

NR 1-13b (3)(a)

MACHINE DIVISION

This chapter will deal with those aspects of the Machine Division (MD) not related to the Intellofax System, ^{which started close to close to} 50 per cent of MD's activities from 1947-67 were devoted to the Intellofax System and as such are discussed in detail in ~~the~~ chapter _____ (Intellofax.)

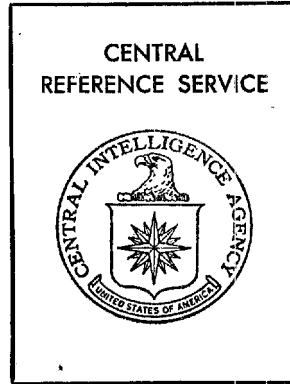
~~Regulation No. 1-130/~~ MD provided the ~~mechanical~~ and technical assets which enabled OCD to achieve ~~the~~ first two functions assigned to the office by Regulation No. 1-130:

- a. Design, develop, and operate such central reference facilities as will ensure that the content of all available intelligence materials is immediately accessible to all offices of the Agency in support of intelligence production; and
- b. In collaboration with the Management Staff, conduct research into, and advise Agency components upon, the application of machine techniques and special devices to problems of information control and bibliographic research.

^{studies} The mission of the Machine Division was to perform the following tasks:

- a. Maintain and service various files, capable of being mechanically handled, which index ~~and~~ or provide organized data related to intelligence information held by certain Office components, and upon request, within its manpower capabilities, perform similar ~~functions~~ services for other Agency components.
- b. Investigate and develop, when necessary, new equipment which will aid in the information processing ~~problems~~ of the DD/I. Upon request and in conjunction with the Management Staff perform a similar service for other Agency components.
- c. Provide methods and systems planning service relative to the use of data processing equipment in handling intelligence information.
- d. Maintain and service machines or equipment which are not readily maintained under service contract.

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Historically the Machine Division had three names from 1946-67. It was ^{first organized as} ~~called~~ the Central Index of the ^{Reference Center of the} Office of Reports and Estimates (ORE) from late 1946 until the merger of the Reference Center with the Office of Collection ~~of~~ ^{in May 1948.} Dissemination (OCD). Under the new OCD, it was designated the Machine Methods Division which name it retained until 1950 when it became the Machine Division, ^(MMD) ~~and so~~ ^{(MD) 2x} remained until Sept 1966 when ^{MD} ~~OCD~~ reorganized and the machine elements were named the Machine Support Division. It will henceforth be referred to as MD in this

chapter. MD had four chiefs during its 20 years of existence:

had been a long time in existence
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~~from its inception in 1947, until he transferred to~~ the Management Staff in September 1950 as chief of a machine planning and development group for the Agency. ^{(2) M.} ~~March~~ who also reported for duty in 1947, had been ~~deputy~~ deputy and had been responsible for the development of much of the early equipment for the central reference facilities. He served as chief until September 1954 when he ~~left~~ ^{1954/56} joined Eastman Kodak Company, ~~particularly in the Minicard department.~~

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who had been Assistant Chief of the Special Register (SR) and responsible for the machine developments in SR, served as chief of MD until he passed on suddenly ^{January} in the ~~fall~~ of 1958. (4)

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had been chief of planning staff and later

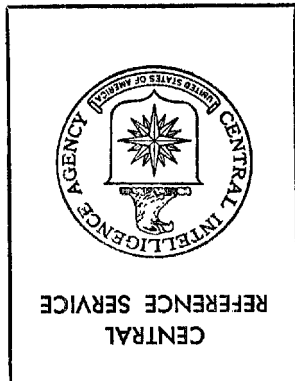
Assistant Chief ^{for only 1 month} since 1957, ~~then became acting chief~~ ^{then} directed the operations of the Division until he retired in 1971.

The T/O's of MD fluctuated from 12 in 1947 to 98 in 1959, leveling off at 91 in 1966.

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as a Navy Commander
 [REDACTED] who had headed a large IBM indexing

unit ~~in Cleveland // for the Navy~~ during World War II, was hired

~~by Kenneth A. Adcock~~ as Chief of the Indexing Division of the
 Control
 Contact Register, Office of ~~the~~ Reports and Estimate (ORE) .

When he reported for duty ^{17 March} on February ~~19~~ 1947 he was placed in charge
 of the Central Index. In March 1947 its
 mission was ~~stated to be~~
 was outlined as: ^{1/}

1. Index, by ~~machine methods~~ business machine procedures the subject matter of all available reports, and other documents, of a foreign intelligence nature.
2. Prepare and distribute accession lists of all newly acquired, important foreign intelligence documents.
3. Locate and identify upon request all available intelligence materials pertaining to any specific foreign subject or area.
4. Analyze the Index at regular intervals to determine superabundance or dearth of available documentary foreign intelligence on any subject of interest to the national security.
5. Apprise the pertinent offices of ~~such~~ the results of such analyses for appropriate action.
6. Provide, upon request, complete bibliographies of available intelligence material on any specific foreign subject or area.
7. Maintain and analyze the IBM card files of Foreign Funds Control and similar special IBM files for listings and statistical intelligence information within the capabilities and physical limitations of the Reference Branch.
8. Acquire, code, and process the special US Bombing Survey Reports and similar documentary files within the limits set down by responsible intelligence and research offices, and limited only by the capabilities and physical limitations of the Reference Branch.

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By August [REDACTED] wrote to the AC/Reference Center that

the functions of the Central Index had broadened since March to answer the increased needs of the various Central Intelligence Group (CIG) units for

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and in conjunction with the Management Staff perform a similar service for other Agency components.

(3) Provide methods and systems planning service relative to the use of data processing equipment in handling intelligence information. (b) Maintain and service machines or equipment which are not readily maintained under service contract.

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A spec was dev by [redacted] wa

was available to M.D. [redacted]

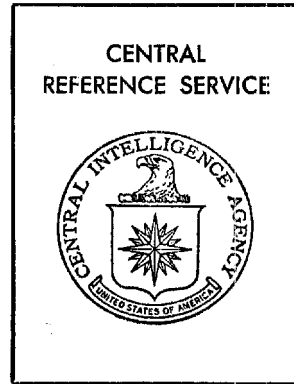
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[redacted] & his team from

MIT spent in design & test on this machine a couple

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abstracts of documentary material and to perform the work of indexing and cataloging the Foreign Broadcast intercepts on a machine basis. (See chapter _____, Intellofax). ~~The~~

With a ceiling of 18 people set for 1948 and 23 for 1949, Mr.

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██████████ felt that the Central Index would undertake only that portion of the mission which related to the Intelligence Documents Division (Library).^{1/}

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██████████ who became ██████████ ^{also} deputy, reported for duty in March.

> By 1948 a T/O of ²⁸ 43 was ~~on the books~~, contemplated.

~~In addition to the administrative and ede~~
In requesting an increase in grade for the Chief, the

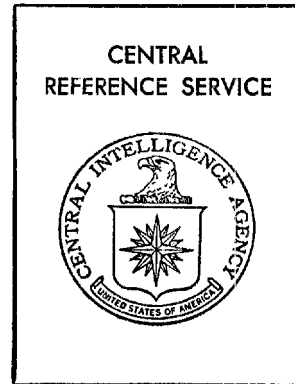
Assistant Director/OCD added the following responsibilities:^{2/}

1. Act as consultant on matters involving all types of office machine operations and technical procedures for CIA and member agencies.
2. Maintain ~~conscious~~ liaison with specialists both in technical continuous industries and companies outside the government and with specialists in the intelligence offices associated with CIA.
3. Maintain continuous study, investigation, and research in the field of management engineering to assure the use of the most efficient and up-to-date methods and procedures in carrying out the mission of the Reference Center.

- ^{1/} Memo, C, Central Index to Acting Chief, Reference Center, 15 Aug 47, sub: 1949 Table of Organization for the Central Index. S. File: Tables of Organization 1947-51 Job: 58-98/6
- ^{2/} Central Index Increase in Grades. (undated, probably 1948) S. File: Ibid

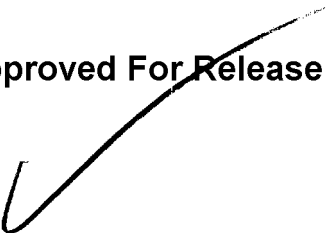
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the machine operations until he retired in 1971.

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With a T/O of 18 people set for 1948 and 23 for 1949, [REDACTED] indicated ^{in 1949 mid-1947} that the Central Index

could undertake only that portion of the mission which

related to the Intelligence Documents Division (Library),

namely the indexing of documents for the Intellofax System,

~~and the indexing of the Foreign Broadcast~~ In requesting a

grade raise for the Chief, ^{*Central Index*} the Assistant Director (AD)/CD added

the following responsibilities: ^{2/}

1. Act as consultant on matters involving all types of office machine operations and technical procedures for CIA and member agencies.
2. Maintain continuous liaison with specialists both in technical industries and companies outside the government and with specialists in the intelligence offices associated with CIA.
3. Maintain continuous study, investigations, and research in the field of management engineering to assure the use of the most efficient and up-to-date methods and procedures in carrying out the mission of the Reference Center.

Those three responsibilities set the tone for the ^{*constant search*} ~~accomplishments~~

~~of the MD during the next ~~17/18~~ 19 years.~~ on the part of MD ~~top~~

~~planners/~~ managers for new and improved methods in machine

techniques, not only for OCD/OCR but also for other Agency

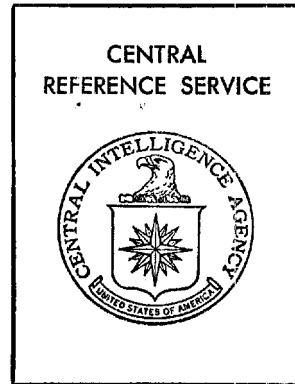
components.

1/ Memo, C, Central Index to Acting Chief, Reference Center, 15 Aug 47, sub: 1949 Tables of Organization for the Central Index, S. File: Tables of Organization 1947-51 Job: 58-98/6

2/ Central Index Increase in Grades. (undated, ~~but~~ probably early 1948)

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~~survey of machine methods it was as~~

The book and periodical subscription purchase record maintained by the CIA Library was placed on a punched-card basis in 1949.

Two of the space orientation in 1949 dictated that separate machine sections for the Industrial Register (IR) and the Biographic Register (BR) be established.

The various registers in OCD, Biographic (BR) and Industrial Register (IR) had their own machine operations. As an alternative to transferring all machine operations to a single jurisdiction, James M. Andrews, Assistant Director of OCD, appointed the Chief, MMD to exercise general surveillance over all OCD machine operations, and ^{1/}

~~In July 1958 the machine operations of the Industrial Register were merged with MD.~~

There was no indication in the record that the absorption of IR's machine section by MD was considered when the two units became collocated in the Riverside Station. (BR had, however, moved to North Building)

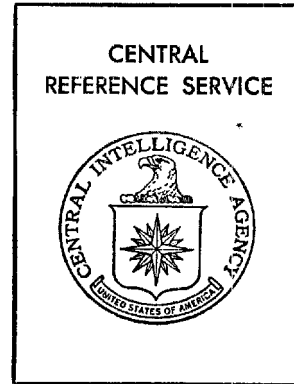
In July 1958 the machine operations of IR were merged with MD (BR had moved to North Building) to provide better job scheduling and machine utilization.

Mr. Paul AD at the time felt that this merger was of primary importance to fully test combined unit job to move into the new building (1961) 15 positions were transferred from IR to MD

^{1/}Memo, AD/CD to all Divisions, 16 Dec 49, sub: Coordination in Machine Methods. File: OUR History-Doc 1946-52 Job: 59-875/1

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MD-6

Indicative of the work MD did in addition to Intelifax is the list of tabulating card files maintained as a service to Agency components:

all domestic & foreign pubs procured by Acquisition Div. CIA Library for all offices in the Agency.

used as an accounting record

- a. The Library Book Order file used to compile statistical reports regarding books that are procured by the CIA Library. It was used to compile statistical reports (begin the month in 1949 for domestic foreign books & periodical subscription) (MD)
- b. The Card catalog file was an index to all books in the CIA Library. The file, although located in the Library, was maintained by MD.

c. Three files, the Film, Spot Photography, and Personality were indexes to material held by or available to OCR's Graphics Register. The Film file was an index to the motion picture films; the Spot Photography file was an index to ground photography; and the Personality Photograph file was a file of photographs of persons.

e. Three files, the Film (motion picture films), Spot Photography (ground photography), and Personality (photographs of persons), were indexes to material held by or available to OCR's Graphics Register.

f. The Intelifax file, arranged by subject and area codes, was an index to the intel license reports on file in the Library.

g. Film Aperture work file was used for statistical purposes in MD and was also as an index to the film storex at Final Records.

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h. The [redacted] was maintained for DD/P, was used to prepare machine listings of information related to people traveling to and from Bloc countries.

i. The 25X1B4d [redacted] file was used for preparing machine listings for ORR for the analysis of freight traffic and

j. The River Register file was used for preparing machine registers of Russian river vessels for ORR.

k. The Special Check List file, containing the names of business establishments outside the Soviet Bloc with business transactions with Bloc countries, was used for preparing machine listings for ORR. (started in February 1952)

l. The ORR Time Study file was maintained analysis of time expended on research projects in ORR.

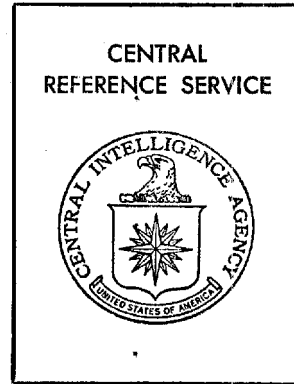
m. The Policy and Program Co-ordination file, maintained for the War Plans Division of DD/P, contained names and identify- from their native countries in case of war. (recommended for evacuation)

Machine Division 1959. File: M-948/1

2/ mem AD/CD to Acting AD/OPR 21 Feb 52 52 58-98/11

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k. The [redacted] file contained the names, geographical latitude and longitude of the primary bombing targets in China and the Soviet Bloc countries. (Source documents did not indicate which office in CIA was the primary user.)

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[redacted]

In ~~FY~~ 1966 the following statistical data ^{was compiled} indicated the amount of money spent on extra-office machine support. ^{This included the}

(a) The NIS Gazetteer Program ^{and other activities approved by OCR at the request of other offices}

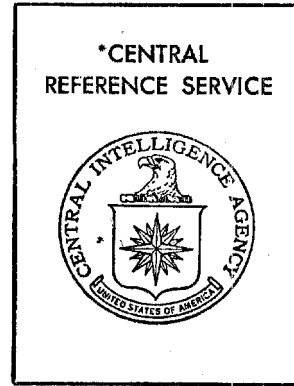
Expenditures: FY 1963
FY 1964
FY 1965
FY 1966

[redacted]

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Charged with the responsibility for the development and efficient operation of special machines and equipment for OCD, and for providing advisory services for CIA offices and ~~1977 Intelligence~~ ~~Advisory Committee (IAC)~~ other intelligence agencies on the availability and use of new machine methods and equipment for intelligence operations, the machine experts in OCD were always looking for and experimenting with new systems and/or equipment. A few of these during the early 1950's included the following: (1) ~~The Film Equipment~~

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~~Project~~. MD worked closely with OSI, which had originally sponsored this project with the ~~special~~ personnel. ~~Using~~ a machine developed by ~~Dr. Andrews~~

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It was hoped that

~~and his team from~~ spent many months with MD personnel and 25X1A5a1 ~~the machine with~~ OCD indexing personnel in testing a comprehensive coding system, which would serve the needs of ~~OSI as well as other government departments~~ constructed from the terminology of science and technology. Dr. Andrews stated to ~~OSI~~ ~~the Office of Intelligence Coordination~~ finally recommended in November 1952 that he did not feel much tangible benefit would be gained by the project and he did not approve of an extension of ~~the~~ contract. ^{RD 20} (2) The Rapid Selector Project. This project

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was carried on jointly between ORR personnel and ~~Minicard~~

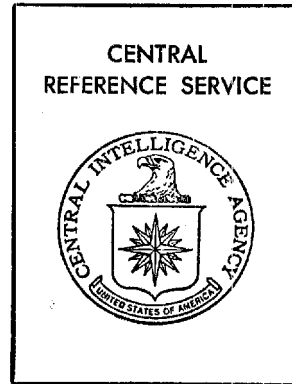
The basic idea was to combine a picture of a document or photograph on film with a dot code pattern immediately preceding it and using the Rapid Film Selector. MD commented that the system would require a complete search of all material and that it would not be possible to process the film until all scanning had been completed. Therefore, the system was considered too slow and cumbersome for OCD's mass production requirements. By 1954/55 ~~OSI Minicard~~ MD was heavily involved in the ~~Minicard~~ more interested and involved in the ~~Minicard~~ development (see chapter _____ Intellofax) and felt that it could do a

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far better job than the Rapid Selector.
U.S. Office for Management to L.H. Samelle IBM 27 July 51 memo, C/MD
to Executive OCD. 15 Dec 52 sub: quantity of material for Term Effort
Related Activities C. 26: MD 447-58 60-5981

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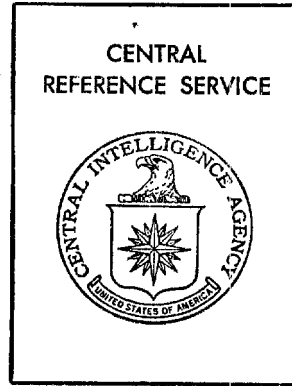
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3. MD and Library managers ~~attended~~ became interested in the [REDACTED] Coordinate Indexing scheme. In this form of indexing cards were set up for each subject encountered, and on each card, document numbers were entered for each document that contained that subject. If a relationship between two subjects was required, then two cards or series of cards relating to the two subjects were pulled and coincidence of document numbers was noted visually or matched by machine. OCD rejected this scheme as being too cumbersome for a large collection of indexed material.

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