RECORD MANAGEMENT IN INDIA
—SOME ASPECTS

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PREFACE

Indian mind is known for its prolixity. We pile up opinions upon opinions as if by compulsive habit. This inveterate habit results in swelling of files. In a lengthy memorandum dated 24 May 1899, Lord Curzon, Viceroy of India, named several anamolies in vogue in the Central Secretariat. By way of illustration he referred to a despatch received in a certain department from the Secretary of State which covered 3½ pages of print. "After being gingerely touched by a few clerks, it was taken in hand by an Under Secretary who paraphrased it (with glosses and readings of his own) in 1¾ pages of print and then added a note recording his opinion in 4½ additional pages of print. The above example was eagerly followed by his colleagues in an ascending scale, and by the time the Viceroy and Members of Council had noted upon it, the recorded notes amounted to 28 pages of small print, as compared with 3½ pages of large print from the Secretary of State which had provoked the lamentable effusion". He cited another case of Inland Steam Vessels Act whose mass of papers in a file were a foot high.

The practices prevalent in Curzon's time have been stretched still further. The administrators are all actively engaged in stereotyping the anamolies of the past.

We are wedded to many other anamolies and have unconsciously been instrumental in creating problems of record explosion and preservation of extreme complexity. Semi-current files are lying in heaps in certain sections of the Ministries and Departments. Departmental Record Rooms, for want of space, appear to be breaking at seams. The National Archives of India is unable to receive more records until its annexe comes up. Yet, as archivists, we cannot divest ourselves of the moral responsibility for the proper upkeep of these records.

In short, the problems are : how to simplify record creation, how to quickly retrieve information from records, and how to preserve records of enduring value? In the wake of paper explosion, the problems of record management are intractable.

To highlight the baffling nature of the problems, the National Archives of India organised a seminar on Record Management on 23-24 October, 1980, during the 'Archives Week.' The inaugural meeting was presided over by Shri Vishnu Sahai, ex-Governor of Assam. The inaugural address was delivered by Shri T. N. Chaturvedi, the then Director, Indian Institute of Public Administration, and now Secretary to the Government of India, Ministry of Home Affairs.

The proceedings of the seminar have already been published in **'The Indian Archives'**, volume XXIX, No. 2 (July-December 1980). These are now also brought out separately in the form of a booklet for the benefit of those in the profession and others interested in the problem.

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RECORD MANAGEMENT IN BRITISH INDIA

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The purpose of this paper is to show that the problems of record management confronting us today had their origin in the last quarter of the eighteenth century when some of the administrative concepts of the present day India were beginning to take roots. An attempt has, therefore, been made in this paper to trace the lineament of this problem which perplexes us today as it did baffle the British from time to time though it did not carry the comprehensive appellation of Record Management which in simple terms connotates the 'cradle to grave' aspects of the life-cycle of records. Though the data at our disposal is too meagre to outline even the main contours of the problems, the British appear to have tackled the problem broadly in two phases. In the first phase, spanning the Company period, the problems confronted were those of accumulations and unqualified destruction. This phase was characterised by what we would now call 'management by crisis'. The second phase covering roughly the Crown period tackled the problems of classification and appraisal. This phase heralded the era of 'management by regulations'.

The Factory Records of the Company had perished in the great storm of 1737 or were lost during the capture of Calcutta by Sirajud Daulah in 1756. Winning the battle of Plassey in the following year, the Company emerged as a political power. This resulted in the expansion of public business leading to corresponding increase in the bulk of records.

Accumulation of records obviously posed the problems of their arrangement and inventory. Initial efforts in this direction were made in 1775. The records of the Supreme Court, which was established two years earlier, were reported to be 'in great disorder and danger of being destroyed'[1] (1) Richard McVeagh

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was, therefore, entrusted with the task of bringing about some order in these records. Similarly the alarming condition of records of Public Department (later Home Department) was highlighted by Edward Hay, Secretary to the Board of Fort William in his letter dated 24th October, 1787[2] to Lord Cornwallis. The work of arrangement and inventorying these records was entrusted to William Dolby[3] for completion by 1st January, 1788. Five years later Regulation XVIII of 1793 imposed on the then Supreme executive an obligation of "Preserving complete the records of the Civil and Criminal judicatures"[4] and placed a ban on the removal, dispersal or disposal of the records except with the approval of the competent authority. In the following year Thomas Scott was entrusted with the task of methodical arrangement of records lying in a state of "accumulated confusion."

The fate of the Revenue Records was no better. The Board of Revenue was apprised of the sad condition of land records in the various offices in the collectorates. In view of the Permanent Settlement in Bengal their arrangement and preservation was considered much urgent. Subsequently, the Public Despatch to the Court of Directors dated 30th April 1797 dilated upon the problem posed for preservation of records accumulated in the Council House from insects and adverse effects of climate indicating the damage already done to many of the proceedings for want of proper apartment. The Government, therefore, built an apartment to serve as the Record Office, equipped with wooden frames near the Council House. By a Resolution dated 6th November, 1797,[5] Mr. Seymour, Registrar in the Revenue and Judicial Departments, was made Record keeper for setting matters right. He laboured hard among these records for fourteen years and with his retirement the post was abolished on 1st September, 1811 as an economy measure.[6]

Nine years later the Supreme Government by their Resolution[7] dated 17th March, 1820, established a Record Office and at the same time created a Presidency Committee of Records consisting of a Judge of Sadar Diwani Adalat, Secretary to the Government in the Judicial and Territorial Departments and Legal Remembrancer, to supervise not only the Calcutta Record Office but also to guide Muffussil Committees created all over Bengal. This Committee helped to rescue from oblivion a valuable series of records but it was dissolved in 1829 leaving the records to languish.[8]

The unrestricted accumulation of records naturally posed the problem of space which in its turn gave rise to the need for getting rid of what were considered as 'unimportant' records. In 1833 the Sadar Adalat secured Supreme Government's permission to destroy all records of all cases decided upto 1820 in the Muffussil courts. After securing a similar authority in 1834 it ordered destruction of records of the Zilla and City Courts, excepting the decrees in original suits and appeals together with documents in which they were found. A decade later in 1845, the operation of the two orders referred to above was further extended by the same Adalat. Three orders in 1852 and two more in the following year were circulated laying down general rules for destruction of useless records. These orders of the Adalat in respect of destruction were adopted by the Calcutta High Court in 1895.[9] In the same year it adopted, with slight modifications, division of records of suits and miscellaneous cases into two categories, *Trial Nuthee*[10] and *Process Nuthee*, laying down specific periods for destruction, after separating certain classes of papers for preservation and destroying certain others.

However, doubts arose about the power of judges to order destruction under the provisions of Bombay Act VI of 1865 of documents and other papers deposited with them by private individuals constituting private property, as they did, the Government sought immunity from legal consequences if such documents were destroyed. Accordingly, the Destruction of Records Act of 1879[11] was enacted and various judicial authorities were empowered to dispose of masses of records, including documents deposited by private individuals, if not reclaimed in time. This Act was amended in 1917[12] providing for delegation of rule making powers to various Government agencies to cover areas not already provided for in the earlier enactment.

Two decades before the enactment of the Destruction of Records Act, the takeover of administration by the Crown was followed by the adoption of a topical filing system in place of what were then called 'Weekly Consultations'. In order to prevent files becoming unwieldy in size, it was also arranged that every file was to close by the end of the month in which it had been started. To check the mixing up of important papers with unimportant, the files were classified[13] into three categories—Firstly 'A' files dealing with questions of policy; secondly 'B' files dealing with important cases other than policy and thirdly 'Deposits' comprising routine papers which did not

require even to be formally recorded and could be weeded out automatically as soon as they had served their purpose. This classification of files, when they were opened or in the making rendered immensely easy the task of identifying and weeding out unimportant papers.

Soon afterwards in sixties of the nineteenth century was set up a Record Committee with Rev. J. Long as Member-Secretary. During its tenure of ten years this Committee was able to appraise the records of a number of Departments. As a result of the suggestion of this Committee, there came into existence for a number of Departments separate Offices of Permanent Records which were the forerunners of the Departmental Record Rooms of present time.

Soon afterwards, in 1891, came into existence the Imperial Record Department, now known as the National Archives of India, to house the non-current records of the Central Government. George Forrest[14], was appointed the Officer-in-Charge marking thereby an organised coordinated effort for appraisal and weeding of records.

With the establishment of the Imperial Record Department, the Home Department took the lead for weeding out unimportant records like spare copies of printed papers which encumbered the shelves. Sir Phillip Hutchins observed in 1891 that there was "an infinite deal of rubbish which I hope Mr. Forrest will not find incompatible with his literary and antiquarian taste to destroy".[15] Subsequently by an office order[16] dated 30th September, 1899, it was decided that there would be an annual weeding of superfluous papers in the months of December and January at Calcutta and in July and August at Simla. Moreover, the Departments were advised to transfer all their non-current records older than twenty years after every five years to the Imperial Record Department.

As a corollary, the need was felt for developing proper criteria for appraisal prior to weeding or retention of records. Opinion was, however, divided over the appraisal of 'B' category files. Sir John Hewett, Home Secretary, noted: "It does not seem to me that any great sense of perspective is required to determine what papers can be kept and what destroyed and at all events the plan of marking those to be preserved with 'P' and those to be destroyed with 'D' can be tried. This can be done by the Registrar, and any doubtful case can be referred to the Under Secretary or Deputy

Secretary".[17] Forrest, however, was of the view that the destruction of any set of papers should not be left absolutely to the discretion of one person. He suggested that the Registrar should draw up a list of papers to be destroyed after every three months and submit it to the Deputy Secretary who should pass it on to the Officer-in-charge of the Records. Similarly, the latter should also submit a list of papers in his custody with recommendations for destruction to the Deputy Secretary who would in turn submit it to the Secretary. This procedure for appraisal was analogous to that followed in London.

While this controversy between Hewett and Forrest was raging, the Government decided to transfer the Imperial capital from Calcutta to Delhi. This decision imparted a new sense of urgency to the question of appraisal of records. Consequently, the Imperial Record Department, which was transferred to the Education Department, issued instructions to all the Departments to undertake weeding of their respective records at once. A fresh set of weeding rules, based on the English system, was hammered out in 1912 enumerating *inter alia* the classes of papers to be retained, and to be destroyed. This helped in the weeding out of a very large percentage of records which had outlived their utility. In this operation as much as 66.1% of the proceedings volumes and Registers and 77.3% of the files were reported to have been weeded out.

In the meanwhile the Government of India Secretariat Procedure Committee, presided over by H. L. Lewellyn Smith, submitted its report on 20th December, 1919. This report brought about a further revision of classification of records. An important element of this classification was that files marked for destruction in a particular year should come up automatically for review for being weeded out. In the following year Henry Sharp, Education Secretary, presented a general sketch[18] of a new scheme to the Finance Department suggesting that the records-creating agencies should resort to weeding immediately after a file had been closed because the case was fresh in everybody's memory. This scheme was elaborated by Mr. Nixon, Deputy Secretary, Finance Department; who suggested division[19] of 'B' files into 'B-1' and 'B-2' according to their importance and proposed that the maximum period after which a paper should be destroyed may be fixed at twelve years and the minimum at one year. The reaction of the Imperial Record Department to the Nixon Plan was not favourable with the result that the plan to complete appraisal

of all the records of the Secretariat by the end of the financial year 1920-21 remained unaccomplished and the weeding office was abolished in May, 1920, as an economy measure.

While the weeding office was abolished the Home Department, after a careful review of the existing destruction and detention schedules issued an order dated 10th December 1920[20] laying down a new procedure. This procedure envisaged (a) the marking of files by the dealing official in a section either for retention or destruction after a specified period according to its importance and (b) the record keeper sending the files marked for destruction during the specified year for review under the supervision of the Superintendent of the section concerned.

In sum, then what appear at at first sight to be isolated events, do indeed reveal the connected story of the gradual evolution of many of the records management practices taken for granted to-day. This also clearly brings out that many a practice was inevitably borrowed by the British rulers from their home country as is the case with most of our modern administrative institutions.

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GOVERNMENTAL RECORDS 'EXPLOSION'—HOW TO CONTAIN IT

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Much of the history of human civilization relating even to times long before the use of script was known to man or paper invented, is contained in some sort of records. Clay tablets of ancient Babylon, Egyptian murals, dried skins and inscriptions on papyrus scrolls, all bear evidence to man's propensity to, and reliance on, record keeping.

In modern day world, in the governmental establishments as well as industrial and commercial organisations, big or small, need is constantly felt to determine and record a vast number of facts both in day to day discharge of their functions as also for use in future. Much of this recorded information is of course intended to be retrieved in course of time for effective decision making. The efficiency and effectiveness of any organisation depends to a large extent on the right information becoming available to it readily at the right time.

In governmental affairs, several factors such as accountability to people through their representatives in Parliament, requirements of audit, varying legal requirements in different situations, and considerations of equity and fairness which in turn desiderate consistency and uniformity in decisions in similar cases, necessitate proper maintenance of records. This pre-supposes the existence of a competent system of records management in the government. Unfortunately, however, records management has been a relatively neglected field and has usually received a low priority in the list of tasks to be accomplished by the administrators, work-a-day as most of them are. On the other hand mounting piles of records in the secretariat year after year have brought about a situation which could perhaps be described as 'record explosion' and which demands instant as well as constant attention.

The problem is not confined to India alone. In some of the western countries, the realisation of this problem dawned years ago. In the U.K., in 1952, the British Government set up a Committee to review the arrangements for preservation of records of the government departments under the chairmanship of Sir James Grigg. In its report which the Committee

submitted in 1954, it observed that the public records already transferred to the Public Record Office (counterpart of the National Archievs here) which, according to the Committee, covered a period of nearly a thousand years, occupied over 200,000 ft. (or about 40 miles) of shelf space. This Committee also estimated that the records in possession of the various government departments which would ultimately be transferred to the Public Record Office for permanent preservation would require 600,000 ft. of shelf space (or about 120 miles). In other words, the amount of preservable material with the various departments would be about three times the quantum of preserved material already in the custody of the Public Record Office. The Committee recalled that a previous inquiry into the arrangements for preservation of public records had been undertaken by the Royal Commission on Public Records appointed as far back as in 1910. It also observed that the wide extension of the field of government business in the twentieth century and the invention of such devices as the typewriter and the duplicating machines had increased enormously the pace of creation of departmental records.

In USA, only five years earlier, in 1947, the government of United States had set up a Commission on Organisation of the Executive Branch of the Government. This Commission in turn set up several task forces including one on records management. The task force on records management estimated that in 1940, approximately 18.5 million cubic feet of federal records occupied more than 18 million sq. ft. of shelf space costing "not less than $ 27 million annually". The space occupied by federal records was found by the task force to be equivalent to 6 times the size of the Pentagon.

The Government of Canada set up a Royal Commission on Government Organisations in 1960. This Commission, in volume I of its report on management of the public service estimated that about $ 500 million was spent on paper work which was about 1/12 of the total budget of 1961. According to the Commission, at least 2.5 million cubic feet of records were stored in government premises and each year 250,000 cubic feet were being added. This latter volume of records, the Commission graphically equated to the carrying capacity of 23 railway box cars. The Commission further lamented that 10 miles of shelf space was being added only to hold new books and publications being acquired by the various government departments. Describing the nature of the problem, the Commission observed thus : "Mounting tide of

paper can inundate the public service unless management pays strict attention to regulating its flow and directing it into useful channels. Records have a life cycle. They are conceived, brought into the world, live a more or less purposeful life in active files, tend to reproduce themselves and in old age, are decently cared for in dormant storage. When they have no purpose to serve, they are cremated. Haphazard control of any stage in the life cycle can be disastrous in so massive an operation."

In India, too, the realisation seems to have come more or less the same time with the publication of the report of the Committee on Archival Legislation (better known as Tara Chand Committee) (1960). This Committee observed that the holdings of records of the various central ministries alone covered more than 210,000 linear feet of space (about 40 miles). The Committee estimated that the subordinate offices had in their custody, in addition 'even on a modest view', records needing about 176 linear miles of shelf space. According to this Committee the annual overall rate of accrual of records in the various offices was about 41,000 linear ft. (or about 8 miles) which meant that the Government would need each year a new repository almost half the size of the National Archives building. Furthermore, growth of central records was taking place almost in a geometrical progression. The Committee expressed its dismay by saying, "that any hope of the centre being able to provide for the upkeep of all its records is likely to prove illusory".

A few years later, the Estimates Committee (1968-69) of the Lok Sabha expressed serious concern about the problem of mounting of records and in particular the immediate need of appraisal of old and semi-current records and suggested a number of measures to overcome the problem. In the words of the Estimates Committee :

> "Considering the voluminous records requiring appraisal which are estimated to be in the neighbourhood of 240 linear miles, it is necessary that a phased programme for the completion of this work over a period of time should be prepared as early as possible and necessary staff deployed for the purpose. The Committee need hardly point out that appraisal of records in time is essential for proper record management, it serves a two fold purpose—it helps in the weeding of unwanted papers resulting in saving of space on the one hand, and in the proper preservation of permanent valuable records on the other. The

Committee urge that no further time should be lost in drawing up a phased programme for appraisal as suggested above and implementing the same in right earnest".

It would be seen that in a short span of eight years from the time the Tara Chand Committee went into the problem to the time that the Estimates Committee of the Lok Sabha addressed itself to the matter, the volume of records—non current and semi current—had gone up six times, i.e., from 40 linear miles to 240 linear miles of shelf space. In other words, an annual accrual roughly at the rate of 25 linear miles of shelf space was taking place. Considering that the National Archives of India occupy only about 80,000 linear ft. or about 15 miles of shelf space, the Government of India would require a repository about 18 times the size of the National Archives of India for its non-current and semi-current records and in addition a new repository about 1½ times the size of the National Archives every year to hold its records. The problem in the union territories and states closely resembles the one at the Centre and in some cases is even worse than that.

At this point, it appears necessary to interrupt the narrative concerning the dimensions of the problem, in order that we may have a clear idea as to what the terms 'semi-current' and 'non-current' connote in so far as records are concerned. When any record is created it is for a specified purpose in day-to-day administration. Until that purpose is finally achieved or is abandoned, the record can be said to be in the stage of currency. Once that stage is reached the next stage is that of the file being 'recorded' either with or without any indication of (a) how long it would be maintained (b) a re-examination at the end of prescribed period and (c) weeding out of valueless material. While still retained by the creating agency, this may be termed as in the stage of 'semi-currency'. The Files in this stage may be either quite active during this period or they may be comparatively non-active, depending upon the contents of the files, the thinking of the government and of the agency concerned. The crucial point, however, is that they are no longer required for the purpose for which they were originally created, but only for ancillary services to other transactions. That such semi-current records should be segregated from the current records is obvious. Finally, comes the stage when the semi-current files become non-active for administrative purposes. By that time, material of ephemeral interest has been weeded out. They are no longer required for reference by the creating agencies, atleast not frequently

enough to warrant their being further retained by the creating agencies. This stage of records is referred to as 'non-current'. When records have attained this stage, they are ripe enough to be transferred to the appointed places in record rooms to be kept as non-current records for indefinite retention. In course of time, they would be subjected to periodical appraisal and those of enduring value would, at the appropriate time, be sent to the National Archives.

In his sixth report (relating to the year 1978-79) on the implementation of the Archival Policy Resolution, the Director of Archives has reported that during 1978-79, in 634 out of the total of 740 central Ministries/Departments and other offices which furnished the data, about 16 to 17 lakhs of non-current records were awaiting final appraisal. Earlier, some 14½ lakhs of files had been accessioned by the National Archives without final approval. The figure of non-current files which were waiting final appraisal in March 1979 thus exceeded 31 lakhs. (In March 1976, the corresponding figure was 25 lakhs). This is a huge figure by any reckoning, but the position of semi-current records is even worse. The 634 agencies referred to earlier had in their possession more than 2.8 crores files, 4 lakh registers, 37 lakh bills, 40,000 bound volumes, 536 bundles, 3 lakh charts, 65 lakh cards in addition to thousands of running ledger accounts, books and other types of records, to totalling more than 4 crores of documents tied up in bundles or just lying loose. On a rough estimate, 80% of these semi-current records, after a proper review by the record creating agencies themselves, could be disposed of making room for accommodating fresh accruals of recorded files.

Needless to say, these piles of semi-current and non-current records occupying valuable space both in the National Archives of India and central ministries/Offices are costing millions of rupees per year to the exchequer. According to a costing attempted by the National Archives a couple of years ago, the rent of space to provide shelving for one file in metropolitan cities like Delhi, Bombay and Calcutta, etc. was about Re. 1 per year to the exchequer. With the recent hike in rental values in these cities this cost could safely be put at Rs. 1.50 per file today. The problem having not only attained, but well passed menacing proportions, the need therefore for launching a crash programme for management of records on scientific lines not only in the National Archives of India and the Central ministries/departments but also in the states and union territories is obvious and crying.

It must be stated here straight away that there is no death of instructions in this regard. Firstly, there is the Manual of Office Procedure which lays down detailed instructions in regard to systematic filing of papers, indexing and recording of files and the custody, review and weeding out of non-current records. These instructions *inter alia* cover classfication of records according to their importance from historical and administrative view points, formulation of record retention schedules, and control mechanisms to keep a watch on records proliferation. Various OMs have been issued in amplification of these instructions from time to time.

Alongside the instructions laid down in the Manual of Office Procedure, there is the Archival Policy Resolution issued by the Government of India in 1972. This lays stress on the need for departmental record rooms, suitable training for the officers in charge of such departmental record rooms, and the transfer of records selected for permanent preservation to the National Archives 25 years after being closed or recorded. It also prescribes instructions for compilation and periodical revision of retention schedules, and of the organisational history of each department. The responsibilities of the Director of Archives, and particularly his coordinating and guiding role in respect of public records etc. are also set out in the Resolution.

The gravamen of the instructions contained in the Manual of Office Procedure and the Policy Resolution is that whatever record is unnecessary may be destroyed, whatever has some value for the future should be classified carefully and preserved but even this latter should be subjected to periodical reviews so that at the time of each review, the value of the record for further preservation can be appraised and only when it is found that a certain record is of permanent value whether from a historical angle or from the administrative point of view, should be consigned to the National Archives of India.

Notwithstanding this, however, it would be seen from the earlier part of this paper that the aforesaid insructions are being honoured more in their breach than in actual observance. It is indeed not as if by the mere fact of appraisals and reviews by the various ministries and departments now and again, the problem can reach a solution. Quite obviously, since the problem must be contained within manageable dimensions and since only such records must be preserved as have intrinsic value from historic as well as administrative angles, a prepondering proportion of the piles of non-current record

which do not answer to this description must be promptly identified and then forthwith destroyed. Unless this is done the chaff would not be separated from the grain which, too, must continue to perish until then. It has to be appreciated the whole purpose behind the archival preservation of records is that what is worthwhile should not only be retained but be easily retrievable so as to be available to the historian, the research worker and the administrator. This is possible only if it can be segregated at the earliest possible stage from all that is worthless and of no consequence in the rest of the heap. If this cannot be accomplished at the earliest stage, the whole lot will get more and more intermingled not only involving much greater difficulty in segregating it later but also involving the possibility that what might have been of permanent value would get submerged in the mass of worthless stuff and become impossible of being picked out later. In fact one could go a step further, namely, that if the problem is to be contained for the future, the urgent need for leafing through and weeding out of even current record from the time one gets created so as to put a halt to this ever-growing mound needs hardly any emphasis.

In this latest report (relating to 1978-79) on the implementation of the Archival Policy Resolution, the Director of Archives while complaining of the present tendency of the ministries to push their non-current records to the National Archives of India without prior appraisal, has also mentioned that the drawing up of the retention schedules of the various ministries/departments themselves is also in arrears. The Director of Archives has however rightly stressed that the drawing up of the schedules themselves is not enough, what is important is its actual implementation.

The Director of Archives has also, in the aforesaid report, lamented the lack of an archival law for which, in his reckoning, an Archival Policy Resolution is no substitute. This is arguable. If the provisions of the Archival Policy Resolution have not so far been implemented, the lack of implementation cannot be attributed to want of statutory authority but to a total lack of appreciation on the part of ministries/departments of the magnitude of the problem and of the importance of proper records management. The Policy Resolution has in fact the merit of flexibility so that any changes the need for which might become apparent from time to time, can be introduced with relative cease. Legislation no doubt imposes a legal obligation.

But at the same time it introduces a rigidity in procedure which militates against expediency and innovation—attributes needed most in a crisis situation like the present one. In any case, the mere enactment of legislation by itself is unlikely to make the ministries and departments alive to the situation if the Policy Resolution has not.

What seems the first and foremost step in this direction is to arouse consciousness among the ministries and departments and the staff working in them particularly those concerned with the management of records about the ever growing volume of records, or the records 'explosion'. Perhaps campaigns and drives to do away with unwanted records, interspersed with seminars, workshops and discussions within ministries, departments, offices and in fact even individual divisions and sections of offices, to arouse the consciousness of all concerned, may be the starting point to clean up the augean stables.

This may be followed, if not accompanied, by the setting up of control mechanism in the shape of special cells to be installed in each ministry/department to oversee the progress of the work of appraisal and weeding of records under the direct supervision of the Secretary of the Ministry or the head of department. The progress report should indicate the total quantum of records appraised, of those intended to be weeded out, of those actually weeded out, of those to be retained as also the remaining holdings of records yet to be reviewed. This in fact is a business which for quite some time to come would need no less attention than the actual day-to-day business being transacted if we are not to be overtaken by the deluge referred to in the opening paragraphs of this paper.

What is no less important is the existence of a well-organised departmental record room in each ministry and department where records can remain in a state of good preservation. Due to paucity of space in most offices, huge piles of records are kept in highly unsatisfactory surroundings devoid of infrastructure facilities like proper shelves and other essential equipment like fire extinguishers, exhaust fans and spraying machines etc. to ensure proper dusting, spraying and repair of records is non-existent. Out of the 46 central government organisations which furnished information to the Director of Archives on the question whether proper record room facilities were available, as many as 25 stated that record rooms were not properly equipped. These included even important ministries like Defence and Labour, Departments of Civil

Supplies and Cooperation, Company Affairs, Expenditure, Power, Office of Director-General of Health Services, U.P.S.C., and so on all in Delhi and several offices situated outside Delhi. Several other organisations which sent information simply reported that they did not have any provision for housing their records. The provision of a scientifically organised departmental record room for every ministry and office is indeed a must for ensuring the proper up-keep of records during the long spells of time for which these have to be kept by the creating agencies.

No less important is the need for training those in charge of management of records and particularly the officers in charge of the departmental record rooms. The latter are usually or should be whole time staff for the purpose of record management. The National Archives of India has been organising short-term in-service training courses in archival management since 1973-74, intended *inter alia* for officers manning the various departmental record rooms in the central ministries and offices. For the last 2 years or so they have also been running correspondence courses for this purpose. These are certificate courses. In addition to these regular courses, special facilities for observation-*cum*-training in record management, repair of records and microfilming, are also provided by the National Archives of India. What is urgent is that each ministry and department should get a nucleus of staff speedily trained in this highly important discipline.

Side by side it ought to be possible for the I.W.S. Units in the various ministries and in fact the Staff Inspection Unit, to look into the question of staff requirements for departmental record rooms of various sizes depending upon the quantum of record holdings so as to be able to prescribe a uniform pattern of staffing of this highly important wing in each office.

There is also an urgent need for preparation of a comprehensive archival manual which would contain not only the principles and practices of modern record management and the requirements of the Archival Policy Resolution, but also the provisions of the Manual of Office Procedure concerning filing, indexing, classification, appraisal and review, maintenance, preservation and weeding out of records. The manual could with advantage contain provisions regarding the qualitative aspect of records management and also educational and other qualifications and professional expertise required for each functionary working in the departmental record rooms. This

comprehensive and self-contained manual should be distributed to all officers in charge of departmental record rooms as well as to all O & M Officers of each ministry and department.

To sum up, the rate at which records in government are multiplying should be a matter of serious concern to all. Despite the fact that the committees appointed by the Government as also the Estimates Committee of Parliament, had spelt out the magnitude of the problem with clarity, little impact seems to have been made on the quarters concerned. What is called for is immediate active involvement of the top echelons in various ministries and departments and the launching of special campaigns and drives for not only weeding out the unwanted records but also to put into place the wanted records in an organised and easily retrievable fashion so that they can be of use at the required time to the decision maker, the research worker or the historian. Measures to arouse the consciousness at senior levels to the rapidly growing problem, setting up of suitable control mechanisms to oversee the progress of appraisal of non-current and semi-current records, providing proper departmental record rooms in each ministry/department with the required infrastructural facilities like proper shelves and equipments, imparting proper training to personnel incharge of management of record rooms can brook no further delay. Last but not least, the preparation of a comprehensive archival manual needs to be taken up on an urgent basis.

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FILE MANAGEMENT

S. SINGHARAJAN

The proper organization of 'Paper works management' would mean a great reduction in the quantity of records. Records Management assumes responsibility for mail, correspondence, files and forms management, office equipment, supplies, storage of records, micrographics, records disposition, documentation, survey of audit and agency records. It also includes paper works, quality, directives management, report management and clerical management.

In the U.S.A. an on-the-spot Audit recommended by the Hover Commission had eliminated voluminous correspondence. Similarly, the Torrens System in Australia simplified transfer of titles to lands. All changes of title are recorded on the titles derived from the crown grants. A title is cleared after a single examination and registered in a single document. Further changes of titles are recorded simply and cheaply on the same document. This system is in vogue in parts of Britain, Europe and U.S.A.

Similarly, *Pattas* granted in states like Tamil Nadu can be placed under the "Torrens System" for all types of land transactions, and the present costly system of land registration can be dispensed with. Further, a *Patta* may be declared "an instrument of credit" for purposes of a bank loan to farmers thus making him credit-worthy with a single document in his pocket. In a country like India, where an individual is not credit worthy, and land offers no liquidity, a single document like the *Patta* can bring in a total revolution in raising capital. Similarly, companies and Government Offices may issue cards to their employees with details of their eligibility for loans with authority to raise loans from banks within the permissible limit indicated thereon.

It will be seen from the above that to achieve uniformity in record creation it is necessary to reduce the data to standard forms and to lift up facts and figures to prepare summary statements, to make decisions on operational cost of materials, labour, transportation etc. Invoices, receipts, production figures, account book entries or any other category of record should have standard nomenclature so that it is easy to compare

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figures from different documents. There should be standard size of paper, typewriters, envelopes, file cabinets, drawers and desks. Code words should be used to facilitate filing while standard forms would facilitate business. Records and reports should be simplified and facts recorded briefly to facilitate decision making.

Growth of routine files should be controlled by adopting standard forms. Similarly repetitive noting should be discouraged. Preparation of too many copies should be avoided. The work process should be simplified by an Organisation and Methods cell.

Record administration can account for 10 to 40% of the administrative cost. The main series of records to be maintained are book-keeping, accounts, stocks, sales, production and personnel. The Cost of stationery, maintenance of records and their servicing should not be lost sight of. It costs 22 paise for an additional copy and 4 paise for retention. Thus, the cost of Records Management and the administrative cost can be reduced substantially and at the same time productivity can be boosted by simplifying paper work.

Alongwith the simplification of paper work, an effective system of filing is a '*sin quo non*' in Records Management. An effective system of filing greatly facilitates referencing or retrieval of information. The best system so far adopted in this respect is the chronological-geographic-alphabetical chain procedure of classification and filing.

The alphabetical system is useful in companies with a large clientele. Similarly, the numerical system is employed in numbering purchase orders, sales and invoices. Chronological filing is used in Government Offices. Commercial organisations generally adopt geographic filing to assess area-wise sale or production.

However, in large organisations, no single basic system can incorporate all the diffused information. Thus, we find that the alphabetical file has combined chronology (year and date), the numeric (current-cum-disposal number) and chaining of files on the basis of the chain procedure of Ranganathan which provides for linking of files as well. The numeric has been developed further and is called Duplex Numeric where these numbers are assigned consecutively to principal subjects and these are subdivided as subject heads.

In a bid to comprehend diffused knowledge, Melvil Dewey developed the decimal classification model based on the scheme devised by Jacob Schwartz. In the process of evolution of systems, the alphabetic subject file became common of the four (Alphabetic, Duplex Numeric, Dewey Decimal and Chain Procedure) and alphabetical subject file found favour in large organisations. One virtue with subject filing is that it can be expanded indefinitely; it can be combined with good points in other systems as well. It is intelligible to any person who may like to use it.

The Administrative Reforms Commission Government of India, has gone a step further in this direction by suggesting improvement in the conventional subject filing in all the Departments of Government of India and has recommended the "Functional Filing System", the redeeming features of which can be easily incorporated with the subject filing system in Government offices, companies, corporations etc., as an efficient instrument of administration and retrieval of information.

FORMS MANAGEMENT IN GOVERNMENT OFFICES

H. K. VERMA

Forms have been defined as "printed or typed documents with blank spaces for insertion of information". In a broader sense all pieces of paper designed to facilitate the work of an organisation and which are used to obtain, convey or record information essential to its operations can be defined as forms.

Forms are an integral part of almost every organisation, whether Government or private. Their use for collection, communication and processing of information has been steadily increasing in all spheres of activity. There is probably no procedure in public or private enterprise which does not require the use of forms.

The cost of paper and manpower has been steadily rising over the years. Besides, poorly designed forms are poor administrative tools and as such result in waste, unnecessary expense and inefficient work. Control over the quality and quantity of forms together with simplification of related procedures can bring about tangible savings. On the other hand, a mounting volume of cumbersome forms will only result in more paper work, greater clerical costs and diminishing efficiency and also dissatisfaction to clients.

The cost of developing forms is high. But it is insignificant as compared to the cost involved in using them. At the same time, it is through forms that the common man most frequently comes into direct contact with the machinery of Government. Forms thus play a very important role in projecting the image of Government. Inadequate attention to the production of forms, their design, size, etc. not only leads to wasteful expenditure but is also a potential source of irritation to persons using them. It is for these reasons that forms deserve special and continuous attention. It is only proper to ensure that these are simple and well designed and do not lead to collection of unwanted information of infructuous expenditure.

To attain these objectives it is necessary to have an effective forms control programme. Since forms are an extension of the prescribed methods and procedures of work, a forms

control programme is concerned not only with the merits of the form but also with the need and efficiency of the procedure which require its use.

A review of forms is always a very rewarding exercise for elimination of unnecessary forms and retionalisation of procedures. This is so because forms once prescribed, continue to be filled in even though the recipient no longer has any use for the information obtained or the control measures for which these were introduced are no longer necessary. Another reason is that forms often become obsolete or redundant because of the availability of desired information in other documents or other similar forms. Even in cases where the review confirms the need for a form the exercise may not be altogether futile. Quite often the review may lead to simplification of forms and elimination of items seeking information which is no more required.

Ideally, review of forms should be carried out in conjunction with a survey of the administrative procedures and working methods of the concerned organisation. Such surveys, however, take considerable time. It is, therefore, advisable not to hold up the work of forms review for want of an organisation survey. Instead, forms review independent of such surveys should be carried out if the results of simplification are to be attained in a reasonable time. In such a case the rationalisation measures are restricted to purely technical aspects of forms design, e.g., drafting, size, quality of paper, the kind of print and its size, the spacing of entries, etc.

It is, therefore, not only desirable but necessary to have institutional arrangements for a systematic and periodic review of forms. Besides, the intangible benefits in the form of increased administrative efficiency, the monetary savings alone, which would be many times more than the expenditure involved in such an effort, would justify the establishment of a standing machinery for forms control.

With this end in view Government of India set up in February 1978, a Task Force to go into the various aspects of production of forms, e.g., their need, design, size etc., with special emphasis on those meant for use of the public and to evolve suitable guidelines and supporting techniques for achieving standardisation of forms. The Task Force which was headed by the Additional Secretary, Administrative Reforms had, besides government representatives, non-official members

also. The point to which the Task Force addressed itself was the need for institutional arrangements for determining the need, design, size etc. of forms.

A sample survey of the forms being used in government revealed that a large number of forms are not only unnecessarily complex but also do not conform to the standard sizes stipulated by the Indian Standard Institution. Though India switched over to metric system quite a few years ago, a large number of forms are still being produced in non-metric sizes. Sometimes it is perhaps unavoidable because of the special requirements or because of the paper produced by old paper mills and printing done on old presses not aligned to metric sizes. More often however, this is due to ignorance or lack of a conscious effort on the part of form prescribing authorities. As paper is one of the most costly items in the production of forms, wastage can be avoided by adapting the forms to the standard paper sizes. Moreover, standardisation of forms sizes would facilitate their filing, storage and processing.

Forms prescribed and used in Government can broadly be classified into three groups, "Standard" forms which are used in most of the departments/offices and are, therefore, required to be printed in large numbers, e.g., forms prescribed in the Central Treasury Rules, Manual of Office Procedure, etc. These are generally printed, stocked and supplied centrally. The second category of forms are 'Special' forms which are peculier to a department, e.g., foreign assignment fofm, CGHS prescription form etc. Special forms are got printed by the department/office either directly or through the Directorate of Printing in the Ministry of Works and Housing. They are, however, stocked and supplied mainly by the Department concerned. The third category of forms can be classified as 'Reports and Returns' which seek information from certain specified persons/agencies mainly for control purposes. These are meant mainly to meet the ad-hoc information requirements of a particular department/office for a limited period. Such forms are generally not printed but are either typed or cyclostyled in view of their limited use.

It is estimated that there are more than 10,000 standard forms in use in the Central Government. Of these about 2,000 have been prescribed by the Railways, 4,000 by the Ministry of Defence, 900 by the Posts and Telegraphs Department and the rest by the remaining departments/offices of the Government. The special forms though normally printed by the Directorate

of Printing are stocked not by them but by the department concerned and their number is estimated to be quite large. Besides these printed forms, there are large number of reports and returns which are normally cyclostyled or typed.

In view of the limited time and resources available, only a small number of fast moving forms selected on a random basis were taken up by the Task Force for detailed scrutiny of their size, design, contents, etc. For this purpose information regarding the total number of forms in use in government, their code number, size, annual consumption etc. was collated. Simultaneously, the then existing institutional arrangements for control and review of forms were also ascertained. The reasons for which government organisations have not been able to bring their forms in conformity with the sizes laid down by ISI were also looked into.

As a result of its deliberations and examination of the data/information furnishd by ministries/departments etc. the Task Force felt that there was need for :

(i) institutional arrangements in each form prescribing organisation for control and review of forms;

(ii) codification of forms;

(iii) training in forms management;

(iv) observance of the paper sizes prescribed by ISI in the use of forms; and

(v) drawing up a manual on design of forms;

and accordingly made a number of recommendations to achieve these objectives.

The considerations that weighed with the Task Force in arriving at its conclusions were two-fold : (i) improving efficiency of work through better designed forms and improvement of related procedures, and (ii) effecting economy in consumption of paper by simplification and standardisation of forms. In view of the fact that forms are intimately related to methods and procedures of work, the Task Force felt that review and control of forms can best be carried out by the agency prescribing the forms. Apart from this the sheer number of forms in use justified decentralised control over forms. The Task Force accordingly suggested decentralisation of functions relating to forms control and review to ministries/departments where this work will be handled by forms control committees headed by the Financial Advisor with the assistance of Internal Work

Study Units. As regards standardisation in forms sizes, the Task Force suggested a number of measures for ensuring that forms are brought out in prescribed sizes only. This would not only avoid wastage in use of paper but would also facilitate processing and storage of forms. Some of the other important recommendations made relate to development of suitable information system for control and review of forms, training in forms management, preparation of manuals and guidelines for persons manning forms review and control cells in ministries/departments.

It is hoped that the implementation of the recommendations made would not only step up the pace of work through improved methods and procedures but would also lead to substantial economy in consumption of paper through standardisation in forms sizes and elimination of unnecessary and obsolete forms.

The recommendations made by the Task Force were accepted by the Government and accordingly referred to ministries/departments for implementation. The progress made so far is indicated below :

(1) (a) 22 ministries/departments (covering 25 ministries/departments) have set up Form Control Committees headed by Financial Adviser to guide and supervise the work regarding form control and four sub-ministry formations have also set up form control committees.

(b) 10 ministries/departments did not consider it necessary to set up F.C.C. either because adequate machinery for this work already existed or because the number of forms prescribed by them is very small.

(c) The matter is still under consideration in 10 ministries/departments.

(2) A number of ministries/departments, including a few where FCC have not been set up, have already done considerable work in regard to control and review of forms. This includes not only collection of data regarding forms but also their review with a view to their simplifications, abolition, etc.

(3) The Ministry of Works and Housing have issued instructions to all ministries/departments in regard to the observance of ISI standards for printing forms.

(4) The Institute of Secretariat Training and Management have reported that Forms Design already forms an integral part of the training courses in the area of management services run by it. Its training Division has been requested to organise through ISTEM, 3-4 days full time training/orientation courses in Forms Design and Control.

(5) The task of drawing up a Manual of Form Design is to be taken up shortly.

SUMMARY OF RECOMMENDATIONS

1. The instructions issued in regard to observance of ISI standards for printing of forms should be specifically brought to the notice of all officers and sections/units of ministries/departments and other offices for information and compliance.

2. Where it is unavoidable to bring out a form in a non-standard size, the controlling authority should give adequate justification for the same.

3. The Directorate of Stationery should try to persuade paper mills to produce paper for Government consumption in metric sizes laid down by ISI.

4. The Directorate of Printing should draw up a plan for phasing out old printing presses not aligned to metric standards.

5. Other factors permitting, as far as possible, both sides of the paper should be used for printing forms to effect saving in the use of paper.

6. Since the size of forms is dependent upon the information requirements in each case, the aspect relating to optimum size of each form should be looked into by the respective Form Review and Control Unit in consultation with the Directorate of Printing wherever necessary.

7. The work relating to form review and control should be decentralised.

8. Each ministry/department and their major subformations should have a Form Review and Control Unit to attend to the functions of form review and control.

9. Form Review and Control Units should form an integral part of the Internal Work Study Units in ministries/departments.

10. There should be a departmental Forms Control Committee for each ministry/department to guide and supervise the work of Forms Review and Control Unit. Its constitution should be as under:

Financial Adviser	Chairman
O&M Officer	Member
Joint Secretary concerned	Member

11. The functions of the departmental Forms Control Committees should include:
    (i) Screening all proposals for introduction of new forms.
    (ii) Cyclic review of forms prescribed by the ministry/department.
    (iii) Codification of forms.
    (iv) Determining the optimum size for each form and ensuring its conformity with the prescribed sizes.
    (v) Prescribing the design of forms.
    (vi) Improving related procedures and methods of work.

12. The functions of the Forms Review and Control Unit in the Directorate of Printing in regard to form control should primarily be:
    (i) Determining the manner of production of copies of forms.
    (ii) Assessing the requirements of forms and determining the number and frequency of their printing.
    (iii) Printing, storage and distribution of forms.
    (iv) Training of staff in form review and control in consultation with Department of Personnel & Administrative Reforms.
    (v) Preparation of guidelines, manuals etc. for form designing, review and control.
    (vi) Acting as the nodal agency for forms review/and control and maintaining liaison with departmental Forms Control Committees.

13. Institutional arrangements for forms review and control on the lines indicated in Recommendations 9-12 should be made in Defence, Railways, P&T, with greater delegations to lower levels.

14. Cyclostyled/typed forms including 'reports' and 'returns' should fall within the purview of Forms Review and Control Unit.

15. The Forms Review and Control Units should maintain numerical & functional files relating to various forms.

16. Persons manning the Forms Review and Control Units apart from having a knowledge and experience in organisation, procedures and methods analysis generally, should have proper training and experience in form design and review.

17. The Department of Personnel & Administrative Reforms should arrange orientation courses in form design and control for the benefit of persons working in Forms Review and Control Units.

18. 'Forms review and control' should form part of the syllabii of the various general training programmes arranged by the ISTM for ministerial staff.

19. A check list should be used for examining proposals relating to forms by Forms Review and Control Units in the ministries/departments.

20. The Directorate of Printing with the assistance of Deptt. of Personnel and A.R., if necessary, should bring out a manual on the Design of Forms for use of various ministries/departments.

MAIL MANAGEMENT

I. K. Rao

Though the efficiency of an organisation depends largely on the calibre of the management, the types of information systems etc., the promptness with which the organisation responds to customers' requests has its own crucial role to play. The quickness with which the stimuli received from outside in the form of written communications is fed into the system and the speed with which the decisions are communicated to those who are waiting for them, have a material bearing on the overall efficiency of the organisation. Mail management which may be defined as planning, organising and controlling of the incoming and outgoing mail of an office is part of the paper work management in an organisation and an important aspect which any management which values the goodwill of the clientele, can ill-afford to neglect.

Every office or organisation has to maintain continuous contacts with members of the public and other branches and departments spread over different parts of the city, country or even the world. This is done by sending written communications through messengers or post offices. Each office, therefore, sends out and receives large number of written communications everyday in the form of letters, circulars, telegrams, memoranda, etc. These written communications are known as 'Mail' which can be classified into incoming and outgoing mail. It is the function of the mailing department to handle both incoming and outgoing mail in the most efficient manner in order to achieve organisational objectives. Efficient handling of mail enables an organisation to maintain contacts with different parties, persons, departments and agencies and helps in furtherance of the interests of the organisation.

To ensure prompt and effective handling of mail, efficient management of the mailing department is very essential. This involves (a) organising the mailing department, (b) supervising the mailing services, (c) establishment of mailing routines and (d) mechanising the mailing service.

Depending upon the size and nature of work to be handled by the organisation, the mail may be handled by one person or by individual sections or by a centralised mailing section.

The advantages of a centralised mailing section are :

(i) Responsibility of handling incoming and outgoing mail can be entrusted to persons who have specialised in this area, so that the job could be handled with competence and efficiency.

(ii) Mail operations can be co-ordinated and systematised thereby avoiding duplication of effort.

(iii) It facilitates economical use of labour-saving devices such as letter opener, folding and sealing machine, franking machine, etc.

(iv) It enables curtailment of expenditure on postage through use of a single envelope, wherever possible for all communications intended for a particular address.

In the secretariat offices of the Government of India, there is the Central Registry Section for each Department charged with the responsibility for receipt, registration and distribution of the incoming mail meant for that department. It is generally headed by a section officer with the necessary supporting staff, including a resident clerk or a night duty clerk. A Central Issue section, which is often combined with the Central Registry, is responsible for fair typing of communications, comparing of fair copies, obtaining signatures of the concerned officers and their despatch.

The supervision of the mailing department requires the services of an efficient and experienced supervisor who has a thorough knowledge of the routines of mailing operations and the current rules of the Post and Telegraph Department. The supervisor must be capable of guiding the team and getting the work done efficiently and economically. Effective supervision involves periodic review of the methodology of work with a view to improving it. In addition to the annual inspection by an officer not concerned with the unit, surprise checks by senior officers would help in keeping the functionaries alert.

The underlying principle for handling incoming mail is that mail once received in the premises should be delivered to the appropriate person or section with the least possible delay. Establishment of definite procedures and routines for handling incoming and outgoing mail would greatly facilitate planning of an efficient mail service.

There are definite procedures adopted by the Government of India Departments for receipt of mail during and outside office

hours. During office hours, the entire mail of a department including that addressed to Ministers and Officers by name, is received in the Central Registry Section. However, immediate and important mail addressed to Ministers and Officers by name sent through special messengers is received directly by them or their personal staff. Outside office hours, mail marked 'immediate' addressed by name is received by the addressees themselves at their residences. In other cases, the night duty clerk in the Central Registry receives the mail.

The Central Registry opens all covers, except those addressed to Ministers and Officers by name or those bearing a security grading. While opening the covers, the Central Registry checks the enclosures and makes a note of any missing item. All opened covers, as well as the unopened classified covers are date-stamped indicating the name of the Department and the serial number assigned to the communication in the dak register. The entire mail is then sorted out sectionwise and officerwise. To facilitate this, the Central Registry maintains an alphabetical index of the subjects dealt with in each section.

With a view to economising the time and effort, only the following types of communications are registered by the Central Registry :

(a) telegrams, wireless and telex messages,

(b) registered postal mail,

(c) inter-departmental files,

(d) court summons and receipts enclosing valuable documents, e.g. service books, etc.,

(e) Parliament questions, resolutions, cut-motions and references seeking information relating to them,

(f) unopened inner covers containing classified dak,

(g) letters from Members of Parliament, and

(h) any other category covered by departmental instructions.

Urgent mail is distributed as and when received while other mail is distributed at suitable intervals. The mail received late in the day is kept ready for distribution early next day.

In handling outgoing mail the sections send approved drafts of communications to the Issue Section which collects all such approved drafts in respect of the entire department, gets

the communications fair-typed and signed so that they are ready for being sent out. Thereafter communications to be sent by post are separated from those to be delivered by hand. The communications meant for despatch by post or those addressed to officers by name are kept in covers of appropriate size, ensuring as far as possible, that all communications intended for the same addressee are placed in a single cover. The envelopes to be sent by foreign post, for which ordinary postage stamps are used, are separated from the rest. Service postage stamps of appropriate value are affixed to the remaining envelopes to be despatched by post.

The clerk in charge of despatch of outgoing mail maintains a despatch register which includes relevant particulars such as the number of the communication, the address and the value of the stamps affixed. Telegrams are despatched promptly while registered and insured articles are sent to the post office well before the closing hour prescribed for the receipt of such communications. Other communications are posted at convenient intervals.

Non-postal communications are sorted out according to the location of the addresses and entered in messenger books for delivery to the addressees. Urgent communications are despatched promptly. Ordinary communications are despatched at least twice a day at suitable intervals.

After the communications have been delivered, the despatcher examines the messenger books to see that all communications entered therein have been duly acknowldged by the recipients under dated signatures written in ink. Instances where communications have not been acknowledged are immediately brought to the notice of the officer in charge of the Central Issue Section for investigation and suitable action.

To facilitate quick despatch of papers, the Central Issue Section maintains complete and up-to-date information relating to the working hours, the residential and office addresses of all departments, institutions and persons to whom the outgoing mail is usually addressed.

In no other section of the office is speed so important as in the mailing section. Since the handling of incoming and outgoing mail involves performance of many routine and monotonous operations, mechanisation of mailing service is a must. Mechanisation helps in keeping down the possibility of errors

to the minimum. Some of the machines which can be used to advantage are :

(a) Mail Opener : used for opening envelopes received in the mailing department. It may be either hand operated or an automatic electrically operated machine that feeds, stores and stocks more than 500 envelopes a minute.

(b) Date and Time Recorder : An electric clock that is automatically charged and prints time and date of receipt of the mail.

(c) Mailing Scale : The accurate weighing of mail eliminates excess payment of postage. Modern weighing scales have built-in charts giving rates of mail postage stamp.

(d) Folding Machine : For folding the letters before being inserted in the envelopes. This machine can automatically fold sheets from the adjusted place.

(e) Inserting Machine : Used for inserting the folded letters in the envelopes. This machine automatically inserts the letters in the envelopes and seals them by moistening the flaps. An electrically operated machine can insert 4000 letters per hour.

(f) Franking Machine : Used for affixing stamps over letters. The outgoing mail is inserted in the machine and a handle operated. The machine marks the letter with the required denomination of the postage.

(g) Addressing Machine : Used for printing names and addresses of customers on large number of labels, invoices, envelopes etc. The names and addresses of regular customers on the mailing list are either put on specially made fibre stencils or embossed on metal plates. These plates once prepared can be repeatedly used. Such plates are stocked on a hopper fitted into the machine from which required address plates are automatically selected and fed into the machine. The machine can print about 1000 addresses per hour.

(h) Sorting Equipment : Before filing or mailing, the letters are sorted with the help of Multesort or Sortofile which ensures accuracy in sorting.

The purpose of mechanising the mailing service is to save time and expedite mailing activity, thus making the service economical and efficient. If, however, the quantity of mail is not adequate enough to result in saving, there may be no justification for mechanising the mailing department.

The above methods are based on the system existing in the Central Government offices, particularly its Secretariat. Methods and procedures are not and ought not to be static, for they are only a means to achieve an end which may be changing from time to time. The procedures that we are following in the Secretariate today are the outcome of our constant efforts to find a better and newer methods of work.

VITAL RECORD MANAGEMENT

R. K. PERTI

In the present day world a massive amount of paper work is being done in government offices, corporations, industrial, financial and business organisations. Simultaneously, other media like tapes, films, punch cards etc. have come in to play their own roles. Consequently, the documentary evidence produced is far too voluminous to be managed easily and the material or information of vital interest and of enduring value is fast getting submerged in the various media. It is, therefore, necessary that the documentary legacy, in whatever form it may be, should be duly taken care of, segregated and preserved for its operational and evidential value as also for conducting the current business. In identifying records or information of vital importance, one has to examine the relationship between strategic planning and structural change of an organisation. Changes in market trends, the strategy for growth and new product lines of industrial or business houses provide the directions for locating vital records and safeguarding them for providing consistency and continuity in operations and for protection of organisational interests.

Initially, the problem of identifying records of vital importance was very simple. Government offices or merchant houses performed limited functions and the desired information was obtained as and when needed without any difficulty. But of late a colossal change has taken place in consequence of the manifold expansion of governmental activity, especially when it has become a welfare State. The same is true of merchant houses, commercial and other organisations. Their capital and labour intensive activities, combined with the revolution in the means of communication and the integration of mass production with the mass distribution is posing a serious problem of storage and quick retrieval of information of vital importance. They are interested not merely in maintaining just Profit and Loss Statements, but are now producing new kinds of records embodying diverse types of information. The diversity of records created by fast copier machines, dicta-phones, audio-tapes, computers, films, etc. is, in fact, necessitated as much by the growing complexities of an organisation as by the necessity of assessing and analysing its performance.

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When there is a massive production of records and information is provided in varied forms, it is essential that records of vital importance should be classified and segregated right from the time of their production. This would enable to bestow proper care on documents which provide stimulus to the top level executives to take up issues and for the juniors to provide accomplishment reports and furnish background material on various problems. In fact, such records serve as nerve centre of an office, an organisation or a corporate body. But unfortunately, it has been noticed that valuable documents generally embody incomplete information. This has been so largely because major issues are settled by verbal discussions and are not recorded. Notwithstanding the fact that instructions exist that all verble decisions and factors leading to them should be recorded and duly confirmed, but in practice such instructions are rarely observed.

Another lacuna that has been noticed relates to the difficulty of identifying policy records at the time of their creation. Often policy decisions emanate from issues of little significance. For example, it has been noticed that in an organisation a file dealing with deployment of staff ends up with notes and memoranda on the nature and functioning of that organisation. That does not mean that no attempt should be made to classify records and information available on soft ware documentation. After all each department of a government, an organisation, a corporate body or a business house does create certain records which it will like to preserve at all costs.

An assessment of the continuing value of documents amongst various categories of records like those pertaining to policy or organisational structure, procedural and operational matters, or reportorial documents etc. is a necessary exercise. Policy documents contain minutes, memoranda and other documents which furnish decisions bearing on policy, substantive or specific programmes, inspections, correspondence leading to significant activity, muniment of titles relating to law and property, a register and memoranda of cases, appointment of committees, and commissions, international agreements and conventions, etc. Organisational documents usually comprise statutes, executive orders, as well as drafts and supporting material relating to creation, organisation, reorganisation of an office or a corporate body, discontinuation and consolidation of functions, establishment matters like recruitment, promotion, reversion, retrenchment, pension, retirement, resignation, extension of service, re-employment, etc., records of acquisition, sale,

purchase or mortage of real property, budget and budget planning, major series of accounts, interpretations, opinions, memoranda of law, correspondence and memoranda delegating or defining powers and responsibilities. Procedural documents of continued value are official manuals, directives, rules and regulations, instructions, staff studies or special reports relating to methods, techniques and operations or analysis of work-load and performance. Operational records pertain to tests or operations conducted or transactions carried through in bringing forth a product. Rules for publicity and propoganda are no less important and they need to be properly safe-guarded. In a democratic set-up, there is a set of papers which reflect the functioning of an organisation and are of continued importance. In this category would also come even those records in which data is collected and compiled for a reply to a question in the Parliament. As these papers furnish operational data and analysis of achievements, they fall in the category of vital records. Besides, there are certain categories of records like registers of births, marriages, deaths, citizenship or electoral rolls, property returns, service books of the top brass, etc. which an office/organisation will like to retain for the intrinsic information they contain.

Records and information on vital matters have been generally produced and kept in the traditional form, i.e. manuscript or typescript. But in the wake of information explosion during the last two decades, when basic data of vital importance to an organisation or a corporate body has been fast growing a demand has been created for utilising new technologies like elctric data processing and document miniaturisation. This has been created partially by the need to safeguard vital records in case of natural calamities like fire, flood, earthquake or man-made like war, arson etc., as also for storing such information. Under the new system of performing old task, information is largely unstructured, which is quite unlike a file where each document is keyed to it. Information in the non-conventional system is filed by a simple identifier such as accession number or machine location address. The various non-conventional methods of keeping and storing information that have come into vogue and used for storing vital information, are : computers, microfilms, punched cards, punched tapes and the related software documentation like sound recording on magnetic and audio tapes, discs, drums, etc.

The question of retrieving vital information available in files, cards, etc. is no less pertinent if record management is to

play its proper role. It is, therefore, essential that information should be properly classified. Files, etc. should be classified under major and minor subject heads. The former should have main numbers, while the latter should be given sub-numbers. They may follow the conventional filing system or the functional filing system. However, all files should bear cross-references so that information on related subjects could be easily retrieved and case history of a problem could be quickly prepared. The need for proper keys to these records which would help in quick retrieval of information or data cannot be overemphasised. These could be in the form of guides, inventories or registers, location registers, card catalogues, special lists, shelf and box lists, indices, and calendars. Similar type of reference media with slight changes would also be needed for machine readable records and software documents. Indices should, however, reflect not only broad subject heads as given at the time of opening a file but all that has gone into the file during the period it was live. An index should be compiled at the time of closing the file after taking cognizance of all that has been dealt with in it. For example, a file was noticed to have been opened under the head 'Deployment of Staff', a self-evident subject head indicative of the routine nature of the file. But its study revealed its true importance, as it reflected the nature and functioning of the organisation itself. The Indexer should take note of all such matters, if he is to provide an effective retrieval system. Therefore, obviously to assess the importance of a file and to obtain a quick retrieval of information it is imperative that right types of tools should be designed. Indices could be subject indices, nominal indices or indices of place name. The utility and desirability of each type would, however, vary from situation to situation and office to office.

Proper maintenance and up-keep of records and information media of vital importance is no less important. Each Organisation that creates them is interested in their sustenance and would like to take all steps which could ensure it. The materials are, however, subject to deleterious effect of various factors like environmental, biological and chemical.

Sun, light, heat, moisture and pollution hold the key amongst the environmental factors and they need to be controlled for providing longevity to paper, films and magnetic tapes. Though air-conditioning provides the solution, proper arrangement for air-circulation and humidity control can serve the purpose in respect of paper. Amongst the biological factors

come the fungi and insects of various types. These can be controlled by discreet use of chemicals. Among chemical factors, aging of paper, fading of ink, deterioration of gelatine, (the main constituent of films) and tapes due to use or faulty handling can be inhibited by taking appropriate preventive measures.

Modern techniques like preparation of master copies for security keeping and using only duplicates for day to day work, ensures safety of these otherwise delicate materials. To ensure preservation of vital documents and information media in case of war, fire, flood, an earthquake or a theft and to provide for their security and longivity, it is desirable to store master copies away from epicentre of activity under proper environmental conditions.

STORAGE OF RECORDS

RANBIR KISHOR

Policy and decision-making at the top executive level in an organisation, be it government or commercial, requires vital information regarding its transaction and activities. Multiplicity of information, and its bulk increases with the growth of the organisations and is available in the records created and maintained by it. Managing these records, maintaining them in a system that results in quick retrieval of information that is needed out of them represents a major activity in an average office. Though record-keeping represents an important aspect in the working of an organisation, yet being an activity which is not directly related to productivity, resources that are needed for their long-term preservation are mostly wanting. Their geometric rate of growth also puts a limitation to space that can be provided for storage, for funds that are available for scientific maintenance in good physical state and servicing personnel needed for care and processing. Today cost of construction and materials has considerably risen and wages have increased. The problem of records creation, maintenance in their current state, and subsequent preservation in the record rooms thus need reappraisal for an optimum utilisation of resources available.

Greater bulk of the records that are available is on paper which has differed widely in its quality from time to time. In its early stages of manufacture because of the use of the high grade raw materials and manually operated processes, its quality and keeping qualities were good. However, search for cheaper raw materials for reducing the cost of manufacture, mechanised finishing process and need for improving upon its writability and printability, led to a degradation in its keeping qualities. Paper manufactured in late 19th and early 20th century was mostly of poor grade while in general use. Only for such use where cost considerations were subjective to its use, good quality paper was selected. This resulted in an accelerated weakening of paper in records, which substantially increased due to ill-devised maintenance and storage environments.

For long-term and even medium-term preservation and keeping qualities, a judicious selection of paper, writing ink

or medium is very essential. It is also necessary that maintenance conditions are so provided that the deleterious influences wrought by environment could be eliminated as far as possible.

During and after the Second World War, the technological advancement and need for economising in storage space, demand for which was ever growing for keeping vital statistical data, resulted in use of microfilms. Today bulk of this media together with its other forms *viz.*, microcards, microfische, aperture card etc. is finding its way in records. In the latter half of the 20th century use of computers has introduced a number of media types in records which include magnetic tapes, besides various types of paper and film material. These modern record materials require controlled conditions of environment for their use and also for their maintenance and keeping. Effect of adverse environmental conditions is far greater in these materials than in the case of paper.

Dampness, stagnant air, sunlight and hot and dry climate bring about the deterioration of records components which are organic in nature, *viz.*, paper, film base, magnetic tapes etc. Deleterious influence of these agents can be minimized by avoiding rooms which are damp, improperly ventilated and dark. A dry, well-ventilated and suitably lighted room is needed for proper keeping of records. Further since stagnant air favours the growth of biological pests, thorough air-circulation in every part of the record room is essential. Cross ventilation, provision of adequate number of electric fans and a few exhaust fans facilitate air circulation. Dust among records is not only unhygienic, but is conducive to growth of micro-organism. Regular dusting of records for keeping them neat and tidy is very necessary. Use of vacuum cleaner is the only ideal way of dusting records, since ordinary dusting and sweeping does not remove dust, but merely transfers it.

A separate record room is a vital necessity for every department or organisation. A record room should as far as possible be located on the ground floor, unless the floors have been designed with load bearing capacity. While selecting its location, it may be ensured that no water pipe or drains pass near, above or under the room since at times blockade of the drains or accidental bursting of pipes results in flooding the record room and damaging the records.

For providing storage environment conductive to long-term preservation, airconditioning of record room is very desirable.

Though paper can exist satisfactorily in ordinary climatic conditions, yet microfilms, magnetic tapes and other modern record materials show physical damage and quick degradation if not stored in airconditioned repository. For effective air-conditioning, ventilation should be so planned as to permit minimum leakage of the conditioned atmosphere. While calculating conditioning load, bulk of shelving equipment, record material, the number of persons sitting in the room, movement of man or material should be taken into account. In buildings which do not have central airconditioning, use of package type or window-type air-conditioners is satisfactory. Humidity and temperature in record room should be measured regularly, the ambient conditions desirable being, temperature 22-25° C and relative humidity 45-50%. For maintaining proper humidity control in the conditioned area, it is necessary that permeation of dampness through the walls or floors does not take place. The floors should be laid waterproof and the walls should be given water resistant oil paint coating. While considering airconditioning of the record room it may be taken into account that the airconditioning plant has to be planned for clockwise air-conditioning all the year round. Such running of plant will often lead to occasional breakdown and a provision for stand-by plant may have to be made. Breakdowns if not provided for or attended to quickly, are likely to create conditions which lead to accelerated damage to records.

However, keeping in view economy in resources, in many cases, it may not be possible to provide air-conditioning for the record room. In such cases its is desirable that the record room should have adequate ventilation, and the aircirculatory arrangements so as to eliminate pockets of stagnant air. For reducing the adverse influence of high humidity, use of desiccating chemicals like calcium chloride, silica gel etc. could be made. Mechanical dehydrating devices are available and could be used with advantage. Provision of windows and ventilators aids air-circulation but at times they allow direct sunlight which if allowed to fall in records brings about physical weakening of paper and its discoloration. In such cases it is necessary to provide glass panes of lemon or bottle green colour and curtains of the same colour so that while providing air-circulation evil influence of light could be avoided. For security of materials windows should be covered with fine mesh wire gauze. This does not allow insects etc. flying into the room and also filters the incoming air to an extent.

In a central office complex or a big building where a number of Departments or Ministries are allotted accommo-

dation, it is desirable to earmark a central portion of the complex or the building for record storage activity. Such a centralised accommodation will facilitate maintenance of desirable optimum and congenial environment necessary for longevity of records. This will be economical as well.

In hot and humid tropical climates, biological pests are responsible for major damages. Among them are mildew (a micro-organism) cockroaches, silverfish, white ant, book-worm and psocids. These pests often grow in stagnant air, in dark and dingy or damp places. A room with adequate air-circulation, where records are kept dust-free with a regular periodic dusting arrangement, does not allow incidence of these damaging agents. However, use of insect repellent chemicals like naphthalene among records on shelves acts as a good deterrent, use of insecticidal sprays on floor or walls and in corners of the rooms helps in providing adequate safety. Use of such sprays directly on record materials is to be avoided since some chemicals might stain the record materials. These records which show an active growth of mildew (greyish or whitish growth on leather, cloth or paper), or bookworm etc. need segregated treatment in a fumigation chamber. Thymol fumigation helps in killing mildew, while paradichlorobenzene fumigation kills bookworms, psocide etc. Fumigation is carried out in airtight steel or wooden vaults with dose of the fumigating chemical and the period of fumigation depending on the nature and extent of infestation. Yet another technique which is very effective for all types of infestation, is that of vacuum fumigation. This needs a high capacity steel vault capable of withstanding high vacuum, a pump for creating vacuum and a chamber for storing and mixing poisonous gases. It needs installation which is costly and depends on the bulk of records needing treatment. Toxic gases like mixture of carbon dioxide and eheylene oxide are used in vacuum fumigation.

Damage to records by white ants and rodents is more if not cared for well in time. For preventing damage by rodents it is essential to aviod their entry into the room by providing proper wire mesh at the outlet drains through which they find access to the room. The only way to check their menace is to use rat traps containing poisonous baits. Since they are attracted by smell of eatables, carrying of food stuff etc. or eating in record room should be prohibited. For this very reason a record room should never be in the vicinity of a canteen or stores of similar nature. Great care is, however, necessary against termite infestation in the storage area. Cracks and holes in floors and walls should be treated with sodium

arsinite, D.D.T. etc. and wooden racks, cupboards etc. coated with an insecticidal paint containing creosote or dieldrin. Painting has to be repeated every six months once at least before the onset of rains. In a building known to be infested with termites, keeping records by avoiding all contact with walls or ground is desirable. Contact with walls is avoided by keeping storage shelves, almirahs etc. away from the wall (12 cm — 15 cm) and that from the ground by painting the outside structure with termite resistant paint up-to a height of at least 12 cm— 15 cm.

Shelving equipment for storing records should be functional, durable, easy to clean, providing safety from fire dust etc. A few considerations which aid selection are :

1. Maximum space utilisation;
2. Accommodation to all physical forms and media; (paper, newspaper, films, tapes, photographs);
3. Access requirements;
4. Volume of present holding and anticipated growth rate.

Besides the above, the selection of the shelving equipment has to depend on the nature and the extent of storage space and the budget available. Use of metal shelves in record rooms is preferable since it provides safety against fire. Standard uprights with slots are available commercially to provide for adustable shelving. While selecting metal shelving one essential consideration is that the paint used for shelves should be fire resistant, stable, rust proof and of non-staining type. While fixing the uprights or vertical stand to support the shelving, it is desirable to provide main, side aisles or gangways for movement of man and material. All gangways providing main entrance to the stacks or near the wall should be 1.5-M. wide, while gangway in the side, from stack row to stack row 0.80 M wide. A maximum height of 2.20 M. is usually desirable so that the shelves are easily made accessible.

Besides the stationary shelving described above, mobile steel shelving has been used in many European countries and are now being assembled indigenously. Though the use of mobile shelving gives compact storage and maximum density of storing capacity in a given area, yet its cost is rather prohibitive, and the labour utilised for their use is also much more

than that needed with stationary shelving. Mechanical failure often met with mobile shelves added to the cost makes the use of stationary shelving advantageous.

Storage of bound volumes does not present much difficulty and these can be kept on shelves in rows with book ends on the extreme sides. Loose papers in dockets or dossiers or stitched files need storage facilities. One of the methods of archives storage used traditionally is the formation of paper bundles with stiff supports on both sides. Such bundles are tied firmly with logline so that the files do not get shifted from their position while handling the bundles and can be kept on shelves both horizontally or vertically. The bundles are so formed that the entire weight of the bulk rests on the plywood ends.

Document containers or boxes made of metal or hard pressed boards designed both for horizontal or vertical storage of files or dockets containing documents are used. The design and size of the box depends on the specific requirement of the stored documents. However, one essential criteria is that the material used should be acid free, stable and non-staining type. Metal containers have the advantage of being durable, non-inflammable but these are heavy unless made of a light metal but then they are very expensive. Press boards are lighter and their capacity is more than a metal container. Whereas a metal container can hold 3 linear inches of record, a press board container may take 5.1 linear inches of records.

Whereas for storage of normal size documents described above, shelving and ancillary storage equipment is helpful but for maps, drawings, and charts, microfilms and other photo prints and documents, special type of plan filing cabinet or suitably designed racks to hold rolled maps and other documents are required. The two main types of filing equipments widely used for storage of current materials particularly files are the lateral filing cupboards and the drawer-type filing cabinets :

This type of equipment is available in several styles and in different heights. They are simple to operate. Each cabinet holds six three-feet rows of files making eighteen feet in all more than twice the capacity of a normal 4 drawer filing cabinet described below. It takes 4½ sq. ft. of floor space as against 2 conventional 4 drawer filing cabinets which take 12 sq. ft. with drawers fully extended. The files are filled in strong craft packets standing by themselves on suspension

frames. Space is provided on the edge of each pocket for captioning the titles of the files for easy identification. Some models have double folding doors or roller shutters or blinds which facilitate their use in restricted spaces in offices.

This type of cabinet is available in four different sizes : 4 drawer, 3 drawer, 2 drawer and single drawer unit. The files are cradled by strong craft pockets linked in a concertina that glides easily on suspension frames within each drawer. Each unit needs a floor space of 3 sq. ft. for its installation and takes up another 3 sq. ft. when the drawers are fully extended during use. It allows a storage capacity of approximately 200 files of $\frac{1}{2}$" thickness each. The insignificant storage space that it allows in relation to its cost and the wide floor area that it takes for its installaion and operation compared to the lateral filing system mentioned above makes this equipment uneconomical for use in offices where there are many files to handle. It might be considered for use in offices where the collection of files is small or to serve as a subsidiary cabinet for housing classified files separately from the main storage unit.

These two systems are ideally suited, from the preservation point of view, for the items stored within them are not only protected from deleterious influences such as light, atmospheric gases, and insects, but also from unauthorised handling because of available locking devices in them.

Maps, plans, oversize prints and drawings need special receptacles for storage. They may be filed horizontally or vertically in specially designed cabinets. The horizontal multi-drawer cabinets are available in several sizes : 36×24 inches, 42×30 inches, 48×36 inches, with shallow drawers varying in depths from 3 to 4 inches. Each drawer can accommodate from 150 to 300 sheets of thin maps or drawings depending on its depth and as the collections grow new units may be added by stacking on top of the original cabinets. Thus the map collection can grow for many years on the original floor space. The vertical filing cabinets vary from 52 inches to 72 inches in height, with capacity running from 1000 to 2500 sheets. The map or plan is suspended individually by means of map strip or map holder from metal rod. The advantage in this suspended filing system is that it is easier to handle the maps. Institutions which cannot afford such expensive receptacles could have their maps rolled and placed on shelves after having them securely covered with strong wrapping papers

as a temporary arrangement. Maps larger than the cabinets available in any case will have to be rolled on shelves.

With modern systems approach in record management special type of filing cabinets with quick reference devices have been developed and before planning any specific records storage equipment these specialised agencies may be consulted. The essential feature of storage container is the quick information retrieval and accessibility as also the facilities of movement of record to other wings for reference, servicing or restoration, microfilming etc. To facilitate the movement, use of steel trolleys with swivel rubber lined castors are very convenient. Similarly for reaching uppermost shelves, use of step ladders or platform type ladders is very convenient. Such auxiliary servicing aids should always be kept handy.

For magnetic tapes it is essential that the container used for their storing is dust proof and non-magnetic. During storage these are to be protected from high intensity magnetic or electrical field. These include power generation and transmission lines, radar installations etc.

Microfilm in record offices are mostly in reel form. For their storage the film is wound on spools of plastic or non-staining metal and kept in cans with telescopic lids. These cans are kept in cardboard cartons which contain indexing details for the specific roll. These cartons are then stored in special cabinets drawers which have suitable compartment for keeping cartons with their index detail up for easy retrieval.

All the steps taken to maintain optimum, hygienic and secure storage environments are of little help if not backed by proper care in handling, use and transit of the record materials. Paper in current files or in recorded files should always be well protected with proper file covers. These covers should be acid free and with fast colours so that it does not get migrated to the papers kept in them. Care must always be taken to see that file covers and the corners of enclosures are not "dog-eared". Enclosures that get detached from files should be properly reinserted into their correct place and not merely pinned. Use of metal pins/clips produce stain and should not be allowed to remain in file for long. Tagging of paper should be done in properly punched holes and not merely by inserting and tearing the paper edge with its metal holder.

Any tear or accidental damage should be immediately repaired with high grade non-acidic paper or good quality tissue using flour or starch paste. Use of gum and cellotape

should be avoided for mending and repair. While in transit or movement each file should be given file-board support with flap to tie it. The size of the file-board and file cover should be so selected that the sheets always remain well-inserted and there is no chance of their edges getting curled or torn.

If papers are to be stiched in file covers there should be enough margin for stiches. Where there is no margin, guard or flap of a good paper should be pasted on their edges to give a protective edge for stitching. Papers in loose sheet should be well collected with their edges, in juxtaposition before final stitching. Trimming of four edges of the files should be avoided until it is ensured that all pages have enough margin.

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MICROFILM — A JINNEE THAT NEEDS TO BE MANAGED

R. C. GUPTA

This paper outlines the general pattern of setting up of microfilm laboratories in archives and libraries in India and focusses attention on the lacunae in the on-going programmes of security microfilming. It emphasizes the need to establish central laboratories and storage vaults.

Archives are known to grow in geometrical progression. Ever-growing and, indeed, staggering bulk of record and library materials, and perennial inadequacy of storage space are the proverbial problems facing the cus'odians of these materials. 'Microfilm' is no longer an unfamiliar word; even school children know about it as a tool of spies, if not as a medium of storage and dissemination of knowledge. The past two decades have seen setting up of reprographic units with micro-copying occupying the pride of place in several libraries, archives and documentation centres in India.

An analysis of the reasons for establishing microfilm laboratories in several cases would show that considerations like living up with the Jonesses; 'how can you think of a modern progressive archives or library without a microfilm unit?' have in no small measure contributed in justifying the proposals. Those controlling the purse strings being generally albiet vaguely aware of the potential applications of the new found medium in scholarly institutions condescended to allocate funds for the acquisition of microfilm camera, but often rejected other related items or at best deferred their consideration. The Jinnee was born! It demanded processing facilities, inspection tables, densitometers, splicers, reading machines, enlargers for hard copies, positive duplicating machines, dark rooms, special storage vaults, trained personnel and provision for peraparation of reference tools and servicing of films.

Barring perhaps a few exceptions, by and large the afore-given picture holds good for the pattern of growth of the reprographic units in Indian libraries and archives. Conceding that under the prevalent administrative limitations and financial constraints it was expedient and a matter of strategy to let the Jinnee be born and demand the wherewithal to keep it alive,

such an approach has nevertheless resulted in lacunae or shortcomings in the implementation of vital programmes.

In 'security microfilming' also known as 'insurance microfilming', the avowed purpose is to prepare microfilms of the most invaluable and vital documents and preserve the same safely as insurance copy against any possible loss of or damage to the originals. Institutions having acquired microfilm cameras have taken up such programmes in respect of their holdings. Have they the technical expertise to ensure quality control and facilities for laboratory tests for residual hypo and silver salts ? Unless the processing of films intended for archival storage conforms to the standards evolved over years of painstaking research and experience, the shelf life of films is doubtful and keeping qualities of images poor. Sample testing of batches of processed films or of weekly output is an inescapable necessity. Reliance only on rule of thumb techniques to achieve the desired elimination of unwanted salts is fraught with risk.

A well conceived programme of security microfilming comprises of preparation of the following three copies :

(i) Master copy for permanent storage. It is used for preparation of laboratory master in the event of the latter being spoiled.

(ii) Laboratory master intended for preparation of reference copies as and when required.

(iii) Reference copy for day to day consultation.

Preparation of these three copies, each having its specific purpose and end use is essential if the programme is to effectively serve its purpose. Often only one copy is produced and the same used for duplication as well as for reference. Even where programmes for preparing reference copies have been envisaged they have not made significant progress.

Where are these masters being stored? I am not aware of a single institution having separate vaults planned and constructed to provide the essential security against theft, fire, flood, insects, vermins, deterioration due to adverse climatic conditions. They continue to be housed in the same premises as the originals often by their side. In the event of an unforeseen catastrophy, mishap or virulent insect or fungus infestation what guarantee does such an arrangement provide for survival of the 'insurance copy' ?

Compared to paper, microfilm is a very delicate medium and is much more responsive to fluctuations and extremes of

humidity and temperature. A speck of dust innocuous in paper document will mark a word and a fine scratch may completely obliterate a whole line. Black and white safety base microfilms are of archival permanence and can be expected to last as long as good quality rag paper, *provided* they are stored under optimum environmental conditions of temperature and humidity, are not allowed to come in contact with deteriorating agents like gases, vapours, acidic paper, rubber, particulate matter etc. and are handled with care. These conditions have been spelled out in IS : 3130-1972 Indian Standard Code of Practice for Handling and Storage of Microtransparencies (Microfilm and Microfiche) and it would suffice to mention here that the recommended ambient conditions for storage of archival film are 68°F temperature and 35-40% relative humidity, round the clock throughout the year. Hardly any institution has facilities for storage of microfilms under these ambient conditions which only central air-conditioning with suitable provision for filtering acidic gases and particulate matter, and for regulating both temperature and humidity can provide. Ordinary window conditioners serve no useful purpose. Some organizations have installed package air conditioners which may be deemed as ad-interim measures. In practice they do not provide the required control of humidity. Others continue to watch helplessly, the deterioration of the collection of micro-copies, exposed to the adverse tropical conditions, extreme climatic variations and atmospheric pollutants, and wishfully hope that they would be duplicated before their strength and image quality are impaired to such an extent that duplication is ruled out.

Security copying programmes of cultural heritage, archives, manuscripts and rare books, need a second look. Each institution having an on-going or envisaged programme of security microfilming should draw up plans for fully equipped self-contained microfilm laboratory as well as suitable storage vaults. Functional requirements provide irrefutable justification.

The magnitude of on-going programmes of most institutions and those likely to be taken up by many archives libraries and manuscripts repositories in the next decade or so would hardly justify expenditure in mushroom growth of such laboratories. Optimum utilization of capital outlay on equipment, machinery, storage facilities as well as high level of technical direction can be achieved by setting up central laboratories each catering to a group of such institutions. For reasons of security and safety, librarians and archivists are not willing to send the originals out of their custody. Where the microfilming is to be spread over

an appreciable span of time, the installation of camera is justified even if it means idle capacity. Other aspects, however, can be handled by the central laboratories which should be equipped and manned to provide the following services :

(i) Inspection of films.

(ii) Conducting laboratory tests for processing requirements of archival films.

(iii) Processing of films.

(iv) Duplication of films.

(v) Storage of masters in suitably constructed and air-conditioned vaults.

(vi) Rendering advice in conformity with the national and international standards.

In addition, these laboratories can take up microfilming of private collections and holdings of institutions having small specific projects.

The security microfilming for cultural wealth discussed in the paper is being done by many Governmental organizations. Even within the much lamented limitations there is ample scope for streamlining of procedures, and application of modern management concepts.

ARCHIVES MANAGEMENT OF SUMMER MONEX DATA

RATTAN K. DATTA

Monex (Monsoon Experiment) was conducted at the initiative of the Government of India by the World Meteorological Organization in collaboration with various member countries to understand and predict vagaries of monsoon in the Indian subcontinent, between May 1 and August 31, 1979. For the execution of the summer Monex, an International Monex Management Centre was established at the Meteorological Office, New Delhi. Observations taken from diversified sources like surface based systems, observations made through instruments carried over air-crafts, ships, satellites etc. form the Monex Data Set.

The data were categorised into two groups :

(i) Quick-Look Data Set which was compiled on a real time basis within 24 hours of the time of observation. It had limited quality control check and is useful for preliminary research work ; and

(ii) The main Data Set which is finalised within 18 months of the conclusion of the experiment after rigorous efforts.

The Quick-Look Data Set has been further classified into two categories, digital and non-digital. The former is carried over computer and magnetic tapes, while the latter is kept on microfilms. The Main Data Set, which is of lasting value, has also been broadly categorised into digital and non-digital groups. The digital data have been further sub-divided into (a) merged data type, i.e., for which standard uniform international format exists, and (b) non-merged type data set, i.e., for which individual national format was devised. The data of the non-digital category are comparatively more exhaustive and of lasting utility.

In the documentation system, care has been taken to indicate not only the procedure of preparation of the Data Set but also the known limitations of the procedure. Quality of the data has been checked to facilitate future experimentation and development of data set. Before the data has been actually put on microfilms, steps have been taken to undertake stringent checks. Data of doubtful nature is to be evaluated by experienced Meteorologists. This data will be safely preserved for conducting intensive research in the field of Monsoon Meteorology.