9,313 Documents	1,312 Bibliographies	-	59,425* Copies
		.003	.024	.244	14.580	5.856	.939	5.597	1,742	32.423		.738
2,240	4,638,720	AT at .010										
	2,369,520	AT at .014										
	1,500,000	12 at .023										

*Excludes 2 indexes totaling 9,200 copies.

Personal Services Requirements by Operating Functions

Schedule I

Plan "A"

<u>Function</u>	<u>Direct</u>		<u>Indirect</u>		<u>Total*</u>	
	<u>M.Y.</u>	<u>Cost</u>	<u>M.Y.</u>	<u>Cost</u>	<u>M.Y.</u>	<u>Cost</u>
A. Document Processing						
1. Document Receiving	4.97	16,735	.36	1,915	5.33	18,650
2. Dup. Check & Descrip. Cat.	17.67	61,998	1.20	6,886	18.86	68,884
4. Foreign Language Abstract	1.62	7,852	.11	590	1.73	8,442
5. Distribution Classification	10.06	48,357	.73	3,894	10.79	52,251
6. Security Check	2.45	9,663	.18	967	2.63	10,630
C. Request Services						
1. Document Request	21.16	88,490	1.99	10,324	23.15	98,814
2. Distribution Records	2.58	8,590	.24	1,245	2.82	9,835
3. Document Supply	7.64	25,617	.71	3,686	8.35	29,303
4. Demand Bibliographies	7.57	28,011	.56	2,992	8.13	31,003
5. Document Acquisition	4.17	13,454	.39	2,016	4.56	15,470
D. Library						
1. Catalog Card File Maintenance	9.20	29,989	.67	3,578	9.87	33,567
2. Archives	7.78	25,290	.56	2,992	8.34	28,182
3. Reference Service	4.47	15,441	.32	1,710	4.79	17,151
E. Editorial & Copy Preparation						
1. Editorial	5.54	25,274	.51	2,815	6.05	28,089
2. Typing	12.29	38,961	1.10	5,968	13.39	44,929
3. Proofreading	2.07	7,002	.18	985	2.25	7,987
4. Illustration & Layout	3.83	12,165	.34	1,878	4.17	14,043
F. Reproduction						
1. Photocopy	.82	3,437	.15	688	.97	4,125
2. Platemaking	3.15	12,108	.28	1,358	3.43	13,466
3. Photoduplicating	1.36	4,136	.19	893	1.55	6,029
4. Offset Duplicating	1.78	6,688	.16	772	1.94	7,460
5. Bindery (Collating)	1.03	3,525	.09	434	1.12	3,959
6. Bindery (Cutting)	4.00	14,201	.36	1,749	4.36	15,950
7. Bindery (Drilling)	.15	531	.02	93	.17	629
8. Bindery (Banding)	.52	1,846	.04	196	.56	2,042
9. Bindery (Stitching)	.43	1,523	.03	142	.46	1,665
10. Stock Handling	1.08	3,688	.10	488	1.18	4,176
11. Control	5.04	16,846	.46	2,237	5.50	19,083
12. Microfilming	10.23	33,291	2.01	9,287	12.24	42,578
13. Film Processing	2.98	9,734	.59	2,727	3.57	12,461
14. Microfilm Archives	8.12	25,848	1.60	7,407	9.72	33,255
15. Process Airgraph	3.23	11,533	.63	3,913	3.86	15,446
16. Photo Prints	.81	2,710	.16	741	.97	3,451
G. Shipping						
1. Addressograph	4.56	14,363	.41	2,108	4.97	16,471
2. ATI Cards	2.17	6,937	.20	1,041	2.37	7,978
3. Request Documents	1.97	6,286	.18	930	2.15	7,216
5. Reclassification Bulletin	.55	1,754	.06	316	.61	2,070
6. Demand Bibliography	.05	156	-	-	.05	156
7. ASTIA Publications	.06	187	-	-	.06	187
8. Form Letters	.23	931	.04	204	.27	1,135
Total Direct Man Years & Salaries	179.19	645,048	18.60	92,170	197.79	737,218
Less Preparation of Manuals and Brochures	4.62	16,195	1.35	4,732	5.97	20,927
	174.57	\$628,853	16.65	\$87,438	191.42	\$718,291

*Note: Total salaries in each work function reflect the third step of each grade. The total salaries divided by the total number of employees equals average salary used in determining total costs for each function.

PLAN "A"

SCHEDULE II

Allocable Costs Other Than Direct Personal Services

Direct Personal Services Overtime, Lump Sum Leave, FICA			\$ 16
Administrative Salaries	Man Years	Salaries	
Administrative Personnel	26	\$117,169 (4)	
Administrative Support	5.97	20,927 (5)	
	<u>31.97</u>	<u>\$138,096</u>	
Administrative Overtime, Lump Sum Leave, FICA		3,190 (6)(7)(8)	
Total Administrative Personnel Costs			14
Guard Service			43
Temporary Duty Travel			9
Machine Maintenance & Rental			1
Total Except Supplies			<u>215</u>
Supplies			157
Total Allocable Costs			<u>\$352</u>

- (1) Overtime represents 1% of Direct Personal Services Costs
- (2) Terminal Leave represents 86% of total estimated payments
- (3) Social Security Taxes represents 86% of total estimated payments
- (4) Based on third step each employee
- (5) Includes distribution of 5.97 man years for manuals and brochures
- (6) Administrative Overtime represents 1% of salaries
- (7) Terminal Leave represents 14% of total estimated payments
- (8) Social Security Taxes represents 14% of total estimated payments
- (9) Fifteen guards at average salary of \$2900
- (10) Estimated
- (11) Distribution of Supplies shown on Schedule III

Distribution of Allocable Costs, Except Supplies, to Primary Activities
 (Based on Direct Personal Services Costs)

Activity	Direct Salaries	Percent	Direct Over-time, Terminal Leave, FICA	Administrative Salaries	Admin. Over-time, Terminal Leave, FICA
Receiving	18,650	2.60	437	3,590	83
Descriptive Cataloging	87,956	12.28	2,059	16,958	392
Subject Cataloging	25,714	3.59	601	4,958	115
Distribution Classification	26,537	3.70	622	5,110	118
Abstracting	13,500	1.88	317	2,596	60
Catalog Card Preparation	92,906	12.97	2,178	17,911	416
Catalog Card Distribution	20,325	2.84	476	3,922	90
British Accession List	2,046	.29	49	400	9
Reclassification Bulletin	2,750	.38	87	525	16
Translation List	7,002	.98	141	1,353	27
Request Processing	135,242	18.88	3,166	26,073	603
Storage	33,466	4.67	797	6,449	152
Reproduction	126,000	17.60	2,937	24,305	560
Acquisition	15,470	2.16	385	2,983	73
Demand Bibliography	40,687	5.68	933	7,844	178
Local Library	47,133	6.58	1,079	9,087	205
Technical Data Digest	20,907	2.92	489	4,032	93
	<u>\$716,291</u>	<u>100.00</u>	<u>\$16,753</u>	<u>\$138,096</u>	<u>\$3,190</u>

ces

ave, FICA			\$ 16,753 (1)(2)(3)
Man Years	Salaries		
26	\$117,169 (4)		
5.97	20,927 (5)		
<u>31.97</u>	<u>\$138,096</u>		
	3,190 (6)(7)(8)		

141,286
43,500 (9)
9,600 (10)
4,748 (10)
<u>215,887</u>
137,734 (11)
<u>\$353,621</u>

Services Costs
Estimated payments
Total estimated payments
for manuals and brochures
Salaries
Estimated payments
Total estimated payments

e III

es, to Primary Activities
Costs)

Percent	Direct Over- time, Terminal Leave, FICA	Administrative Salaries	Admin. Over- time, Terminal Leave, FICA	Travel & Guard Service	Machine Maintenance & Rental	Administrative Man Years
2.60	437	3,590	83	1,381	132	.83
12.28	2,059	16,958	392	6,521	579	3.92
3.59	601	4,958	115	1,906	140	1.15
3.70	622	5,110	118	1,965	128	1.20
1.88	317	2,596	60	998	76	.60
12.97	2,178	17,911	416	6,887	659	4.15
2.84	476	3,922	90	1,508	151	.91
.29	49	400	9	154	15	.09
.38	87	525	16	202	27	.12
.98	141	1,353	27	520	34	.31
18.88	3,166	26,073	603	10,025	840	6.04
4.67	797	6,449	152	2,480	243	1.49
17.60	2,937	24,305	560	9,345	888	5.62
2.16	385	2,983	73	1,147	121	.69
5.68	933	7,844	178	3,016	263	1.82
6.58	1,079	9,087	205	3,494	328	2.10
2.92	489	4,032	93	1,551	124	.93
100.00	\$16,753	\$138,096	\$3,190	\$53,100	\$4,748	31.97

OPERATING SUPPLIES

SCHEDULE III

PLAN "C"

Description	Justification
Photo Offset Plates	(a) Documents to catalog= 170 per day x 250 days = 42,000 per year, + 6 per layout (b) 76 ATI documents per day requiring extra plates (c) TAB - 72 pages per week x 52 weeks (d) Forms to print, 55 x 6 printings (Avg 3 pages) (e) Reclassification Bulletin, 10 pages, Monthly (f) Prefab Bibliographies 11,265 subject headings x 2 reproductions - 6 per layout (g) Listing scientific & technical reports; ASTIA Products & Services, Miscellaneous
Paper, Dennison, Gum	For Franked Stickers
Paper, Index, Bristol	For 11,580,000 cards
Paper, Offset	(a) TAB, 3744 pages x 4,000 runs (b) Misc Forms 22-1/2" x 35" sheets (c) Scientific & Technical reports (d) Misc. Reproduction
Paper, Masking	Form 1
Paper, Duplicating, Copy	Misc. reproduction
Xerox Plates	Repair parts for Multilith, special ink, cleaner sheets, cleaning solution, etc.
Miscellaneous Reproduction Supplies	
Miscellaneous Addressograph parts	
Miscellaneous flexowriter supplies	
Corrugated cardboard boxes	1000 each of 3 sizes
Binding Wire	
Penalty Envelopes	4 sizes
Non-penalty envelopes	3 sizes
Master Mailer Cartons	2 sizes
Paper, Photographic	Normal workload is based on 278 requests per day, avg. 50 pages per documents, o total of 13,900 pages required per day, or 18 rolls Based on 278 requests per day. Daily use 4 packages Based on 278 requests per day. Daily use 3-1/3 packages Based on 278 requests per day. Daily use 3-1/4 packages Unit cost same as airgraph chemicals. Based on 62 documents processed daily, totaling 3600 cards, or 5 rolls of paper Based on 62 documents processed daily requiring 3 rolls daily For reproducing 20 ozalid requests daily To remove curl from photographic paper For enlarger, paper chopper, etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc.
Chemicals, Developer, (Airgraph)	
Chemicals, Stop	
Chemicals, Fix	
Chemicals for Processing Microcard	
Paper, Microcard	
Microfilm	
Ozalid paper and film	
Solution, print straightener	
Miscellaneous spare parts	
Drawing Paper & Illustration Board	
Paints, Oils	
Drawing Instruments	
Brushes and Pencils	
Miscellaneous ink, pens, spray, etc.	

Total Cost, Operating Supplies

Note: Distribution of costs other than those directly chargeable are distributed on basis of known usage.

	Quantity per year	Unit Cost	Total Cost		PLAN "A"		PLAN "B"	
					Percent of Plan C	Cost	Percent of Plan C	Cost
bar, + 6 per layout	7,000	\$.22 ea.	\$ 1,540	1	82	\$ 1263	82	\$ 1263
	3,166	.22 ea.	696	2	82	571	82	571
	3,744	.22 ea.	824	3	-	-	77	634
	990	.22 ea.	217	4	100	217	100	217
	120	.22 ea.	26	5	74	19	74	19
ions - 6 per layout	3,755	.22 ea.	826	6	100	826	100	826
ervices, Miscellaneous	5,700	.22 ea.	1,254	7	100	1254	100	1254
			250	8	100	250	100	250
	231,584	.0292 ea.	6,753	9	74	4997	74	4997
	1,872,000	.0136 ea.	25,459	10	-	-	77	19603
	400,000	.0136 ea.	5,440	11	100	5440	100	5440
	9,000	.0136 ea.	122	12	100	122	100	122
	5,000	.0136 ea.	68	13	100	68	100	68
	12,000	.0383 ea.	460	14	85	391	85	391
	450,000	2.02 per M	909	15	77	700	77	700
	20	17.00 ea.	340	16	100	340	100	340
leaning solution, etc.	-	-	3,290	17	100	3290	100	3290
	-	-	100	18	100	100	100	100
	-	-	371	19	100	371	100	371
	3,000	.0166 ea.	50	20	100	50	100	50
	20	1.00 ea.	20	21	100	20	100	20
	700,000	.0092 ea.	6,382	22	74	4723	74	4723
	175,000	.0119 ea.	2,075	23	74	1536	74	1536
	7,000	.0429 ea.	300	24	100	300	100	300
pages per documents, or a								
	4,500	25.00 ea.	112,500	25	52	95625	52	58500
	1,000	2.75 ea.	2,750	26	52	2750	52	1430
	833	5.20 ea.	4,330	27	52	4330	52	2252
	813	4.80 ea.	3,900	28	52	3900	52	2028
	-	-	450	29	-	-	77	347
or 5 rolls of paper	1,250	12.04 ea.	15,050	30	-	-	77	11589
ly	750	1.78 ea.	1,335	31	77	1028	77	1028
			500	32	100	500	100	500
			500	33	100	500	100	500
			700	34	100	700	100	700
			388	35	100	388	100	383
			224	36	100	224	100	224
			200	37	100	200	100	200
			276	38	100	276	100	276
			465	39	100	465	100	465
			\$201,340			\$137734		\$127512

Distribution of Costs of Operating Supplies

Plan "A"

Item No.	Total	Receiving	Descrip. Catalog.	Subject Analysis		Abstract- ing	Catalog Card Service		British Acc. List	Reclass. Bulletin	Translation List	Request Process.	Document	
				Subject Catalog.	Distrib. Classif.		Card Prop.	Card Distri.					Storage	Repro
1.	1,263						1,263							
2.	571						571							
3.														
4.	217	6	27	8	8	4	28	6	1	1	2	41	10	
5.	19									19				
6.	826						826							
7.	1,254	33	154	45	46	24	162	36	4	5	12	236	59	
8.	250							125					60	
9.	4,997						4,997							
10.														
11.	5,440	141	668	195	201	102	706	154	16	21	53	1,028	254	
12.	122	3	15	4	5	2	16	3			1	24	6	
13.	68	2	8	2	3	1	9	2			1	14	3	
14.	391						391							
15.	700											700		
16.	340	9	42	12	13	6	44	10	1	1	3	65	16	
17.	3,290	39	183	53	55	28	1,993	42	4	6	15	281	70	
18.	100							100						
19.	372	10	46	13	14	7	48	11	1	1	4	70	17	
20.	50												25	
21.	20												10	
22.	4,723							4,723						
23.	1,536							1,536						
24.	300													
25.	95,625												150	
26.	2,750													
27.	4,330													
28.	3,900													
29.														
30.														
31.	1,028													
32.	500													
33.	500													
34.	700	18	86	25	26	13	91	20	2	3	7	132	33	
35.	388	10	48	14	14	7	50	11	1	1	4	74	18	
36.	224	6	28	8	8	4	29	6	1	1	2	42	10	
37.	200	5	24	7	7	4	26	6	1	1	2	38	9	
38.	276	7	34	10	10	5	36	8	1	1	3	51	13	
39.	465	12	57	17	17	9	60	13	1	2	5	87	22	
	137,734	301	1,420	413	427	216	11,346	6,812	34	53	114	2,883	785	110

Abstract- ing	Catalog Card Service		British Acc. List	Reclass. Bulletin	Translation List	Request Process.	Document Apply Service			Demand Bibliography	Local Library Service	Technical Data Digest
	Card Prep.	Card Distri.					Storage	Reproduction	Acquisition			
	1,263 571											
4	28	6	1	1 19	2	41	10	38	5	12	11	6
24	826 162	36 125	4	5	12	236	59 60	220 65	27	71	83	37
102	706	154	16	21	53	1,028	254	957	118	309	358	159
2	16	3			1	24	6	21	3	7	8	4
1	9	2			1	14	3	12	1	4	4	2
6	491	10	1	1	3	700						
28	1,993	100	4	6	15	65	16	60	7	19	22	10
7	48	11	1	1	4	70	70	262	32	85	98	44
							17	65	8	21	24	11
							25	25				
							10	10				
	4,723 1,536						150	150				
								95,625				
								2,750				
								4,330				
								3,900				
								1,028				
13	91	20	2	3	7	132	33	500	15	40	46	20
7	50	11	1	1	4	74	18	123	8	22	26	11
4	29	6	1	1	2	42	10	69	5	13	15	7
4	26	6	1	1	2	38	9	39	4	11	13	6
5	36	8	1	1	3	51	13	36	6	16	18	8
9	60	13	1	2	5	87	22	49	10	26	31	14
216	11,246	6,812	34	63	114	2,883	785	110,916	219	656	760	399

MAINTENANCE AND MACHINE RENTAL

Schedule IV

PLAN A

Rental of Xerox	\$ 600
Service Contract for Cameras	1,000
Contract for Electrical Services	500
Contract for Plumbing Services	2,000
Contract for Repairs to Processor and Printer	600
Contract for Sharpening Cutter Blades and Drills	<u>48</u>
	\$4,748

Document Service Center
Summary of Costs and Man Years, Plan "P"
In Whole Dollars and Man Years

Exhibit A

	Total	Receiving	Duplicate Check	Doc.Stor. Maintain.	Descript. Catalog.	Subject Catalog	Distri. Classif.	Abstract- ing	Microfilm
Direct Operating Costs									
Personal Services:									
Document Processing	232,332	18,476	18,120		60,867	24,221	27,600		32,900
Man Years	60.32	5.36	4.98		16.75	5.06	5.78		22.09
Announcement	4,409								
Man Years	1.25								
Request Services	193,662			30,400					
Man Years	57.04			9.25					
Library	35,620								
Man Years	10.42								
Editorial & Copy Preparation	36,522							14,688	
Man Years	27.55							3.57	
Reproduction	129,501								
Man Years	34.73								
Shipping	35,164								
Man Years	10.66								
Total Direct Personal Services	727,230	18,476	18,120	30,400	60,867	24,221	27,600	14,688	32,900
Total Direct Man Years	196.57	5.36	4.98	9.25	16.75	5.06	5.78	3.57	22.09
Overtime, Lump Sum Leave, FICA	16,855	529	521	800	1,311	563	644	32	1,920
Operating Supplies	127,512	293	288	685	967	385	440	33	2,340
Maintenance & Machine Rental	4,718	130	120	224	305	122	140	86	55
Total Direct Costs	876,445	19,328	18,948	3,109	63,055	25,231	28,324	15,148	37,715
Administrative & Overhead Costs									
Personal Services	133,962	3,402	3,335	6,335	11,211	4,460	5,103	2,700	15,200
Man Years	30.65	.78	.76	1.45	2.57	1.32	1.37	.62	3.55
Overtime, Lump Sum Leave, FICA	3,117	79	78	127	261	104	119	3	30
Travel and Guard Service	53,100	1,350	1,222	2,512	4,414	1,768	2,023	1,073	6,000
Total Administrative & Overhead	190,179	4,831	4,735	8,974	15,886	6,332	7,245	3,806	21,230
Total Costs	1,066,624	23,159	23,683	12,083	78,941	31,623	35,569	18,994	58,945
Total Man Years	227.32	6.14	5.74	10.70	19.32	6.08	6.95	4.19	26.64
Positions Required	24	7	6	11	20	7	7	5	28
Additional Dollar Requirements	66,496	3,382	1,772	892	2,833	4,753	263	3,722	6,100
Total Dollar Requirements	1,133,120	27,541	25,455	12,975	82,774	36,376	36,814	22,721	65,045
Unit Costs, Direct Costs Only:									
Units Produced		221,480	161,327	161,327	50,785	30,135	30,135	10,008	5,000
Unit Cost		.0387	.037	.022	1.250	.740	.945	1.560	7.500

Script. Catalog	Subject Catalog	Distri. Classif.	Abstracting	Micro-filming	Catalog Cards Prep.	Cards Distri.	T A B Prep.	Distri.	Micro-cards	Pack ss. Bull. Prep.	ss. Bull. Distri.	Request Process.	Document Storage	Sup. Reprod.
1,867	24,221	27,699		32,246										
.75	5.06	5.78		22.99										
							4,409							
							1.25							
												79,689	26,867	
												20.22	7.46	
												15,306		
												4.42		
		14,668			19,226	1,752	23,735		6,984	137				
		3.57			11.33	.51	6.88		2.02	.04				
					39,823	2,084	16,857		32,518	415				37,884
					10.52	.54	4.60		8.66	.11				16,501
						9,901								4,859
						3.30		13,880					4,269	1.47
								4.22			2,393		1.29	
1,867	24,221	27,699	14,668	32,246	39,823	13,737	15,001	13,880	39,502	552	2,393	34,995	31,136	12,719
.75	5.06	5.78	3.57	22.99	24.65	4.05	12.73	4.22	10.68	.15	.63	24.64	8.75	11.97
1,867	563	644	30	1,926	2,068	319	1,046	323	917	14	19	2,206	723	993
.75	385	440	23	2,346	11,265	1,508	19,502	6,465	12,216	12	18	2,267	631	66,486
.75	122	140	8	556	596	98	307	102	258	4	15	596	212	298
1,553	25,251	28,925	15,343	37,777	132,978	16,082	65,856	30,770	52,893	582	2,322	99,984	32,702	110,518
211	4,460	5,103	2,740	15,270	16,995	2,532	8,291	2,558	7,273	187	388	17,483	5,733	7,876
.75	1.32	1.17	.82	3.50	3.75	.58	1.90	.59	1.66	.02	.09	4.00	1.31	1.80
1,867	124	119	35	355	382	59	193	60	170	2	3	107	133	183
.75	1,368	2,023	1,473	3,253	3,530	1,004	3,287	1,314	2,883	42	132	6,935	2,273	3,122
1,867	6,432	7,285	3,842	21,678	23,277	3,595	11,771	3,692	10,326	151	521	24,855	8,195	11,181
1,867	31,623	36,168	19,140	108,455	126,255	19,657	77,627	24,402	63,219	739	2,757	124,799	50,841	121,699
.75	6.28	6.95	4.19	28.49	28.49	4.63	14.63	4.51	12.24	.17	.72	38.54	10.06	13.77
1,867	7	7	5	23	30	5	16	5	13	-	1	30	10	15
.75	2,793	261	3.72	3,359	7,051	1,509	7,168	954	3,257	82	3.7	5,243	-	10,869
1,867	38,416	38,429	22,921	115,844	134,306	21,166	84,795	25,956	66,576	815	3,231	150,042	50,841	132,564
1,867	1,445	20,195	14,802	1,445	1,445	1,445	1,445	1,445	1,445	1,445	1,445	1,445	1,445	1,445
.75	1.445	2.019	1.480	1.445	1.445	1.445	1.445	1.445	1.445	1.445	1.445	1.445	1.445	1.445

12,531,900 AD
1.016

1,452,225 AD No Abstracts
.039

1,500,000 FD
.221

117,520
Copies
.502

600,000 12,000
Copies Copies
.088 .044

Catalog Cards		T A B		Micro-cards	Reclass.Bull.		Request Process.	Document Supply		Acq.	Demand Bibliography	Local Library Service
Prep.	Distri.	Prep.	Distri.		Prep.	Distri.		Storage	Reprod.			
		4,409	1.25									
							79,689	26,867		11,705	44,001	
							20.22	7.46		2.97	11.14	
							15,306					20,314
							4.42					6.00
43,226	1,752	23,735		6,984	137							
1.33	.51	6.88		2.02	.04							
39,823	2,084	16,857		32,518	415							
10.32	.54	4.60		8.66	.11							
	9,901		13,880			2,093		4,269	37,884			
	3.00		4.22			.63		1.29	10.50			
9,049	13,737	45,001	13,880	39,502	552	2,093	94,995	31,136	4,865	156		
24.65	4.05	12.73	4.22	10.68	.15	.63	24.64	8.75	1.47	.05		
2,068	319	1,040	325	917	14	16	2,206	723	11.97	2.97	41,157	20,314
1,265	1,908	1,502	6,465	12,216	12	10	2,167	631	993	272	11.19	6.00
596	98	307	102	258	4	15	596	212	66,486	186	956	471
2,978	16,032	65,856	20,770	52,893	582	2,206	99,964	32,702	290	72	662	326
									270		270	145
									110,518	12,235	43,045	21,256
6,595	2,532	8,291	2,558	7,273	107	388	17,493	5,753	7,876	2,156	7,581	3,737
6.75	.58	1.90	.59	1.66	.02	.06	4.00	1.31	1.80	.49	1.73	.86
3.82	59	193	60	170	2	3	407	133	183	50	176	87
6,530	1,004	3,287	1,014	2,883	12	15	6,935	2,273	3,122	855	3,005	1,481
3,277	3,595	11,771	3,632	10,326	151	551	24,835	8,139	11,181	3,061	10,762	5,305
6,255	19,657	77,627	24,402	63,219	733	2,757	124,799	40,841	121,699	15,296	53,807	26,561
8.40	4.63	14.63	4.81	12.34	.17	.72	28.84	10.06	13.77	3.46	12.92	6.86
	5	16	5	13	-	1	30	10	15	4	14	7
1,321	1,509	7,168	954	3,357	82	3.7	5,243	-	10,869	2,390	3,972	474
1,306	21,166	84,795	25,356	66,576	815	3,131	130,042	40,841	132,568	17,686	57,779	27,035
1,125	3,793,700	24,250	11,520	12,000	782	12,000	24,448	37,581	42,832	4,656	1,312	12,042
Cards	Cards	Titles	Copies	Titles	Titles	Copies	Requests	Documents	Documents	Titles	Bibliographies	References
	.004	2.716	.177	4.408	.744	.13	4.089	.870	2.580	2.628	32.808	1.765
900 AD												
1.316												
225 AD No Abstracts												
009												
000 PB		117,820		600,000	12,000							
021		Copies		Copies	Copies							
		.562		.688	.040							

Personal Services Requirements by Operating Functions

Schedule I

Plan "B"

Function	Direct		Indirect Supervision		Total*	
	M.Y.	Cost	M.Y.	Cost	M.Y.	Cost
A. Document Processing						
1. Document Receiving	4.99	16,714	.37	1,762	5.36	18,476
2. Dup. Check & Descrip. Cat.	17.75	62,106	1.32	6,280	19.07	68,386
5. Distribution Classification	10.06	48,199	.78	3,721	10.84	51,920
6. Security Check	2.47	9,696	.19	903	2.66	10,601
B. Announcement						
1. Title Announcement Bulletin	1.16	3,917	.09	492	1.25	4,409
C. Request Services						
1. Document Request	15.59	66,742	1.68	7,838	17.27	74,580
2. Distribution Records	2.65	8,816	.30	1,406	2.95	10,222
3. Document Supply	7.63	25,461	.82	3,826	8.45	29,287
4. Demand Bibliography	7.57	27,892	.57	2,720	8.14	30,612
5. Document Acquisition	2.68	9,255	.29	1,352	2.97	10,607
D. Library						
1. Catalog Card File Maintenance	7.92	25,851	.68	3,243	8.60	29,094
2. Archives	7.68	25,069	.58	2,764	8.26	27,833
3. Reference Service	4.48	15,426	.34	1,621	4.82	17,047
E. Editorial & Copy Preparation						
1. Editorial	2.94	11,948	.26	1,431	3.20	13,379
2. Typing	17.55	55,493	1.45	9,499	19.01	64,992
3. Proofreading	2.68	9,661	.22	1,208	2.90	10,869
4. Illustration & Layout	3.46	10,976	.28	1,543	3.74	12,519
F. Reproduction						
1. Photocopy	.94	3,961	.16	817	1.10	4,778
2. Platemaking	3.62	13,929	.30	1,655	3.92	15,584
3. Photoduplicating	1.34	5,514	.17	902	1.51	6,416
4. Offset Duplicating	3.20	13,135	.26	1,431	3.46	14,566
5. Bindery (Collating)	1.48	5,054	.12	670	1.60	5,724
6. Bindery (Cutting)	5.96	22,265	.49	2,705	6.45	24,970
7. Bindery (Drilling)	.15	562	.02	111	.17	673
8. Bindery (Banding)	.64	2,191	.05	269	.69	2,460
9. Bindery (Stitching)	.83	2,928	.06	334	.89	3,162
10. Stock Handling	1.06	3,623	.09	492	1.15	4,115
11. Control	5.04	17,123	-	-	5.04	17,123
12. Microfilming	10.23	33,338	1.74	8,910	11.97	42,248
13. Film Processing	2.84	9,851	.49	2,499	3.33	12,350
14. Microfilm Archives	8.12	26,083	1.38	7,006	9.50	33,089
15. Process Airgraph	3.06	10,683	.53	2,704	3.61	13,387
16. Photo Prints	4.99	17,042	.83	4,209	5.82	21,251
G. Shipping						
1. Addressograph	4.60	14,392	.48	2,225	5.08	16,617
2. ATN Cards	1.69	5,050	.17	795	1.76	5,845
3. Request Documents	1.97	6,256	.21	981	2.18	7,237
4. Title Announcement Bulletin	1.20	3,814	.13	610	1.33	4,424
5. Reclassification Bulletin	.55	1,745	.06	283	.61	2,028
6. Demand Bibliography	.05	153	-	-	.05	166
7. ASTIA Publications	.06	187	-	-	.06	187
8. Form Letters	.22	696	.03	142	.25	838
Total Direct Man Years & Salaries	183.02	652,702	18.00	91,359	201.02	744,061
Less Preparation of Manuals and Brochures	3.85	13,888	.80	2,885	4.65	16,773
	179.17	\$638,814	17.20	\$88,474	196.37	\$727,288

*Note: Total salaries in each work function reflect the third step of each grade. The total salaries divided by the total number of employees equals average salary used in determining total costs for each function.

Allocable Costs Other Than Direct Personal Services

Direct Personal Services Overtime, Lump Sum Leave, FICA			\$ 16,8
Administrative Salaries	Man Years	Salaries	
Administrative Personnel	26	117,169 (4)	
Administrative Support	4.65	16,773 (5)	
	<u>30.65</u>	<u>\$133,942</u>	
Administrative Overtime, Lump Sum Leave, FICA		3,117 (6)(7)(8)	
Total Administrative Personnel Costs			137,0
Guard Service			43,5
Temporary Duty Travel			9,6
Machine Maintenance & Rental			4,7
Total Except Supplies			<u>211,8</u>
Supplies			127,5
Total Allocable Costs			<u>\$339,3</u>

- (1) Overtime represents 1% of Direct Personal Services Costs
- (2) Terminal Leave represents 4.8% of total estimated payments
- (3) Social Security Taxes represents 4.3% of total estimated payments
- (4) Based on third step each employee
- (5) Includes distribution of 4.65 man years for manuals and brochures
- (6) Administrative Overtime represents 1% of salaries
- (7) Terminal Leave represents 15.2% of total estimated payments
- (8) Social Security Taxes represents 15.2% of total estimated payments
- (9) Fifteen guards at average salary of \$2900
- (10) Estimated
- (11) Distribution of Supplies shown on Schedule III

Distribution of Allocable Costs, Except Supplies, to Primary Activities
 (Based on Direct Personal Services Costs)

Activity	Direct Salaries	Percent	Direct Overtime, Terminal Leave, FICA	Administrative Salaries	Admin. Overtime, Terminal Leave, FICA	Tr Gua
Receiving	18,476	2.51	429	3,402	79	
Duplicate Check	18,120	2.49	421	3,335	78	
Document Storage Maintenance	34,400	4.73	800	6,335	147	
Descriptive Cataloging	60,867	8.37	1,414	11,211	261	
Subject Cataloging	24,221	3.33	563	4,460	104	
Distribution Classification	27,699	3.81	644	5,103	119	
Abstracting	14,688	2.02	341	2,706	63	
Microfilming	82,949	11.40	1,926	15,270	355	
Catalog Card Preparation	89,049	12.24	2,068	16,395	382	
Catalog Card Distribution	13,737	1.89	319	2,532	59	
TAB Preparation	45,001	6.19	1,046	8,291	193	
TAB Distribution	13,880	1.91	323	2,558	60	
Microcards	39,502	5.43	917	7,273	170	
Reclassification Bulletin Prep.	552	.08	14	107	2	
Reclassification Bulletin Distri.	2,093	.29	49	388	9	
Request Processing	94,995	13.06	2,206	17,493	407	
Document Storage (Supply)	31,136	4.28	723	5,733	133	
Document Reproduction	42,716	5.88	993	7,876	183	
Document Acquisition	11,705	1.61	272	2,156	50	
Demand Bibliography	41,157	5.66	956	7,581	176	
Local Library Service	20,314	2.73	471	3,737	87	
	<u>\$727,290</u>	<u>100.00</u>	<u>\$16,895</u>	<u>\$133,942</u>	<u>3,117</u>	<u>\$5</u>

FICA

\$ 16,895 (1)(2)(3)

Man Years	Salaries
26	117,169 (4)
4.65	16,773 (5)
<u>30.65</u>	<u>\$133,942</u>
	3,117 (6)(7)(8)

137,059
43,500 (9)
9,600 (10)
4,748 (10)
211,802
127,512 (11)
\$339,314

ces Costs
ted payments
estimated payments

nals and brochures
es
ted payments
estimated payments

Primary Activities
(sts)

Direct Over- time, Terminal Leave, FICA	Administrative Sa' ries	Admin. Over- time, Terminal Leave, FICA	Travel & Guard Service	Machine Maintenance & Rental	Administrative Man Years
429	.02	79	1,350	130	.78
421	3,335	78	1,322	120	.76
800	6,335	147	2,512	224	1.45
1,414	11,211	261	4,444	405	2.57
563	4,460	104	1,768	122	1.02
644	5,103	119	2,023	140	1.17
341	2,706	63	1,073	86	.62
1,926	15,270	355	6,053	556	3.50
2,068	16,395	382	6,500	596	3.75
319	2,532	59	1,004	98	.53
1,046	8,291	193	3,287	307	1.90
323	2,558	60	1,014	102	.59
917	7,273	170	2,883	258	1.66
14	107	2	42	4	.02
49	388	9	154	15	.09
2,206	17,493	407	6,935	596	4.00
723	5,733	133	2,273	212	1.31
993	7,876	183	3,122	290	1.80
272	2,156	56	855	72	.49
956	7,581	176	3,005	270	1.73
471	3,737	87	1,481	145	.86
<u>\$16,895</u>	<u>\$133,942</u>	<u>3,117</u>	<u>\$53,100</u>	<u>\$4,748</u>	<u>30.65</u>

OPERATING SUPPLIES

SCHEDULE III

PLAN "C"

Description	Justification
Photo Offset Plates	(a) Documents to catalog= 170 per day x 260 days = 42,000 per year, + 6 per layout (b) 76 ATL documents per day requiring extra plates (c) TAB - 72 pages per week x 52 weeks (d) Forms to print, 56 x 6 printings (Avg 3 pages) (e) Reclassification Bulletin, 10 pages, Monthly (f) Prefab Bibliographies 11,265 subject headings x 2 reproductions - 6 per layout (g) Listing scientific & technical reports; ASTIA Products & Services, Miscellaneous
Paper, Dennison, Gum Paper, Index, Bristol Paper, Offset	For Franked Stickers For 11,580,000 cards (a) TAB, 3744 pages x 4,000 runs (b) Misc Forms 22-1/2" x 35" sheets (c) Scientific & Technical reports (d) Misc. Reproduction
Paper, Masking Paper, Duplicating, Copy Xerox Plates Miscellaneous Reproduction Supplies Miscellaneous Addressograph parts Miscellaneous typewriter supplies Corrugated cardboard boxes Binding Wire Penalty Envelopes Non-penalty envelopes Master Mailer Carbons Paper, Photographic	Form 1 Misc. reproduction Repair parts for Multilith, special ink, cleaner sheets, cleaning solution, etc. 1000 each of 3 sizes 4 sizes 3 sizes 2 sizes Normal workload is based on 278 requests per day, avg. 50 pages per documents, total of 13,900 pages required per day, or 18 rolls Based on 278 requests per day. Daily use 4 packages Based on 278 requests per day. Daily use 3-1/3 packages Based on 278 requests per day. Daily use 3-1/4 packages Unit cost same as airgraph chemicals. Based on 62 documents processed daily, totaling 3600 cards, or 5 rolls of paper Based on 62 documents processed daily requiring 3 rolls daily For reproducing 20 oxalid requests daily To remove curl from photographic paper For enlarger, paper chopper, etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc.
Chemicals, Developer, (Airgraph) Chemicals, Stop Chemicals, Fix Chemicals for Processing Microcard Paper, Microcard Microfilm Oxalid paper and film Solution, print straightener Miscellaneous spare parts Drawing Paper & Illustration Board Paints, Oils Drawing Instruments Brushes and Pencils Miscellaneous ink, pens, spray, etc.	

Total Cost, Operating Supplies

Notes: Distribution of costs other than those directly chargeable are distributed on basis of known usage.

	Quantity per year	Unit Cost	Total Cost		PLAN A		PLAN B	
					Percent of Plan C	Cost	Percent of Plan C	Cost
• + 6 per layout	7,000	\$.22 ea.	\$ 1,540	1	82	\$ 1,263	82	\$ 1,263
	3,166	.22 ea.	696	2	82	571	82	571
	3,744	.22 ea.	824	3	-	-	77	634
	990	.22 ea.	217	4	100	217	100	217
	120	.22 ea.	26	5	74	19	74	19
as - 6 per layout	3,755	.22 ea.	826	6	100	826	100	826
ices, Miscellaneous	5,700	.22 ea.	1,254	7	100	1,254	100	1,254
			250	8	100	250	100	250
	231,584	.0292 ea.	6,753	9	74	4,997	74	4,997
	1,872,000	.0136 ea.	25,459	10	-	-	77	19,603
	400,000	.0136 ea.	5,440	11	100	5,440	100	5,440
	9,000	.0136 ea.	122	12	100	122	100	122
	5,000	.0136 ea.	68	13	100	68	100	68
	12,000	.0383 ea.	460	14	85	391	85	391
	450,000	2.32 per M	909	15	77	700	77	700
	20	17.00 ea.	340	16	100	340	100	340
ning solution, etc.	-	-	3,290	17	100	3,290	100	3,290
	-	-	100	18	100	100	100	100
	-	-	371	19	100	371	100	371
	3,000	.0166 ea.	50	20	100	50	100	50
	20	1.00 ea.	20	21	100	20	100	20
	700,000	.0092 ea.	6,382	22	74	4,723	74	4,723
	175,000	.0119 ea.	2,075	23	74	1,536	74	1,536
	7,000	.0429 ea.	300	24	100	300	100	300
es per documents, or a								
	4,500	25.00 ea.	112,500	25	52	95,625	52	95,500
	1,000	2.75 ea.	2,750	26	52	2,750	52	14,30
	833	5.20 ea.	4,330	27	52	4,330	52	22,52
	813	4.80 ea.	3,900	28	52	3,900	52	20,28
	-	-	450	29	-	-	77	347
5 rolls of paper	1,250	12.04 ea.	15,050	30	-	-	77	11,989
	750	1.78 ea.	1,335	31	77	1,028	77	1,028
			500	32	100	500	100	500
			500	33	100	500	100	500
			700	34	100	700	100	700
			388	35	100	388	100	388
			224	36	100	224	100	224
			200	37	100	200	100	200
			276	38	100	276	100	276
			465	39	100	465	100	465
			\$201,340			\$137,734		\$127,512

Plan - pⁿ

Item No.	Total	Receiving	Duplicate Check	Document Storage	Maint. Cataloging	Descrip. Cataloging	Subject Cataloging	Distribution Classification	Abstracting	Micro-filming	Catalog Card Prep. Distri.	T A B Prep. Distri.	Micro-cards	Reclea. Prep.
1.	1,263										1,263			
2.	571										571			
3.	634												634	
4.	217	6	5	10		18	7	8	4	25	26	4	13	4
5.	19													19
6.	826										826			
7.	1,254	32	51	59		105	12	10	25	143	153	24	76	24
8.	350											125		68
9.	4,997										4,997			
10.	19,603											19,603		
11.	5,440	138	135	257		455	181	207	110	620	666	103	577	104
12.	122	3	1	6		10	4	5	2	14	15	2	8	2
13.	68	2	2	3		6	2	3	1	8	8	1	4	1
14.	391										391			4
15.	700													
16.	340	9	8	16		28	11	13	7	40	43	6	21	6
17.	3,290	38	37	70		125	50	57	30	170	1,982	28	92	28
18.	100													100
19.	371	9	9	18		51	12	14	7	43	46	7	23	7
20.	50													20
21.	20													
22.	4,723										1,181		3,542	
23.	1,536										584		1,152	
24.	300													
25.	58,500													
26.	1,430													
27.	2,252													
28.	2,028													
29.	747													
30.	11,589													11,589
31.	1,028									1,028				
32.	500													
33.	500													
34.	700	18	17	33		59	25	27	14	80	86	13	43	13
35.	368	10	10	18		32	13	15	8	44	47	7	24	7
36.	221	6	6	11		19	7	9	5	26	26	4	14	4
37.	200	5	5	9		17	7	8	4	23	25	4	12	4
38.	276	7	7	13		23	9	11	6	31	34	5	17	5
39.	465	12	12	22		39	15	18	9	53	57	7	29	9
	127,512	255	287	545		567	385	443	232	2,413	11,261	1,907	20,318	5,846
														12,216
														27

[illegible]

MAINTENANCE AND MACHINE RENTAL

Schedule IV

PLAN R

Rental of Xerox	\$ 600
Service Contract for Cameras	1,000
Contract for Electrical Services	500
Contract for Plumbing Services	2,000
Contract for Repairs to Processor and Printer	600
Contract for Sharpening Cutter Blades and Drills	<u>48</u>
	\$4,748

Document Service Center
Summary of Costs and Man Years, Plan "C"
In Whole Dollars and Man Years

Exhibit A

	<u>Total</u>	<u>Receiving</u>	<u>Duplicate Check</u>	<u>Doc. Stor. Maintain.</u>	<u>Desc. Catalog</u>	<u>Distrib. Classif.</u>	<u>Micro- filming</u>	<u>Pr</u>
<u>Direct Operating Costs:</u>								
<u>Personal Services</u>								
Document Processing	250,994	21,180	21,265		71,433	37,512	99,604	
Man Years	65.99	6.03	5.73		19.26	7.47	27.0	
Announcement	6,588							
Man Years	1.65							
Request Services	250,493			43,865				
Man Years	64.21			11.27				
Library	60,316							
Man Years	15.93							
Editorial & Copy Preparation	71,038							
Man Years	20.44							
Reproduction	176,787							
Man Years	45.96							
Shipping	45,691							
Man Years	13.46							
Total Direct Personal Services	861,907	21,180	21,265	43,865	71,433	37,512	99,604	
Total Direct Man Years	227.64	6.03	5.73	11.27	19.26	7.47	27.50	
Overtime, Lump Sum Leave, FICA	18,550	456	458	944	1,538	807	2,144	
Operating Supplies	201,340	339	340	702	1,143	600	2,264	
Maintenance & Machine Rental	4,748	126	120	235	402	156	574	
Total Direct Costs	1,686,545	22,101	22,183	45,746	74,516	39,075	104,586	
<u>Administrative & Overhead Costs</u>								
<u>Personal Services</u>								
Man Years	134,602	3,311	3,325	6,850	11,159	5,855	15,560	
Overtime, Lump Sum Leave, FICA	30.75	.76	.76	1.57	2.55	1.34	3.55	
Travel and Guard Service	2,574	71	71	146	238	125	332	
Man Years	53,100	1,306	1,312	2,703	4,402	2,310	6,138	
Total Administrative & Overhead	190,576	4,688	4,708	9,699	15,799	8,290	22,030	
Total Cost	1,277,121	26,789	26,891	55,445	90,315	47,365	126,616	
Total Man Years	258.39	6.79	6.49	12.84	21.81	8.81	31.05	
Positions Required	273	7	7	13	23	9	32	
Additional Dollar Requirements	54,154	738	1,893	625	4,414	954	3,441	
Total Dollar Requirements	1,331,275	27,527	28,784	56,068	94,729	48,319	130,057	
<u>Unit Costs, Direct Costs Only:</u>								
Units Produced		261,092	185,826	185,826	59,552	42,077	42,077	11,
Unit Costs		.085	.119	.246	1.251	.929	2.486	

(4,559
5,520
1,500

[illegible]

Personal Services Requirements by Operating Functions

Schedule I

PLAN "C"

Function	Direct		Indirect Supervision		Total *	
	M.Y.	Cost	M.Y.	Cost	M.Y.	Cost
A. Document Processing						
1. Document Receiving	5.64	15,108	.39	2,071	6.03	21,180
2. Dup. Check & Descript. Cat.	20.87	72,338	1.39	7,342	22.06	79,679
3. Distribution Classification	6.99	34,968	.48	2,546	7.47	27,512
4. Security Check	2.74	12,277	.19	1,023	2.93	13,290
B. Announcement						
1. Title Announcement Bulletin	1.54	6,383	.11	806	1.65	6,588
C. Request Services						
1. Document Requests	25.26	104,694	2.04	10,668	27.32	115,352
2. Distribution Record	4.08	13,286	.32	1,872	4.40	14,938
3. Document Supply	10.37	33,589	.81	4,248	10.88	37,837
4. Demand Bibliography	9.08	35,902	.62	3,230	9.70	39,192
5. Document Acquisition	2.10	8,246	.16	837	2.26	9,083
D. Library						
1. Catalog Card File Maintenance	9.38	37,979	.72	3,828	10.10	41,807
2. Document Archives	8.13	28,845	.52	2,751	8.65	29,596
3. Reference Services	5.48	20,875	.35	1,849	5.83	22,724
E. Editorial & Copy Preparation						
1. Editorial	.15	513	.02	111	.16	524
2. Typing	11.61	43,211	.87	5,307	12.48	48,518
3. Proofreading	2.53	8,481	.15	984	2.73	9,536
4. Illustration & Layout	4.13	15,212	.28	1,608	4.42	17,820
F. Reproduction						
1. Photo Copy	1.10	4,232	.14	724	1.24	4,955
2. Photomaking	4.28	15,383	.32	1,749	4.60	17,132
3. Photo Duplicating	2.08	8,463	.20	1,080	2.28	7,523
4. Offset Duplicating	3.91	16,367	.27	1,477	4.15	17,844
5. Bindery (Collecting)	2.08	7,021	.14	782	2.22	7,803
6. Bindery (Cutting)	8.40	30,566	.62	3,402	9.02	33,968
7. Bindery (Drilling)	.25	850	.01	111	.27	961
8. Bindery (Bandings)	.73	2,484	.00	333	.73	2,817
9. Bindery (Stitching)	1.35	4,526	.08	482	1.45	5,119
10. Stock Handling	1.06	3,410	.07	381	1.12	3,791
11. Control	6.52	19,458	.39	2,128	6.91	21,587
12. Microfilming	12.06	42,630	1.61	8,242	13.70	50,172
13. Film Processing	3.51	11,824	.47	2,436	3.98	14,270
14. Microfilm Archives	10.80	35,102	1.41	7,219	12.01	42,321
15. Process Airgraph	5.02	17,485	.30	4,083	5.32	21,573
16. Photo Prints	6.27	26,752	.32	4,200	7.09	32,952
G. Shipping						
1. Addressograph	4.72	14,807	.36	1,851	5.08	16,658
2. AFI Cards	2.59	9,255	.20	937	2.79	10,232
3. Requested Documents	3.74	12,502	.29	1,862	4.03	13,664
4. Title Announcement Bulletin	1.62	5,241	.13	510	1.75	5,851
5. Reclassification Bulletin	.18	585	.01	44	.19	629
6. Demand Bibliography	.06	191	-	-	.06	191
7. ASTIA Publications	.08	255	-	-	.08	255
8. Form Letters	.22	712	.02	88	.24	800
Total Direct Man Years & Salaries	214.39	785,144	18.00	94,198	232.39	879,340
Less Preparation of Manuals and Brochures	3.97	16,571	.78	2,862	4.75	17,433
	210.42	770,573	17.22	91,336	227.64	861,907

*Note: Total salaries in each work function reflect the third step of each grade.
The total salaries divided by the total number of employees equals average salary used in determining total costs for each function.

PLAN "C"

SCHEDULE II

Allocable Costs Other Than Direct Personal Services

Direct Personal Services, Overtime, Lump Sum Leave, FICA			\$ 18,550
Administrative Salaries	Man Years	Salaries	
Administrative Personnel	26	117,169 (4)	
Administrative Support	4.75	17,533 (5)	
	<u>30.75</u>	<u>\$ 134,702</u>	
Administrative Overtime, Lump Sum Leave, FICA		2,876 (6)(7)(8)	
Total Administrative Personnel Costs			137,578
Guard Service			13,500
Temporary Duty Travel			9,600
Machine Maintenance and Rental			6,780
Total Except Supplies			<u>213,858</u>
Supplies			201,340
Total Allocable Costs			<u>\$415,211</u>

- (1) Overtime represents 14 of Direct Personal Services costs
- (2) Terminal Leave represents 86.64 of total estimated payments
- (3) Social Security Taxes represents 86.64 of total estimated payments
- (4) Based on third step each employee
- (5) Includes distribution of 4.75 man years for manuals and brochures
- (6) Administrative Overtime represents 14 of salaries
- (7) Terminal Leave represents 15.46 of total estimated payments
- (8) Social Security Taxes represents 15.46 of total estimated payments
- (9) Fifteen guards at average salary of \$2900
- (10) Estimated
- (11) Distribution of Supplies shown on Schedule III

Distribution of Allocable Costs, Except Supplies, to Primary Activities
 (Based on Direct Personal Services Costs)

Activity	Direct Salaries	Percent	Direct Overtime, Terminal Leave, FICA	Administrative Salaries	Admin. Overtime, Terminal Leave, FICA
Receiving	21,180	3.46	56	3,311	71
Duplicate Check	21,265	2.47	458	3,325	71
Document Storage Maintenance	13,565	5.00	944	6,850	146
Descriptive Cataloging	71,433	8.29	1,538	11,159	236
Distribution Classification	37,512	1.35	807	5,855	125
Microfilming	99,604	11.56	2,144	15,560	332
Catalog Card Preparation	69,390	8.10	1,503	10,903	233
Catalog Card Distribution	20,439	2.36	221	3,204	68
PAE Preparation	60,090	6.97	1,293	9,382	200
PAE Distribution	15,110	1.75	325	2,356	50
Microcards	55,622	6.46	1,336	8,882	187
Reclassification Bulletin Prep.	608	.07	13	94	2
Reclassification Bulletin Distri.	1,248	.14	26	188	4
Request Processing	149,222	17.31	3,212	25,300	493
Document Storage (Supply)	38,273	4.44	824	5,976	128
Document Reproduction	70,310	8.16	1,514	10,984	235
Document Acquisition	8,730	1.01	187	1,379	29
Demand Bibliography	51,508	5.98	1,109	8,049	172
Local Library Service	26,038	3.02	560	4,265	87
	<u>\$361,907</u>	<u>100.00</u>	<u>\$18,550</u>	<u>\$134,702</u>	<u>\$2,876</u>

Costs

ave, FICA

\$ 18,550 (1)(2)(3)

Man Years	Salaries
26	117,169 (4)
4.75	17,433 (5)
<u>30.75</u>	<u>\$ 134,602</u>
	2,874 (6)(7)(8)

137,476
13,500 (9)
9,600 (10)
4,718 (10)
<u>215,294</u>
201,340 (11)
<u>\$113,914</u>

Services Costs

Estimated payments

Total estimated payments

Manuals and brochures

Salaries

Estimated payments

Total estimated payments

III

to Primary Activities

Costs

Direct Over- time, Terminal Leave, FICA	Administrative Salaries	Admin. Over- time, Terminal Leave, FICA	Travel & Guard Service	Machine Maintenance & Rental	Administrative Man Years
456	3,311	71	1,306	126	.76
458	3,325		1,312	126	.76
924	6,850	125	2,703	235	1.57
1,556	11,179	238	4,402	402	2.55
807	5,855	125	2,310	156	1.34
2,114	15,560	332	6,138	574	3.55
1,503	10,903	233	4,301	393	2.19
441	3,201	68	1,264	120	.73
1,253	9,382	200	3,702	353	2.14
865	2,336	150	929	96	.54
1,436	8,682	185	3,425	276	1.98
13	92	2	37	3	.02
26	188	4	74	8	.04
3,212	23,300	498	9,192	803	5.32
824	5,976	128	2,358	209	1.37
1,514	10,984	231	4,333	408	2.52
187	1,359	28	536	47	.31
1,109	8,049	172	3,175	269	1.84
360	4,065	87	1,604	150	.93
<u>\$18,550</u>	<u>\$134,602</u>	<u>\$2,874</u>	<u>\$53,100</u>	<u>\$4,718</u>	<u>30.75</u>

OPERATING SUPPLIES

SECTION III

PLATINUM

Description	Justification
Photo Offset Plates	(a) Documents to catalog: 170 per day x 250 days = 42,000 per year. + 6 per layout (b) 76 A21 documents per day requiring extra plates (c) TAB - 52 pages per week x 52 weeks (d) Forms to print, 55 x 6 printings (Avg 3 pages) (e) Declassification Bulletin, 10 pages, Monthly (f) Prefab Bibliographies 11,285 subject headings x 2 reproductions - 6 per layout (g) Listing scientific & technical reports; ASTIA Products & Services, disseminated
Paper, Bondware, Gum	For Franked Stickers
Paper, Index, Bristol	For 11,480,000 cards
Paper, Offset	(a) TAB, 744 pages x 4,000 runs (b) Wire Forms 72-1/2" x 35" sheets (c) Scientific & Technical reports (d) Misc. Reproductions
Paper, Masking	Form 1
Paper, Enlarging, Copy	Misc. reproduction
Screen Plates	Repair parts for Multilith, special ink, cleaner sheets, cleaning solution, etc.
Miscellaneous Paper for ton Supplies	
Miscellaneous Address graph parts	
Miscellaneous Fluorescent supplies	
Corrugated cardboard boxes	1000 each of 3 sizes
Binding Wire	4 sizes
Family Envelopes	3 sizes
Non-remedy envelopes	1 size
Master Mailer Cartons	Normal workload is based on 275 requests per day, avg. 50 pages per document, total of 13,900 pages required per day, or 28 rolls
Paper, Photographic	Based on 275 requests per day. Daily use 4 packages Based on 275 requests per day. Daily use 3-1/3 packages Based on 275 requests per day. Daily use 3-1/2 packages Unit cost same as airgraph chemicals. Based on 12 documents processed daily, totaling 1600 cards, or 5 rolls of paper Based on 12 documents processed daily requiring 3 rolls daily For reproducing 20 small requests daily To remove curl from photographic paper For enlarger, paper chopper, etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc. For restoration of documents; making badges, signs etc.
Chemicals, Developer, (Airgraph)	
Chemicals, Stop	
Chemicals, Fix	
Chemicals for Processing Microcard	
Paper, Microcard	
Microfilm	
Coiled paper and film	
Solution, print straightener	
Miscellaneous spare parts	
Drawing Paper & Illustration board	
Paints, Oils	
Drawing Instruments	
Brushes and Pencils	
Miscellaneous ink, pens, spray, etc.	
Total Cost, Operating Supplies	
Notes: Distribution of costs other than those directly chargeable are distributed on basis of known usage.	

	Quantity per year	Unit Cost	Total Cost		PLAN A		PLAN B	
					Percent of Plan C	Cost	Percent of Plan C	Cost
+ 6 per layout	7,000	\$.22 ea.	\$ 1,540	1	82	\$ 1,263	82	\$ 1,263
	3,166	.22 ea.	696	2	82	571	82	571
	3,744	.22 ea.	824	3	-	-	77	634
	990	.22 ea.	217	4	100	217	100	217
	120	.22 ea.	26	5	74	19	74	19
- 6 per layout	3,755	.22 ea.	826	6	100	826	100	826
ee. Miscellaneous	3,700	.22 ea.	1,254	7	100	1,254	100	1,254
			250	8	100	250	100	250
	231,584	.0092 ea.	6,753	9	74	4,997	74	4,997
	1,872,000	.0136 ea.	25,459	10	-	-	77	19,603
	100,000	.0136 ea.	5,440	11	100	5,440	100	5,440
	9,000	.0136 ea.	122	12	100	122	100	122
	5,000	.0136 ea.	68	13	100	68	100	68
	12,000	.0083 ea.	991	14	85	991	85	991
	450,000	1.02 per H	909	15	77	700	77	700
	20	17.00 ea.	340	16	100	340	100	340
ing machine, etc.	-	-	3,290	17	100	3,290	100	3,290
	-	-	100	18	100	100	100	100
	-	-	371	19	100	371	100	371
	3,000	.0156 ea.	50	20	100	50	100	50
	20	1.00 ea.	20	21	100	20	100	20
	700,000	.0092 ea.	6,382	22	74	4,723	74	4,723
	175,000	.0118 ea.	2,073	23	74	1,536	74	1,536
	1,000	.0029 ea.	300	24	100	300	100	300
per documents, or a								
	4,500	35.00 ea.	112,500	25	52	95,625	52	95,625
	1,000	2.05 ea.	2,050	26	52	2,750	52	2,750
	833	5.20 ea.	4,330	27	52	4,330	52	2,252
	813	4.80 ea.	3,900	28	52	3,900	52	3,028
	-	-	450	29	-	-	77	347
rolls of paper	1,250	12.04 ea.	15,050	30	-	-	77	11,989
	750	1.78 ea.	1,335	31	77	1,028	77	1,023
			500	32	100	500	100	500
			500	33	100	500	100	500
			700	34	100	700	100	700
			388	35	100	388	100	388
			224	36	100	224	100	224
			200	37	100	200	100	200
			276	38	100	276	100	276
			465	39	100	465	100	465
			\$201,340			\$337,734		\$427,512

2000

[illegible]

MAINTENANCE AND MACHINES RENTAL

Schedule IV

PLAN C

Rental of Xerox	\$ 600
Service Contract for Cameras	1,000
Contract for Electrical Services	500
Contract for Plumbing Services	2,000
Contract for Repairs to Processor and Printer	600
Contract for Sharpening Cutter Blades and Drills	<u>48</u>
	\$4,748

SECTION IV WORKLOAD SURVEY

Planning for future operations of the Document Service Center has been developed from a workload survey which completely disregarded the existing organization and reduced each functional area to its component parts. The requirements for each component necessary to accomplish a service were based both on experience and statistics gathered from existing records for previous years and on current workload data. Within each component a work standard was established. These standards are based on individual productivity rates and wherever possible were related to commercial and/or industrial standards for the same work. In order to obtain the productive man days necessary to accomplish the work in a given area, the established standard was divided into the workload for a complete fiscal year. This figure is the productive man days for a given job. To obtain the gross man days, the productive man days were multiplied by the standard factor of 1.20308. This gross man days figure was divided by 230 to obtain the gross man years required in each functional area. The sum of the gross man years for all functional areas gives the number of direct man years necessary to fulfill the DSC part of the ASTIA mission.

Further elaborations representing operating plans based on this workload survey have been incorporated in the several exhibits. The difference between the workload survey and these exhibits lies principally in that the workload survey disregards organization and establishes basic productive man years while the various plans based on these production statistics include the cost of both direct and indirect supervision, supplies, and other operating essentials.

FUNCTIONAL AREAS		DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
A.	Document Processing	The processing program represents a series of steps in treating acquired documents so that they can be intelligibly and accurately announced and so that their contents will be exploited to the fullest possible advantage to the Dept. of Defense Research and Development program. Accuracy is essential as improper cataloging would result in the material not being found when required.	_____	221,680 reports/year
1.	Document Receiving Check			
	Initial Screening	Record all incoming reports for statistical purposes. Eliminate non-pertinent materials. (3 1/2 doc./day). Sort material by originating agency for processing. (This desk also stamps extra copies of reports found to be duplicates by Duplicate Screening. See Operation A.2).	450 items/man day	886 -37 849 reports & dupe.
	Disposition and Routing	Record routing of received items: to Processing Line; to destruction; to sender; to other interested Offices. Handle destruction of classified matter when required.	700 items/man day	849 domestic & foreign
	Supervisory	_____	_____	_____
2.	Duplicate Screening & Descriptive Cataloging	Identify documents previously cataloged and descriptively catalog new titles.	19 titles descriptively cataloged/man day	204 new titles/day
	Cataloging Review	Check accuracy of entries made by catalogers, above.	80 titles/man day	204 new titles/day
	Supervisory	Administrative and Supervision	_____	_____
3.	Duplicate Screening & Descriptive Cataloging (Foreign)	Same as 2 above (for material of Foreign origin).	Same as 2 above.	_____
	Cataloging Review	Same as 2 above (Acts as Supervisor).	Same as 2 above.	_____
4.	Abstract (Foreign Language)	Prepare abstracts and translate titles of foreign language documents.	8 abstracts/man day	11 titles/day
	Abstract Review	Review all abstracts prepared (Acts as Supervisor)	Indeterminate	11 titles/day
5.	Distribution Classification	Classify documents by Subject Division and Subject Section for distribution control. Initiate and enter appropriate distribution limitations on work sheets. Annotate inadequate titles (within limits). Determine extent of further processing and announcement. (ATI, UTI and TAB). Designate those titles to be microcarded.	36 titles/man day	137 titles/day
	Subject Cataloging	Assign Specific Subject headings to new title	40 titles/man day	137 titles/day
	Supervisory and Review	Review all entries made by classifiers also act in supervisory capacity.	Entire output (rate indeterminate)	_____
6.	Security Check	Check and verify security classification of doc. in accordance with current authority lists.	125 titles/man day	137 titles/day
	Supervisory and Review	Review and supervise work of checkers. Take necessary steps to reconcile apparent inconsistencies in security classification by correspondence, etc., with authoritative sources. Responsible for compilation of entries for reclassification bulletin.	Entire output (rate indeterminate)	_____

Y RATE	PLAN "A"				PLAN "B"				VO
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	
	221,480 reports/year	—	—	—	221,480 reports/year	—	—	—	221,480 reports/year
									79,224 reports/year
									281,092 total/year
	886 -37 849 reports & dups.	472	567.8	2.18	886 -37 849 reports & dups.	472	567.8	2.18	281,092 total reports 1,044 reports/day - 37 reports/day 1,007 reports & dups
	849 domestic & foreign	304	365.7	1.41	849 domestic & foreign	304	365.7	1.41	1,007 reports/day
	—	1 man year	—	1.00	—	1 man year	—	1.00	—
ely ay	204 new titles/day	2,680	3,224.3	12.40	204 new titles/day	2,680	3,224.3	12.40	242 new titles/day
	204 new titles/day	637	766.4	2.95	204 new titles/day	637	766.4	2.95	242 new titles/day
	—	1 man year	—	1.00	—	1 man year	—	1.00	—
	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—
ay	11 titles/day	400	400.0	1.50	—	—	—	—	—
	11 titles/day	—	—	—	—	—	—	—	—
	137 titles/day	979	1177.8	4.53	137 titles/day	979	1177.8	4.53	168 titles/day
	137 titles/day	856	1029.8	3.96	137 titles/day	856	1029.8	3.96	—
(re)	—	1 man year	—	1.00	—	1 man year	—	1.00	—
ay	137 titles/day	274	329.6	1.27	137 titles/day	274	329.6	1.27	168 titles/day
(re)	—	1 man year	—	1.00	—	1 man year	—	1.00	168 titles/day

GROSS MAN YEARS	PLAN "B"				PLAN "C"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
---	221,480 reports/year	---	---	---	221,480 reports/year DSC	---	---	---
					$\frac{79,224}{2}$ reports/year TID			
					281,092 total/year ASTIA			
2.18	886 -37 849 reports & dups.	472	567.8	2.18	281,092 total reports/year ASTIA 1,044 reports/day gross - 37 reports/day valueless 1,007 reports & dups.	559	672.5	2.59
1.41	849 domestic & foreign	304	365.7	1.41	1,007 reports/day	360	433.1	1.67
1.00	---	1 man year	---	1.00	---	1 man year	---	1.00
12.40	204 new titles/day	2,680	3,224.3	12.40	242 new titles/day	3,185	3,831.8	14.74
2.95	204 new titles/day	637	768.4	2.95	242 new titles/day	757	910.7	3.50
1.00	---	1 man year	---	1.00	---	1 man year	---	1.00
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
1.50	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
4.53	137 titles/day	979	1,177.8	4.53	168 titles/day	1,200	1,443.7	5.55
3.96	137 titles/day	856	1,029.8	3.96	---	---	---	---
1.00	---	1 man year	---	1.00	---	1 man year	---	1.00
1.27	137 titles/day	274	329.6	1.27	168 titles/day	336	404.2	1.55
1.00	---	1 man year	---	1.00	168 titles/day	1 man year	---	1.00

FUNCTIONAL AREAS		DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
A.	7. Document Processing Cataloging Standards and Authority Records	Establish and maintain uniform authority lists of Originating and Publishing agencies. Maintain security authority file. Develop uniform rules for descriptive cataloging, abbreviation standards, cataloging format, etc.	Rate indeterminate (Supporting Function)	_____
	Cataloging Branch (Chief)	Responsible for adherence to above procedures.	_____	_____
B.	Announcements			
	1. Title Announcement Bulletin (TAB)	Prepare copy for Title Announcement Bulletin, arranging by Subject Divisions and security classifica- tions. In addition to the entries required for TAB this material is used as a control file in the prepa- ration of layouts for card reproduction.	100 entries/man day	_____
C.	Request Services			
	1. Document Requests			
	a. Screening of Requests	Check incoming requests against Using Agency Roster to determine whether requestor is an eligible user (i.e. contractor to one of the military services, military or other government agency.) The Using Agency Roster is based upon a certification by an appropriate Dept. of Defense Agency of the "need-to-know" of each user. Determine whether items requested are of type normally included in ASTIA's holdings. Make disposition of requests to proces- sors, bibliographers, by referral, or return to requestor in cases of ineligibility. Record disposition and assign se- quence (order) numbers. Conduct necessary correspond- ence. Has complete authority over handling and initiation of all requests. Administers all request operations.	Entire Volume (Estimated between 110-120 requests/day)	59 request/days (295 items/day) screening (103 items/day) identification (295 items/day) limitations (295 items/day) validity (295 items/day) sorting (18 items/day) check release
	b. Request Processing	Identify items not requested by stock (ATI) number. Determine availability of requested documents. Initiate orders for reproduction of documents in cases where an issue copy is not available in stock. Determine qualifi- cations of requestor to receive the item requested from viewpoint of security clearance, "need-to-know", and applicability of any special distribution limitations. Prepare correspondence to requestor regarding any phase of request. Refer requests for documents not contained in D6C files for acquisition action. Obtain documents from stock or from reproduction. Prepare completed orders for packaging.	15 requests/day	_____
		Perform clerical and administrative operations in support of order processing.	15 requests/day	_____
	c. Request Authority Records (1) Using Agency Roster	Establish and maintain records of security clearances, "need-to-know" certifications, contract numbers, authorized addresses and signatures and other data pertinent to official communication between ASTIA and agencies of the Dept. of Defense and its contractors with regard to release of classified documentary material	200 roster changes/day 50 contracts rec'd/day file maintenance	_____

[illegible]

		PLAN "B"				PLAN "C"			
Y8	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
	_____	_____	_____	_____	_____	_____	_____	_____	_____
	1.00	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00
	_____	97 entries/day	243	292.3	1.00	127 entries/day	318	382.6	1.47
	2.00	59 requests/day (319 items)	2 man years	_____	_____	123 requests/day ASTIA (558 items)	3 man years	_____	3.00
	.97 3.31 2.80 3.10 4.17 1.3								
	_____	59 requests/day	983	1,182.6	4.55	123 requests/day ASTIA	2,017	2,426.6	9.33
	_____	59 requests/day	983	1,182.6	4.55	123 requests/day ASTIA	2,017	2,426.6	9.33
	3.00	_____	3 man years	_____	3.00	_____	3 man years	_____	3.00

FUNCTIONAL AREAS		DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
C.	Request Services			
2.	Distribution Records	Maintain permanent record of all distribution actions completed, including receipts for classified documents shipped.	300 pieces/man day	360 pieces/day
	a. Supervisor (Chief, Distribution Records)	Administration of distribution records, perform necessary supervision.	_____	_____
3.	Document Supply			
	a. Filing Duplicate Copies	Organize documents by stock number. Furnish data on Secret documents to be filed for accountability records.	350 items/man day	645 doc./day
	b. Pulling Requested Copies	Match requisitioned items by stock number with filed documents, pull documents, check indicated security classification of documents against requisition and note any discrepancies. Furnish data for accountability records on Secret items being shipped. Initiate requisition on Photo Reproduction Section for necessary number of copies when requested items are not in stock.	125 items/man day	123 doc./day
	c. Classification Check	Where security classification as indicated on document does not agree with that entered on requisition form, correct security is determined and document classification changed with authority notation.	_____	_____
	d. Accountability Record	Accurate inventory maintained on number of copies of Secret documents (by stock number) contained in document supply.	700 postings/man day	129 entries/day
	e. Surplus Disposal	Continuing activity on disposal of surplus copies of older documents for conservation of supply space.	350 items/man day	523 doc./day
	f. Catalog and Microcard Supply	File cards into pigeonholes by stock number. Pull microcards from pigeonholes by stock number for shipment in lieu of paper copy when user has requested the document in this form. Furnish data to accountability records on Confidential microcards pulled for shipment.	Indeterminate	Indeterminate
4.	Demand Bibliographies			
	a. Bibliography Research	Determine Subject Headings corresponding to scope of bibliography request. Determine limitations of bibliography content with respect to security and "need-to-know". Compile list of stock numbers corresponding to required bibliography entries. Extensive discussions with project engineer are frequently required to develop scope of project.	1.5 bibliographies/man day	6.3 D.B./day
	b. Bibliography Compilation	Select catalog cards corresponding to bibliography compilation. Prepare completed bibliography for transmission with appropriate correspondence.	3 bibliographies/man day	1.3 D.B./day
	c. Supervisor (Chief, Librarian)	Review work of bibliography clerks and perform necessary administration duties.	_____	_____

ACTIVITY RATE	PLAN "A"				PLAN "B"				
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	
pieces/man day	360 pieces/day	300	360.9	1.39	360 pieces/day	300	360.9	1.39	
	_____	_____	_____	_____	_____	_____	_____	_____	
docs/man day	645 doc./day	461	554.6	2.13	645 doc./day	461	554.6	2.13	
	_____	_____	_____	_____	_____	_____	_____	_____	
docs/man day	123 doc./day	245	294.8	1.13	123 doc./day	245	294.8	1.13	
	_____	_____	_____	_____	_____	_____	_____	_____	
	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00	
entries/man day	129 entries/day	46	55.3	.21	129 entries/day	46	55.3	.21	
	_____	_____	_____	_____	_____	_____	_____	_____	
docs/man day	523 doc./day	373	448.7	1.73	523 doc./day	373	448.7	1.73	
	_____	_____	_____	_____	_____	_____	_____	_____	
Indeterminate	Indeterminate	1 man year	_____	1.00	Indeterminate	1 man year	_____	1.00	
	_____	_____	_____	_____	_____	_____	_____	_____	
photographs/day	5,300/day	883	1062.3	4.09	5,300/day	883	1062.3	4.09	
	_____	_____	_____	_____	_____	_____	_____	_____	
photographs/day	5,300/day	442	531.8	2.05	5,300/day	442	531.8	2.05	
	_____	_____	_____	_____	_____	_____	_____	_____	
	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00	

YS	PLAN "B"					PLAN "C"			
	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
	1.39	360 piece*/day	300	360.9	1.39	733 pieces/day	611	735.1	2.89
	_____	_____	_____	_____	_____	_____	1 man year	_____	1.00
	2.13	645 doc. /day	461	554.6	2.13	1,028 doc. /day	741	891.5	3.43
	1.13	123 doc. /day	245	294.8	1.13	219 doc. /day	437	525.7	2.02
	1.00	_____	1 man year	_____	1.00	Indeterminate	1 man year	_____	1.00
	.21	129 entries/day	46	55.3	.21	187 entries/day	67	80.6	.31
	1.73	523 doc. /day	373	448.7	1.73	571 doc. /day	408	490.9	1.89
	1.00	Indeterminate	1 man year	_____	1.00	Indeterminate	1 man year	_____	1.00
	4.09	5.3 D.B./day	843	1062.3	4.09	6.5 D.B./day	1083	1302.9	5.01
	2.05	5.3 D.B./day	441	531.8	2.05	6.5 D.B./day	542	652.1	2.51
	1.00	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00

FUNCTIONAL AREA		DESCRIPTION OF WORK	PRO. ACTIVITY RATE	VOLUME
C.	Request Services			
	5. Document Acquisition	Conduct correspondence necessary to acquire requested documents not available within ASTIA's holdings. Determine sources to be contacted for demand acquisition. Perform typing, clerical and filing operations in support of function. Establish and implement a program for the acquisition of documents by ASTIA, including a systematic study of acquisition sources in support of a continuing effort to have included on all distribution lists for Dept. of Defense reports. File copies of requisition actions taken and completed. File correspondence and maintain necessary records.	15 Acquisition Actions/ man day	37 Acc. Act./day
	a. 1 File Clerk		Indeterminate	_____
D.	Library			
	Administration Supervisor Chief Librarian Clerk Typist	Implement policies and procedures and provide necessary administration. Handle routine clerical functions, and correspondence and maintain necessary records.	_____	_____
	1. Catalog Card File Maintenance	Organize new catalog cards in accordance with the various catalogs and inter file in these catalogs. Organize and interfile Average of 3 cards/doc. 1 card/doc. Average 2 cards/doc. (Approx. 55% have Military Sponsors) 1 card/doc. (Approx. 55% result from Contracts) 1 card/doc. 2 cards/doc. based on number of foreign doc. cataloged Derived from documents cataloged Numerical series of all documents cataloged Compilation of Demand Bibliographies Log new document numbers on subject heading cards Supervision and administration over maintenance of card catalogs.	300 cards/man day 300 cards/man day 300 cards/man day 300 cards/man day 300 cards/man day 300 cards/man day 300 cards/man day 300 cards/man day 300 cards/man day 300 cards/man day 375 cards/man day 500 entries/man day	411 cards/day 137 cards/day 274 cards/day 75 cards/day 75 cards/day 30 cards/day 229 cards/day 204 cards/day 411 cards/day 411 entries/day
	2. Document Archives			
	a. Master Shelf List Maintenance	Make changes on shelf list cards pertaining to security classification and distribution limitations.	160 changes/man day	1,800 changes/year
	b. Document Collection	File permanent single copies of new documents. Change security classification and distribution limitations as necessary. Change markings on documents as required. Log in, check and bind documents prior to filing. Maintain "vintage" document collection used for historical reference, patent cases, etc.	350 titles/man day 40 titles/man day 125 titles/man day	204 titles/day 1,800 changes/year 204 titles/day
	c. Loan Service (Local)	Accomplish "Charge In" and "Charge Out" on documents loaned to requesters. Loans are made on basis of poor reproducible copy available or to meet emergency requests (25 per day). Documents are also pulled for reference in the library and have to be refilled. (Averages 6 documents each for 40 reference queries per day.)	100 loans/man day	302 loans/day

PLAN "A"				PLAN "B"				
VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME
37 Acq. Act./day	620	745.9	2.87	16 Acq. Act./day (Assumed that 1/2 the request will be cancell- ed immediately when requestor is informed that we don't have items)	310	373.0	1.43	16 Acq. Act./day (Assumed that 1/2 the total acquisition reqs are local)
_____	1 man year	_____	1.00	_____	1 man year	_____	1.00	entire Volume
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	1 man year	_____	_____	_____	1 man year	_____	_____	_____
_____	1 man year	_____	_____	_____	1 man year	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
411 cards/day	343	412.7	1.59	411 cards/day	343	412.7	1.59	504 cards/day
137 cards/day	114	137.2	.53	137 cards/day	114	137.2	.53	168 cards/day
274 cards/day	228	274.3	1.06	274 cards/day	228	274.3	1.06	336 cards/day
75 cards/day	63	75.8	.29	75 cards/day	63	75.8	.29	93 cards/day
75 cards/day	63	75.8	.29	75 cards/day	63	75.8	.29	93 cards/day
30 cards/day	25	30.1	.12	30 cards/day	25	30.1	.12	40 cards/day
229 cards/day	191	229.8	.88	229 cards/day	191	229.8	.88	280 cards/day
204 cards/day	170	204.5	.79	204 cards/day	170	204.5	.79	242 cards/day
411 cards/day	274	329.6	1.27					504 cards/day
411 entries/day	205	246.6	.96	411 entries/day	205	246.6	.96	504 entries/day
_____	1 man year	_____	1.00	_____	1 man year	_____	1.00	_____
1,800 changes/year	11.25	13.5	.05	1,800 changes/year	11.25	13.5	.05	1,800 changes/year
204 titles/day	146	175.6	.68	204 titles/day	146	175.6	.68	242 titles/day
1,800 changes/year	45	54.1	.21	1,800 changes/year	45	54.1	.21	1,800 changes/year
204 titles/day	408	490.9	1.89	204 titles/day	408	490.9	1.89	242 titles/day
302 loans/day	755	908.3	3.49	302 loans/day	755	908.3	3.49	372 loans/day

GROSS MAN YEARS	PLAN "B"				PLAN "C"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
2.87	19 Acq. Act./day (Assumed that 1/2 the requests will be cancell- ed immediately when requestor is informed that we don't have items)	310	378.0	1.48	12 Acq. Act./day (Assumed that 1/3 the total acquisition actions are local)	210	252.6	.97
1.00	_____	1 man year	_____	1.00	Entire Volume	1 man year	_____	1.00
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	1 man year	_____	_____	_____	1 man year	_____	1.00
_____	_____	1 man year	_____	_____	_____	1 man year	_____	1.00
_____	_____	_____	_____	_____	_____	_____	_____	_____
1.59	411 cards/day	343	412.7	1.59	504 cards/day	420	505.2	1.94
.53	137 cards/day	114	137.2	.53	168 cards/day	140	168.4	.63
1.06	274 cards/day	228	274.3	1.06	336 cards/day	280	336.9	1.30
.29	75 cards/day	65	75.8	.29	98 cards/day	78	98.8	.36
.29	75 cards/day	63	75.8	.29	98 cards/day	78	98.8	.36
.12	30 cards/day	25	30.1	.12	40 cards/day	33	39.7	.15
.88	229 cards/day	191	229.8	.88	280 cards/day	234	280.3	1.08
.79	204 cards/day	170	204.5	.79	242 cards/day	202	243.0	.93
1.27					504 cards/day	336	404.2	1.55
.96	411 entries/day	205	246.6	.96	504 entries/day	252	303.2	1.17
1.00	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00
.05	1,800 changes/year	11.25	13.5	.05	1,800 changes/year	11.25	13.5	.05
.68	204 titles/day	146	175.8	.68	242 titles/day	173	208.1	.80
.21	1,800 changes/year	45	54.1	.21	1,800 changes/year	45	54.1	.21
1.80	204 titles/day	408	480.9	1.89	242 titles/day	484	582.8	2.24
3.49	302 loans/day	755	908.3	3.49	302 loans/day	755	908.3	3.49

FUNCTIONAL AREAS		DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
D.	Library			
2.	Document Archives			
d.	British Accessions	Prepare manuscript copy for Accessions List of British documents. Responsible for supervision and administration of all Archives Activities.	100 entries/man day (Same as TAB)	2,810 entries/year
	Supervision (Chief, Librarian)			
3.	Reference Services	Provide library reference service and assistance for military project officers and contractors' representatives visiting DSC. Check security clearance and "need-to-know" of patrons. Select cards from the catalog files for review by patrons. Obtain documents from archives for "on the spot" reference. Provide similar reference Service by Telephone and letter upon demand.	3 man hours/patron 16 queries/man day	548 patrons/year 46 queries/day
	Supervisor (Chief, Librarian)	Accomplish necessary supervision and administration of these patron services.	_____	_____
E.	Editorial and Copy Preparation			
1.	Editorial	Prepare manuscript and edit for reproduction all material that falls within the scope of the ASTIA mission. Responsible for supervision and administration of the editorial functions.	_____	_____
	Supervisor (Chief, Editor)			
a.	Abstracting			
(1)	Documents Cataloged by ASTIA	Prepare copy from author abstracts and/or summary as it appears in the document. Reduce length of abstract to conform with established standards and limitations.	25 abs./man day	58 abs./day
(2)	Periodicals Articles	Edit preprinted abstracts of articles provided by publishers of commercial periodicals for publication in TDD.	40 abs./man day	2,917 abs./year
b.	TDD Editing	Develop and write copy for TDD.	Indeterminate	_____
c.	Manual and Brochure Editing	Prepare copy for reproduction from manuscript.	2 pages/man hour	2 pages/day
d.	Translation Accession List	Edit entries for Translation Accession List.	30 pages/man day	812 pages/year
2.	Typing	Type copy from manuscript for reproduction.		
a.	TAB Control Cards	Type control cards showing descriptive cataloging, identification, and information as to limitations for listing in TAB.	50 cards/man day	_____
b.	TAB Repro Copy	Type compiled entries on master reproduction form using electric typewriter.	7.5 pages/man day	_____
c.	TAB Order Forms	Type entries to match the titles appearing in TAB on a master reproduction form using electric typewriters as above.	2.5 forms/man day	_____
d.	Catalog Card (Form 16)	Type copy supplied on work sheet on master reproducible form (Form 16) using IBM electromatic typewriter.		
(1)	With abstracts		20 forms/man day	58 forms/day
(2)	Without abstracts		35 forms/man day	79 forms/day
(3)	ATI Card Invoices	Type multilith mats for ATI Card Invoices.	25 invoices/man day	1,903 invoices/year

RATE	PLAN "A"				PLAN "B"				VOL
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	
man day	2,820 entries/year	22	26.5	.10	_____	_____	_____	_____	_____
		1 man year		1.00		1 man year		1.00	
patron	548 patrons/year	203	244.2	.34	548 patrons/year	203	244.2	.94	548 patrons
man day	46 queries/day	718	863.8	3.32	46 queries/day	718	863.8	3.32	46 queries
	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00	_____
	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00	_____
day	58 abs./day	580	697.8	2.68	58 abs./day	580	697.8	2.68	_____
day	2,917 abs./year	73	87.8	.34	_____	_____	_____	_____	_____
	_____	_____	_____	2.00	_____	_____	_____	_____	_____
hour	2 pages/day	32	38.5	.15	2 pages/day	32	38.5	.15	Estimate 2
day	812 pages/year	27	32.5	.13	_____	_____	_____	_____	812 pages
day	_____	_____	_____	_____	137 cards/day	685	824.1	3.17	168 cards
man day	_____	_____	_____	_____	28 pages/day (2 days week)	388	466.8	1.80	36 pages (2 days)
man day	_____	_____	_____	_____	1.17 pages/day (2 days week)	49	59.0	.02	1.5 pages (2 days)
day	58 forms/day	725	872.2	3.35	58 forms/day	725	872.2	3.35	_____
day	79 forms/day	564	678.5	2.61	79 forms/day	564	678.5	2.61	_____
man day	1,903 invoices/year	76	91.4	.35	1,903 invoices/year	76	91.4	.35	2,333 invs

GROSS DAYS	GROSS MAN YEARS	PLAN "B"				PLAN "C"			
		VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
	.10	_____	_____	_____	_____	_____	_____	_____	_____
	1.00		1 man year		1.00		1 man year		1.00
	.94	548 patrons/year	203	244.2	.94	548 patrons/year	203	244.2	.94
	3.32	46 queries/day	718	863.8	3.32	46 queries/day	718	863.8	3.32
	1.00	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00
	1.00	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00
	2.68	58 abs./day	580	697.8	2.68	_____	_____	_____	_____
	.34	_____	_____	_____	_____	_____	_____	_____	_____
	2.00	_____	_____	_____	_____	_____	_____	_____	2.00
	.15	2 pages/day	32	38.5	.15	Estimate 2 pages/day	32	38.5	.15
	.13	_____	_____	_____	_____	812 pages/year	27	32.5	.13
	_____	137 cards/day	685	824.1	3.17	168 cards/day	840	1010.8	3.89
	_____	28 pages/day (2 days week)	388	466.8	1.80	36 pages/day (3,744 pg./yr) (2 days week)	488	600.3	2.31
	_____	1.17 pages/day (2 days week)	49	59.0	.02	1.5 pages/day (156 pg./yr) (2 days week)	63	75.6	.29
	3.35	58 forms/day	725	872.2	3.35	_____	_____	_____	_____
	2.61	79 forms/day	564	678.5	2.61	_____	_____	_____	_____
	.35	1,903 invoices/year	76	91.4	.35	2,333 invoices/year	93	111.9	.43

FUNCTIONAL AREAS		DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
E.	2. Editorial and Copy Preparation			
	Typing			
	e. Prefab, Bibliography Cards	Type copy supplied on master card on reproduction form using IBM electromatic typewriter.	50 forms/man day	15,000 cards/year
	f. Microcard	Type descriptive cataloging and distribution limitations on multi-ith mats.	35 mats/man day	_____
	g. TDD Copy	Type manuscript pages.	12 manuscript pages/man day	135 manuscript pg./m
	h. Reclassification Bulletin	Type repro copy from manuscript.	8 pages/man day	6 pages/month
	i. British Accession List	Same as Reclassification Bulletin.	8 pages/man day	8 pages/week
	j. Manual and Brochure Typing	Same as above.	8 pages/man day	2 pages/week
	k. Translation Accession List	Same as above.	8 pages/man day	812 pages/year
	3. Proofreading	Proofread all typed copy prior to approval.	40 pages/man day	8,569 pages/year
	Supervisor (Chief, Editor)	Responsible for accuracy of typing and copy transmitted for reproduction. Responsible for necessary supervision and administration.	_____	_____
	4. Illustration and Layout	Responsible for necessary format and layout. Insert captions and prepare illustrations.		
	a. TAB Make-up	Insert headings in typed repro copy	30 pages/man day	_____
	b. Catalog Card Layout	Drymount the layout six forms face up. This requires extra layout for the reverse side.		
F.	(1) With Abstracts		20 layouts/man day	19.3 layouts/day
	(2) Without Abstracts		20 layouts/man day	13.2 layouts/day
	c. Layout Record	Maintenance of record by layout number for control and recovery for reprint.	Indeterminate	
	d. Prefab Bibliography Card Layout	Drymount the layout six forms face up.	60 layouts/man day	2,500 layouts/year
	e. TDD Layout & Illustration	Prepares format, layout and make-up.	10 pages/man day illust. 30 pages/man day layout 30 pages/man day make-up.	60 pages preparation _____
	f. Manuals and Brochures	Prepares format, layout and make-up.	10 pages/man day illust. 30 pages/man day layout 20 pages/man day make-up.	1,000 pages/year _____
	g. Translation Accession List	Same as above except no illustration required.	Same as above.	812 pages/year _____
	Reproduction	Maintain and operate specialized facilities to accomplish the reproduction of documents by microfilm and other photocopy processes.		
	1. Photocopy	Accomplish photographic negative of all master repro required for offset printing.		
	a. Title Announcement Bulletin	Photocopy master repro prior to preparing plate for printing.	80 layouts/man day	_____
	(1) TAB Order Forms	Same as above.		_____

DATE	PLAN "A"				PLAN "B"				VOLUME
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	
	15,000 cards/year	800	962.5	3.70	15,000 cards/year	800	962.5	3.70	15,000 cards/year
	_____	_____	_____	_____	48 mats/day	343	_____	_____	62 mats/day
no day	136 manuscript pg./mo.	158	190.1	.73	_____	_____	_____	_____	_____
	5 pages/month	8	9.6	.04	5 pages/month	8	9.6	.04	5 pages/month
	8 pages/week	52	62.8	.24	2 pages/week	63	75.8	.29	2 pages/week
	2 pages/week	63	75.8	.29	_____	_____	_____	_____	_____
	812 pages/year	101	121.5	.47	13,771 pages/year	344	413.9	1.59	12,413 pages/year
	8,569 pages/year	214	257.5	.99	_____	_____	_____	_____	_____
	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00	_____
	_____	_____	_____	_____	3,034 pages/year	101	121.5	.47	3,900 pages/year
	_____	_____	_____	_____	_____	_____	_____	_____	_____
	19.3 layouts/day	243	292.3	1.12	19.3 layouts/day	243	292.3	1.12	25-1/3 layouts/day
	13.2 layouts/day	185	198.5	.76	13.2 layouts/day	185	198.5	.76	15-1/3 layouts/day
	_____	_____	_____	_____	_____	_____	_____	_____	_____
	2,500 layouts/year	42	50.5	.19	2,500 layouts/year	42	50.5	.19	2,500 layouts/year
ust,	60 pages preparation/mo.	72	86.6	.33	_____	_____	_____	_____	_____
yout	_____	24	28.9	.11	_____	_____	_____	_____	_____
ake-up,	_____	24	28.9	.11	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	_____
ust,	1,000 pages/year	101	121.5	.47	1,000 pages/year	101	121.5	.47	1,000 pages/year
yout	_____	34	40.9	.16	_____	34	40.9	.16	_____
ake-up,	_____	34	40.9	.16	_____	34	40.9	.16	_____
	_____	_____	_____	_____	_____	_____	_____	_____	_____
	812 pages/year	28	33.7	.13	_____	_____	_____	_____	_____
	_____	28	33.7	.13	_____	_____	_____	_____	_____
	_____	_____	_____	_____	2,912 layouts/year	37	44.5	.17	3,744 layouts/year
	_____	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	122 layouts/year	1.5	1.8	.01	156 layouts/year

GROSS MAN YEARS	PLAN "B"				PLAN "C"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
3.70	15,000 cards/year	800	982.5	3.70	15,000 cards/year	800	982.5	3.70
—	48 mats/day	343	—	—	62 mats/days	443	533.0	2.05
.73	—	—	—	—	—	—	—	—
.04	5 pages/month	8	9.6	.04	5 pages/month	8	9.6	.04
.24	—	—	—	—	—	—	—	—
.29	2 pages/week	63	75.8	.29	2 pages/week	63	75.8	.29
.47	—	—	—	—	—	—	—	—
.99	13,771 pages/year	344	413.9	1.59	12,413 pages/year	310	373.0	1.43
1.00	—	1 man year	—	1.00	—	1 man year	—	1.00
—	3,034 pages/year	101	121.5	.47	3,900 pages/year	130	156.4	.60
1.12	19.3 layouts/day	243	292.3	1.12	25-1/3 layouts/day	317	381.4	1.47
.76	13.2 layouts/day	165	198.5	.76	15-1/3 layouts/day	192	231.0	.89
.19	2,500 layouts/year	42	50.5	.19	2,500 layouts/year	42	50.5	.19
.33	—	—	—	—	—	—	—	—
.11	—	—	—	—	—	—	—	—
.11	—	—	—	—	—	—	—	—
.47	1,000 pages/year	101	121.5	.47	1,000 pages/year	101	121.5	.47
.16	—	34	40.9	.16	—	34	40.9	.16
.16	—	34	40.9	.16	—	34	40.9	.16
.13	—	—	—	—	—	—	—	—
.13	—	—	—	—	—	—	—	—
—	2,912 layouts/year	37	44.5	.17	3,744 layouts/year	47	56.5	.22
—	122 layouts/year	1.5	1.8	.01	156 layouts/year	2	2.4	.01

FUNCTIONAL AREAS	DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
F. Reproduction			
1. Photocopy			
b. Catalog Cards	Photocopy 6 card master layout forms with reduction to provide 3 in. x 5 in. catalog cards after cutting.	80 layouts/man day	
(1) With Abstracts	An extra layout is required for each 8 up card set.	"	4,832 layouts/year
(2) Without Abstracts	Single side photocopy.	"	3,291 layouts/year
c. Prefab Bibliography Cards	Photocopy 6 card master layout forms. Same as for catalog cards.	"	2,500 layouts/year
d. Reclassification Bulletin	Photocopy repro master.	"	75 layouts/year
e. Manuals, Brochures, Etc.	Photocopy repro master in either same size or reduced according to indicated size.	"	1,000 layouts/year
f. Translation Accession List	Photocopy repro master with 1/3 reduction to 8-1/2 in. x 11 in. for printed copy.	"	812 layouts/year
2. Plate Making	Transfer impression from photographic negative to plate. In process negative is opaqued and masked, and image is burned onto plate for offset reproduction.	20 plates/man day	
a. Title Announcement Bulletin	Prepare plates as above.	"	
(1) TAB Order Forms	Prepare plates as above.	"	
b. Catalog Cards			
(1) With Abstracts	Prepare plates for both front and back side of layout.	"	4,832 plates/year
(2) Without Abstracts	Prepare plates for front side only.	"	3,291 plates/year
c. Prefab Bibliography Cards	Prepare plates.	"	2,500 plates/year
d. Reclassification Bulletin	Prepare plates.	"	75 plates/year
e. Manuals, Brochures, Etc.	Prepare plates.	"	1,000 plates/year
f. Translation Accession List	Prepare plates.	"	812 plates/year
3. Photoduplicating	This process of reproduction is used for economy, 1 time reproduction, and special outsize page forms. It is used in making reproduction of floor plans, photocopy negatives, vandykes, and other odd forms of master repro copy.		
a. Photostat	This process is used for reproduction where only one copy is required or where material exceeds normal page size or material is in some form of master repro copy which cannot be microfilmed with clarity.	750 sheets/man day	110,000 sheets/year
b. Oxalid	This form of reproduction is used when there is on file a master oxaparchment or photographic negative of the document requested and the limited number of copies required does not warrant offset reproduction.	1500 sheets/man day	174,600 sheets/year

DATE	PLAN "A"				PLAN "B"				VOLUME
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	
day	_____	_____	_____	_____	_____	_____	_____	_____	_____
	4,832 layouts/year	61	73.4	.28	4,832 layouts/year	61	73.4	.28	6,332 layouts/year
	3,291 layouts/year	41	49.3	.19	3,291 layouts/year	41	49.3	.19	3,834 layouts/year
	2,500 layouts/year	32	38.5	.15	2,500 layouts/year	32	38.5	.15	2,500 layouts/year
	75 layouts/year	1	1.2	.01	75 layouts/year	1	1.2	.01	75 layouts/year
	1,000 layouts/year	12.5	15.0	.05	1,000 layouts/year	12.5	15.0	.05	1,000 layouts/year
	812 layouts/year	10	12.0	.05	_____	_____	_____	_____	_____
day	_____	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	2,912 plates/year	146	175.6	.68	3,744 plates/year
	_____	_____	_____	_____	122 plates/year	6	7.2	.03	156 plates/year
	4,832 plates/year	242	291.1	1.12	4,832 plates/year	242	291.1	1.12	6,332 plates/year
	3,291 plates/year	165	198.5	.76	3,291 plates/year	165	198.5	.76	3,834 plates/year
	2,500 plates/year	125	150.4	.58	2,500 plates/year	125	150.4	.58	2,500 plates/year
	75 plates/year	4	4.8	.02	75 plates/year	4	4.8	.02	75 plates/year
	1,000 plates/year	50	60.2	.23	1,000 plates/year	50	60.2	.23	1,000 plates/year
	812 plates/year	41	49.3	.19	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	_____
day	110,000 sheets/year	147	176.9	.68	110,000 sheets/year	147	176.9	.68	175,000 sheets/year
days	178,640 sheets/year	119	143.2	.55	178,640 sheets/year	119	143.2	.55	280,000 sheets/year

GROSS MAN YEARS	PLAN "B"				PLAN "C"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
.28	4,832 layouts/year	61	73.4	.28	6,332 layouts/year	79	95.0	.37
.19	3,291 layouts/year	41	49.3	.19	3,834 layouts/year	48	57.7	.23
.15	2,500 layouts/year	30	38.5	.15	2,500 layouts/year	32	38.5	.15
.01	75 layouts/year	1	1.2	.01	75 layouts/year	1	1.2	.01
.05	1,000 layouts/year	12.5	15.0	.05	1,000 layouts/year	12.5	15.0	.05
.05								
	2,912 plates/year	146	175.6	.68	3,744 plates/year	187	225.0	.87
	122 plates/year	6	7.2	.03	156 plates/year	8	9.6	.04
1.12	4,832 plates/year	242	291.1	1.12	6,332 plates/year	317	381.4	1.47
.76	3,291 plates/year	165	198.5	.76	3,834 plates/year	192	231.0	.89
.58	2,500 plates/year	125	150.4	.58	2,500 plates/year	125	150.4	.58
.02	75 plates/year	4	4.8	.02	75 plates/year	4	4.8	.02
.23	1,000 plates/year	50	60.2	.23	1,000 plates/year	50	60.2	.23
.19								
.68	110,005 sheets/year	147	176.9	.68	175,000 sheets/year	233	280.3	1.08
.55	178,640 sheets/year	119	143.2	.55	290,000 sheets/year	187	225.0	.87

FUNCTIONAL AREA	DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
F. Reproduction			
4. Offset Duplicating	This medium of reproduction is used as the most economical method for reproducing documents, cards, forms, etc., in quantities of 50 or more.		
a. Title Announcement Bulletin	The plates are inked and run on offset paper, both sides.	48 setups/man day	
(1) TAB Order Form	Same as above.	48 setups/man day	
b. Catalog Cards	Plates are inked and run on Bristol card stock that has been cut to 10 in. x 9 in., so that 6 cards will appear on each sheet. The sheets are reversed and rerun with the backup plate so that both sides of the card sets are imprinted.	13 setups/man day	2416 press runs/year 320 copies/year run 6 cards each
(1) With Abstracts			
(2) Without Abstracts	Plates are inked and run on Bristol card stock 6 up, one side only.	48 setups/man day	3291 press runs/year 120 copies/run 6 cards each
(3) A.I. Card Invoices	Plates are inked and run on offset paper, one side.		1903 press runs/year
c. Prefab Bibliography Cards	Plates are inked and run on Bristol card stock 6 up, one side only.	48 setups/man day	2500 press runs/year 109 copies/run 6 cards each
d. Reclassification Bulletin	Plates are inked and run on offset paper, both sides.	48 setups/man day	75 press runs/year
e. Manuals, Brochures, etc.	Plates are inked and run on offset paper, both sides.	48 setups/man day	1000 press runs/year
f. Translation Accession List	Plates are inked and run on offset paper, both sides.	48 setups/man day	812 press runs/year
g. Microcards	Print cataloging information on back of microcard. Machine must be hand-fed.	48 setups/man day	
5. Bindery (Collating)			
a. Title Announcement Bulletin	Collate Title Announcement Bulletin 1,700 sets.	15,000/man day	
(1) TAB Order Form	Collate TAB Order Form 1,700 manually.	1,700/man day	
b. Catalog Cards			
(1) With Abstracts	Collate 20 sets.	2,400/man day	2,416 x 20/year
(2) Without Abstracts	Collate 20 sets.	2,400/man day	3,291 x 20/year
c. Prefab Bibliography	Collate 100 sets.	2,400/man day	2,500 x 100/year
d. Reclassification Bulletin	Collate 1,000 sets.	15,000/man day	75 x 1,000/year
e. Manuals and Brochures, etc.		15,000/man day	500 x 1,500/year
6. Bindery (Cutting)			
a. Catalog Cards			
(1) With Abstracts		240 cuts/man day	2,416 x 8/year
(2) Without Abstracts		240 cuts/man day	3,291 x 8/year
b. Prefab Bibliography		240 cuts/man day	2,500 x 8/year
c. Manuals, Brochures, etc.		240 cuts/man day	50 x 20/year
d. Raw Stock			
(1) Index Bristol	500,000 (25-1/2 x 30-1/2)	120 cuts/man day	$\frac{397,800}{300} \times 8 \frac{1}{2}$ year
e. Microcards	Cut and Stack microcards (Double Cut)	1,440 cards/man day	
f. (1) Autograph (80.82%)	Average 30 pages/doc. (cut pages)	100 doc./man day	137 doc./day
(2) Ovaloid (11.67%)	Average 30 pages/doc. (cut pages)	100 doc./man day	20 doc./d
(3) Photostat (7.31%)	Average 30 pages/doc. (cut pages)	100 doc./man day	13 doc./day

ACTIVITY RATE	PLAN "A"				PLAN "B"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN YEARS	GROSS MAN YEARS
/man day	_____	_____	_____	_____	_____	_____	_____	_____
/man day	_____	_____	_____	_____	2912 press runs/year	61	73.4	.28
/man day	_____	_____	_____	_____	122 press runs/year	2.5	3.0	.01
/man day	2416 press runs/year 320 copies/year run 6 cards each	151	181.7	.70	2413 press runs/year (Take effects quantity or'y) 175 copies/run 6 cards each	151	181.7	.70
/man day	3291 press runs/year 120 copies/run 6 cards each	69	83.0	.32	3291 press runs/year 175 copies/run 6 cards each	69	83.0	.32
/man day	1903 press runs/year	40	48.1	.19	1903 press runs/year	40	48.1	.19
/man day	2500 press runs/year 100 copies/run 6 cards each	52	62.6	.24	2500 press runs/year 100 copies/run 6 cards each	52	62.6	.24
/man day	75 press runs/year	1.6	1.9	.01	75 press runs/year	1.6	1.9	.01
/man day	1000 press runs/year	20.8	25.0	.10	1000 press runs/year	20.8	25.0	.10
/man day	812 press runs/year	17	20.5	.08	_____	_____	_____	_____
/man day	_____	_____	_____	_____	48 press runs/day	250	300.5	1.16
day	_____	_____	_____	_____	_____	_____	_____	_____
day	_____	_____	_____	_____	1,000 x 28/week	97	116.7	.46
day	2,416 x 20/year	24.1	.09	50	2,416 x 20/year	20	24.1	.09
day	3,391 x 20/year	33.0	.13	21.4	3,391 x 20/year	27.4	33.0	.13
day	2,500 x 100/year	125.1	.48	104	2,500 x 100/year	104	125.1	.48
day	75 x 1,000/year	6.0	.02	5	75 x 1,000/year	5	6.0	.02
day	500 x 1,500/year	60.2	.23	50	500 x 1,500/year	50	60.2	.23
man day	2,416 x 8/year	97.4	.37	81	2,416 x 8/year	81	97.4	.37
man day	3,391 x 8/year	132.3	.51	110	3,391 x 8/year	110	132.3	.51
man day	2,500 x 8/year	101.1	.39	84	2,500 x 8/year	84	101.1	.39
man day	50 x 20/year	5.1	.02	4.2	50 x 20/year	4.2	5.1	.02
man day	397,806 300 x 8/year	105.9	.41	88	397,806 300 x 8/year	98	105.9	.41
man day	_____	_____	_____	_____	2,400/day	417	501.7	1.93
man day	139 doc./day	418.7	1.61	348	139 doc./day	348	418.7	1.61
man day	20 doc./day	61.4	.24	51	20 doc./day	51	61.4	.24
man day	13 doc./day	37.3	.14	31	13 doc./day	31	37.3	.14

GROSS MAN YEARS	PLAN "B"				PLAN "C"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN YEARS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
	2912 press runs/year	61	73.4	.28	3744 press runs/year	78	33.8	.36
	125 press runs/year	2.5	3.0	.01	156 press runs/year	3.5	4.2	.02
.70	2416 press runs/year (TAB Affects quantity only) 175 copies/run 6 cards each	151	181.7	.70	3168 press runs/year Est. 250 copies/run 6 cards each	139	239.4	.32
.32	3291 press runs/year 175 copies/run 8 cards each	69	83.0	.32	3834 press runs/year Est. 250 copies/run 6 cards each	80	36.2	.37
.19	1903 press runs/year	40	48.1	.19	1903 press runs/year	49	59.0	.23
.24	2500 press runs/year 100 copies/run 6 cards each	52	62.6	.24	2500 press runs/year 100 copies/run 6 cards each	52	62.6	.24
.61	75 press runs/year	1.6	1.9	.01	75 press runs/year	1.6	1.9	.01
.10	1000 press runs/year	20.8	25.0	.10	1000 press runs/year	20.8	25.0	.10
.08								
	48 press runs/day	250	300.8	1.16	62 press runs/day	323	388.6	1.49
	1,000 x 28/week	97	116.7	.45	1,700 x 36/week	212/year	256.0	.98
20	2,416 x 20/year	20	24.1	.09	3,166 x 20/year	26/year	31.3	.12
27.4	3,291 x 20/year	27.4	33.0	.13	3,834 x 20/year	32/year	38.5	.15
104	2,500 x 100/year	104	125.1	.48	2,500 x 100/year	104	125.1	.48
5	75 x 1,000/year	5	6.0	.02	75 x 1,700/year	8.5	10.2	.04
50	500 x 1,500/year	50	60.2	.23	500 x 1,500/year	50	60.2	.23
81	2,416 x 8/year	91	97.4	.37	3,166 x 8/year	106	127.5	.49
110	3,291 x 8/year	110	132.3	.51	3,834 x 8/year	128	154.0	.59
84	2,500 x 8/year	84	101.1	.39	2,500 x 8/year	84	101.1	.39
4.2	50 x 20/year	4.2	5.1	.02	50 x 20/year	4.2	5.1	.02
88	$\frac{397,800}{300} \times 8/\text{year}$	88	105.9	.41	$\frac{500,000}{300} \times 8/\text{year}$	111	133.5	.51
	2,400/day	417	501.7	1.93	3,100/day	538	647.3	2.49
348	138 doc./day	348	418.7	1.91	220 doc./day 51 doc./day	550 - 128	815.7	3.14
51	20 doc./day	51	61.4	.24	32 doc./day	80	96.2	.37
31	13 doc./day	31	37.3	.14	20 doc./day	50	60.2	.23

FUNCTIONAL AREAS		DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
F.	Reproduction			
7.	Bindery (Drilling)			
a.	Catalog Cards	16 sets (42,000)	400,000/man day	548,000/year
b.	Requested Documents	Estimate 10% of these are drilled.	20/man hour	17/day
8.	Bindery (Banding)			
a.	Banding Cards	All cards are banded in sets of approx. 120.	480 pkg./man day	49,250 pkg./year
b.	Banding Microcards	Microcards are banded in sets of 50 each.	480 pkg./man day	
9.	Bindery (Stitching)			
a.	Requested Documents	Joggle and staple	600/man day	155 doc./day
b.	ASTIA Documents			
(1)	Manuals, Brochures, Etc.		1,000/man day	10,500 doc./year
(2)	Title Announcement Bulletin		1,400/man day	
	TAB Order Form			
(3)	Reclassification Bulletin		1,400/man day	15,000 doc./year
10.	Stock Handling	Unload paper and index Bristol from trucks, move into stock (in basement), rearrange stock (all sensitized materials and chemicals have to be used in order of receipt), shifting of material from one operation to another.	Indeterminate	Indeterminate
11.	Control			
a.	Repro Control	Initiate work orders. Maintain statistics and records on reproduction.	75 work orders/man day 75 work orders/man day	66 work orders/day 66 work orders/day
b.	Maintenance of Repro Files	Reclassification, restoration, withdrawals and return of repros (including records)	2 doc./man day (reclass) 0.25 doc./man day (restor) 100/man day (withdrawals & return)	300 repro/year 50 doc./year 33 doc./year
12.	Microfilming			
a.	Control	Logging in and out and follow-up on reproduction of documents for TID.	180 doc./man day	34,250 doc./year
b.	Prepare	Prepare for microfilm and reassemble	150 doc./man day	34,250 doc./year
c.	Microfilm Document	Microfilm documents average 35 pages/doc. (includes 5 target shots)	35 doc./man day	34,250 doc./year
d.	Splicing	Document & Film screening (splicing in corrections)	90 doc./man day	34,250 doc./year
	Supervisor			
	Camera Maintenance	Maintain all photo equipment	Indeterminate	Indeterminate
13.	Film Processing			
		Develops microfilm	10 reels/man day	2,039 reels/year
		Proofreading developed film	10 reels/man day	2,039 reels/year
		(Listing errors against document)	(5 reels/man day, (on 16mm)	
		Develop copy camera film	80 negatives/man day	12,510 negs/year

2

Q

PRODUCTIVITY RATE	PLAN "A"				PLAN "B"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
400,000/man day 20/man hour	548,000/year 17/day	1.4 27	1.7 32.5	.01 .13	548,000/year 17/day	1.4 27	1.7 32.5	.01 .13
480 pkg./man day 480 pkg./man day	49,250 pkg./year	103	123.9	.48	49,250 pkg./year 12,000 pkg./year	103 25	123.9 30.1	.48 .1
600/man day	155 doc./day	65	78.2	.30	155 doc./day	65	78.2	.30
1,000/man day 1,400/man day	10,500 doc./year	11	13.2	.05	10,500 doc./year 119,600 doc./year	11 35	13.2 102.3	.05 .4
1,400/man day Indeterminate	15,900 doc./year Indeterminate	11 1 man year	13.2	.05 1.00	15,000 doc./year Indeterminate	11 1 man year	13.2	.05 1.00
75 work orders/man. day 75 work orders/man day	66 work orders/day 66 work orders/day	220 220	264.7 264.7	1.02 1.02	66 work orders/day 66 work orders/day	220 220	264.7 264.7	1.02 1.02
2 doc./man day (reclass) 0.25 doc./man day (reclass) 100/man day (withdrawals & return)	300 repro/year 50 doc./year 33 doc./year	150 200 83	180.5 240.6 99.9	.63 .93 .38	300 repro/year 50 doc./year 33 doc./year	150 200 83	180.5 240.6 99.9	.63 .93 .38
180 doc./man day	34,250 doc./year	191	229.8	.98	34,250 doc./year	191	229.8	.98
150 doc./man day	34,250 doc./year	228	274.3	1.05	34,250 doc./year	228	274.3	1.05
35 doc./man day	34,250 doc./year	979	1,177.8	4.53	34,250 doc./year	979	1,177.8	4.53
90 doc./man day	34,250 doc./year	381	458.4	1.76	34,250 doc./year	381	458.4	1.76
Indeterminate	Indeterminate	1 man year	—	1.00	Indeterminate	1 man year	—	1.00
10 reels/man day 10 reels/man day (5 reels/man day, if on 16mm) 80 negatives/man day	2,039 reels/year 2,039 reels/year 12,510 negs/year	204 204 156	245.4 245.4 187.7	.94 .94 .72	2,039 reels/year 2,039 reels/year 12,510 negs/year	204 204 156	245.4 245.4 187.7	.94 .94 .72

B

GROSS DAYS	GROSS MAN YEARS	PLAN "B"				PLAN "C"			
		VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
	.01 .13	548,000/year 17/day	1.4 27	1.7 32.5	.01 .13	672,000/year 32/day	1.7 50	2.0 60.2	.01 .23
	.48	48,250 pkg./year 12,000 pkg./year	103 25	123.9 30.1	.48 .12	57,100 pkg./year 15,500 pkg./year	119 32.3	143.2 38.9	.55 .15
	.30	155 doc./day	65	78.2	.30	291 doc./day	121	145.6	.56
	.05	10,500 doc./year 119,600 doc./year	11 85	13.2 102.3	.05 .39	10,500 doc./year 195,000 doc./year	11 139	13.2 167.0	.05 .84
	.05	15,000 doc./year	11	13.2	.05	15,000 doc./year	11	13.2	.05
	1.00	Indeterminate	1 man year	—	1.00	Indeterminate	1 man year	—	1.00
	1.02	66 work orders/day	220	264.7	1.02	78 work orders/day	260	312.8	1.20
	1.02	66 work orders/day	220	264.7	1.02	78 work orders/day	260	312.8	1.20
	.69	300 repro/year	150	180.5	.69	300 repro/year	150	180.5	.69
	.93	50 doc./year	200	240.6	.93	50 doc./year	200	240.6	.93
	.38	33 doc./year	83	99.9	.38	52 doc./year	130	156.4	.60
	.88	34,250 doc./year	191	229.8	.88	42,000 doc./year	234	281.5	1.08
	1.05	34,250 doc./year	228	274.3	1.06	42,000 doc./year	280	336.9	1.30
	4.53	34,250 doc./year	979	1,177.8	4.53	42,000 doc./year	1,200	1,443.7	5.55
	1.76	34,250 doc./year	381	458.4	1.76	42,000 doc./year	467	561.6	2.16
	1.00	—	1 man year	—	1.00	—	1 man year	—	1.00
	1.00	Indeterminate	1 man year	—	1.00	Indeterminate	1 man year	—	1.00
	.94	2,039 reels/year	204	245.4	.94	2,471 reels/year	247	297.2	1.14
	.94	2,039 reels/year	204	245.4	.94	2,471 reels/year	247	297.2	1.14
	.72	12,510 negs/year	156	187.7	.72	17,641 negs/year	221	266.9	1.08

FUNCTIONAL AREAS		DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
F. Reproduction				
14. Microfilm Archives	Make Opaphane Copies	One master for vault One reproducible master One working copy Maintenance of microfilm files.	30 reels/man day	6117 reels/year
	Breakdown	Breakdown film into individual documents and place in file. (10 reels current production, 15 reels back from airgraph/day)	1) 40 titles/man day 2) 100 charges/man day 6 reels/man day	1800 changes/year 189 charges/day 5096 reels/year
	Process Document Requests	Arrange in numerical order and sort for Airgraph reproduction.	325 items/man day	139 items/day
15. Process Airgraph		Sort and splice by density into 100 ft reels (18 reels/day) Print Process (including maintenance of processors.)	325 items/man day 13.3 reels/man day 8 reels/man day	139 items/day 10 reels/day 10 reels/day
16. Photo Prints		Process photo prints for requested documents, TDD, brochures, etc.	350/man day	7574/year
a. Microcards		This medium of reproduction is used when the requester desires a complete copy of the document in microcopy form. The microcard is forwarded on request in lieu of a paper copy of the document. 50 prints each 62 doc./day - printing only Makesup Preparation of machine Process Microcards	2400/man day 30/man day 3/man hour 480/man hour	
	Drying Room	Ferrotyping and drying photoprints	400/man day	7574/year
	Stock Handling	Storage and withdrawal of photo supplies		
G. Shipping				
1. Addressograph	a. Maintenance of Using Agency Plates	Supervisor Maintain addressograph plates for user agencies showing on master plate for each user the subject Divisions for which cleared, type of agency, Agency Code Number, Security clearance and address with attention line. Proofread plates.	120 changes/man day 240 plates/man day Negligible	200 changes/day 200 changes/day
	Maintenance of TDD Distribution List	Maintain distribution list for Technical Data Digest.		
	b. Addressing	Forms, envelopes or labels for shipping. (1,000 plates 52 times per year) (1,100 plates 14 times per year) 50 per year to 650 addressees. All plates as required.	1,000 items/man hour 1,000 items/man hour 300 items/man hour 1,000 items/man hour	 300,950/year 65,500/year 154,000/year
2. ATI Cards	a. Marking Invoices	Mark invoices for Agencies still getting cards automatically.	330 invoices/man day	69,968/year
	b. Select Cards & Stuff	Select cards and stuff into envelopes.	400 invoices/man day	69,968/year
	c. Seal Envelopes	Seal envelopes.	1,350 invoices/man day	69,968/year

PRODUCTIVITY RATE	PLAN "A"				PLAN "B"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
30 reels/man day	6117 reels/year	204	245.4	.94	6117 reels/year	204	245.4	.94
40 titles/man day	1800 changes/year	45	54.1	.21	1800 changes/year	45	54.1	.21
100 charges/man day	139 charges/day	348	418.7	1.61	139 charges/day	348	418.7	1.61
6 reels/man day	5096 reels/year	849	1021.4	3.93	5096 reels/year	849	1021.4	3.93
335 items/man day	139 items/day	107	128.7	.50	139 items/day	107	128.7	.50
325 items/man day	139 items/day	107	128.7	.50	139 items/day	107	128.7	.50
13.3 reels/man day	10 reels/day	188	228.2	.87	10 reels/day	188	228.2	.87
8 reels/man day	10 reels/day	313	376.6	1.45	10 reels/day	313	376.6	1.45
350/man day	7574/year	22	26.5	.10	7574/year	22	26.5	.10
_____	_____	_____	_____	_____	_____	_____	_____	_____
2400/man day	_____	_____	_____	_____	2400/day	250	300.8	1.18
30/man day	_____	_____	_____	_____	42/day	400	481.2	1.85
2/man hour	_____	_____	_____	_____	daily	63	75.8	.29
480/man hour	_____	_____	_____	_____	2400/day	125	150.4	.58
400/man day	7574/year	19	22.9	.09	7574/year	19	22.9	.09
_____	_____	1/2 man year	_____	.50	_____	1/2 man year	_____	.50
_____	_____	1 man year	_____	1.00	_____	1 man year	_____	1.00
120 changes/man day	200 changes/day	417	501.7	1.93	200 changes/day	417	501.7	1.93
240 plates/man day	200 changes/day	208	250.2	.96	200 changes/day	208	250.2	.96
Negligible	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
1,000 items/man hour	_____	_____	_____	_____	2,600/week	17	20.5	.08
1,000 items/man hour	300,950/year	38	45.7	.18	600/week	4	4.8	.02
300 items/man hour	65,500/year	27	32.5	.13	230,938/year	28	33.7	.13
1,000 items/man hour	154,000/year	19	22.9	.09	65,500/year	27	32.5	.13
_____	_____	_____	_____	_____	154,000 items/year	19	22.9	.09
330 invoices/man day	69,988/year	212	255.0	.96	61,381/year	156	187.7	.72
400 invoices/man day	69,988/year	175	210.5	.81	61,381/year	129	155.2	.60
1,330 invoices/man day	69,988/year	53	63.8	.25	61,381/year	39	46.9	.18

B

GROSS MAN YEARS	PLAN "E"				GROSS MAN YEARS	PLAN "C"				GROSS MAN YEARS
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS		VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	
.94	6117 reels/year	204	245.4	.94		7451 reels/year	247	297.2	1.14	
.21	1800 changes/year	45	54.1	.21		1800 changes/year	45	54.1	.21	
1.81	139 charges/day	348	418.7	1.81		220 charges/day	550	661.7	2.55	
3.93	5096 reels/year	849	1021.4	3.93		6250 reels/year	1042	1253.6	4.82	
.50	139 items/day	107	128.7	.50		271 items/day	208	250.2	.96	
.50	139 items/day	107	128.7	.50		271 items/day	208	250.2	.96	
.87	10 reels/day	188	226.2	.87		18 reels/day	301	362.1	1.39	
.45	10 reels/day	313	376.8	1.45		18 reels/day	500	601.8	2.31	
.10	7574/year	22	26.5	.10		12,054/year	34.5	41.5	.16	
—	—	—	—	—		—	—	—	—	
	2400/day	250	300.8	1.16		3100/day	323	388.6	1.49	
	48/day	400	481.2	1.86		62/day	517	622.0	2.39	
	daily	63	75.8	.29		daily	63	75.8	.29	
	2400/day	125	150.4	.58		3100/day	203	243.0	.96	
.09	7574/year	19	22.9	.09		12,054/year	30	36.1	.14	
.50	—	1/2 man year	—	.50		—	1/2 man year	—	.50	
1.00	—	1 man year	—	1.00		—	1 man year	—	1.00	
1.93	200 changes/day	417	501.7	1.93		200 changes/day	417	501.7	1.93	
.96	200 changes/day	208	250.2	.96		200 changes/day	208	250.2	.96	
—	—	—	—	—		—	—	—	—	
	2,600/week	17	20.5	.08		5,216/week	34	40.9	.16	
	600/week	4	4.8	.02		600/week (mil. issue)	4	4.8	.02	
.18	290,938/year	28	33.7	.13		365,662/year	46	55.3	.21	
.13	65,500/year	27	32.5	.10		65,500/year	27	32.5	.13	
.09	154,000 items/year	19	22.9	.09		178,200 items/year	22	26.5	.10	
.98	51,381/year	156	187.7	.72		85,038/year	258	310.4	1.19	
.81	51,381/year	129	155.2	.60		85,038/year	213	258.3	.96	
.25	51,381/year	39	46.9	.18		85,038/year	64	77.0	.30	

FUNCTIONAL AREAS	DESCRIPTION OF WORK	PRODUCTIVITY RATE	VOLUME
G. Shipping			
3. Requested Documents			
a. Single Wrap	Pack and Wrap - single wrap (397)	240 pkg./man day	203/day
b. Double Wrap	Pack and Wrap - double wrap (171)	120 pkg./man day	89/day
4. Title Announcement Bulletin			
a. Stuff Restricted TAB	_____	700/man day	_____
b. Stuff Confidential TAB	_____	700/man day	_____
c. Stuff Military TAB	_____		_____
d. Seal Envelopes	_____	1,330/man day	_____
5. Reclassification Bulletin			
a. Stuff Reclassification Bulletin	Stuff 1,000 copies.	700/man day	1,000/month
b. Seal Envelopes	Seal envelopes.	1,330/man day	1,000/month
6. Demand Bibliographies			
a. Single Wrap	Wrap and Ship Demand Bibliographies.	240 pkg./man day	204 pkg./year
b. Double Wrap	Wrap and Ship Demand Bibliographies.	120 pkg./man day	1,121/year
7. ASTIA Publications			
a. Stuff ASTIA Publications	Six of the seven ASTIA publications are (F. 8)		
b. Seal Envelopes	disseminated to the Users - 1,350 each.		
	Stuff envelopes 8,100 (6 x 1,350)	700/man day	6,000/year
	Seal envelopes 8,100 (6 x 1,350)	1,330/man day	6,000/year
8. Form Letters			
a. Stuff Envelopes	Stuff form letters into envelopes 50 letters	1,400/man day	32,500/year
	(650) = 32,500		
b. Seal Envelopes	Folding done mechanically in Publishing Division	1,500/man day	32,500/year
	50 letters (650) = 32,500		

2

OF WORK	PRODUCTIVITY RATE	PLAN "A"				PLAN "B"	
		VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED
(397) p (171)	240 pkg./man day 120 pkg./man day	206/day 89/day	215 185	258.7 222.6	1.00 .85	206/day 89/day	215 185
_____	700/man day	_____	_____	_____	_____	50/week	4
_____	700/man day	_____	_____	_____	_____	1,300/week	97
_____	_____	_____	_____	_____	_____	900/week	67
_____	1,330/man day	_____	_____	_____	_____	1,950/week	76
	700/man day	1,000/month	74	89.0	.34	1,000/month	74
	1,330/man day	1,000/month	39	46.9	.18	1,000/month	39
lographies.	240 pkg./man day	204 pkg./year	1	1.2	.05	204/year	1
lographies.	120 pkg./man day	1,121/year	8	10.8	_____	1,121/year	9
ications are (F. 8)							
each.							
(, 350)	700/man day	6,000/year	8.6	10.3	.04	6,000/year	8.6
(, 350)	1,330/man day	6,000/year	4.5	5.4	.02	6,000/year	4.5
opes 50 letters	1,400/man day	32,500/year	23	27.7	.11	32,500/year	23
in Publishing Division	1,500/man day	32,500/year	22	26.5	.10	32,500/year	22

B

GROSS MAN YEARS	PLAN "B"				PLAN "C"			
	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS	VOLUME	MAN DAYS REQUIRED	GROSS MAN DAYS	GROSS MAN YEARS
1.00	206/day	215	258.7	1.00	397/day	414	498.1	1.92
.85	89/day	185	222.6	.86	171/day	356	428.3	1.65
—	50/week	4	4.8	.02	68/week	5	6.0	.02
—	1,300/week	97	116.7	.45	1,618/week	120	144.4	.56
—	900/week	67	80.6	.31	1,419/week	105	120.3	.49
—	1,950/week	76	91.4	.35	2,632/week	103	124.0	.48
.34	1,000/month	74	89.0	.34	1,350/month	23	27.7	.11
.18	1,000/month	39	46.9	.18	1,350/month	12	14.4	.06
.05	204/year	1	1.2	.05	250/year	1	1.2	.06
—	1,121/year	9	10.8	—	1,375/year	11	13.2	—
.04	8,000/year	8.6	10.3	.04	8,100/year	11.6	13.9	.05
.02	6,000/year	4.5	5.4	.02	8,100/year	6.1	7.3	.03
.11	32,500/year	23	27.7	.11	32,500/year	23	27.7	.11
.10	32,500/year	22	26.5	.10	32,500/year	22	26.5	.10

FUNCTIONAL AREAS	DESCRIPTION OF WORK	MANNING	PLAN "A"	PLAN "B"
			GROSS MAN YEARS	GROSS MAN YEARS
H. Office of the Chief	Responsible for the accomplishment of that portion of the ASTIA mission assigned to DSC.			
1. Chief, DSC	Directs all components of DSC and keeps the Director of ASTIA informed.	Chief, DSC	1.00	1.00
2. Deputy Chief, DSC	Assumes full responsibility for DSC in absence of Chief. Supervises all components of DSC under general supervision of Chief, DSC.	Deputy Chief, DSC 2 Clerk Steno.	1.00 2.00	1.00 2.00
L. Administrative Staff	In order to carry out the mission of ASTIA it is necessary to perform a number of Staff level functions. These staff duties are specialized and require trained specialists.			
1. Administration	Perform administrative functions as pertain to personnel, budget and fiscal, supply, mail and receptionists.	Chief (Admin. Office) Admin. Asst.	1.00 1.00	1.00 1.00
Budget and Fiscal	Control purchase orders, authenticate reports of contractors, and prepare periodic personnel and budget status reports.	1 Budget & Fiscal Officer 1 Clerk Typist	1.00 1.00	1.00 1.00
Mail	Control and route both incoming and outgoing mail.	1 Chief (Clerk) 4 Clerk, Mail	1.00 4.00	1.00 4.00
Personnel	Handle all matters pertaining to personnel actions.	1 Driver, Truck	1.00	1.00
Receptionists	Check security clearance of persons admitted to DSC for purposes of obtaining services or use of reference files and reports.	1 Admin. Asst. 1 Clerk Typist	1.00 1.00	1.00 1.00
Supply	Procure, issue and maintain records on all office supplies and equipment necessary to sustain DSC operations.	2 Clerks (directly responsible to Admin. Office)	2.00	2.00
2. Plans and Operations	Responsible to Chief and Deputy Chief, DSC in analyzing operations, at the operating level, performing staff studies, maintaining standard operating procedures, and compiling essential statistics to justify operational requirements.	1 Chief (Supply Clerk) 2 Clerks (Supply) 1 Clerk Typist 1 Chief, Operation Analyst 1 Org. & Method Examiner 1 Clerk Typist	1.00 2.00 1.00 1.00 1.00 1.00	1.00 2.00 1.00 1.00 1.00 1.00
3. Security	Take such actions as are necessary to implement and maintain plant security.	1 Security Officer	1.00	1.00
J. Operating Staff	Assume responsibility at the operating level for the accomplishment of all phases of DSC activity.	Chief Asst. Chief 1 Clerk Steno.	1.00 1.00 1.00	1.00 1.00 1.00
1. Chief, Service Division	Supervise components of DSC engaged in cataloging, indexing, announcing the availability of, and distribution to accredited users of scientific and technical documents acquired by ASTIA, maintain a reference library and provide reference and related services including bibliographies as requested.			
2. Chief, Production Division	Supervise components of DSC engaged in all forms of reproduction, publication copy presentation, illustration and format. Responsible for establishing specifications for and maintaining the development of new publishing and photographic processes and equipment as becomes necessary for fulfilling the ASTIA mission.	Chief Asst. Chief 1 Clerk Steno	1.00 1.00 1.00	1.00 1.00 1.00
Total Man Days & Man Years (Gross)		Plan "A" - Gross Man Days, 52,357.1; Gross Man Years, 201.41; Plan "B" - Gross Man Days, 53,343.9; Gross Man Years, 213.94 Plan "C" - Gross Man Days, 62,378.81; Gross Man Years, 239.94		

	DESCRIPTION OF WORK	MANNING	PLAN "A"	PLAN "B"	PLAN "C"
			GROSS MAN YEARS	GROSS MAN YEARS	GROSS MAN YEARS
	Responsible for the accomplishment of that portion of the ASTIA mission assigned to DSC.				
	Directs all components of DSC and keeps the Director of ASTIA informed.	Chief, DSC	1.00	1.00	1.00
	Assumes full responsibility for DSC in absence of Chief. Supervises all components of DSC under general supervision of Chief, DSC.	Deputy Chief, DSC 2 Clerk Stenos.	1.00 2.00	1.00 2.00	1.00 2.00
	In order to carry out the mission of ASTIA it is necessary to perform a number of Staff level functions. These staff duties are specialized and require trained specialists.				
	Perform administrative functions as pertain to personnel, budget and fiscal, supply, mail and receptionists.	Chief (Admin. Office) Admin. Asst.	1.00 1.00	1.00 1.00	1.00 1.00
	Control purchase orders, authenticate reports of contractors, and prepare periodic personnel and budget status reports.	1 Budget & Fiscal Officer 1 Clerk Typist	1.00 1.00	1.00 1.00	1.00 1.00
	Control and route both incoming and outgoing mail.	1 Chief (Clerk) 4 Clerk, Mail	1.00 4.00	1.00 4.00	1.00 4.00
	Handle all matters pertaining to personnel actions.	1 Driver, Truck	1.00	1.00	1.00
	Check security clearance of persons admitted to DSC for purposes of obtaining services or use of reference files and reports.	1 Admin. Asst. 1 Clerk Typist	1.00 1.00	1.00 1.00	1.00 1.00
	Procure, issue and maintain records on all office supplies and equipment necessary to sustain DSC operations.	2 Clerks (directly responsible to Admin. Office)	2.00	2.00	2.00
	Responsible to Chief and Deputy Chief, DSC in analyzing operations, at the operating level, performing staff studies, maintaining standard operating procedures, and compiling essential statistics to justify operational requirements.	1 Chief (Supply Clerk) 2 Clerks (Supply) 1 Clerk Typist 1 Chief, Operation Analyst 1 Org. & Methods Examiner 1 Clerk Typist	1.00 2.00 1.00 1.00 1.00 1.00	1.00 2.00 1.00 1.00 1.00 1.00	1.00 2.00 1.00 1.00 1.00 1.00
	Take such actions as are necessary to implement and maintain plant security.	1 Security Officer	1.00	1.00	1.00
	Assume responsibility at the operating level for the accomplishment of all phases of DSC activity.	Chief Asst. Chief 1 Clerk Steno.	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
	Supervise components of DSC engaged in cataloging, indexing, announcing the availability of, and distribution to accredited users of scientific and technical documents acquired by ASTIA, maintain a reference library and provide reference and related services including bibliographies as requested.				
	Supervise components of DSC engaged in all forms of reproduction, publication copy presentation, illustration and format. Responsible for establishing specifications for and maintaining the development of new publishing and photographic processes and equipment as becomes necessary for fulfilling the ASTIA mission.	Chief Asst. Chief 1 Clerk Steno	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Plan "A" - Gross Man Days, 52,357.1; Gross Man Years, 201.41. Plan "B" - Gross Man Days, 53,343.9; Gross Man Years, 205.16. Plan "C" - Gross Man Days, 62,378.81; Gross Man Years, 239.94					