

A CENTRALIZED SYSTEM OF NATIONAL, STATE, COUNTY AND CITY AERIAL TOPOGRAPHIC LIBRARIES

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THE GREAT ACCELERATION IN THE USE OF AERIAL MAPS FOR A MULTITUDE OF PURPOSES AND THE CONSEQUENT DEMAND FOR LARGE SCALE MAPS FOR ALL KINDS OF LAND USE AND PLANNING HAVE SO FAR OUTDISTANCED THE ORGANIZATION OF ANY COMPREHENSIVE COORDINATION OF THE WORK AS A WHOLE THAT THE TASK SEEMS ALMOST INSURMOUNTABLE. MANY ABLE MINDS HAVE FORESEEN THE IMPENDING NECESSITY FOR SUCH COORDINATION AND HAVE GIVEN GENEROUSLY OF THEIR TIME, ALREADY FILLED TO OVERFLOWING WITH THEIR REGULAR DUTIES, TO ENVISAGE A SOLUTION OF THIS COMPLEX PROBLEM.

IMPENDING LEGISLATION MAKES IT QUITE PROBABLE THAT WITHIN THE NEXT FIVE YEARS OR LESS IT WILL BE NECESSARY TO PHOTOGRAPH THE ENTIRE ARABLE SURFACE OF THE UNITED STATES. THIS IS THE CROP CONTROL AND LAND USE PROGRAM OF ONE AGENCY ALONE - THE AGRICULTURAL ADJUSTMENT ADMINISTRATION.

ADDED TO THIS IS THE REGULAR WORK OF THE GEOLOGICAL SURVEY AND THE COAST AND GEODETIC SURVEY ALONG RAPIDLY EXPANDING BUT WELL OUTLINED PROGRAMS; THE SOIL CONSERVATION SERVICE WITH ITS PROBLEM OF SOIL EROSION; THE TENNESSEE VALLEY AUTHORITY AND SIMILAR AGENCIES IN FACE-LIFTING UNCLE SAM'S COUNTENANCE; THE FORESTRY IN CONSERVING OUR TIMBERLAND RESOURCES; THE BUREAU OF PUBLIC ROADS IN HIGHWAY LOCATION AND CONSTRUCTION; THE ARMY AND NAVY FOR MILITARY AND ENGINEERING; THE POST OFFICE FOR POSTAL ROUTES; BUREAU OF MINES IN MINING DEVELOPMENTS; THE NATIONAL PARK SERVICE IN FOREST AND PARK ADMINISTRATION; AND OF MANY OTHER FEDERAL AGENCIES IN LONG-TIME PLANNING AND COOPERATION WITH STATE, COUNTY AND MUNICIPAL AUTHORITIES. THIS HAS CAUSED AN INCREASING DEMAND FROM COMPANIES, CORPORATIONS, PUBLIC SERVICE ORGANIZATIONS AND PRIVATE INDIVIDUALS WHO, AS TAXPAYERS, FEEL THAT THEY SHOULD HAVE A SHARE IN THE USE OF THESE MAPS.

THE LIST OF USES IS A LONG ONE. MUNICIPAL PLANNING; RECORDS OF PUBLIC UTILITIES, RAILWAYS, GAS MAINS AND POWER LINES, POWER AND IRRIGATION DEVELOPMENT, HIGHWAY PLANNING, LAND RECORDING; SOIL CLASSIFICATION AND USE, TAX CONTROL, DRAINAGE, PUBLIC PARKS, DIKES, FLOOD CONTROL; MINING AND OIL DRILLING, HOUSING, AND MAP PUBLISHING ARE BUT A FEW OF THE MYRIAD USES FOR WHICH ACCURATE, LARGE-SCALE MAPS ARE NEEDED. ALL THIS WEALTH OF DETAILED INFORMATION AND A HOST OF OTHER USEFUL DETAILS EXIST IN ANY SET OF GOOD AERIAL NEGATIVES OF A GIVEN AREA. ANY ONE KIND OF MAP, EVEN ANY GENERAL PURPOSE MAP CANNOT BEGIN TO EXHAUST THE DATA TO BE FOUND IN A GOOD PHOTOTOPOGRAPHIC SURVEY.

NO ONE USE NOR ANY POSSIBLE COMBINATION OF USES BEGINS TO EXHAUST THE WEALTH OF DETAIL IN A SET OF NEGATIVES WHICH IS STILL GOOD, STILL USEFUL FOR A MYRIAD OF OTHER PURPOSES. THAT IS THE MAIN REASON THAT A CENTRALIZED COORDINATION OF AERIAL NEGATIVES IS NEEDED. THEY ARE THE SOURCE OF DATA FOR UNLIMITED USES; USES TO WHICH THEY ARE UNAVAILABLE WITHOUT THIS NECESSARY CENTRALIZED CONTROL AND COORDINATION. IT IS TRUE THAT WITH TIME AND CHANGE, WITH IMPROVEMENTS IN LAND USE AND IMPROVEMENTS IN AERIAL TOPOGRAPHY THESE NEGATIVES WILL, OVER A PERIOD OF YEARS, BECOME OBSOLETE BUT THAT DOES NOT PROVE THAT THEY WILL BECOME USELESS NOR THAT THEY SHOULD NOT BE CAREFULLY PRESERVED. RECORDS AND MONUMENTS, ACCOUNTS AND TRADE ROUTES ARE OLDER THAN HISTORY. WHAT IS PAST IS BUT THE PROLOGUE OF THE UNDREAMED FUTURE. IF THESE RECORDS ON PERISHABLE NITRO-CELLULOSE CAN BE PRESERVED FOR POSTERITY, WHO SHALL PROPHECY WHAT OUR DESCENDENT CARTOGRAPHERS WILL DECIPHER FROM THESE SHRUNKEN, DECAYING AND STINKING ROLLS OF FADED FILM?

THE DIFFERENT STATES AND CITIES ARE RAPIDLY BECOMING CONSCIOUS OF THE VALUE OF THE AERIAL FILMS FOR CHECKING THEIR TAX ROLLS. THE STATE OF CONNECTICUT HAD LARGE-SCALE AERIAL SURVEYS MADE BY THE MUNICIPAL SERVICE COMPANY

OF CONNECTICUT. THE RESULTING CHECK OF THE GRAND LIST OF TAXABLE PROPERTY WAS INCREASED BY AN AVERAGE OF 47%. AS A RESULT OF THIS INCREASE IN THE TOTAL LIST THE TAX RATE WAS LOWERED BY AN AVERAGE OF 29% WITHOUT DECREASING THE TOTAL TAX INCOME.

SEVERAL OTHER STATES HAVE PASSED ENABLING LAWS OR ARE CONSIDERING SUCH LEGISLATION IN ORDER TO AVAIL THEMSELVES OF THIS EFFICIENT AND LOW-PRICED METHOD OF TAX RATE REDUCTION; THUS STARTING ON THE ROAD TO A MORE MODERN, EQUITABLE, IMPROVED METHOD OF KEEPING STATE, COUNTY AND MUNICIPAL RECORDS. SOME OF THESE STATES ARE: MICHIGAN, FLORIDA, INDIANA, ILLINOIS, MISSOURI, IOWA, OHIO, MARYLAND AND OTHERS. IN SOME OF THESE STATES THE LEGISLATION IS NOT YET COMPLETE, EVEN THOSE WHICH HAVE PASSED ENABLING ACTS ARE NOT YET FULLY ORGANIZED BUT THE VIRUS IS WORKING.

IF THE PLANS OF THE AGRICULTURAL ADJUSTMENT ADMINISTRATION ARE CARRIED OUT EVERY STATE IN THE UNION WILL BECOME AIR MAP CONSCIOUS IN THE NEXT FEW MONTHS; BESIDES THAT, NOT ONLY WILL THE STATES BECOME WELL AWARE OF THE MEANING OF AIR MAPS BUT NEARLY EVERY COUNTY SEAT IN THE UNITED STATES WILL BE INFECTED WITH THE VIRUS. THE FIRST SYMPTOM OF THIS VIRUS IS USUALLY AN ACUTE HEADACHE OF ALL THE EMPLOYEES IN THE COUNTY CLERK'S OFFICE AND A REALIZATION THAT THE COUNTY RECORDS "AIN'T WHAT THEY ORTER BE."

IT IS A FOREGONE CONCLUSION THAT FOR A LONG TIME AT LEAST THERE WILL BE NO FACILITIES FOR THE STORAGE AND PRESERVATION OF AERIAL FILMS IN ANY OF THE COUNTY SEATS EXCEPT POSSIBLY IN A VERY FEW PLACES WHERE CITIES COMPRISE COUNTIES, SUCH AS NEW YORK OR ST. LOUIS. EVEN IN CASES SUCH AS THESE, THERE DO NOT EXIST FACILITIES FOR THE ORIGINAL SOURCE MATERIAL; THAT IS, THE AERIAL NEGATIVES THEMSELVES. IN SOME CASES, HOWEVER, IT IS PROBABLE THAT STATE GOVERNMENTS MAY WISH TO TAKE CARE OF THE AIR FILMS WHICH ARE MADE WITH STATE FUNDS WITHIN THEIR OWN BOUNDARIES. THIS IS QUITE NATURAL BUT IT SHOWS AT THE SAME TIME THE NECESSITY FOR A COMPREHENSIVE AND COORDINATED PLAN FOR AN INTER-LIBRARY EXCHANGE WITH A MAIN CENTRAL ESTABLISHMENT IN WASHINGTON.

THIS ALSO ACCENTUATES THE FACT THAT THERE IS NOW NO COORDINATED CENTRAL LIBRARY OR DEPOSITORY FOR AERIAL FILM RECORDS WITHIN THE FEDERAL GOVERNMENT ITSELF. NOT ONLY IS THERE NO SUCH CENTRAL DEPOSITORY BUT NONE OF THE DEPARTMENTS OR AGENCIES IN THE DISTRICT OF COLUMBIA HAVE ADEQUATE OR APPROVED DEPOSITORIES FOR THE FILM WHICH THEY NOW HAVE ON HAND. NOT ONLY ARE THESE DEPOSITORIES INADEQUATE BUT NO PLANS HAVE YET BEEN APPROVED FOR NEW VAULTS TO TAKE CARE OF THE RAPID INCREMENT OF FILMS NOW PLANNED OR CONTRACTED FOR.

MANY AGENCIES ARE LOOKING TO THE COMMITTEE ON NATIONAL, STATE AND LOCAL LIBRARIES AND LABORATORIES FOR AERIAL PHOTOGRAPHS TO PROVIDE CENTRAL STORAGE AND LIBRARY SERVICE. THAT IS TO BE EXPECTED AS NO ONE AGENCY WANTS TO EXPEND FUNDS FOR VAULTS IF A BETTER PLAN WITH ADEQUATE FUNDS CAN BE PULLED OUT OF THE CAPITOL DOME BY SOME GIGANTIC FEAT OF LEGERDEMAIN. DO NOT THINK THAT THE TRICK CANNOT BE DONE; MANY OF THE BEST MINDS IN THE SOCIETY HAVE BEEN GIVING TIME AND THOUGHT AND WORK WITHOUT STINT TO SOLVE THE METHOD OF GETTING THE RABBIT OUT OF THE HAT.

FIRST OF ALL WE HAVE THE PRECEDENT OF CANADA, OUR NEXT DOOR NEIGHBOR, THAT OPERATES SUCCESSFULLY A CENTRALIZED DEPOSITORY OR LIBRARY WITH SERVICE FOR HER WIDE DOMAIN. IT IS TRUE THAT CANADA'S PROBLEM IS NOT SO LARGE AS OUR OWN AND THAT A COMPARABLE ESTABLISHMENT IN THE UNITED STATES HAS A MORE COMPLEX SCHEME TO WORK OUT. SO THAT WE WILL HAVE A FOUNDATION FOR DISCUSSION OF THE PROBLEM, THERE IS INSERTED HERE AN ACCOUNT OF THE CANADIAN PLAN, THE TEXT OF WHICH WAS KINDLY FURNISHED THE WRITER BY MR. JOHN MCLEISH, DIRECTOR, DEPARTMENT OF MINES AND RESOURCES, OTTAWA, CANADA.

THE NATIONAL AERIAL PHOTOGRAPHIC LIBRARY, OTTAWA

THE NATIONAL AERIAL PHOTOGRAPHIC LIBRARY IS LOCATED IN THE MINES AND

GEOLOGY BRANCH OF THE DEPARTMENT OF MINES AND RESOURCES. IN IT ARE FILED PRINTS OF ALL AERIAL NEGATIVES TAKEN IN CANADA BY THE ROYAL CANADIAN AIR FORCE. NINETY PER CENT OF ALL AERIAL PHOTOGRAPHS TAKEN IN CANADA HAVE BEEN TAKEN BY THIS AIR FORCE, THE REMAINDER BEING TAKEN BY PRIVATE COMPANIES AND SOME PROVINCIAL DEPARTMENTS. MONIES HAVE BEEN PROVIDED FOR THE INCLUSION OF THESE LATTER PRINTS IN THE LIBRARY IN THE NEAR FUTURE. THE NEGATIVES THEMSELVES ARE STORED IN FIRE-PROOF VAULTS IN THE PHOTOGRAPHIC OFFICE AT THE ROCK-CLIFFE AERODROME LOCATED ABOUT THREE MILES OUTSIDE THE CITY.

THE INDEX AND FILING SYSTEM MAINTAINED AT THE PHOTOGRAPHIC LIBRARY MAY BE DESCRIBED UNDER THREE MAIN DIVISIONS, AS FOLLOWS:-

- (1) THE INDEX CARD SYSTEM, CONTAINING THE ESSENTIAL INFORMATION PERTAINING TO EACH PARTICULAR PHOTOGRAPH.
- (2) THE INDEX MAPS, INDICATING THE LOCATIONS OF THE AERIAL PHOTOGRAPHS.
- (3) THE FILING SYSTEM ITSELF, WHEREIN A CONTACT PRINT OF EACH AVAILABLE NEGATIVE IS FILED IN THE RESPECTIVE CONTAINER OR CONTAINERS ALLOTTED TO THE PARTICULAR MAP SHEET AREAS.

THE CARD INDEX SYSTEM

THE AERIAL FILM EMPLOYED WITH THE AERIAL SURVEY CAMERAS AT PRESENT IN USE IS SUPPLIED IN ROLLS, EACH OF SUCH LENGTH AS TO ALLOW FOR 110 EXPOSURES, OR THEREABOUTS, THE EXPOSURE AREA BEING APPROXIMATELY 7" BY 9" IN DIMENSIONS. WHEN A ROLL HAS BEEN ENTIRELY EXPOSED IT IS FORWARDED FOR DEVELOPMENT TO THE ROYAL CANADIAN AIR FORCE, PHOTOGRAPHIC SECTION, AT OTTAWA, AND IS ACCOMPANIED BY A REPORT IN DUPLICATE, GIVING PARTICULARS THAT THE CAMERA OPERATOR CAN SUPPLY RELATIVE TO THE NEGATIVES CONTAINED THEREIN. ONE COPY OF THIS REPORT WITH THE PROPER ROLL NUMBER MARKED THEREON, IS IMMEDIATELY FORWARDED TO THE AERIAL PHOTOGRAPHIC LIBRARY. WHEN THE INDEX PRINTS OF ANY ROLL OF NEGATIVES ARE LATER SUPPLIED, INFORMATION IS THUS READILY AVAILABLE TO SERVE FOR FACILITATING THE PRELIMINARY HANDLING OF THE PRINTS. WHEN THE ROLL IS DEVELOPED AND BEFORE ANY CONTACT PRINTS ARE MADE THEREFROM, THE NEGATIVE ROLL NUMBER AND THE RESPECTIVE NUMBER OF EACH EXPOSURE IN SUCH ROLL ARE MARKED ON EACH FILM NEGATIVE, EACH ROLL BEING NUMBERED CONSECUTIVELY AS RECEIVED. IN ADDITION TO THESE NUMBERS THE FOLLOWING INFORMATION IS MARKED ON THE FIRST EXPOSURE OF EACH ROLL:-

- (A) THE NUMBER OF THE ROLL;
- (B) THE DATE OF EXPOSURE;
- (C) THE ELEVATION;
- (D) THE CAMERA AND LENS NUMBER;
- (E) THE OPERATION NUMBER AND LINE NUMBER OF OPERATION ON WHICH ROLL WAS TAKEN

IN THE CARD INDEX ONE CARD IS ALLOTTED TO EACH ROLL. AS SOON AS A ROLL OF INDEX PRINTS IS RECEIVED A CARD IS GIVEN THE ROLL NUMBER AS A HEADING AND A RECORD IS MADE ON IT OF THE FOLLOWING INFORMATION:-

- (A) NUMBER OF PHOTOGRAPHS CONTAINED IN THE PARTICULAR ROLL;
- (B) DATE OF EXPOSURE;
- (C) DATE OF RECEIPT;
- (D) NUMBER OF COPIES RECEIVED, PHOTOGRAPHIC OPERATION NUMBER, ALTITUDE, LOCATION;
- (E) INFORMATION RELATIVE TO CAMERA AND LENS USED, AS OBTAINED FROM THE FILM REPORT AND CAMERA CALIBRATION INFORMATION AVAILABLE IN THE OFFICE;
- (F) DISPOSAL OF PHOTOGRAPHS AND CROSS REFERENCE TO PARTICULAR MAP INDEX SHEET SHOWING INDEX LOCATION OF THE PHOTOGRAPHS.

TO INSURE AGAINST THE LOSS OF ANY OF THIS INFORMATION IT IS ALSO RECORDED IN A BOOK OR REGISTER AT THE SAME TIME.

INDEX MAPS

THE WHOLE SYSTEM OF INDEXING, RECORDING AND FILING IS BASED ON THE LOCATION OF THE AREA SHOWN IN EACH AERIAL PHOTOGRAPH. FOR INDEXING OBLIQUE AERIAL PHOTOGRAPHS THE MAP SHEETS ON THE FOUR-MILE SCALE OF THE NATIONAL TOPOGRAPHIC SERIES ARE USED. IF THE PARTICULAR FOUR-MILE SHEET HAS NOT BEEN ISSUED, THEN A MAP IS SPECIALLY MADE TO THE REQUIRED SCALE BY ENLARGING OR REDUCING THE BEST AVAILABLE MAP, AND WITH THE PROPER BOUNDARIES TO SERVE THE PURPOSE. ON THIS MAP THE LOCATIONS OF THE OBLIQUE AERIAL PHOTOGRAPHIC FLIGHTS ARE MARKED, TOGETHER WITH THE CORRESPONDING NEGATIVE ROLL NUMBERS AND SUFFICIENT OF THE EXPOSURE NUMBERS OF EACH ROLL TO FIX THEIR MAP LOCATIONS. TO AVOID CONGESTION OF INDEX INFORMATION ON A SHEET, THE VERTICAL AERIAL PHOTOGRAPHS ARE INDEXED APART FROM THE OBLIQUES.

TO SERVE AS A TEMPORARY MAP INDEX UNTIL THE OBLIQUE PHOTOGRAPHIC OPERATION IS COMPLETED, OR UNTIL THE CLOSE OF THE FIELD SEASON, THE LOCATIONS OF THE ROUTES TRAVELLED BY THE AIRCRAFT WHEN PHOTOGRAPHING, ARE INDICATED BY LINES DRAWN ON A COPY OF THE MAP ACCOMPANYING THE INSTRUCTIONS FOR THE PHOTOGRAPHY. THE ROLL NUMBERS OF THE NEGATIVES OBTAINED ON THOSE ROUTES ARE MARKED ON THE LINES AS WELL AS THE LOCATIONS AND NUMBERS OF THE FIRST AND LAST EXPOSURE, AND A FEW INTERMEDIATE EXPOSURES OF EACH ROLL. LATER, THIS INFORMATION IS ADDED TO THE FOUR-MILE INDEX SHEET WHERE INKS OF DIFFERENT COLOR ARE USED FOR CLEARNESS IN SHOWING THE LOCATIONS AND NUMBERS OF THE DIFFERENT ROLLS. THE NEGATIVE NUMBERS OF ALL OBLIQUE AERIAL PHOTOGRAPHS INDEXED ON ANY INDEX MAP SHEET ARE LISTED ON THE MARGIN OF THE SHEET IN THE SAME COLOR OF INK AS USED IN SHOWING THEIR MAP LOCATION. FOR INDEXING VERTICAL AERIAL PHOTOGRAPHS, THE ONE-MILE SCALE MAP IS EMPLOYED WITH BOUNDARIES CONFORMING TO THOSE OF THE ONE-MILE MAP SHEETS OF THE NATIONAL TOPOGRAPHIC SERIES. AS SOON AS ANY PHOTOGRAPHS TAKEN ON A VERTICAL AERIAL PHOTOGRAPHIC OPERATION ARE RECEIVED, THE ROUTES ON WHICH THEY WERE OBTAINED ARE MARKED BY LINES GIVEN THE CORRESPONDING NEGATIVE ROLL NUMBERS, ON A COPY OF THE MAP ACCOMPANYING THE INSTRUCTIONS FOR THE OPERATION. THE MAP LOCATIONS OF THE PRINCIPAL POINTS OF THE FIRST, LAST, AND A NUMBER OF THE INTERMEDIATE EXPOSURES OF EACH ROLL ARE FIXED, NUMBERED AND MARKED BY SMALL CIRCLES. LOCATIONS OF INTERVENING EXPOSURES ON THE FLIGHT LINES ARE DETERMINED BY PROPORTION. THIS TEMPORARY INDEX MAP SERVES UNTIL THE FINAL INDEX MAP IS MADE.

IN COMPILING MAPS FROM VERTICAL AERIAL PHOTOGRAPHS BY THE RADIAL INTERSECTION METHOD, THE MAP LOCATION OF THE PRINCIPAL POINT OF EACH PHOTOGRAPH USED IS FIXED IN THE PROCESS. PRINTS, AT THE ONE-MILE STAGE OF THESE MAPS, WHICH SHOW BY SMALL CIRCLES THE PRINCIPAL POINTS OF THE PHOTOGRAPHS, ARE USED FOR MAKING THE FINAL INDEX MAPS, EACH PRINT COVERING THE AREA OF A ONE-MILE MAP SHEET OF THE NATIONAL TOPOGRAPHIC SERIES. THE ROUTE FOLLOWED BY THE AIRCRAFT WHEN EXPOSING A PARTICULAR ROLL IS SHOWN BY JOINING IN COLORED INK THE SMALL CIRCLES, REPRESENTING THE CONSECUTIVE EXPOSURES OF SUCH ROLL. THE ROLL NUMBER AND THE NUMBER OF THE FIRST, LAST AND EVERY FIFTH EXPOSURE, IS MARKED IN INK OF THE SAME COLOR AS THAT OF THE ROUTE FLOWN. THE INDEX MAP SHEET IS THEN MARKED WITH ITS PROPER NUMBER; THE NEGATIVE NUMBERS OF THE PHOTOGRAPHS INDEXED THEREON ARE ENTERED IN THEIR RESPECTIVE COLOR IN THE MARGINAL LIST, AND THE OUTLINES OF THE AREA COVERED IN A FEW INDIVIDUAL EXPOSURES ARE MARKED ON THE MAP.

TO FACILITATE THE REPLACEMENT OF ANY INDEX MAP SHEET, IF LOST, A REGISTER IS KEPT IN WHICH IS ENTERED THE LIST OF NEGATIVE NUMBERS OF AERIAL PHOTOGRAPHS INDEXED UPON EACH OF THEM.

THE FILING SYSTEM

PRINTS FOR FILING ARE SUPPLIED ON 9" BY 11" DOUBLE-WEIGHT, SEMI-MATTE PAPER AND THE FILING EQUIPMENT FOR THEM CONSISTS OF SMALL STEEL BOXES WHICH ARE SUPPORTED ON STEEL SHELVEING. EACH BOX HOLDS ABOUT TWO HUNDRED PHOTOGRAPHS. EACH SECTION OF SHELVEING CONTAINS EIGHT SHELVES AND EACH SHELF AC-

COMMODATES SEVEN OF THE STEEL BOXES. WHEN THE PHOTOGRAPHS ARE RECEIVED FOR FILING, AND BEFORE THEY ARE ENTERED ON THE INDEX MAP SHEET, THEY ARE TEMPORARILY PLACED IN STEEL BOX CONTAINERS HEADED WITH THE PHOTOGRAPHIC OPERATION NUMBER ON WHICH THE PHOTOGRAPHS WERE OBTAINED, AND MARKED WITH THE ROLL AND NEGATIVE NUMBERS OF THE PHOTOGRAPHS STORED THEREIN. AS SOON AS ANY PHOTOGRAPHS HAVE BEEN INDEXED ON ANY INDEX MAP SHEET, A STEEL FILING BOX IS MARKED WITH THE NUMBER OF SUCH MAP SHEET AND THE INDEX PHOTOGRAPHS, AS LISTED ON THE PARTICULAR MAP IN THE CONTAINER ALLOTTED TO THE MAP SHEET AREA, ARE FILED. THE NEGATIVE NUMBERS OF ALL THE PHOTOGRAPHS STORED IN THE BOX ARE MARKED ON THE CARD ATTACHED THERETO. THE STEEL BOXES CONTAINING THE VERTICAL AERIAL VIEWS ARE GROUPED TOGETHER AND ARRANGED ACCORDING TO THEIR LOCATION, AND THOSE CONTAINING THE OBLIQUE VIEWS ARE SIMILARLY GROUPED AND PLACED ON THE SHELVING.

ONE OF THE MAIN FUNCTIONS OF THE PHOTOGRAPHIC LIBRARY IS TO MAKE AVAILABLE TO GOVERNMENT AGENCIES, PRIVATE COMPANIES, OR INDIVIDUALS, ANYWHERE IN CANADA, THE INFORMATION CONTAINED IN THE PHOTOGRAPHS. PRINTS OF ANY OF THE NEGATIVES MAY BE OBTAINED BY GOVERNMENT ORGANIZATIONS AT A COST OF TWELVE CENTS A PRINT, WHILE TO COMPANIES AND PRIVATE INDIVIDUALS THE CHARGE IS TWENTY-FOUR CENTS EACH. IN ORDER TO SAVE UNNECESSARY EXPENSE, PRINTS ARE LOANED TO GOVERNMENT DEPARTMENTS BOTH PROVINCIAL AND FEDERAL, WHILE RESPONSIBLE PARTIES MAY BE LOANED PRINTS FOR SHORT PERIODS.

BESIDES THE AGENCIES IN WASHINGTON WHICH ARE MAKING AND USING AERIAL FILMS, THERE ARE A GREAT MANY DEPOSITORIES OF AERIAL FILMS SCATTERED ABOUT THE COUNTRY WHICH ARE FEDERAL PROPERTY. THE AIR CORPS UNITS OF THE WAR DEPARTMENT HAVE A VERY LARGE NUMBER OF AERIAL FILMS AT VARIOUS FLYING FIELDS AND ARMY POSTS THROUGHOUT THE UNITED STATES. FOR VARIOUS REASONS THE AIR CORPS IS ANXIOUS TO CONCENTRATE A LARGE PORTION OF THESE IN WASHINGTON. PLANS ARE NOW BEING DISCUSSED TO STORE SOME OF THESE AERIAL ROLLS IN THE NATIONAL ARCHIVES IN WASHINGTON BUT THE PRESENT LIMITED CAPACITY OF THE FILM VAULTS THERE WILL BE CROWDED IF THE AMOUNT BROUGHT IN IS ANYWHERE NEAR THE ESTIMATED VOLUME.

UNDER THE PRESENT LAWS ALL INACTIVE FEDERAL PHOTOGRAPHIC FILMS HAVING RECORD OR HISTORICAL SIGNIFICANCE ARE SUBJECT TO DEPOSIT IN THE NATIONAL ARCHIVES. THE STATUS OF AERIAL FILMS AS RECORDS OF HISTORICAL SIGNIFICANCE SEEMS TO BE UNQUESTIONED. THE LOGICAL CONCLUSION IS THAT IF THE NATIONAL ARCHIVES IS TO HOUSE THESE RECORDS EVENTUALLY AS THEY BECOME MORE OR LESS INACTIVE, THEN WHY NOT HAVE THE NATIONAL ARCHIVES EXTEND ITS SCOPE TO BECOME THE CUSTODIAN AND GIVE SERVICE FOR A CENTRALIZED DEPOSITORY OF ALL THE AERIAL NEGATIVES OF THE FEDERAL GOVERNMENT NOT IN ACTIVE USE?

DR. R. D. W. CONNOR, ARCHIVIST OF THE UNITED STATES, SOON BECAME AWARE, THROUGH HIS DEPUTY EXAMINERS WHO HAVE BEEN MAKING IDENTIFICATION AND VOLUME SURVEYS OF FEDERAL RECORDS WITHIN THE DISTRICT OF COLUMBIA AND FROM THE SURVEY OF FEDERAL ARCHIVES UNDER THE WORKS PROGRESS ADMINISTRATION WHICH HAS SURVEYED THE MAJORITY OF FEDERAL RECORDS THROUGHOUT THE UNITED STATES, THAT THE PHOTOGRAPHIC RECORDS OF THE GOVERNMENT WHICH INCLUDE AERIAL FILMS AS WELL AS MOTION PICTURES AND PHOTOGRAPHIC NEGATIVES OF ALL KINDS AMOUNT TO AN ASTOUNDING TOTAL OF ABOUT 600 TONS. UNTIL THESE SURVEYS WERE MADE NO ONE HAD ANY KNOWLEDGE OF THE EXTENT OF THE PHOTOGRAPHIC RECORDS OF THE GOVERNMENT. NOT ONLY IS THE PRESENT VOLUME VERY GREAT BUT THE USE OF PHOTOGRAPHY FOR FEDERAL PURPOSES IS INCREASING AT A RAPIDLY ACCELERATING RATE, PARTICULARLY THE USE OF AERIAL FILMS.

THESE ACCUMULATIONS OF LARGE AMOUNTS OF PHOTOGRAPHIC MATERIAL, A GREAT PERCENTAGE OF WHICH IS ON NITRO-CELLULOSE BASE, PRESENT VERY SPECIAL PROBLEMS IN STORAGE. NOT ONLY IS NITRO-CELLULOSE HIGHLY INFLAMMABLE BUT UNDER CERTAIN CONDITIONS IS EXPLOSIVE AS WELL. IN ADDITION TO ITS INFLAMMABLE NATURE IN COMBUSTION IT GIVES OFF POISONOUS AND CORROSIVE FUMES WHICH ARE DANGEROUS TO

HUMAN LIFE AND ESPECIALLY DESTRUCTIVE TO OTHER TYPES OF RECORD MATERIALS.

THE ORIGINAL PLAN WAS TO HOUSE ONLY A LIMITED AMOUNT OF THIS KIND OF MATERIAL IN THE ARCHIVES BUILDING; PARTLY BECAUSE NO FIGURES FOR THE PROBABLE VOLUME WERE AVAILABLE BUT MOSTLY BECAUSE IT WAS NOT DEEMED PRUDENT TO GO BEYOND A SAFE LIMIT IN HOUSING SUCH DANGEROUS STUFF IN CLOSE PROXIMITY TO PAPER DOCUMENTS.

THE ARCHIVIST OF THE UNITED STATES RECOGNIZED AT ONCE THE PROBABLE NECESSITY FOR PROVIDING AS SOON AS POSSIBLE A SEPARATE STRUCTURE AWAY FROM THE PRESENT NATIONAL ARCHIVES BUILDING WHERE ADEQUATE PROVISIONS COULD BE MADE WHICH WOULD BE SUITABLE FOR ALL KINDS OF PHOTOGRAPHIC RECORDS NOT ABSOLUTELY NECESSARY TO BE HOUSED IN THE MAIN STRUCTURE. BECAUSE SOME DIVISIONS OF THE NATIONAL ARCHIVES WERE AND STILL ARE ENGAGED IN COOPERATION WITH THE NATIONAL BUREAU OF STANDARDS AND WITH OTHER SCIENTIFIC AND ENGINEERING ORGANIZATIONS IN THE STUDY OF THE CARE, HANDLING AND STORAGE OF NITRATE FILM AND ITS CORRELATED PROBLEMS, THE ARCHIVIST ASKED THE CHIEFS OF THESE DIVISIONS TO COOPERATE WITH HIM IN CALLING A MEETING TO BE HELD IN THE NATIONAL ARCHIVES BUILDING.

TO THIS MEETING WERE INVITED REPRESENTATIVES OF ALL OF THOSE MAJOR DEPARTMENTS AND AGENCIES OF THE GOVERNMENT WHERE PHOTOGRAPHY IS USED FOR ANY PURPOSE. ATTENDANCE WAS PRACTICALLY 100 PERCENT AND THE INTEREST MANIFESTED WAS VERY GRATIFYING. AS THE REPORT OF THIS MEETING HAS NOT YET BEEN RELEASED FOR PUBLICATION THE RESULTS CANNOT BE DIVULGED HERE. HOWEVER, IT CAN BE SAID THAT ACTIVE WORK AND PLANNING TOWARD AN ADEQUATE AND COMPREHENSIVE SOLUTION OF THE PROBLEM HAS NOT CEASED SINCE THIS COMMITTEE MET.

OTHER ORGANIZATIONS WHICH ARE WORKING TOWARD A CENTRALIZED SYSTEM, BESIDES THE AMERICAN SOCIETY OF PHOTOGRAMMETRY, ARE THE FEDERAL BOARD OF SURVEYS AND MAPS; PLACES WHERE STATE AERIAL MAPPING DIVISIONS HAVE BEEN ORGANIZED; COLLEGES AND UNIVERSITIES WHERE AERIAL SURVEYING AND ENGINEERING ARE TAUGHT; AND MEN AT THE HEADS OF MANY OF THE AERIAL SURVEYS COMPANIES.

H. A. BUEHLER, STATE GEOLOGIST OF MISSOURI, WRITES:

"MY CHIEF INTEREST IN AERIAL PHOTOGRAPHS IS THE PREPARATION OF TOPOGRAPHIC MAPS AND TO THIS END I AM VERY MUCH INTERESTED IN THE MATTER OF STORAGE AND PRESERVATION OF THE NEGATIVES. DURING THE PAST YEAR SOME 17 COUNTIES WERE PHOTOGRAPHED BY THE AGRICULTURAL DEPARTMENT AND THESE FILMS ARE NOW SUPPOSED TO BE RETURNED TO THE COUNTIES INDIVIDUALLY. IF THIS IS DONE THE PHOTOGRAPHS WILL SOON BE DISSIPATED AND LOST. DURING THE LAST YEAR I HAVE DISCUSSED THIS MATTER AT SOME LENGTH WITH THE DEPARTMENT OF AGRICULTURE AT COLUMBIA AND HAVE OFFERED TO PROVIDE SPACE IN A FIRE-PROOF BUILDING HERE AT ROLLA FOR THE COLLECTION AND PRESERVATION OF THE NEGATIVES. NO DECISION HAS BEEN REACHED IN THE MATTER AND I ONLY HOPE IT WILL BE POSSIBLE FOR THE NEGATIVES TO BE COLLECTED AT ONE POINT, EITHER HERE OR AT COLUMBIA, FOR PRESERVATION."

T. M. BUSHNELL, IN CHARGE SOIL SURVEY, PURDUE UNIVERSITY, LAFAYETTE, INDIANA, SAYS:

"I WILL BE VERY GLAD OF AN OPPORTUNITY TO PARTICIPATE IN THE WORK OF THE COMMITTEE ON LIBRARIES FOR AERIAL PHOTOS OF THE AMERICAN SOCIETY OF PHOTOGRAMMETRY AND ANTICIPATE RECEIVING FURTHER INFORMATION ABOUT THE PLAN OF ATTACK UPON THE PROBLEM.

THIS SUBJECT IS ESPECIALLY INTERESTING IN INDIANA JUST NOW BECAUSE WE ARE ESTABLISHING A SERVICE FOR SUPPLYING CONTACT PRINTS AND ENLARGEMENTS FROM THE NEGATIVES WHICH ARE NOW OR MAY BE STORED IN THE SPECIAL FIREPROOF VAULTS IN THE PURDUE UNIVERSITY AGRICULTURAL EXPERIMENT STATION. AS RESULTS OF THE LOCAL SITUATION THIS PHOTO SERVICE IS NOW SIMPLY A PHASE OF THE INDIANA SOIL

SURVEY DESIGNED TO MEET CERTAIN IMMEDIATE NEEDS BUT WE ALSO TAKE A BROAD VIEW OF THE SITUATION AND WOULD LIKE TO HAVE OUR PICTURES AND FACILITIES BE OF PERMANENT AND GENERAL BENEFIT TO ANYONE WHO CAN MAKE USE OF THEM.

I HAVE LONG BEEN INTERESTED IN AERIAL PHOTOGRAPHY AND PHOTOGRAMMETRY AND BUT FOR THE PRESSURE OF OTHER INTERESTS AND DUTIES, MIGHT HAVE BEEN A CHARTER MEMBER OF YOUR SOCIETY. HOWEVER, I CAN NOW GIVE SOME ATTENTION TO THIS WORK SO ENCLOSE MY APPLICATION FOR MEMBERSHIP WHICH WAS KINDLY SUPPLIED THROUGH MR. MARSHALL WRIGHT SOMETIME AGO.

HOW MIGHT I ACQUIRE A COMPLETE FILE OF THE SOCIETY'S PUBLICATIONS AND ALSO A LIST OF OTHER MATERIAL WHICH SHOULD BE IN THE LIBRARY OF ANY WELL-INFORMED PHOTOGRAMMETRIST."

M. M. LEIGHTON, CHIEF, STATE GEOLOGICAL SURVEY DIVISION, URBANA, ILL., SAYS:

"I AM GREATLY INTERESTED IN THE SUBJECT OF NATIONAL, STATE AND LOCAL LIBRARIES AND LABORATORIES FOR AERIAL PHOTOGRAPHS, AND I SHALL BE VERY GLAD TO SERVE ON YOUR COMMITTEE.

MY INTEREST RESULTS FROM THE FACT THAT THE ILLINOIS STATE GEOLOGICAL SURVEY HAS ACTED FOR MANY YEARS AS THE BASIC MAPPING AGENCY OF THIS STATE, IN THE PREPARATION OF A STATE TOPOGRAPHIC MAP IN COOPERATION WITH THE UNITED STATES GEOLOGICAL SURVEY. AERIAL PHOTOGRAPHS ARE VERY IMPORTANT IN THIS WORK IN MAKING FOR GREATER ACCURACY AND IN REDUCING COSTS. MOSAIC MAPS ARE A COMING NEED OF A NUMBER OF OUR STATE DEPARTMENTS AND AGENCIES, A NEED WHICH CAN BE SERVED IF THERE IS A STATE LIBRARY AND LABORATORY OFFICIALLY DESIGNATED. THE HORIZONTAL CONTROL NECESSARY FOR THESE MOSAICS HAS BEEN ACCOMPLISHED BY US FOR 95% OF THE STATE. THERE HAVE BEEN CONSIDERABLE AREAS PHOTOGRAPHED IN ILLINOIS DURING THE PAST DECADE AND THE NEGATIVES ARE WIDELY SCATTERED.

THE AMERICAN SOCIETY OF PHOTOGRAMMETRY IS IN AN EXCELLENT POSITION TO OBTAIN INFORMATION AND FORMULATE A STATEMENT EMBRACING THE NEEDS OF THE FEDERAL GOVERNMENT ON THE ONE HAND, AND THE STATES ON THE OTHER; TO RECOMMEND A PLAN WHEREBY THE NEEDS OF BOTH MAY BE SERVED; TO SET UP A LIST OF REQUIRED QUALIFICATIONS FOR AGENCIES IN THE DIFFERENT STATES TO SERVE AS LIBRARIAN OF NEGATIVES AND PRINTS; AND PERHAPS TO MAKE RECOMMENDATIONS OF AN AGENCY IN EACH STATE . . ."

J. S. DODDS, PROFESSOR OF CIVIL ENGINEERING, IOWA STATE COLLEGE, AMES, IOWA, WRITES:

" . . . I AM INDEED INTERESTED IN PHOTOGRAMMETRY AND HAVE ARRANGED TO HAVE THE AERIAL PHOTOGRAPHS WHICH HAVE BEEN TAKEN FOR THE SOIL CONSERVATION COMMITTEE IN A CONSIDERABLE PART OF IOWA, STORED AND MADE AVAILABLE HERE AT AMES.

" . . . IT IS MY UNDERSTANDING THAT THE FEDERAL GOVERNMENT IS GOING TO TAKE THE PHOTOGRAPHS AWAY FROM US HERE AT AMES AND FILE THEM IN WASHINGTON. THIS WOULD BE A VERY GREAT MISTAKE I THINK, BECAUSE IF THEY ARE TO BE AVAILABLE FOR USE IN THE VARIOUS STATES SOME CENTRAL AGENCY SHOULD HAVE CHARGE OF THEM. IOWA STATE COLLEGE IS WELL ABLE TO FURNISH THIS SERVICE AND MAKE PRINTS FOR THOSE WHO NEED THEM. . ."

"IT WILL BE A PLEASURE TO SERVE ON THE COMMITTEE ON NATIONAL, STATE AND LOCAL LIBRARIES FOR AERIAL PHOTOGRAPHS. . ."

LT. O. S. READING HAS CONTRIBUTED TWO CONDENSED OUTLINES OF THE PRINCIPAL REQUIREMENTS FOR THE ESTABLISHMENT OF A CENTRALIZED NATIONAL LIBRARY AND LABORATORY OF AERIAL SURVEYS WITH STATE, COUNTY AND SCHOOL AND COLLEGE BRANCHES:

"I. REQUIREMENTS FOR NATIONAL LIBRARY OF AERIAL SURVEYS

1. ADEQUATE STORAGE VAULTS FOR NEGATIVES WITH PROVISION FOR EXPANSION.
2. LABORATORY FOR CONTACT PRINTS AND RATIO ENLARGEMENTS.
3. FILING EQUIPMENT FOR PRINTS.
4. LABORATORY AND CLERICAL STAFF FOR REPRODUCTION FILING AND FOR COORDINATION OF BRANCH LIBRARIES.
5. APPROPRIATION FOR SUPPLYING INDEX MAPS AND SAMPLE PHOTOGRAPHS TO BRANCH LIBRARIES.
6. APPROPRIATION TO COVER COST OF REPRODUCTIONS SOLD FOR WHICH PROCEEDS ARE TURNED OVER TO TREASURY.

II. OUTLINE OF ORGANIZATION

1. NATIONAL LIBRARY AND LABORATORY
 - A. NEGATIVES STORED IN EXTENSIBLE VAULTS WITH CONTROL OF HUMIDITY AND TEMPERATURE, WITH FACILITIES FOR CONTACT PRINTS AND RATIO ENLARGEMENTS BUT NOT OF MOSAICS OR RECTIFIED PRINTS.
 - B. PHOTO INDEX MOSAICS.
 - C. FILE OF PRINTS ON HAND FOR DISTRIBUTION.
 - D. CLERICAL AND LABORATORY STAFF.
2. STATE LIBRARIES
 - A. NEGATIVES WHEN ADEQUATE FACILITIES FOR STORAGE REPRODUCTION AND DISTRIBUTION ARE AVAILABLE.
 - B. PHOTO INDEX MAPS.
 - C. FILE OF PRINTS FOR DISTRIBUTION AND PRINTS OF MOSAICS WHEN AVAILABLE.
3. COUNTY LIBRARIES
 - A. PHOTO INDEX MAPS.
 - B. SAMPLE PRINTS AND PRINTS OF MOSAICS WHEN AVAILABLE.
4. MEDIUM AND LARGE SCHOOLS AND COLLEGES, PUBLIC LIBRARIES AND MUSEUMS
 - A. PHOTO INDEX MAPS.
 - B. SAMPLE PRINTS AND PRINTS OF MOSAICS WHEN AVAILABLE."

THESE PLANS ARE, OF COURSE, BARE OUTLINES BUT QUITE AMPLE FOR THE PRESENT DISCUSSION. IN THE MAIN, THE PLAN SEEMS TO MEET THE APPROVAL OF ALL PERSONS ENGAGED TECHNICALLY WITH THE MAKING OF AERIAL SURVEYS AND MAPS.

THERE ARE, HOWEVER, MANY OTHER ASPECTS TO THE PROBLEM WHERE THE OPINION OF THOSE INVOLVED FROM OTHER ANGLES MAY NOT BE THE SAME AS THAT OF THE ENGINEERS. THOSE INTERESTED COMMERCIALLY, FOR INSTANCE THE COMMERCIAL AERIAL SURVEYORS WHO MAKE AERIAL FILMS UNDER CONTRACT, MAY FEEL THAT A PART OF THEIR USUAL PREROGATIVE OF BEING ALLOWED TO KEEP THE NEGATIVES FOR A CERTAIN PERIOD OF TIME MAY DEPRIVE THEM OF POSSIBLE REVENUE FOR MAKING ADDITIONAL PRINTS. THE ARMY AND THE NAVY ARE INCLINED TO FAVOR THIS IDEA BECAUSE IT IS THEIR POLICY TO ENCOURAGE ALL INDUSTRY THAT MIGHT TRAIN RESERVE PERSONNEL FOR USE IN THE EVENT OF WAR. AERIAL SURVEYORS WOULD BE OF IMMENSE VALUE IN ANY MILITARY PLANS AND THEIR HIGHLY TRAINED PROFESSIONS CANNOT BE CHEAPLY NOR QUICKLY TRAINED FROM RAW CADETS.

LET US GRANT TO THIS COMMERCIAL PERSONNEL AND TO PRIVATE BUSINESS INVESTMENT THE ENCOURAGEMENT WHICH THEY DESERVE. IF A CONTRACTOR CAN GIVE ASSURANCE THAT FOR A REASONABLE PERIOD THE NEGATIVES WHICH HE HAS TAKEN WILL BE PROPERLY STORED AND CARED FOR, THEN HE CAN KEEP THEM FOR THE USUAL PERIOD, AND AT THE END OF THAT TIME THEY MUST BE TURNED OVER TO THE CENTRAL DEPOSITORY FOR PERMANENT STORAGE. NOT ONLY MAY HE HAVE CUSTODY FOR A REASONABLE PERIOD BUT THERE IS PROBABLY NO REASON WHY THE CENTRAL LIBRARY COULD NOT WORK IN COOPERATION WITH HIM AND REFER REQUESTS TO THE CONTRACTOR FOR PRINTS THAT ANY PURCHASER MIGHT WANT WHILE THE FILMS WERE IN HIS CUSTODY. THIS PRACTICE

IS NOW FOLLOWED IN SOME OF THE OTHER DEPARTMENTS OF THE GOVERNMENT. PERSONS WHO WISH TO MAKE LEGITIMATE USE OF MOTION PICTURES, SLIDE FILMS OR CERTAIN PHOTOGRAPHIC NEGATIVES OF THE AGRICULTURAL DEPARTMENT, FOR EXAMPLE, ARE ALLOWED TO PURCHASE PRINTS OF GOVERNMENT NEGATIVES AT THE CONTRACT PRICE FROM THE CONTRACTORS AFTER OBTAINING PERMISSION FROM THE DEPARTMENT OF AGRICULTURE. DOUBTLESS WITH SUCH AN ARRANGEMENT THE CONTRACTORS WOULD HAVE MORE PROFIT THAN THEY WOULD FROM SALES MADE ONLY UNDER THEIR OWN EFFORTS AND WOULD THUS BETTER BE ABLE TO TIDE OVER THE IRREGULAR CHARACTER OF THEIR EMPLOYMENT PERIODS.

IN THE SAME MANNER, THE CENTRAL LIBRARY SYSTEM SHOULD NOT ATTEMPT TO TAKE OVER THE CREATIVE FUNCTIONS OF ANY DEPARTMENT OR AGENCY USING AERIAL FILMS. IT SHOULD HAVE A COMPREHENSIVE INDEX OF ALL FILMS FOR COORDINATION, CONTROL AND PLANNING, BUT INSOFAR AS ANY AGENCY WHICH HAS USE FOR THE FILMS IS CONCERNED, THAT AGENCY CAN WITHDRAW THE FILMS FOR USE UNLESS IT DOES NOT HAVE FACILITIES TO DO THE WORK FOR ITSELF. IN THAT CASE, OR IN AN EMERGENCY, THE LIBRARY WILL RENDER SERVICE OF SIMPLE NATURE, SUCH AS CONTACT AND SCALE PRINTS, ETC. THE FUNCTION OF THE LIBRARY SHOULD ALWAYS BE THAT OF A LIBRARY.

THE AGENCIES WHICH USE AERIAL FILMS HAVE A FUNCTION FOR THE CREATION OF A CERTAIN KIND OF MAP OR CHART FROM AERIAL DATA. THE CENTRAL LIBRARY SHOULD NEVER TRANSGRESS THE FUNCTION OF ITS CLIENT BUT SHOULD BE EQUIPPED TO AID THAT CLIENT AS FAR AS ITS OWN FUNCTION PERMITS AND THE CLIENT DESIRES.

AT PRESENT NONE OF THE MAP MAKING AND AERIAL FILM USING AGENCIES HAVE ADEQUATE STORAGE SPACE FOR THEIR FILMS. IN THE MAJORITY OF INSTANCES NONE OF THEM SHOULD HAVE STORAGES ANY LARGER THAN ARE NECESSARY FOR THEIR DAILY WORK. ANY LARGE ACCUMULATION OF NITRATE FILM IS ALWAYS DANGEROUS, PARTICULARLY IN THE LARGE AND CROWDED BUILDINGS WHERE MOST OF THIS FILM WORK IS DONE. SPACE IS ALWAYS AT A PREMIUM AND THE CONSTRUCTION OF VAULTS WITH ADEQUATE PROTECTION IS USUALLY PROHIBITIVE IN COST. ON THE OTHER HAND, THERE ARE MANY LOCATIONS NEAR ENOUGH TO WASHINGTON TO GIVE QUICK DELIVERY WHERE ADEQUATE VAULTS CAN BE CONSTRUCTED AT LOW COST AND WITH ENOUGH ISOLATION FOR FILMS TO BE STORED AS SAFELY AS SUCH MATERIAL CAN BE KEPT.

MANY MINOR PROBLEMS OF A CENTRALIZED COORDINATED LIBRARY, LABORATORY AND STORAGE SYSTEMS WITH STATE, COUNTY, CITY AND OTHER LOCAL BRANCHES MIGHT BE DISCUSSED BUT NONE OF THEM NEED BE INSURMOUNTABLE. WHATEVER EFFORT IS EXPENDED TO BRING ABOUT SUCH A SYSTEM WILL REPAY MANY TIMES OVER THE OUTLAY OF THOUGHT, WORK AND FINANCIAL EXPENDITURE. IF WE CAN SELL THE IDEA TO OURSELVES, THEN WE WILL BE EQUIPPED TO SELL THE IDEA UP ON THE HILL TO THE LEGISLATORS SO THAT THEY CAN TRANSLATE IT INTO ACTUALITY.

NOTE: THE ARTICLE, "THE RADIAL-STEREOPLOTTER" BY E. L. M. BURNS AND R. H. FIELD APPEARING ON THE FOLLOWING PAGES IS REPRODUCED FROM THE CANADIAN JOURNAL OF RESEARCH, VOL. 15, JUNE, 1937, BY COURTESY OF THE NATIONAL RESEARCH COUNCIL.