REPORT ON PUBLICATIONS ACTIVITIES

PUBLICATIONS DEPARTMENT

Directorate General for Mineral Resources

Jiddah, Saudi Arabia

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by

Neil W. Maxfield and Robert B. Fraser

U. S. Geological Survey

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D. G. M. R.

Jiddah, Saudi Arabia

May 18, 1974

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OBJECTIVES

The objectives during the past 3½ years were to:

(1) establish and develop the capability to prepare publication quality geologic maps and books.

(2) to become operational in all areas of the Publications Dept.

(3) to employ Saudi personnel for as many positions as possible, particularly in key positions.

(4) to encourage and assist in the gradual turnover al all budget items from Mission-supplied to Ministry-supplied.

(5) to develop the capability of local printing in Jiddah with an existing printing firm.

The final objective will be to leave behind the full capability of the Publications Department in the hands of highly skilled Saudis, fully operational and fully supported through Ministry financing.

INTRODUCTION

This report covers the development of capabilities and activities in the production of formal geologic maps and book reports of the Directorate General of Mineral Resources, Jiddah, Saudi Arabia. It is based on the observations and involvement of the co-authors of the report during the three and one half years from November 1970 through May 1974.

Initial conferences in early 1970 between H. E. Ghazi H. Sultan, Director General of DGMR, and Mr. Robert L. Moravetz, Publications Advisor to DGMR, resulted in the planning of a ". . . publications program which would adequately present the results of geologic and mineral resources studies and stimulate the interest of the international minerals industry."

The Publications Department, in its early days, was involved primarily in establishing procedure and procuring equipment. Very little actual production was accomplished the first year. It was nine months before office and drafting supplies were received, and during that period actual production on the few existing reports was an integral part of training. By the end of the first year the Publications Department was housed in larger quarters, and was equipped and staffed for nearly full production. By mid-1972 typemaking facilities and in-house printing facilities were added, and we were in full production. Eleven reports were published in 1973. In addition to these formal publications which are meant for broad distribution, a number of technical records and internal reports were edited, drafted, and printed, of which two were printed with in-house equipment.

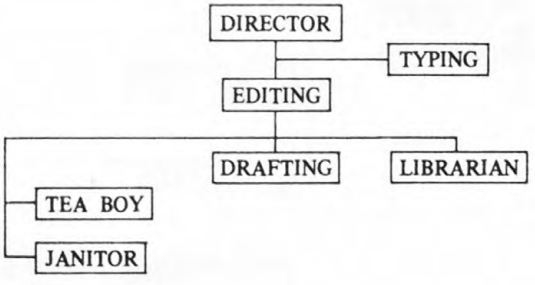
Local contract printing of a multicolor geologic map became a reality in 1973 with the printing of the Geologic Map of the Wadi Harjab Quadrangle, GM-3. Local printing, one of the major objectives of the publications program, could not be realized until reports were being fully prepared internally. Geologic maps are now successfully printed in Jiddah thus eliminating the necessity of map printing outside of Saudi Arabia. During the period covered by this report 30 geologic reports have been published, 3 are in press, and 4 are in preparation.

The final and most important objective is to have this full internal capability, each function and each key position, completely in the hands of qualified and fully trained Saudi personnel. In November of 1970 the Publications Department consisted of ten employees of whom only two were Saudi. Presently the Publications Department consists of thirty-three employees of whom twenty-one are Saudi. This represents a change from 20% to 64%. Of the six key positions in the department, two are occupied by Saudis. Saudi understudies are being trained to fill two other key positions presently occupied by Americans. Of the 17 technical positions, ten are occupied by Saudis.

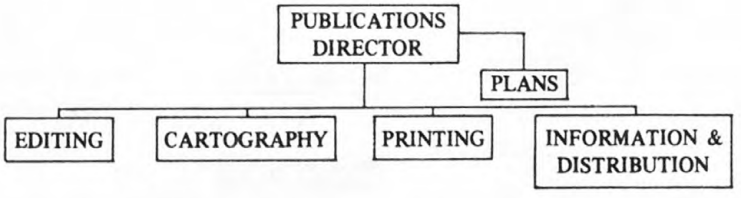
ORGANIZATION

In 1970 the Publications Dept. was called the Editing Office and was directly responsible to the Director General. As the operation was small and most work other than editing was performed at the Middle East Export Press in Beirut, the internal organization was simple. With the introduction of an increased staff, a more systematic and precise division of labor and chain of responsibilities was devised. Also, reorganizations in the Directorate formalized its chain of responsibility and changed the Editing Office, loosely attached to the Director General, into the Publications Department that reports to the Director of Technical Affairs. The following diagrams illustrate the organizational growth of the Publications Department.

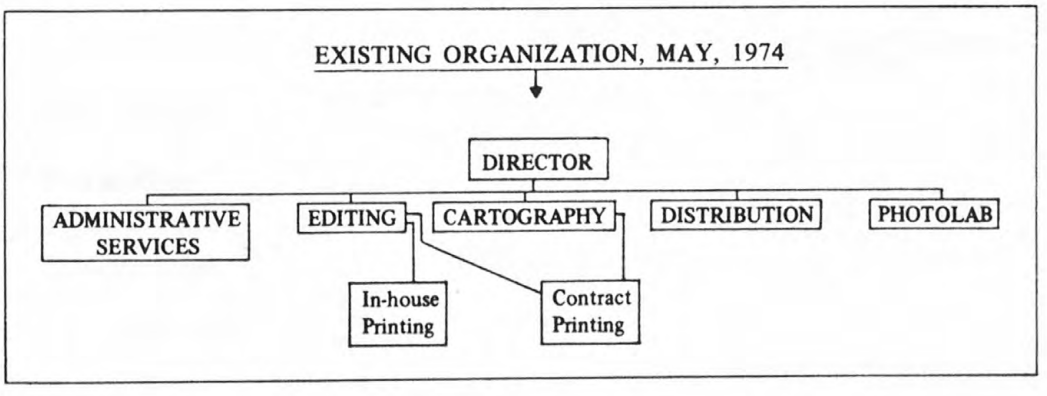
EXISTING ORGANIZATION, NOVEMBER, 1970



PROPOSED ORGANIZATION, NOVEMBER, 1970

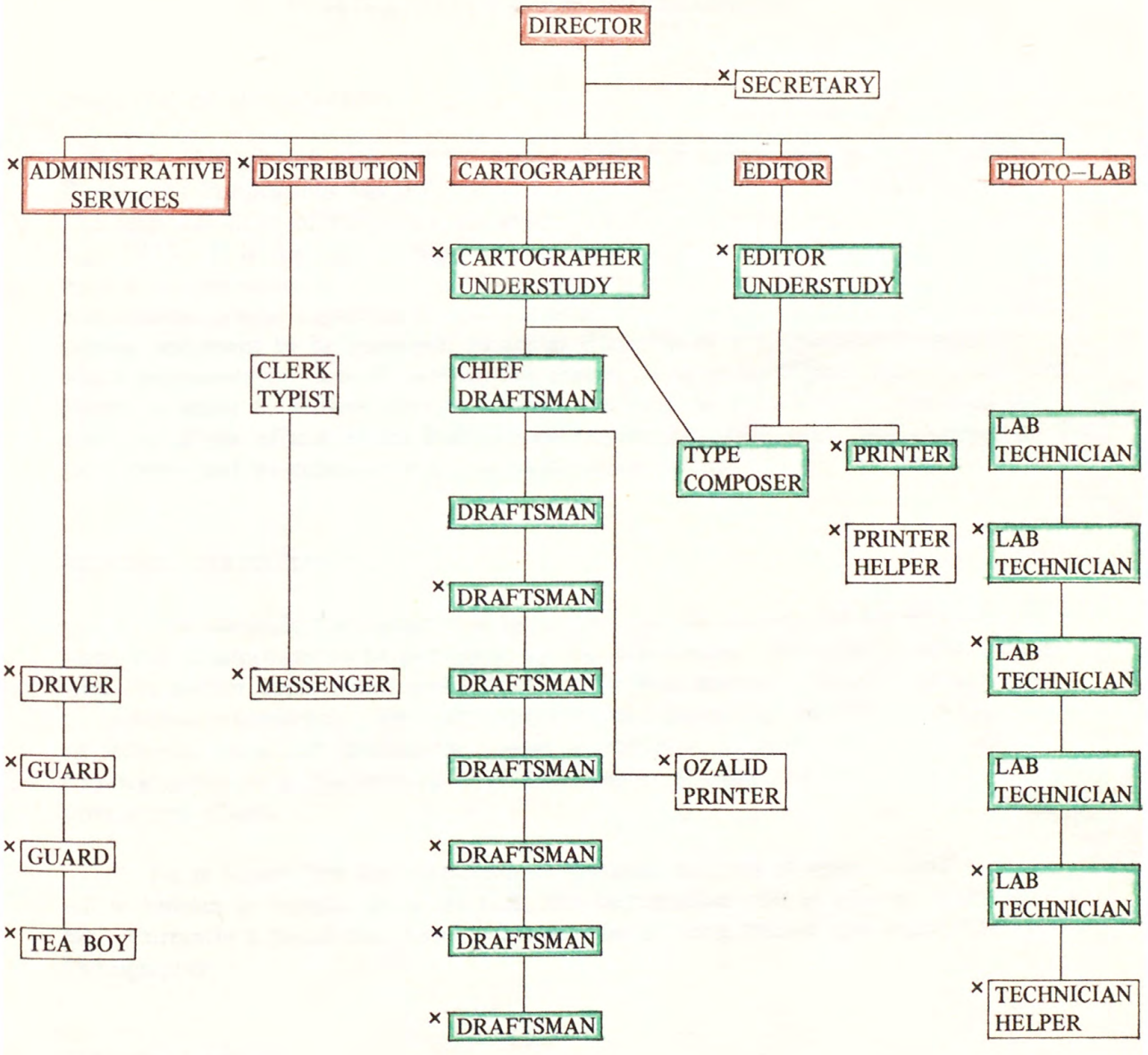


EXISTING ORGANIZATION, MAY, 1974



The organizational structure within the Publications Department has changed from its proposed plan as the needs and capabilities of the program developed.

PUBLICATIONS DEPARTMENT, DGMR



EXPLANATION

Key positions

Technical positions

× Saudi Personnel

PUBLICATIONS DEPARTMENT OFFICERS

DIRECTOR OF PUBLICATIONS

At the present time and for much of the last three years, the office of the Director of Publications has been filled on and "Acting" basis by the Cartographer. The responsibilities of the office are much as described in the Moravetz report of May 1970. It is the responsibility of the Director of the Publications Department to give overall direction to the publications program of the Directorate; to recommend publications policy; supervise the establishment of guide-lines defining types of publications and maps to be prepared; to act as chairman of a publications committee which represents the several contributing groups so as to coordinate their publications efforts in order to achieve conformity and efficiency in publishing; to supervise the activities of the offices of the Publications Department; and to act as an advisor to the Directorate and its subsidiaries on all publications matters.

GEOLOGIC CARTOGRAPHER

The Geologic Cartographer is responsible for establishing design standards for maps and illustrations to be published by the department. He consults with and advises the author departments and offices on the best manner of graphic presentation of technical information. He must supervise the preparation, proofing, and printing of all technical maps and illustrations. Most importantly, he must train Saudi and third-country nationals in the techniques of cartographic drafting and then supervise their production efforts.

He is responsible for overseeing all contract printing of maps. Until a photo-lab technician is brought from the U.S., the cartographer acts as advisor to the photo-lab. Currently a Saudi counterpart cartographer is being trained and supervised by the Cartographer.

TECHNICAL EDITOR

The technical editor is responsible for preediting all maps and illustrations and for editing and supervising the printing of all text material. He also supervises the IBM type composer and the in-house printing facility. The editor serves as advisor to the DGMR and all author departments on the best manner of text publication. The editor is responsible for the decisions on geographic nomenclature. He is the representative of the Publications Department at all meetings at the DGMR dealing with the computer facility. Currently a Saudi counterpart editor is being trained and supervised by the editor.

DISTRIBUTION OFFICER

The distribution officer is responsible for local and international distribution of maps and reports and for over-counter map sales. He is also responsible for the receiving and entering into DGMR Stores of all shipments of printed material. As part of his activity he must maintain the distribution lists and seek exchanges of publications in return for ours to build up the DGMR library.

ADMINISTRATIVE OFFICER

The administrative officer is responsible for the procurement and storage of supplies and equipment for the department. He is responsible for negotiating printing contracts with the advice of the cartographer and editor. He maintains personnel records. He is responsible for the preparation of the annual budget. He supervises the activities of the department courier.

REQUIRED PROCEDURE FOR ACCEPTING, APPKOVING, AND BEGINNING A NEW REPORT FOR PUBLICATION

1. The report is received from the originating office or Mission (BRGM, USGS, or DGMR) and is accompanied by a letter from the head of the office requesting that the report be approved by the Ministry for publishing.

   MATERIAL RECEIVED:

   a. Letter of request from the head of the Mission to the Director of the Publications Department, DGMR.

   b. Author's original draft on reproducible, stable material. This item is called the Author's compilation copy.

   c. One colored-out ozalid of the mapped area. This item must have any and all edit marks that originate from the Mission, i.e., this is the one copy of the map that is considered to be as complete as possible. This copy is called the MILL COPY. (It is important that any marks denoting change which are marked on the MILL COPY must be incorporated into the Compilation Copy).

   d. One ozalid copy which shows the dashing requirements (dashing color code). On this ozalid the author will have colored all approximate dashes in red (contacts and faults); all inferred dashes in a second color, and all concealed dashes in a third color. Solid contacts or faults can be left uncolored.

   e. If there is any doubt as to which lines on the map are contacts and which are faults, then the author should be requested to furnish an additional ozalid marking all faults in red. (Sometimes the author shows little or no distinction in line weight between contacts and faults . . . the draftsman must be able to make that distinction with no problem).

   f. The package received from the Mission must include the Compilation Copy, MILL COPY, and any necessary color guides for all component parts of the illustration; map, cross-section(s), explanation, and accompanying figures, if used.

   g. The Mission should also furnish final base copy. Final base copy is, in most cases, an accent negative made from the photomosaics. Base copy must be scale stable.

   h. Two copies of the manuscript text. (One edited by the Mission).

2. The Director of the Publications Department writes a letter to the Publications Committee requesting that they approve the map and text for publications. A copy of the text and map is sent along with the letter. The Committee is not to spend a lot of time and effort editing . . . only to decide if the report is of sufficient value to publish, and if they approve of it being published as (for example) a Geologic Map (GM-)

   Routinely, this letter and package begin their entry into the Publications Committee with Mr. Peter Collenette. The usual procedure is to have the report delivered to Mr. Collenette who, after his appraisal, forwards the report on to the next Committee member, etc. At present the Publications Committee is made up of three members: Peter Collenette, DGMR; Mr. Bertucat, BRGM; and Mr. Jackson, USGS.

   The Committee may make recommendations or ask specific questions concerning the report . . . such queries are usually in the form of an attached note which the next Committee member will read. If there are any major problems it may be necessary to ask for a meeting of all Committee members to dissolve the problem.

3. After the report has been returned from the Publications Committee, a letter from the Director of the Publications Department is written to the Deputy Minister requesting his approval for the report to be published and distributed. The Deputy Minister will want to take a brief look at the map and text, and he will want to see the approving signatures of the Publications Committee members.

4. When the letter to the Deputy Minister has been signed and returned, the report then begins its steps in preparation. At this point the report is logged-in as received and approved for publication. The text and MILL COPY of the illustration(s) are given to the Text Editor (Technical Editor) to edit. Original drawing of illustration(s) are kept with the Cartographer until the Technical Editor has finished with his edit of all copy.

   As soon as the Technical Editor has completed his edit of the map, all copy pertaining to the map is forwarded to the Cartographer. The Technical Editor will retain the Text copy and proceed with the job of preparing the text for publication.

5. There are three major steps required of the Cartographer before the draftsmen can actually begin preparation of material for publication, and a fourth major step which can be done at a later date but before the map is ready for color separation.

   The three steps to be done first are:

   a. To make sure that there is a negative (Accent neg.) prepared for the map which is of good quality and one which is properly registered to the Compilation Copy.

   b. To provide a type order to the type composing machine operator. This type order can be made by the Cartographer himself or detailed to someone else who has been trained to do the job. If he elects to assign this job to another person it remains the Cartographer's responsibility that the type order is complete and accurate. In any case a type order must be proofread by the composing machine operator and rechecked by the Cartographer.

   c. When it is assured that the Author's Compilation copy registers properly to the base negative then the compilation copy is sent to the photolab for making scribe sheets. Even at this early stage, enough thought will have to go into the preparation needs of the map to determine how many scribe sheets are needed. Generally the following rule will apply: Have one scribe sheet made for each of the separate colored dikes. An additional scribe sheet should be made for roads, if roads are shown on the map.

   The fourth major step to be done by the Cartographer is to prepare the color chart needed by the draftsmen in color separation.

   Note: If the Drafting Section needs work it is a good idea to make the first three steps as soon as possible. If the workload within the Drafting Section is heavy, the fourth step (color chart) can be completed along with everything else before submitting the report to the Drafting Section.

6. During the progress of the map the Cartographer should make periodic checks on the progress of the job and see if there are any problems. The Draftsman's questions will go to the Chief of the Drafting Section. The Chief of the Drafting Section will take care of most of the problems relating to map preparation but should be encouraged to discuss problems of this nature. It can be determined from these discussions with the Chief Draftsman what additional training should be planned for the draftsmen. Also, any technical problems with the preparation of a map should be relayed to the Cartographer.

FACILITIES

In 1970, the publications office was located in a three-room temporary villa on the Ministry compound. One large room was used by four draftsmen, a smaller room was for the editor, and a third room, also small, was shared by the manuscript typist and technical librarian. The tea service and ozalid machine shared a small kitchen. When the staff increased to include a cartographer, director, and distribution officer, three offices in the Geologic Department were occupied. Three small rooms in the old geologic building were used as map storerooms.

The initial objective of the new Publications Department staff was to provide a place and equipment for training in the preparation of maps and reports and for their production. In the Spring of 1971, after exhaustive search, a suitable building was found and renovated for use of the Publications Department. There were now 17 rooms available to the Publications Department including the storerooms in the old geology building which were not abandoned when we moved to the new villa.

In March 1974, the Publications Department occupied its long-awaited new building. It was proposed that the photo lab, which has been managed by Mr. Fred Lavery of U.S.G.S., would fall under the supervision of the Publications Department at the time of the move to the new building. The new building is designed to contain the entire publications operation including the photo lab. We now occupy 29 rooms in the new building as well as the storage rooms in the old geology building.

During the early part of 1971, large quantities of office furniture, drafting furniture, and office and drafting expendable supplies and equipment were ordered. There was virtually nothing in the department, and an initial order was made to accommodate the department, including the proposed expansion of personnel and services, for a two-year period. The lack of equipment on hand and the waiting period of as much as 9 months after ordering new supplies, was a major obstacle in the way of training cartographic draftsmen. However, this was successfully surmounted by small shipments of vital tools and supplies from BTI in Washington.

A problem still to be faced is the development of local sources of expendable material and specialized equipment. Little is presently available locally, and what is available is priced higher in Saudi Arabia than overseas.

In the spring and summer of 1972, a Multilith 1250 W offset press and supporting equipment and an IBM Selectric Composing machine with 20 fonts were ordered. The printing and typesetting equipment was complete by late spring of 1973. Now we are able to provide our own map type and some text type and to print a great deal of the Ministry's and the USGS' internal reports, forms, and other jobs.

The composing machine is clearly the most useful single addition as it frees us from a dependence on US Government channels of communication for obtaining map type, or from direct purchase, and drastically cuts the turnaround time for type orders. We can now have same-day service on map type. In the future it is hoped a magnetic tape system will be added to increase the text typesetting efficiency. Once we can set our own text type, book publications can be printed locally.

The printing shop is of more dubious value as it is presently equipped. The press has never been in perfect repair, and is consequently not reliable. The plate-making facilities rely upon considerable photo lab support. A necessary pair of items for efficient operation are an automatic (electrostatic) plate maker and a collating machine. The electric trimming machine is unreliable and should be replaced with a manually powered trimmer.

The drafting section has fifteen light tables. In 1971 four of these light tables were built in Lebanon and after considerable delay in customs were received by truck shipment. At the start of 1972 two light tables were designed and built locally and the balance have been made since that time with much improved carpenter work.

The distribution office was equipped with an addressograph machine and a mailing room with wrapping benches. It is presently planned that the entire local and international distribution can be handled at the publications building. Also the distribution office is equipped to perform over-counter distribution of maps and reports.

In mid 1973 the DGMR Technical Library was transferred to the Geologic Department so as to be more easily available to the users.

CONTRACT PRINTING

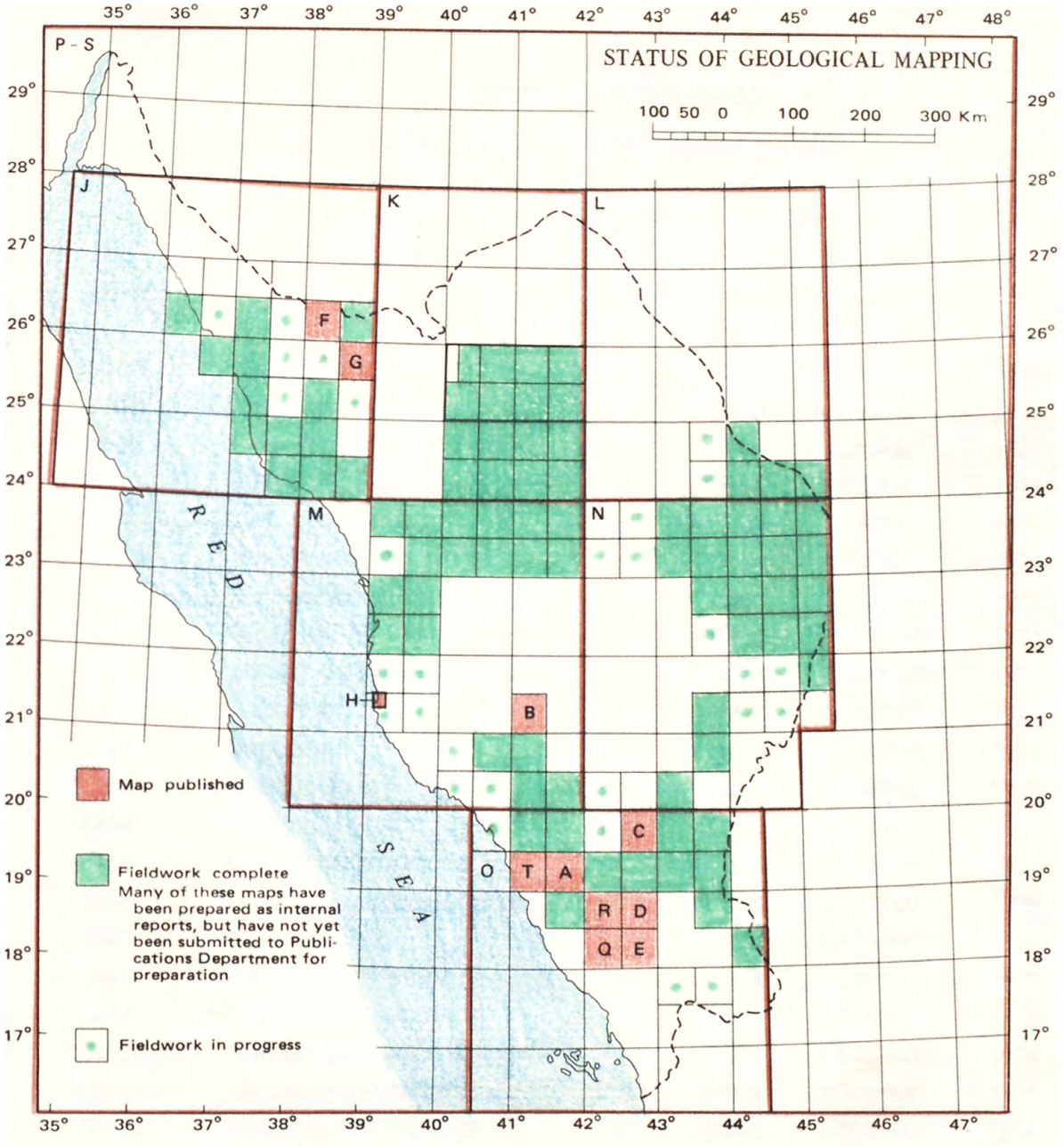
The DGMR Publications Department did most of its map preparation and printing at the Middle East Export Press, Inc. (MEEPI) in Beirut until early 1971. Compilation material was sent to MEEPI for drafting and platemaking. Press proofs were checked in Jiddah for all maps except those too large for MEEPI's press, in which case they were prepared and printed by the USGS in Washington, D. C.

In 1971 the Publications Department began a program to train draftsmen, and by March 1972, the first map prepared entirely in Jiddah was sent to MEEPI for printing. From that time on, most of the cartographic preparation of maps and text illustrations has been done in Jiddah.

It was considered desirable for many reasons to attempt map printing inside Saudi Arabia. With that in mind the large printing plants in Jiddah were visited during the late part of 1972. The Dar Al Asfahani and Co. Press was chosen to print multicolor geologic maps, as they had a press of sufficient size, platemaking facilities, and folding equipment, and showed a keen interest in learning to print high-quality maps. In August 1973 Asfahani printed their first multicolor map. Since then Asfahani has printed seven more multicolor maps for us, and complete map production inside the Kingdom of Saudi Arabia is a reality.

Some book printing has been done at Asfahani Press, but the array of type available is so small and the quality of typesetting and layout is so low, that most book printing will continue to be done at MEEPI. Perhaps, if the IBM Selectric Composer facility can be expanded to the point where we provide our own book type, we can print books at Asfahani.

The vagaries of supplies in the Middle East affect our contract printing. On several occasions we have been delayed for months while waiting for a delivery of paper or printing plates. An increasing effort has been made and should continue to be made to estimate our printing requirements far in advance, so that the printer can have supplies ready for us.



	AP-1	TOPO ARAB PENINSULA	USGS	1:4,000,000	
	AP-2	TECTONIC PENINSULA	USGS	1:4,000,000	
	AP-3	ARABIC TOPO, PENINSULA	DGMR	1:4,000,000	
A	GM-1	WADI YIBA	USGS	1:100,000	
B	GM-2	JABAL 'IN	USGS	1:100,000	
C	GM-3	WADI HARJAB	USGS	1:100,000	
D	GM-4	KHAYBAR QUAD	USGS	1:100,000	
E	GM-5	KHAMIS MUSHAYT	USGS	1:100,000	
F	GM-6	SAHL AL MATRAN	USGS	1:100,000	
G	GM-7	WAYBAN QUAD	USGS	1:100,000	
H	GM-8	ENGR GEOL JIDDAH	BRGM	1:10,000	
J	GM-9	AEROMAG-GEOPHYSICS	USGS	1:500,000	
K	GM-10	AEROMAG-GEOPHYSICS	USGS	1:500,000	
L	GM-11	AEROMAG-GEOPHYSICS	USGS	1:500,000	
M	GM-12	AEROMAG-GEOPHYSICS	USGS	1:500,000	
N	GM-13	AEROMAG-GEOPHYSICS	USGS	1:500,000	
O	GM-14	AEROMAG-GEOPHYSICS	USGS	1:500,000	
P	GM-15	MINERAL LOCALITY MAP (ENGLISH)	DGMR	1:2,000,000	
Q	GM-16	JABAL SAWDAH	USGS	1:100,000	
R	GM-17	JABAL 'AYA	USGS	1:100,000	(in progress)
S	GM-18	MINERAL LOCALITY MAP (ARABIC)	DGMR	1:2,000,000	(in progress)
T	GM-19	AL QUNFIDHAH	USGS	1:100,000	(in progress)

REPORTS PREPARED BY

PUBLICATIONS DEPARTMENT DGMR

SINCE NOVEMBER 1970

MAPS

MI-20	WADI ABU GHADA	USGS	1:25,000	1971
MI-21	WADI UMM AL ARTA	USGS	1:25,000	1971
MI-22	WADI ABU BU'AYTHIRAM	USGS	1:25,000	1971
MI-23	QULUB AL HUMAYDAN	USGS	1:25,000	1971
MI-24	KUTAYBAT NASIR	USGS	1:25,000	1971
MI-25	THANIYAT TURAYF	USGS	1:25,000	1971
AP-1	TOPO ARAB PENINSULA	USGS	1:4,000,000	1972
AP-2	TECTONIC PENINSULA	USGS	1:4,000,000	1972
AP-3	ARABIC TOPO, PENINSULA	DGMR	1:4,000,000	1974
GM-1	WADI YIBA	USGS	1:100,000	1972
GM-2	JABAL 'IN	USGS	1:100,000	1972
GM-3	WADI HARJAB	USGS	1:100,000	1973
GM-4	KHAYBAR QUAD	USGS	1:100,000	1973
GM-5	KHAMIS MUSHAYT	USGS	1:100,000	1973
GM-6	SAHL AL MATRAN	USGS	1:100,000	1973
GM-7	WAYBAN QUAD	USGS	1:100,000	1974
GM-8	ENGR GEOL JIDDAH (2 plates)	BRGM	1:100,000	1973
GM-9	AEROMAG-GEOPHYSICS	USGS	1:500,000	1974
GM-10	AEROMAG-GEOPHYSICS	USGS	1:500,000	1974
GM-11	AEROMAG-GEOPHYSICS	USGS	1:500,000	1974
GM-12	AEROMAG-GEOPHYSICS	USGS	1:500,000	1974
GM-13	AEROMAG-GEOPHYSICS	USGS	1:500,000	1973
GM-14	AEROMAG-GEOPHYSICS	USGS	1:500,000	1974
GM-15	MINERAL LOCALITY MAP (2 plates)	DGMR	1:2,000,000	1974
GM-16	JABAL SAWDAH	USGS	1:100,000	1974
GM-17	JABAL 'AYA	USGS	1:100,000	1974 (in progress)
GM-18	MINERAL LOC. ARABIC (2 plates)	DGMR	1:2,000,000	1974 (in progress)
GM-19	AL QUNFUDHAH	USGS	1:100,000	1974 (in progress)

BULLETINS

BULL-5 Mineral resources of the Southern Hijaz quadrangle, Kingdom of Saudi Arabia, by Richard Goldsmith. 1971. 62 p.; plate in pocket. [Published in same volume as Bull. 6]. This was 80 percent complete in November 1970.

BULL-6 Geology of the Mahd adh Dhahab-Umm ad Damar area, Kingdom of Saudi Arabia, by Richard Goldsmith and J. H. Kouther. 1971. 20 p.; plate in pocket. [Published in same volume as Bull. 5]. This was 75 percent complete in November 1970.

BULL-7 The Ha'il Arch—a key to deformation of the Arabian Shield during evolution of the Red Sea rift, by W. R. Greenwood. 1973. 5 p.

BULL-8 Stratigraphy and tectonism of the southern part of the Precambrian Shield of Saudi Arabia, by D. L. Schmidt and others. 1973. 13 p.

BULL-9 Petrology and chemical analysis of selected plutonic rocks from the Arabian Shield, Kingdom of Saudi Arabia by W. R. Greenwood and G. F. Brown. 1973. 9 p.

BULL-10 The taphrogeosynclinal Jubaylah Group in the Mashhad area, Northwestern Hijaz, Kingdom of Saudi Arabia, by D. G. Hadley. 1974. 18 p.

BULL-11 Gamma radiation—an aid to geologic mapping on the Arabian Shield, Kingdom of Saudi Arabia, by V. J. Flanigan. 1974. 10 p.

BULL-12 The Al Ji'lani layered basic intrusion, Ad Dawadimi District, Saudi Arabia, by A. M. S. Al Shanti, W. Skiba, and G. R. Davis. In preparation.

BULL-13 Geology of the Ad Dawadimi District, by A. M. S. Al Shanti. In preparation.

BULL-14 The mineralization of the Ad Dawadimi District of Saudi Arabia, by A. M. S. Al Shanti. In preparation.

ANNUAL REPORT

Mineral Resources Activities 1969-70. 1971. 36 p.

MINERAL RESOURCES REPORT OF INVESTIGATIONS

MRRI-2 Phosphorite deposits in the Sirhan-Turayf basin, Kingdom of Saudi Arabia, by C. R. Meissner, Jr. and Abdullah Ankary. 1972. 27 p.; 3 plates in pocket.

TECHNICAL RECORDS

TR-1971-1 The north Samran exploration area, by W. K. Liddicoat. 1971. 74 p.; plate in pocket.

TR-1971-2 The geology of the Aqiq-Ablah and Wadi Bidah-Mahawiyah area, by K. Metz and others. 1973. 60 p.; 4 plates in pocket.

TR-1972-1 Genetic and environmental factors controlling the formation of the massive sulphide deposits of Wadi Bidah and Wadi Wassat, Saudi Arabia, by Barry Jackaman. 1973. 244 p.; 6 plates in pocket.

TR-1973-1 The Red Sea and coastal plain of the Kingdom of Saudi Arabia—a review, by Sir Patrick Skipwith, Bt. 1973. 149 p.

TR-1974-1 Economic status of mineral deposits of western Saudi Arabia, edited by W. K. Liddicoat. 1974. 10 p.

FINANCE

The DGMR Publications Department was, until 1970, supported jointly by the DGMR (who paid the salaries), the BRGM, and the USGS (each of whom paid for the printing of publications initiated in their organizations). Upon the reorganization of the department in 1970-71, the USGS assumed the majority of the financial burden for the support of the publications activity. It was at that time that the objective was set forth to have the DGMR assume the entire burden of fiscal support for the Publications Department over a three-year period. It has not been possible to implement this objective, although some progress has been made.

In January 1974, a budget proposal was sent to the DGMR requesting 995,148.00 SR (Saudi Riyals) of which 493,000.00 was for printing, supplies, and equipment and 502,148.00 SR was for salaries for fiscal year 1975. This proposal was similar to that proposed and approved for the current fiscal year. The presentation and acceptance of these budgets, and the approval of the current budget comprise the major success we have had in transferring the financial responsibility for the Publications Department to the DGMR. We have been unable to spend most of this money owing to an inability to comply (in many instances to understand) with Ministry of Finance rules on spending allocated funds.

We have not been able to get draftsmen and other employees transferred to the DGMR payroll from the USGS as the USGS pays higher wages than the DGMR can pay. We have been unable to purchase supplies and equipment with DGMR funds because of the difficult regulations. We have been able to spend some DGMR money on printing. Consequently, the majority of the financial burden of the Publications Department is and probably will be carried by the USGS. It should remain, however, a continuing objective to have the DGMR assume the entire financial responsibility for the Publications Department.

PROBLEMS AND CHALLENGES

SALARY-GRADE STRUCTURE

The employees of the Publications Department are divided into two separate payroll sources (U.S.G.S. payroll and Ministry payroll) each with its own grade structure, requirements for promotion, and system of performance rating. This condition makes it extremely difficult for management to assure that the top performance employees receive a higher salary than the average performance employees.

In the case of the drafting section where individual skills can be measured against an acceptable average, or compared with others who perform essentially the same tasks, the salary of the employee should reflect his total performance and tenure in relation to the others. The draftsman with the best experience and highest performance should receive the highest salary within the group, and where two employees perform the same tasks with equal skill they should receive the same pay. This alignment of salaries based on performance is impossible when the employees are divided into two separate salary structures.

It cannot be expected for the Ministry to inflate their salary structure to match that of the Missions, but neither should we expect skilled employees within the lower structure to be content where this inequity exists. This problem can not be solved until all employees are placed under one payroll source which should be the Ministry payroll.

It appears unlikely that all employees can be transferred to Ministry payroll because they are unwilling to accept the drastic reduction in pay. Compounding this situation is the fact that the Personnel Bureau regulations of employment do not provide any credit for specialized experience en lieu of formal education. It is not axiomatic that the only persons qualified for a job are those with higher education. Some credit must be granted the person who is technically qualified by specialized experience even though he may not have enough formal education to meet the present requirements. In many technical fields two years of specialized technical training or experience is of more value than two years of formal education.

PERFORMANCE RATINGS

As in the case of salaries the employees fall under one of two systems of performance ratings. U.S.G.S. employees receive a performance rating which is filled out by the employees' supervisor. Ministry employees receive no written performance rating but are judged to be satisfactory or not by someone outside of the Publications Department. Whether the employee is subject to a written performance rating or not, all employees should be subject to evaluation and appropriate action by his supervisor who can observe the employees' daily activity and performance. The Director of Publications Department should submit performance rating evaluations on all employees to the Director of Technical Affairs. This would provide the Ministry with better insight to the performance of employees and serve as factors governing salary increases.

BUSINESS COMMUNICATION

The new building provided for the Publications Department has many advantages over previous space occupied, however there are certain inconveniences which combine to pose a problem in communication. The isolated location of the new building and inadequate telephones make it difficult to conduct business with Ministry Officials and other business associates outside of the building.

DISTRIBUTION

The distribution of published reports has been a particularly disappointing weakness of the Publications Department. The problems of distribution involve fairly complicated certification procedures and mailing procedures in addition to the predictable problems in logistics. However it has been observed that none of these difficulties are insurmountable and are, in fact, relatively insignificant when placed in the hands of a reliable and competent employee given charge of the Distribution Section. Efforts to dislodge reports from this section have been intensified and if the current enthusiastic response can be sustained there should be noticeable improvement in this area. Accomplishments in this area are especially vital to the Ministry because these published reports are the end product of all of the time, knowledge, and money spent.

CONCLUSIONS AND RECOMMENDATIONS

The capability to prepare publication-quality geologic maps and books has been established. All areas of the Publications Department are operational and Saudi personnel have been employed in over 60% of the positions, including two key positions. In addition, the capability of contract printing in Jiddah has been achieved. The foundation for continued technical production has been established and the development of a publication program has been successful.

Much of the success is a direct tribute to the employees who have shown genuine desire to learn and produce. Daily activities have often been dependent upon bilingual communications plus the personal resolve of many to promote good will through achievements. The quality of personnel is the source of a successful business and this is especially true when business of a technical nature revolves around two or three languages.

Although there has been good progress, now it is time for refinement, increased production, and concentrated efforts toward the gradual turnover of all budget items to the Ministry.

The transfer of salaries from USGS to DGMR and the business of actually spending DGMR allocated funds are two areas which will require increased attention by the Director of Publications. Budgets are submitted but as yet very little has actually been spent from these budgets. Ways need to be found to smooth out and simplify this problem.

The American advisory team originally intended for the Publications Department consisted of three persons, a Director, a Cartographer, and an Editor. For most of the time during the past three years the Cartographer has also been assigned the duties of the Director. This should be changed. The activities of the Director are matters of particular importance and as such require immediate attention. When one man covers both jobs, neither job can be properly dealt with. More could be accomplished in vital areas by the placement of a full-time Director in addition to the Cartographic Advisor and the Editor.

Translation and approval of Geographic Names has been loosely handled and should be high priority. Our source for approval of Geographic Names has been shifted from a nominal committee in Riyadh to persons appointed within our own shop with the final approval being with one of several Ministry Officials. The appointment of one person, properly qualified, to perform this task would be of great benefit to production. This person should be employed within the Ministry as a full-time expert in translation of Geographic Names. As the mapping programs of the USGS, BRGM, and DGMR increase their production the need for such an authority will also increase.

Various scenes around the publication plant