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**MOTION PICTURE
PRODUCTION FACILITIES
OF SELECTED
COLLEGES AND
UNIVERSITIES**

A Survey by the
University Film Foundation
Reported by
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for the Foundation

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education

PREFACE

This report is an account of a survey, entitled "A Project to Survey the Motion Picture Production Facilities of Selected Colleges and Universities in the United States," which was conducted by the University Film Foundation during the Spring and Fall of 1960, under a contract with the United States Office of Education.

A major reason for the survey was the dearth of organized information about the university film production units. The University Film Producers Association, the professional organization in the university film field, has members from more than 80 universities and other non-profit educational institutions, and approximately 50 universities are institutional members. Through its formal and informal publications and its annual conference, the UFPA attempts to provide a channel for the exchange of information about the production of films on the college and university campus. Even so, relatively little information about the structure and operation of the university film units was actually available. Although some of the units are as much as 30 years old, the services which they are capable of providing may not be fully recognized even on their own campuses, nor are professional organizations, foundations, and agencies aware of the number and capabilities of these units.

It was thought that a survey to collect detailed and systematic information about the administration and facilities of university film units would not only provide useful information, but might actually prevent the duplication of facilities on a campus. (In several instances, a grant has been given to one division of a university to carry out research which involved the use of motion pictures, and a new unit has been established within that division when a film unit already existed on campus.)

It was also felt that faculty and staff should know where, within a reasonable distance if not on their own campus, they can obtain assistance in planning programs that involve the use of motion pictures in research, in establishing a motion picture unit, or in producing films for teaching purposes.

It was not the purpose of this survey to evaluate the film units nor to assign comparative rankings. Rather, the purpose was to arrive at an over-all picture of the competencies and production potential of the units by investigating their staff resources, equipment, physical facilities, services, administrative support, and record of performance.

The University Film Foundation designated as principal investigator Dr. Don G. Williams, Director of Motion Picture Production, University of Kansas City, Kansas City, Missouri.

As a preliminary step toward the survey, the U.S. Office of Education prepared a questionnaire designed to identify educational institutions having film production units. This questionnaire was sent to universities having at least 2,000 degree-bound students and to public school systems in cities of 100,000 or more population. Replies received were used by the University Film Foundation in selecting institutions to be surveyed and visited by the principal investigator. Forty colleges and universities furnished the information which makes up the major portion of this report, but an additional 17 were either visited or contacted by mail, and are reported more briefly. Some known to have units were not included in the survey for varying reasons.

It was found that very few public school systems were making, or had made, motion pictures. The relatively few films that had been made were usually of a specialized nature. It was decided, therefore, after consultation with staff of the Office of Education, that the survey should concentrate on the film production activities of colleges and universities.

While the preliminary questionnaire was being circulated, the University Film Foundation, with the cooperation of members of the University Film Producers Association, developed an interview guide to be used with university administrators, and an

interview guide and extensive inventory check list to be used with the production units. These were designed to obtain information on the administrative organization, staff resources, equipment, and physical facilities of each unit.

Both the interview guides and check lists were extremely detailed, comprehensive, and lengthy. Since it is not unusual for returns to mail questionnaires of a complex nature to be less than 25%, and since a response as small as this would not be sufficient to give a picture of the university film units, it was decided that personal visits by the investigator to individual campuses were essential to insure reasonable accuracy and completeness. In addition, on-site visitation would make it possible to observe the actual condition of equipment and facilities. Such condition affects production, but would not normally be reflected in an inventory.

It was further decided that if much of the information (for example, that regarding administrative support) were to be comparable from one university to another, a structured interview with administrators would be necessary. Each individual interviewed was asked the same questions, although each was encouraged to expand on any question as much as he wished. Detailed answers gave valuable insight into the particular campus situation being studied. The nature of the questions asked allowed

for some comparison of answers. Although this is a descriptive rather than a statistical study, use of such structured interviews makes it possible to say, for example, that such-and-such a percent of the units own certain types of equipment, that median staff pay for writer-directors is so much, or that university units as a group produced a certain number of films for campus instruction in 1959-60.

Not all the information requested was available from every unit. In some instances, only a part of the units were able to respond to a question because only a part had the facility under consideration. In other instances, response was 100%.

Data which were not sufficient to contribute meaningful information to the over-all picture of university film production were not included in this report.

The inventory check list and interview guide for the film unit were mailed to the unit a few days prior to the investigator's visit, and in most cases the inventory was largely filled out prior to his arrival. He did, however, assist in completing items which were not clearly understood. He interviewed film unit staff members, inspected facilities and equipment, viewed films that had been produced, and conferred with university administrators. An attempt was made to schedule conferences with the dean or other official directly responsible to top administra-

tion for the unit as well as with the president, vice-president, or dean of faculties. In many cases, it was possible to talk to all these officials.

After about one-fourth of the campuses had been visited, it became apparent that some of the units were so small, inactive, new, or at such a great distance geographically that it was not practical to visit them. Similarly, for the smaller units, the extremely detailed check list and interview guide became unduly burdensome since applicable items for them were few and scattered. Consequently, letters were written to about twenty of these universities and pertinent information was collected through an exchange of correspondence. These units are reported in Chapter 8, "Additional Producing Units," even though not all were visited personally by the investigator.

Funds under this contract could not be expended to survey teaching programs in motion picture production. However, quite a bit of incidental information about teaching was collected; at many universities teaching and production activities overlap because of joint use of staff, equipment, and facilities. Four universities were surveyed under the assumption that the staff was engaged in producing educational or research films. It was found, however, that the films made at these universities were produced by students enrolled in the film production

courses. These four universities are discussed with the teaching programs reported in Chapter 7, because they represent situations not typical of the other producing units.

Although information collected regarding the teaching programs is included in this report, it should not be regarded as giving a comprehensive picture of the training of the future film-maker in an academic setting.

Perhaps the most impressive experience stemming from the survey was to see a small but highly motivated unit draw on all the resources of its university to produce an outstanding film -- a film that would be a credit to a large, generously budgeted commercial production company.

A note of caution might well be sounded here. In some units, one or two men provide the high degree of motivation which makes it possible for the unit to rise above handicaps and obstacles. If these key people were lost to the unit, no matter what the remaining physical equipment and facilities might be, the university would no doubt have an ineffective producing unit until adequate replacements were secured.

When a major portion of the survey visits had been completed, a work conference of University Film

Foundation Trustees was held to consider the information collected, to evaluate it, to suggest possible avenues of interpretation, and to establish a general format for the survey report.

This meeting was held at the School of Education of the University of Kansas City, Kansas City, Missouri, on November 28-30, 1960. Those present were: O. S. Knudsen, Iowa State University of Science and Technology; John Flory, Eastman Kodak Company; Neal Keehn, General Film Laboratories; Malcolm Fleming, Indiana University; Herbert E. Farmer, University of Southern California; Robert W. Wagner, The Ohio State University; Kenneth Mason, Eastman Kodak Company; Charles N. Hockman, University of Oklahoma; Luella Snyder, University of Kansas City; and Don G. Williams, University of Kansas City.

Much valuable advice and guidance was received from this advisory group, at this meeting. In addition, Herbert E. Farmer supplied the material comprising Appendix A.

The first draft of the manuscript was submitted for criticism and corrections to the advisory group and also to Edward Fischer, University of Notre Dame; John H. Moriarty, Purdue University; O. E. Patterson, University of California at Los Angeles; and James Webb, Educational Services, Inc. Com-

ments and suggestions were as far as possible, incorporated into the report. However, the interpretations and judgements, which are expressed are solely the responsibility of the principal investigator.

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BACKGROUND OF UNIVERSITY FILM PRODUCTION IN THE UNITED STATES

On August 17, 1947, a small but enthusiastic group met on the campus of the State University of Iowa at the invitation of Lee W. Cochran, then Director of Audio-Visual Services.

Present were 18 people from seven universities and a state education department, one from a church group, and three from companies offering film services.

For the first time a group had come together to discuss specific and common problems in the production of educational films on the university campus.

Fifteen years later this group, the University Film Producers Association, had grown to a membership of 275 from more than 80 educational institutions, with a sustaining membership of 55 commercial companies.

At the meeting in 1947, four films were shown; at the meeting in 1960, only 70 films could be shown at the nightly screening sessions because of the limitation of time, although screenings were held from 8 P.M. until midnight. (Many more were shown at the meeting in 1959 when screenings could, and did, continue until two and three o'clock in the morning.) In

the academic year 1959-60, more than 3,000 reels were produced.

From primary concern with internal administrative and technical problems, the association broadened its interest and activities to include the publication of professional literature in the field of educational film production and training the future film-maker in the United States and abroad. The Association takes an active part in the International Liaison Center of Schools of Cinema and Television of which it is a charter member. Three times a UFPA member has been elected president of the international group. UFPA is also concerned with establishing and maintaining contact with professional organizations in the same general sphere of interest in the United States and abroad, and with research into problems involved in making films on the university campus. In 1958, UFPA established the University Film Foundation to promote activities in which it was interested and to act for it in securing and administering contracts or grants for projects which UFPA is especially qualified to conduct.

Although the 1947 meeting was the first professional conference of university film-makers, film-making as a university function pre-dated the organization by at least 30 years. In fact, recognition of the value of the motion picture in education dates back to Thomas A. Edison himself. Edison visualized the motion picture as an educational tool rather than as a medium for entertainment, but it was for entertain-

ment that the film pioneers used it and as entertainment that it seized the attention and imagination of the American public.

Nevertheless, on university campuses, individual professors saw in films a unique method to record, to study, and to teach; and they made use of it in their own way and for their own purposes. Production of film footage by these educators occurred even before the advent of 16mm film in 1923, although 16mm brought films within the grasp of a much larger group and stimulated tremendous growth in the educational film field.¹

In 1932, the University of Minnesota established in its General College an Audio-Visual Education Department under the directorship of Robert A. Kissack, Jr., with the sole purpose of providing illustrative material for college classes.¹ From the first, the production of motion pictures was an important part of the audio-visual service. The film "Some Aspects of Feeblemindedness," made in 1933, was widely used in its original form until a few years ago when it was revised, updated, and re-titled "Clinical Types of Mental Deficiency."

¹It is interesting to speculate on what effect the development of 8mm sound film may have on education. Its potential for reduced costs, and its already simplified equipment with considerable reduction in weight, make entirely possible the use of 8mm as a teaching and recording tool by individual teachers. Greater changes may result from the introduction of 8mm than were brought about by the advent of 16mm.



University of Minnesota - On location in Architecture classroom.
Scenes being made for "Minnesota Profile" a University of

In 1934, a series of silent films for student nursing was begun; in 1935, production was started on films on stuttering; and, in 1938, two films on safe drinking water and two on dentistry were made. Sound was used from the beginning of the program, although not for every film, and animated films were made as early as 1940. Some production was carried on as a part of other projects, and one of these, in 1936, was supported by a grant from the Carnegie Foundation. In 1937, the General Education Board of the Rockefeller Foundation gave the University of Minnesota a grant to initiate a three-year project for the study of vocational education with the objective of discovering what types of educational films were best suited to class room teaching. This grant, later extended, resulted in the production of a number of films, including "Minnesota Document," a film which is still used extensively throughout the state. This large-scale 35mm project in the theatrical tradition both trained and influenced many exponents of education film production and of audio-visual education, and stimulated development of the field. The film production unit at the University of Minnesota has been in continuous operation since its inception, and today is one of the more active of the university units, with a reputation for high quality production.

Among the oldest of the university units is that at the Ohio State University. In its vaults is a 35mm football film made in 1918. Football films were made on 35mm film until 1932, when the switch to 16mm was made. The Department of Photography made its

first film for strictly instructional purposes in about 1932. This film was titled "The Rumen in the Cow." A survey made in 1935 showed that 13 departments had made their own films. Some of these had been made with the assistance of the Department of Photography of the College of Engineering, but others had been made by individual faculty members using their own or borrowed equipment. The university's first official sound film, "Stone and the Sculptor," was produced in 1941, and the film unit has continued to increase in size, facilities, and activity.

Among the individual pioneers still active in university films is Professor Justus Rising of Purdue University, whose interest in making educational films dates back to 1922 when he saw several 35mm films, produced by the U. S. Department of Agriculture, describing the mechanical units of the automobile. By 1926, he was planning production of a 35mm film demonstrating the use of drawing instruments for use in Engineering Drawing classes. In 1932, using script and titles prepared by the Engineering staff, films on "Lettering," "Sharpening the Pencil," and "Use of T-Square and Triangles" were shot in 16mm, rather than 35mm, and eventually a complete series on engineering drawing was made. In 1941, the establishment of a fellowship under the Purdue Research Foundation made it possible for Mr. Rising to offer to other campus departments some facilities for film making in their own subject matter areas and staff and students from many departments participated. In 1954, this type of produc-

tion was taken over by the newly established Motion Picture Production Unit.

Before World War II, a small number of universities had some facilities for film making, but the big push toward university production of educational films occurred after the war. Educational films had been widely used by the Armed Services during the war, and educators had become conscious of the value of films in teaching and general communication on the basis of their war-time use in training and reporting.

Many a small, struggling audio-visual department which had been established before the war in an extension division or other department of the university, suddenly found itself strongly supported by colleagues who had learned the value of audio-visual materials during military service. Faculty who had been provided with teaching films by the Armed Forces now expected the same service of their college audio-visual department. With this type of stimulation and support the existing units expanded, new units were established, and both old and new received their first and strongest impetus to growth directly from teaching departments. This was augmented by the availability of war surplus equipment and by the improved and less costly 16mm equipment developed for the Armed Forces, which made it possible to equip a film unit at a reasonable cost.

Another factor in this growth was the fact that

many of the commercial film companies which had provided excellent service to the military training aids programs were now ready, willing, and able to provide the same kind of service to the universities even though this would not be an immediately profitable operation for them. They foresaw future development and were willing to gamble their time and assistance in the belief that it would pay off for them in the long run.

It is generally thought that the early film units had three purposes: 1) to record athletic events, particularly football, 2) to produce public relations films for the university, and 3) to provide special purpose footage for academic departments. As the units gained in maturity, and as realization of the value of audio-visual materials spread, there was a shift in objectives and the units began to demonstrate their ability to make educational films.

Today, football films are still important on many campuses, but fewer films of a direct public relations nature are being made, particularly in the area of student recruiting, and it is probable that the number will continue to decrease. University administrators now generally accept the motion picture as a tool to broaden and improve instruction, both on the campus and off, and recognize that films assist the university in achieving its objectives.

In discussing the goals of the motion picture unit at Indiana University, Dr. Herman B Wells, President

of the University, summarized the ways in which such a unit fulfills the traditional functions of the university in teaching, research, service, and preservation of knowledge.

For the teaching function, the unit makes films aimed at improving instruction in elementary, secondary, and university classrooms and with adult groups.

For the research function, the unit makes films that record the progress of research projects and that report on the outcomes of research. Sometimes the films themselves are outgrowths of research conducted by academic departments, and in some instances the use of the motion picture camera has materially furthered research.

For the service function, the unit makes film production facilities available to staff and to citizens and organizations who wish to make teaching materials of the type that fall within the scope of the university and to which the university is uniquely qualified to contribute.

For the preservation of knowledge, the unit makes it possible to record on film the techniques and work of authorities, as a permanent visual document that may actually be more effective than a printed account.

The "publishing" aspect of the film program is well within the historic traditions of the university. For many years the university press has performed an important service, making possible the publication of manuscripts of a specialized and scholarly

nature which, while making a valuable contribution to the body of knowledge, may have a limited audience. Many of these manuscripts would not be considered for publication by a commercial book company because the low sales volume makes them economically undesirable for a company whose very existence depends on showing a profit. The university press has pioneered in service to scholarship--and from time to time demonstrates that the scholarly book may also have wide public appeal.

The university film unit exemplifies a similar service in a different medium, providing a visual medium of publication for which the potential audience may be comparatively small. In some cases, the university press develops a regional or subject matter concentration. It is interesting to note that certain of the film units are also beginning to develop fields of specialization with which they are becoming identified.

The scholarly nature of the service rendered does not mean that university press and university film unit abandon all dreams of the "best seller." Large sale of a book or film makes possible the publication of others which have equal or greater value but less appeal.

The objectives of the various film units are diverse but are always consistent with the objectives and policies of the university, and the films produced are compatible with the philosophy of the university.

When examining the activities, personnel and facilities of a unit, it is essential to take into account the stated objectives of that unit, for the objectives determine the kinds of films made, quality of the staff, and the position the unit occupies within the university.

Types of films produced are also very diverse. A quick glance at the titles included in the listing of "best films" selected by the units themselves, will be sufficient to emphasize the wide range of subject matter that is covered. They range from a black and white, silent record of a research project to a full-scale dramatic treatment of a theatrical subject using all the special techniques available to the film producer.

A unique advantage of the university units is that all the resources of the university -- from faculty to maintenance shop -- are available to them. Because the units exist within the framework of the university, it is possible for them to work over a long period of time with teaching and research faculty on experimental projects which contribute to knowledge without producing income. They offer the individual educator an opportunity to express his ideas visually. They offer him, also, a tool of research and a means of recording progress and data.

As the units have increased in number, size, and activity, there has been increasing realization that

the needs of production could not be met without attention being given to the training of film-makers in academic programs.

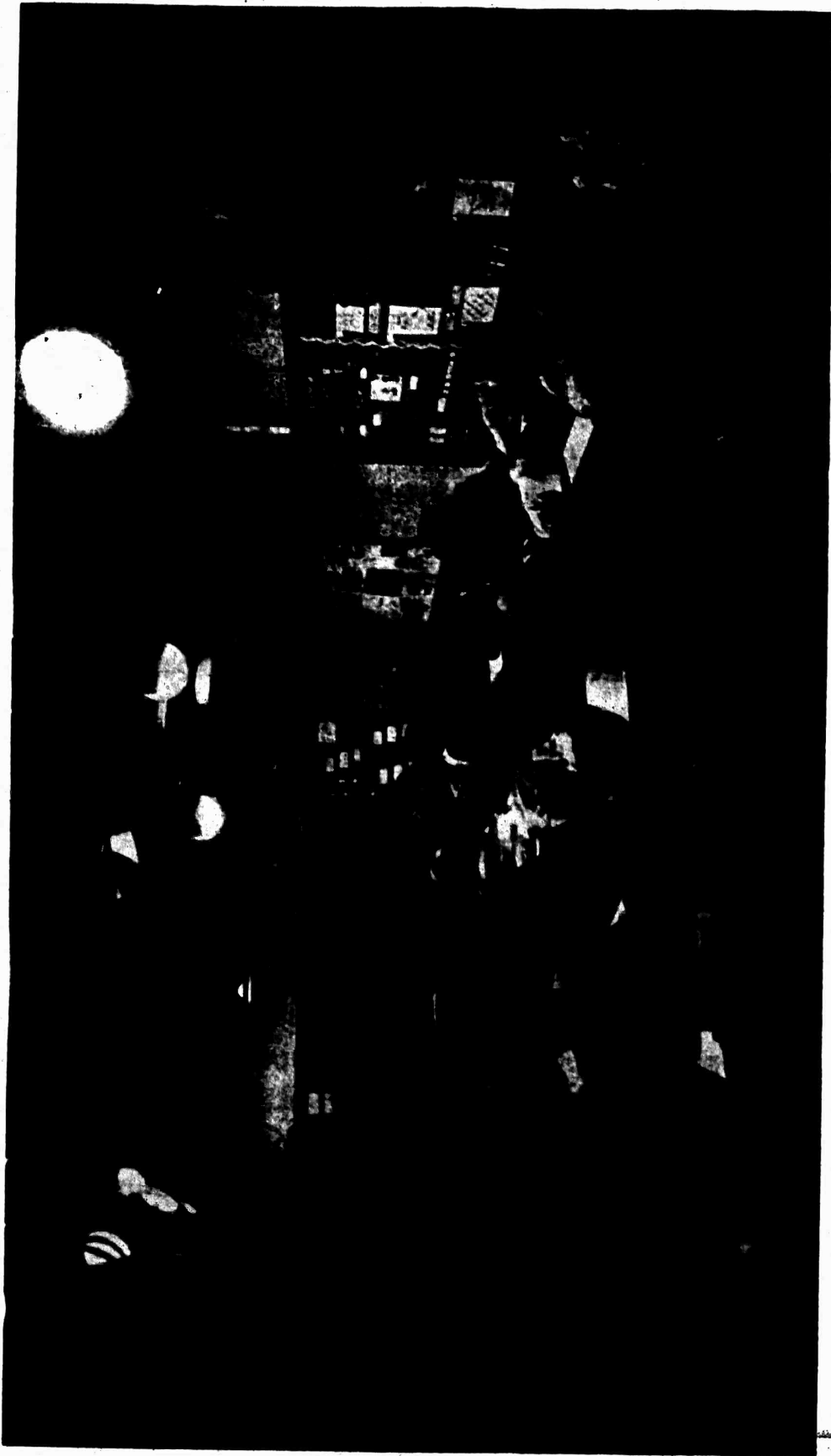
According to President Wells of Indiana University, the production of films by the university has as its necessary corollary the teaching of production. He says, "Inasmuch as the production of educational films is a modern extension of the university function, the universities must train people to produce the types of teaching materials needed by a modern university."

Some of the units which were established strictly as producing organizations have become involved in motion picture teaching. (And interestingly enough, the oldest strictly teaching organization, the University of Southern California, has become involved in production to such an extent that it now has one of the more active production units.) Frequently, the staff members have duties both in production and in teaching. However, there are too few really comprehensive courses of study in film production, and more numerous and more comprehensive academic programs are needed if the increasing needs for competent, creative makers of educational films are to be met.

The growth of the university film movement, considered only in terms of the number of units and films produced, has been both large and rapid. However, within the university production group,

there is serious concern that growth in volume, type of production, and training of the future filmmaker is not commensurate with the needs that already exist, and that growth continued at no more than the present rate must inevitably become progressively more inadequate, for the needs of the areas to be serviced are mushrooming at an infinitely faster tempo.

An excellent foundation has been laid for the production of specialized types of films, and for the training of people to make them. This constitutes an important resource for any group concerned with improving education and furthering the effectiveness of communication. The university units are capable of making a much greater contribution than they are at present called upon to make. They are particularly handicapped by lack of budget to support the production of experimental and specialized teaching films. An academic department which needs and wants a particular film too often finds that it must sacrifice other activities in order to finance it. Neither the film unit nor the academic department has access to additional funds to produce materials needed for improvement of instruction. Until such funds are made available, the film units will not make the contributions to education of which they are capable, nor will the universities capitalize on a resource already available to them.



State University of Iowa. Motion picture production unit studio

CHAPTER 1

ADMINISTRATION

Part I: University Administration and the Film Unit

At every university visited by the investigator, a top university administrative official was interviewed. In 33 cases this was either the president or chancellor. At one university, where such an interview could not be scheduled, the chairman of the faculty committee on motion picture production gave his best interpretation of administrative policy. In the remainder of the cases, the administrator interviewed was either the vice-president, dean of faculty, or other university official who was directly responsible for policy decisions regarding motion picture production. At several universities, several administrators were interviewed, either together or singly.

In order to save time and to structure the interviews so that all answers would be roughly comparable, a list of the questions which were to be discussed was sent to each administrator several days before the interview.

Topics included: (1) goals of the film unit, (2) deterrents to growth, (3) financing the unit, (4) the similarities between the functions of the university film unit and the university press, and (5) university recognition and support of film production.

Admittedly, the administrators interviewed represented a biased sample, because in each case a film unit was in operation at the university. It was assumed that the existence of a motion picture unit was evidence enough of administrative belief in the value of such a facility.

Administrators were assured that none of their answers would be reported by name or identified by institution. It was felt that this anonymity would encourage a freer and more realistic response, and many did, in fact, elaborate on various topics or make additional comments which provided more insight into administrative problems and attitudes than might have been gained otherwise.

GOALS OF THE MOTION PICTURE UNIT

Every administrator interviewed reported that he expected the film unit to grow. No administrator anticipated the dropping of this activity.

However, one stated that without the continuation of the foundation support his unit was receiving, it would be necessary to curtail the present high level of production.

Administrators were asked what goals they expected increased film production activity to serve, and they were further asked to rank in importance the following possible goals:

1. Production of materials to improve instruction on their own campus.
2. Production of materials for use by other educational institutions; i.e., for sale to other universities or educational groups.
3. Direct public relations for the university.
4. Indirect public relations through distribution of films which carry the name of the university.
5. Teaching of educational film production in the academic setting.
6. Research in the communications area.
7. Providing a tool for research for other university departments.

While most administrators were willing to rank these goals from one (most important) to seven (least important) in descending order of importance, some of them had not previously considered one, or several, as goals for their own unit. In these cases, a ranking of "O" (or "not a goal") was assigned and is so reported in Table 1.

TABLE 1
Goals as Ranked by 42 College Administrators

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42							
Improvement of instruction	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Sale of educational films	2	0	0	0	2	0	0	2	3	6	4	0	4	0	2	0	1	1	7	6	2	3	1	2	1	2	6	1	7	3	3	2	0	6	6	6	2												
Direct public relations	5	3	2	0	5	2	6	3	6	2	3	3	6	3	2	3	3	5	3	1	1	5	4	3	2	1	3	2	3	2	2	3	2	1	2	7	2	5	7	5	3								
Indirect public relations	6	0	0	2	6	6	4	0	2	5	4	4	7	5	6	4	5	0	3	4	1	1	6	7	4	4	1	4	3	4	5	2	0	4	0	6	0	4	2	4	3								
Teaching film production	0	2	3	2	3	7	1	5	3	4	7	7	2	0	7	6	4	2	7	1	1	2	1	6	5	0	5	0	5	7	3	6	0	0	5	5	1	3	7	0									
Research in communication	0	4	3	4	5	3	5	2	4	6	6	4	4	5	5	7	5	6	6	1	1	3	2	5	7	1	6	0	7	3	0	4	5	0	4	4	3	3	5	3	5								
Tool for research	0	5	5	6	3	5	3	4	5	4	5	5	2	3	2	1	2	7	5	1	1	4	3	7	6	1	7	0	6	4	0	2	4	5	5	3	4	2	4	2	5								



Indiana University Biology Film

Three presidents, after careful consideration and some discussion, declined to assign ranks, stating that all the enumerated goals were equally important in their thinking. One said, "This is like asking me which I consider more important, the chemistry department or the physics department." Their position is reported in Table 1, by a rank of "1" assigned to all goals.

Production Of Materials To Improve Instruction On Their Own Campus

This was the most important goal of the film unit in the opinion of the university administrators, with 37 (or 88%) ranking it in first place. Two ranked it in second place, and only two ranked it below second place.

Historically, production of public relations films and recording of athletic events played a major (if not the major) part in the activity of the film unit. This present general acceptance by administrators of the role of the film unit in improving instruction represents an important step toward maturity in the whole concept of the production and use of films for and by the university.

Production of Materials for Use by Other Educational Institutions

The goal of making films available to others through

sale of prints was not generally accepted. Only five (including the three who ranked all goals as 1) ranked it in first place. Ten ranked it second and two ranked it seventh. However, 12 (or 28.5%) did not consider it a goal at all.

Administrators who accepted distribution of films as a goal of the unit were on campuses where the head of the film unit had convinced his administration that sale of prints made it possible to recover at least part of the cost of productions from sources outside the university's own budget.

Interestingly enough, included among the 12 who did not consider distribution a goal were a number of administrators who cited the high cost of film production, saying, "If you people could make films cheaper, we would use a lot more of them." They had not considered -- or perhaps it had not been called to their attention -- that films that are useful on their own campus might well be useful on other campuses. Making these films available to others through sale of prints would spread the cost of production over a number of institutions.¹

It was interesting to note that on one campus where the president remarked on the high cost of

¹A detailed discussion of distribution procedures, problems, and advantages will be found in Chapter 6, "Distribution of Films Produced."

his motion picture unit, there were two other film units in operation, each serving only the specialized needs of the department in which it was located.

This is a problem similar to that faced by the university press.¹

Direct Public Relations for the University

The production of public relations films for the university was ranked in first place by only one administrator other than the three who ranked all goals as equally valid. However, 11 ranked it second and 14 ranked it third.

Nearly every university film unit has at some time in its history made public relations films. However, many administrators no longer consider this a prime goal of the film unit. They feel that there have been too many films, too much alike in format, with too similar intent made by too many universities. Public relations films have, in the past, been designed to attract students, secure donations, or tell the public how great the university is -- or to do all three at once.

¹Some similarities between the university film and university press movements are discussed in "Background of University Film Production in the United States."

Now administrators feel that their public relations requirements are better served by films of a documentary or news nature which inform alumni and other friends about activities and progress of the university. Quite often these are sent to alumni groups on a regular schedule varying from one or two a year to as many as eight or nine.

There was a time when the public relations activities of the university were designed to attract as many students as possible. The situation is somewhat different today.

One chancellor stated that his film unit was to make a recruiting film which he hoped would discourage the less capable student from enrolling. This was a state university, required to admit all high school graduates from that state. The chancellor, faced with an increase in enrollment beyond that which could be adequately handled with present facilities and budget, felt that recruiting should be done on a selective basis and hoped that such a film would help put across the point that not all students who graduate from high school can profit from university training.

Indirect Public Relations through Distribution of Films Carrying the University Name

There was considerable difference of opinion regarding the production and distribution of the university-made film as a good public relations device,

and about this type of public relations as a function of the film unit.

Some administrators thought this was a valuable prestige device, apart from the educational usefulness of the films; some did not. Only 10 administrators ranked this indirect public relations function above third place; 12 ranked it in fourth place and 12 did not consider it as a goal at all. This is in direct contrast to opinions about the value of the writing of textbooks and professional articles which traditionally have brought prestige to the university. It is not yet generally believed that the same kind of scholarship may enter into presentation of knowledge through films as enters into professional writing.

Teaching of Educational Film Production in the Academic Setting

Administrators were sharply divided in their opinions about the teaching of educational film production. It was ranked either seventh or not considered as a goal at all by 15 of the administrators; only 15 ranked it among the first three of their goals.

It is apparent that preparing young people to enter the film production field is not of primary concern to university administrators.

The film has been called everything from "trash" to "the only new art form of the 20th Century." Today, films and television are reaching and influencing,

for good or evil, countless millions around the globe. Yet the publicity releases about a writer, director, or actor are more likely to emphasize that "he clawed his way to the top from the back alleys" than they are to say "he graduated from such-and-such a college with a thorough grounding in professional motion picture skills and a broad background in the humanities."

There has never been any sustained and systematic program of training by the theatrical and commercial motion picture, television, and radio industries. One wonders where the film-makers of tomorrow are to come from, especially since the demand for adequately prepared production staff is increasing with great rapidity, and there are less than half a dozen universities now offering truly comprehensive academic programs in film production.

Objections to teaching film production fell into three major categories. (1) Administrators do not have enough money to support their already existing programs and would even like to be able to reduce the number they now offer. They do not wish to expand the academic offerings at a time when the student body is already larger than they feel they can handle adequately. (2) They do not see a definite need for training in motion picture production. (3) They do not consider the production of "movies" to be an occupation requiring a college education, and consequently doubt that courses in film-making deserve a place in the curriculum of the university.

Only about one-third recognized teaching as a logical extension of the film production activity at the university.

This failure to recognize the need for academic film training programs is a critical problem when considered in the light of what motion pictures are expected to accomplish.

The university administrators themselves regarded improvement of instruction as the most important goal of the film unit. Furthermore, the motion picture and television are influencing children and adults around the world. They have become powerful weapons in the Cold War. Yet few university administrators recognize the need for people working in these vital fields to have training equal to their responsibilities. This need has been realized by our Cold War opponents and is being met by them to a degree which would seem incredible to university administrators if it were generally known.

Research in the Communications Area

Again, this was not recognized as a major goal by university administrators, only five ranking it first or second. There seemed to be little or no awareness that the motion picture has a definite role in communications research, that communications research is essential to improvement of instruction, or even that communications is a major problem in the world today. Poor communications

TABLE 2

Summary of Ranking of Goals by Administrators

Number of Administrators Ranking Goal

as

Goal	1st	2nd	3rd	4th	5th	6th	7th	Not a goal
Improvement of instruction	37	3	0	1	1	0	0	0
Sale of educational films	5	10	5	2	0	6	1	12
Direct public relations	4	11	4	1	6	3	2	1
Indirect public relations	3	4	3	12	4	6	2	8
Teaching film production	5	5	5	2	6	4	7	8
Research in communications	3	2	7	8	9	6	3	4
Tool for research	4	6	5	7	11	3	3	3

within the university itself is the subject of frequent complaint by faculty and staff. The university administrators' lack of awareness of communications as a problem may be one reason why it is a problem.

Provide a Tool for Research for Other University Departments

Films are being used as a tool of research in medicine, agriculture, and increasingly in science areas.¹ Very few other academic departments use film regularly, with the possible exception of some research departments which are engaged in work under United States government contracts, where filmed records and reports are required by the government.

Administrators, however, anticipate growth in this type of activity. This was an area where the administrators were more advanced in their thinking than the subject matter people. They felt that they would support the use of filmed records and reports by academic departments engaged in scientific research --that if a project were proposed they were sure that the subject matter people knew how and where a film record would contribute to the collection and interpretation of information, university

¹In addition, only behavioral science and education seem to be aware of the possibilities of the use of film as a research tool. These have been stimulated by the National Defense Education Act.

funds could and would be made available.¹ This was particularly true at those universities with strong agricultural, engineering, science, and medical divisions.

DETERRENTS TO GROWTH

Administrators were asked what they considered to be the greatest deterrents to growth of the motion picture unit. They were asked to rank in importance the following commonly cited deterrents:

1. Lack of general acceptance by the academic staff.
2. Lack of actual space to house the film unit.
3. Lack of funds.
4. Lack of qualified staff.

Their responses are reported in Table 3 and Table 4.

Lack of General Acceptance by the Academic Staff

It is interesting to note that only one administrator ranked lack of general acceptance by university staff in first place.

¹One source of income to the film unit is from academic departments which receive research grants which require film production. See Chapter 2, "Administration, Part II: Organization and Operation of the Film Unit."

TABLE 3

Deterrents	Deterrents as Ranked by 42 College Administrators																																																		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4							
Lack of acceptance	4	4	4	4	4	4	4	4	3	4	2	2	2	2	3	4	2	3	4	4	3	4	4	1	3	2	2	0	3	2	3	3	2	2	4	3	4														
Lack of space	2	2	3	3	2	1	2	1	3	3	2	1	3	3	4	2	2	4	2	3	2	1	2	1	1	3	1	0	4	4	2	4	4	2	1	3	3	2	4	2											
Lack of funds	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lack of staff	3	3	2	2	3	3	4	2	4	4	2	4	4	3	4	4	3	4	3	3	4	2	3	3	4	3	3	2	4	3	3	2	4	3	3	2	4	3	2	4	4	4	4	4	4	4	4	4	3	1	3

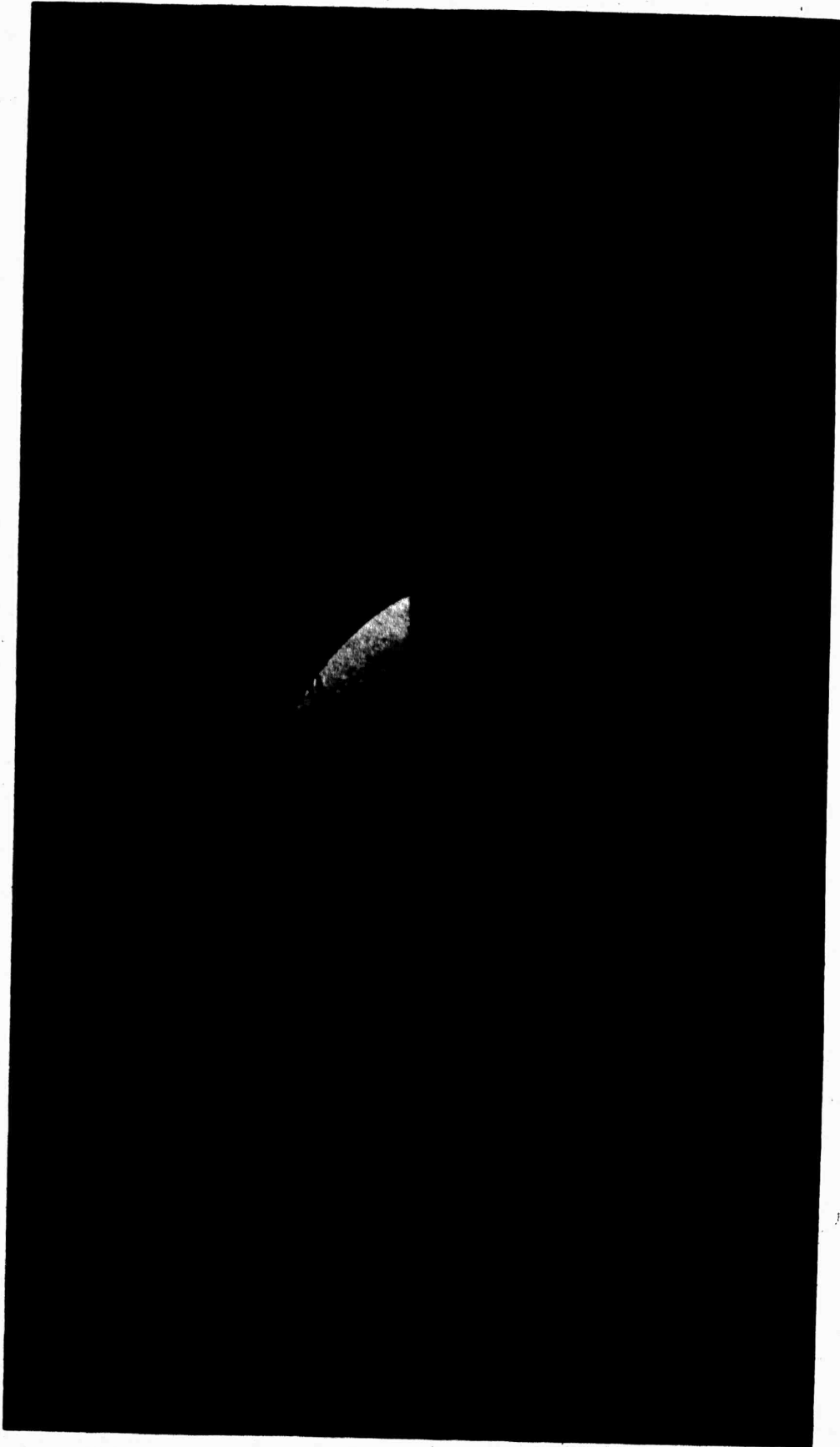


TABLE 4

Summary of Ranking of Deterrents by Administrators

Number of Administrators Ranking Deterrent

<u>Deterrent</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	<u>Not a Deterrent</u>
Lack of general acceptance	1	11	11	18	1
Lack of space	8	15	11	7	1
Lack of funds	32	8	1	1	0
Lack of qualified staff	1	8	18	15	0



University of Houston - KUHT Film Unit Studio

He stated, without qualification, that if there were wide acceptance of, and demand for, film services on the part of the faculty, there would be enough pressure on him and the other administrative officers to insure such services being made available. He further said that if this type of pressure were brought to bear, he could build the film unit with a much clearer conscience.

A business manager who was interviewed in addition to the chancellor felt that if a department really accepted film production as valuable to its instructional program, it would be willing to channel part of its own budget into film production. If departments were not willing to do this, he saw no reason why funds should be made available through the general university budget. This raises some questions about where the primary responsibility for leadership in improvement of instruction rests within the university, particularly when budgets are as tight as they are in all universities.

Lack of Space to House the Film Unit

Shortage of space is a major problem at almost every university. As a deterrent to growth of the film unit, it was ranked in first place by eight administrators and in second place by 15.

On many campuses, no major expansion of services by the film unit will be possible until more adequate housing for it can be provided.

This was vividly illustrated on one campus where the chancellor was very enthusiastic about the future of his film unit. The investigator mentioned that they had no adequate space. The chancellor replied, "No, and if I gave them space from general university funds, there would be eight deans who have legitimate prior rights in my office the next day. Unless I can get money from a foundation or a contract, the film unit will have to wait at least five years before they get really adequate space." This from a chancellor who was both enthusiastic and understanding.

Lack of Funds

Of the 42 administrators, 32 (or 78%) ranked lack of funds as the greatest deterrent to growth of the motion picture unit. Eight ranked it in second place, and only two ranked it as low as third or fourth place.

The lack of funds actually presents an even greater problem than appears on the surface. For many years, university staff felt that while educational motion pictures might possibly be needed at the elementary and secondary levels, by the time a student reached the university he should not require anything beyond the lecture, the laboratory, and the book. By the time the demand for films at the college level became recognized, the explosion in student population had hit the university, and the shortage of funds had also become acute. Consequently, the administration was faced with making a choice between funds for

more laboratory equipment, classrooms, and dormitories, and funds to make motion pictures. The latter has usually been a relatively small item in the budget, but one that can be questioned by a legislator or a conservative trustee. Several presidents frankly said they felt it preferable to finance their motion picture production out of departmental budgets, rather than have it appear as a line item in the general university budget, even though this procedure means slow growth.

Three presidents mentioned that television had been sold to trustees, legislators, and foundations on the basis that it would eventually save money for the university by decreasing faculty-to-student ratios. While instructional films can do the same thing, they have never had the same type of promotion with groups which are in a position to provide or control funds.

Five presidents mentioned that members of their science department staff had been involved in producing films for use in high school classes and were interested in doing similar work at the university level. They all stated that unless assistance was received from foundations and government agencies, it could not be supported from regular university budgets because film production is "too expensive." One chancellor said, "I do not want a big grant to start a big program. I want a modest grant of \$25,000 a year continued over a period of five or six years; then we will have established a solid

program of instructional film production.”

The over-all picture is not one of a total lack of funds, but rather of the desperate struggle for priority for the budget dollar, with worthy programs which seem to lack urgency and glamor all too frequently losing out.

Lack of Qualified Staff

Only one administrator ranked the lack of adequate and competent staff as a prime deterrent to growth. He indicated that the university had had trouble getting satisfactory production staff. Most administrators, however, did not feel that hiring of a competent staff was a problem, provided adequate funds were available. This opinion was not shared by the heads of the units and their immediate superiors, on whom the burden of recruitment generally falls. They recognized the scarcity of well-trained, experienced film makers with the academic background and the professional skills which the university film unit requires. Problems of recruitment below the departmental administrative level are seldom brought to the attention of top administration.

FINANCING THE UNIT

Administrators were asked if the film unit were required to recover all, part, or none of its budget. Nearly all the administrators preferred to change “required” to “expected.”

Three units, which were in service departments, were expected to recover all of their budget, "just like any other service department." However, the administrators, when questioned further, admitted that the film unit would not be eliminated if it did not make its entire budget for a few years, qualifying this with such statements as, "This is a comparatively new field for us and we expect to have to subsidize it for some years," or "If it does not make its budget, we will just have to raise the rates charged."

One administrator definitely stated that if the motion picture department could not support itself within a few years, the university would have to curtail its present high volume of production.

On the other hand, there were three universities which did not expect the unit to recover any of its budget. One of these, however, was a small unit and the administration recognized that as it grew into a larger department, it might be necessary to allocate some of its costs to departments using its services.

Only one university administrator stated that the motion picture unit was considered a part of the university's attempt to improve instruction and, therefore, there should be no charge, now or in the future, to departments using its services. This is in line with the stated goal of improving instruction on campus and recognizes the obligation of the ad-

ministration to provide the financial support required.

Seventeen university presidents stated that they actually subsidized all normal operation of their units and that the units were expected to recover their budgets only when they developed film projects which required the outlay of large amounts of capital. The university then expected the academic department involved, or the film unit with the assistance of outside funds, to defray this expense.

Thirty-five universities expected their film units to recover a part of their budgets from other academic departments, from non-university funds, from sale of prints, or from a combination of these.

Of these, 28 were not expected to recover any of their staff salaries. All staff salaries were provided from a central budget and the unit was expected to recover only the cost of supplies, materials, or outside services.

(There is some over-lapping of figures in the preceeding paragraphs because there are various patterns of budget recovery expected of the various units.)

Many administrators consider the recovery of funds from other university departments merely a bookkeeping and control device, with the unit actually subsidized from university funds. However,

they think that a department which is required to plan and budget for the service of the film unit will make better and more careful use of university funds than it would if film services were provided without charge to the departmental budget.

Some of the 17 administrators who supervised units felt that with university funds as tight as they are, films (and other new media) did not stand a fair chance of being used on campus, particularly if the production of a film meant that a department had to sacrifice funds for items such as research or graduate assistants. Consequently, at these universities funds for films are allocated from sources other than departmental budgets.

If the above section is read without reference to the rest of the survey, it would appear that the production of films is financed largely through funds made available to the film unit from general administration. It might even give the impression that financing the unit is not a major problem. It should be remembered, however, that 78% of the administrators stated that financing was the major problem. When budget was discussed with film unit and department heads, a even more somber picture emerged -- that of departments striving desperately for budgets for many worthy purposes and not feeling that they can afford to allocate relatively large sums for film production. Film unit heads frequently reported that academic departments came to them excited and enthusiastic about an idea for a film

on which they worked for several months, or even a year or longer. Then they would find that nobody had the money to make the film. As one department head said, "We are only going to get so much money each year. If we use part of it to make a film, we have to decide which other items to cut out." This is a hard decision to make when only a few members of the department are vitally concerned in the use of the film with their classes.

THE FILM UNIT AND THE UNIVERSITY PRESS

Administrators were asked if they foresaw that film production would eventually occupy a position comparable to that of the university press. When asked to amplify or explain, the investigator cited the film unit as making available a visual medium for scholarly publication for which the potential audience may be comparatively small, in much the same way as the university press offers channels for conventional publication.

Seventeen, including several at institutions which have outstanding university presses, answered "yes" to this question, and eight answered "no." Five stated that they expected the film unit to play an increasingly greater role in the program of the university because the unit produced material for improvement of the instruction offered to students, for public relations for the university, and for research, while the university press served a more limited objective. (Of these five administrators,

only one was at a university which did not have a university press.)

Two of the administrators were doubtful about this whole area, and ten felt that they should not react to this question as they had not thought about it before and had no convictions about it.

UNIVERSITY RECOGNITION AND SUPPORT OF FILM PRODUCTION

In order to determine the status of film production as compared to more conventional forms of publication by faculty, the administrators were asked if films were included in the regular listings of staff publications. It was felt that this was particularly important in view of the fact that publications are frequently a major consideration in academic promotions.

Nineteen indicated that film production was so listed; 10 indicated that it was not. One university classified films with creative work in art and music; one listed it as a public service rather than as publication. Three had no "all-university" listing of publications. Eight gave qualified answers, saying that they had listed certain series of films and had given credit to the technical advisor as well as to the production staff. Some said that they had given credit for certain outstanding films, but did not usually include films in the listing. One or two had not previously thought of including films in the uni-

versity's list of publications, but thought this should be considered in the future.

When the chancellors were asked if they saw the films produced by the unit, 26 replied "yes;" 15 replied that they saw some of them (one saying he thought he saw all that the unit wanted him to see); one said "only if they appear on television." Of the 19 other administrative officials, 15 said they always saw the unit's films and four said they usually saw them.

Administrators were asked whether or not they would undertake a major expansion of motion picture production if they were called upon to do so by a government agency or a foundation. Eleven gave an unqualified "yes;" two gave an unqualified "no;" 27 said they would examine a specific proposal and undertake it only if it fell within the immediate or long-range goals of the university; two would not commit themselves, but said that such a proposal would be considered, and if it were within the goals of the university, the reaction would probably be favorable.

They were then asked if the university would assist in financing the expansion which might be required. Three replied that they would, provided the project proposed was within the goals of the university. Eight again qualified their answers by saying that any proposal would be considered in light of the university's goals at the time the proposal was

made. One, a president of a state university, indicated that he would need legislative approval for any major financing.

A question was asked regarding the possibility of motion picture teaching occupying a position in the academic program similar to that of journalism.

Thirteen said that they foresaw a film teaching program comparable to journalism; two, who did not have journalism departments, said that it would be of greater importance than journalism; four said that it would be a part of the audio-visual program and would not compare it to journalism; two felt that it should be included in theater arts; one felt that teaching of film production was more comparable to architecture since it combined professional, artistic, and technical skills; 14 felt that it would not be taught at all or should not be compared to journalism; three said that it was more comparable to fine arts or to television than to journalism; and two felt that it definitely belonged in education. One administrator, with an outstanding school of journalism, was somewhat shocked at the idea of comparing the teaching of film to his respected journalism program.

Five administrators, at universities where large-scale television programs had been developed, were well aware of the problems involved in television production and definitely anticipated that there would be considerable increase in motion picture produc-

tion because of the need for filmed programs for their television station. This was true for both broadcast and closed circuit telecasting.

Three were not fully aware of the various technical problems involved, and were considerably confused in their thinking regarding the taping of programs. They seemed to think that with the advent of magnetic video-tape recording, all the problems of recording programs for television were solved. While this may be the case in the future, at the present and for the foreseeable future, it is likely that much of the pre-recorded material seen on television will continue to be produced on motion picture film. At the present time, 65% of all commercial television programming is on film.

Two university presidents anticipated growth of the film unit to make possible the recording, over a long period of time, of certain experimental projects, particularly in science areas. These film records would then be edited for use in documenting research and in instruction, either in regular or "television" classrooms.

TABLES OF ORGANIZATION

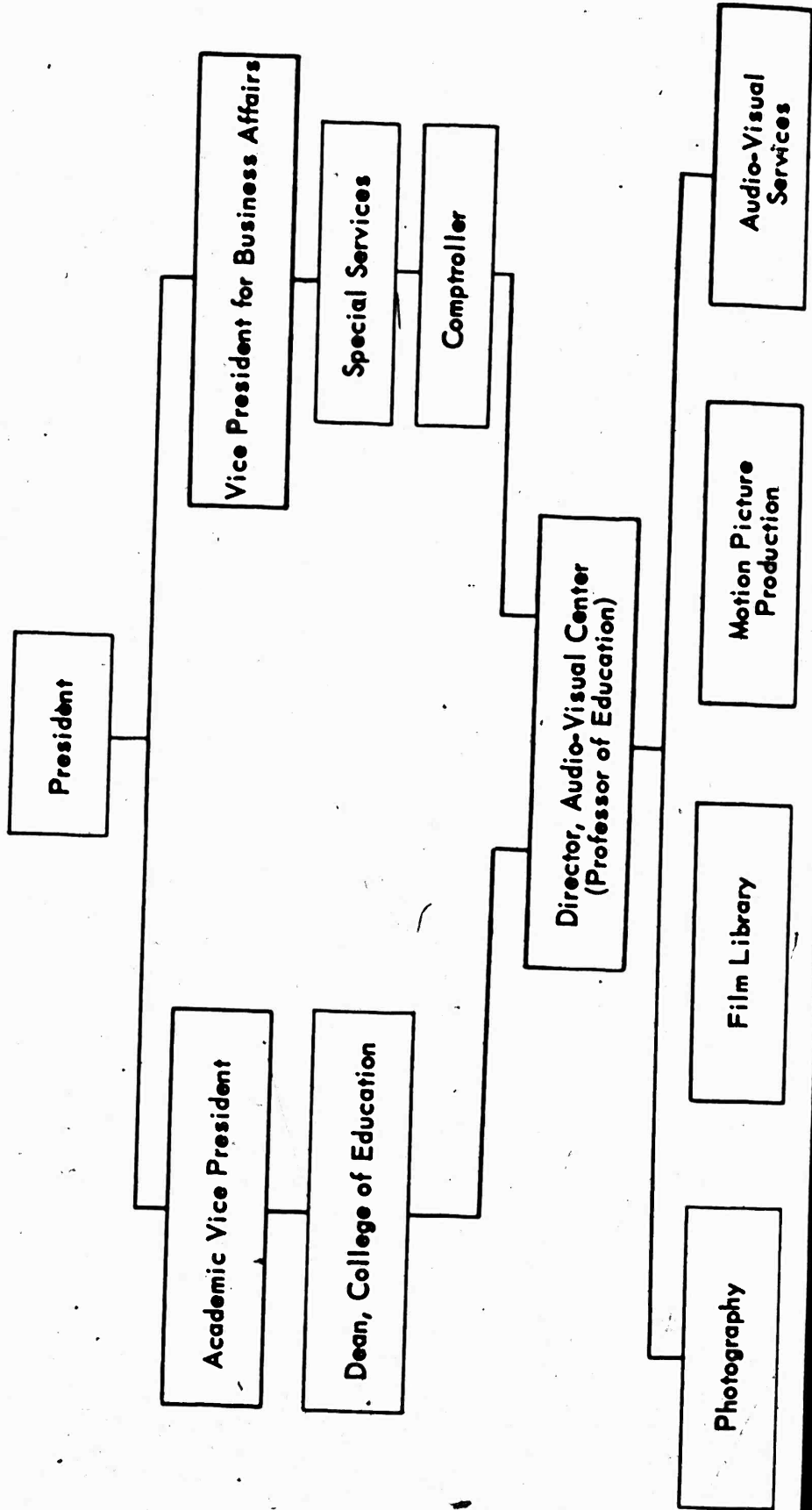
Units were asked to diagram their relationship to the general university administration. The diagrams provide interesting documentation of the individuality and independence of the universities in the United States. No general patterns of adminis-

trative organization can be discerned. Each university has its own individual plan, developed over the years in terms of the situation on its own campus.

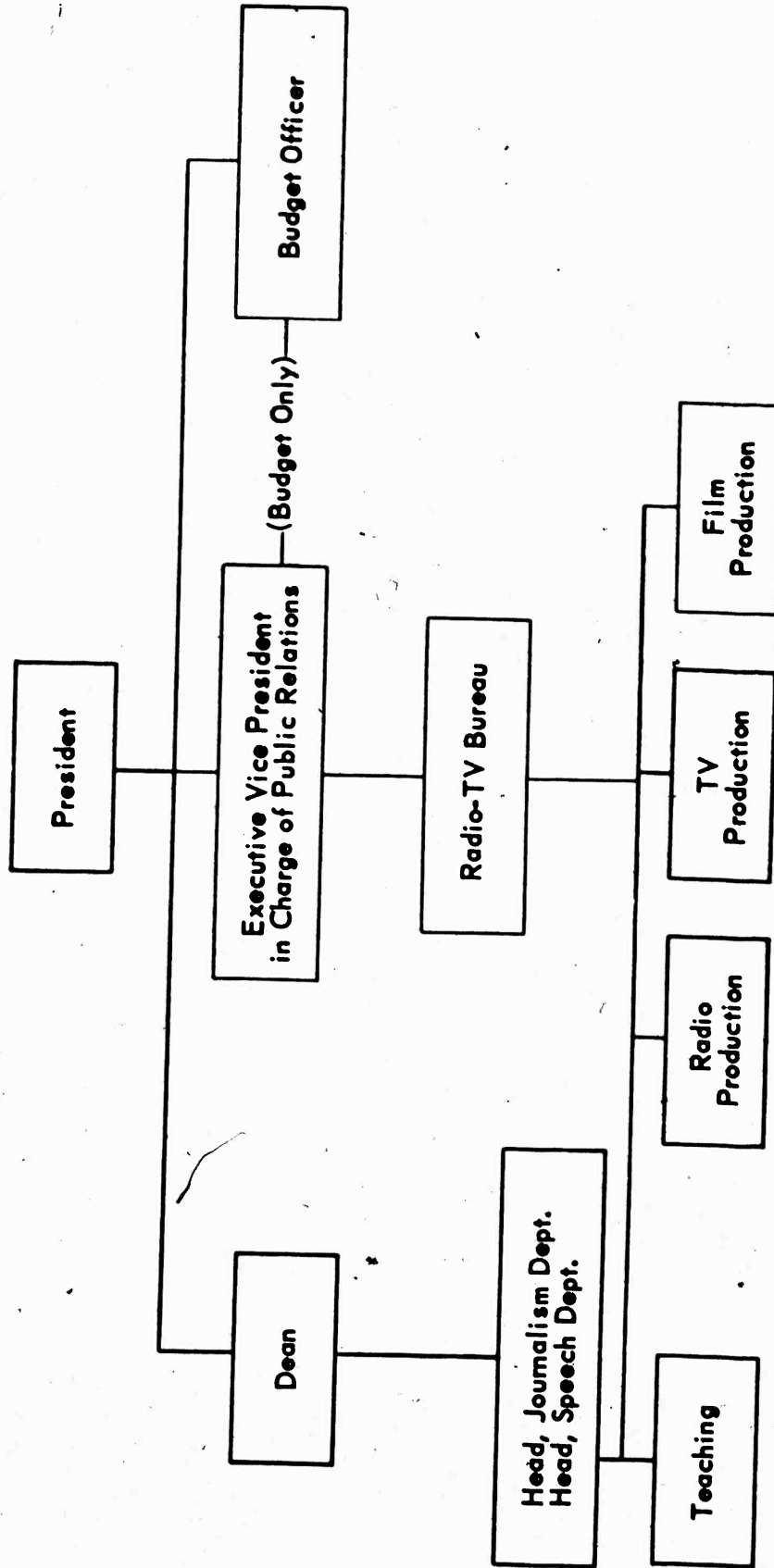
In the diagrams selected for publication, solid lines represent relationships with direct administrative authority and responsibility; dotted lines, relationships without direct authority.

See Following Page

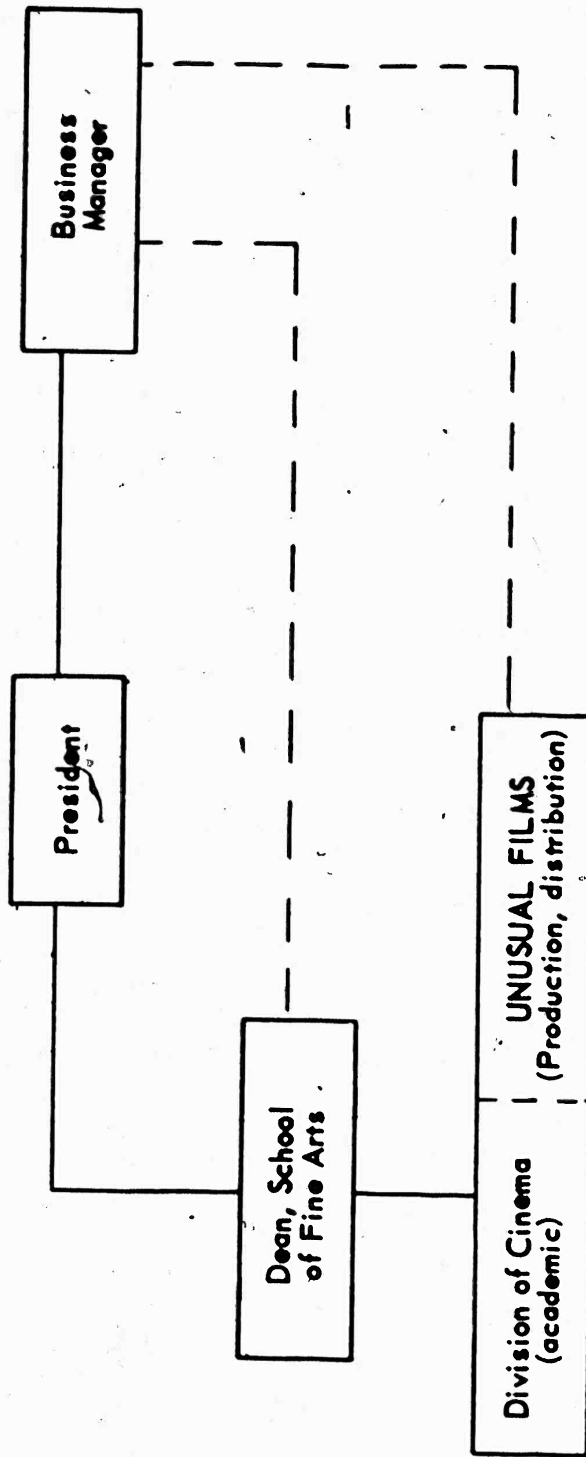
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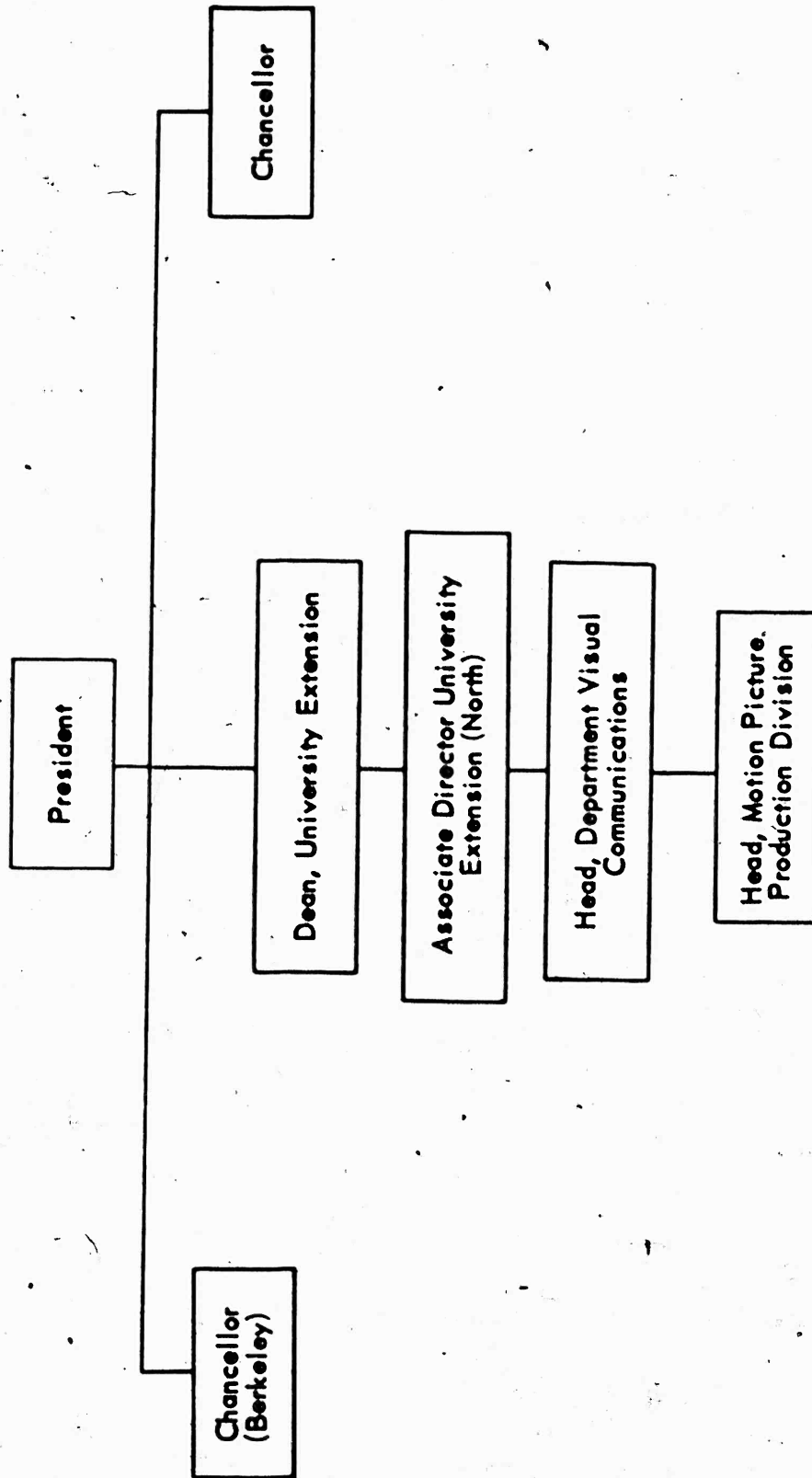
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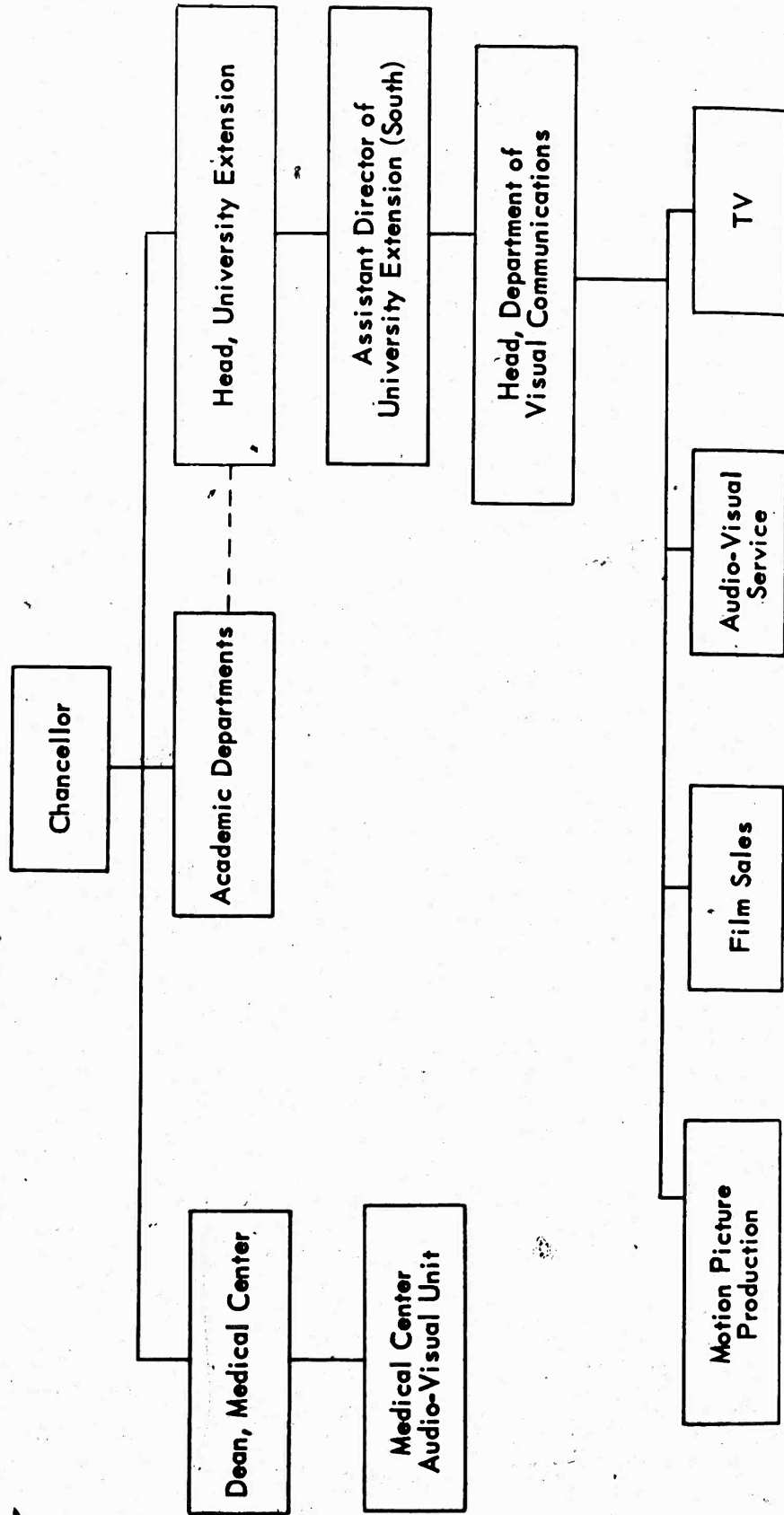
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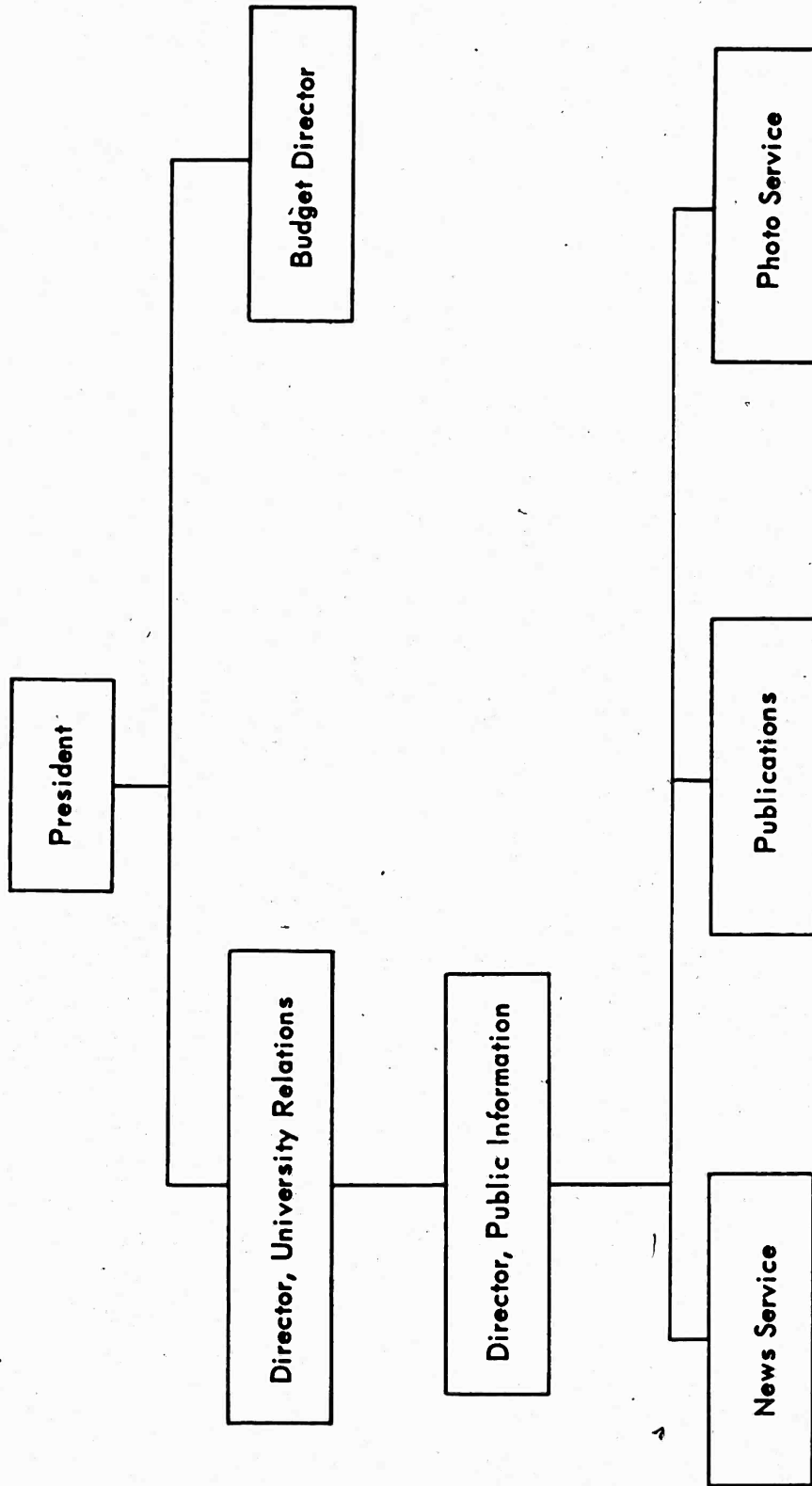
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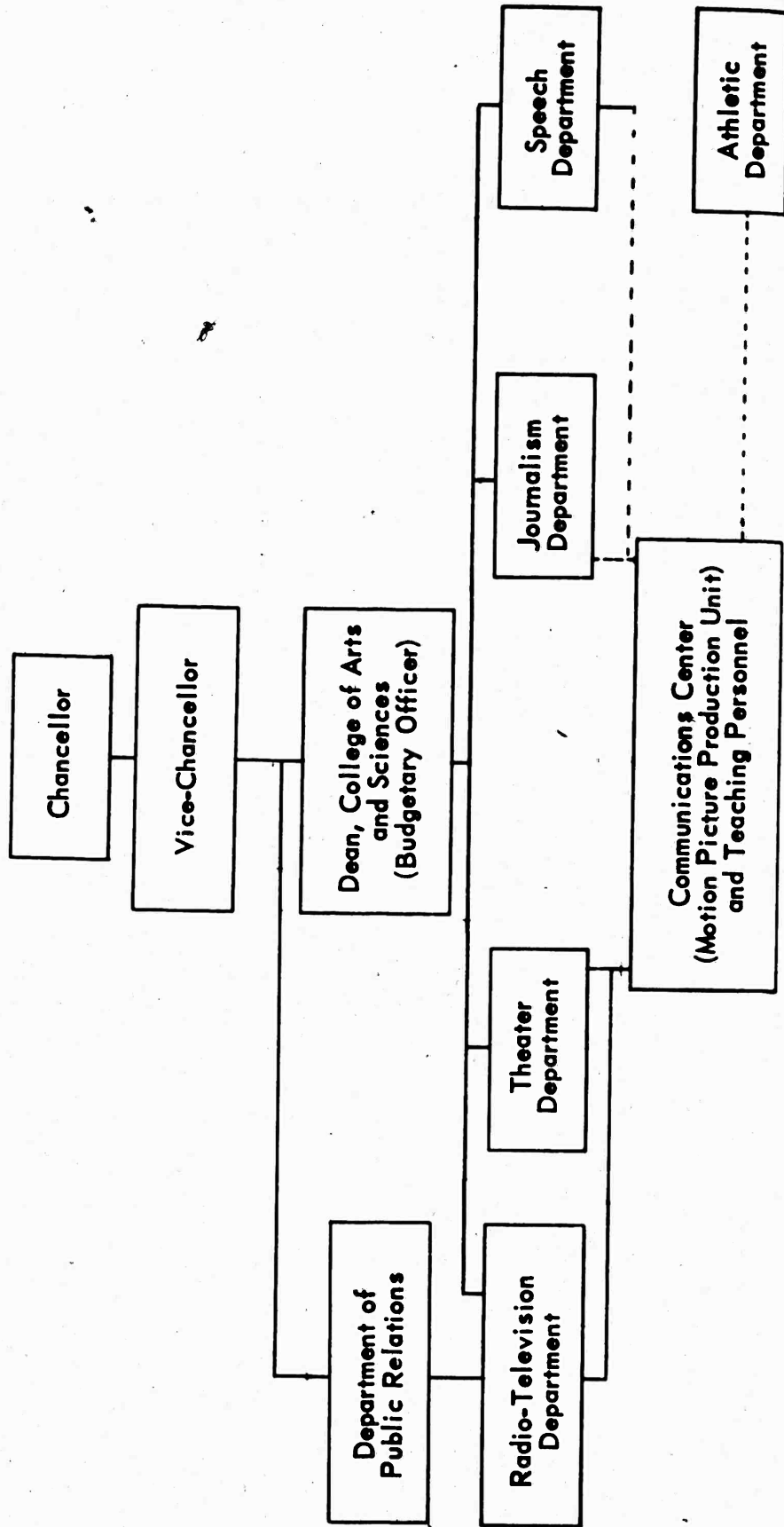
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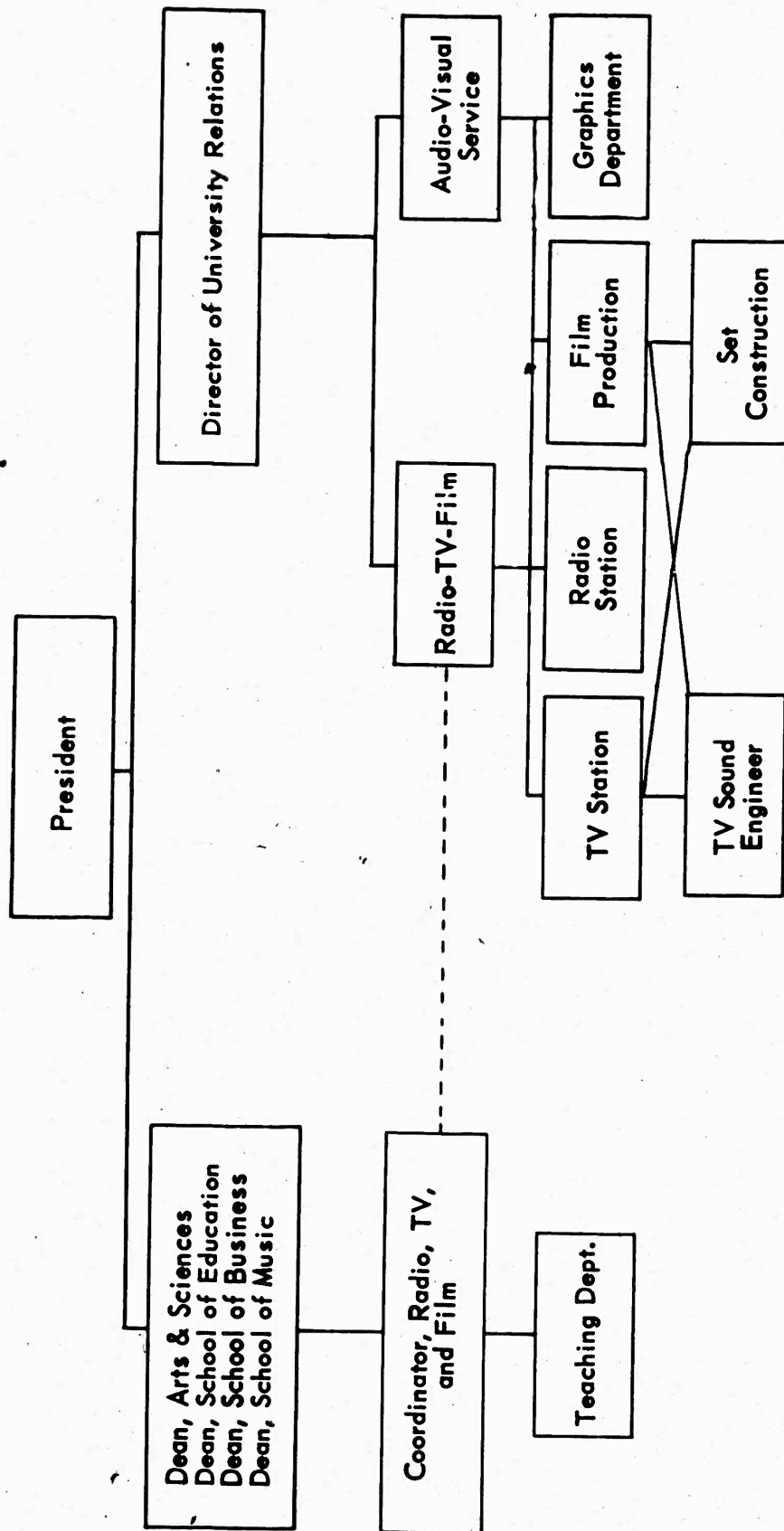
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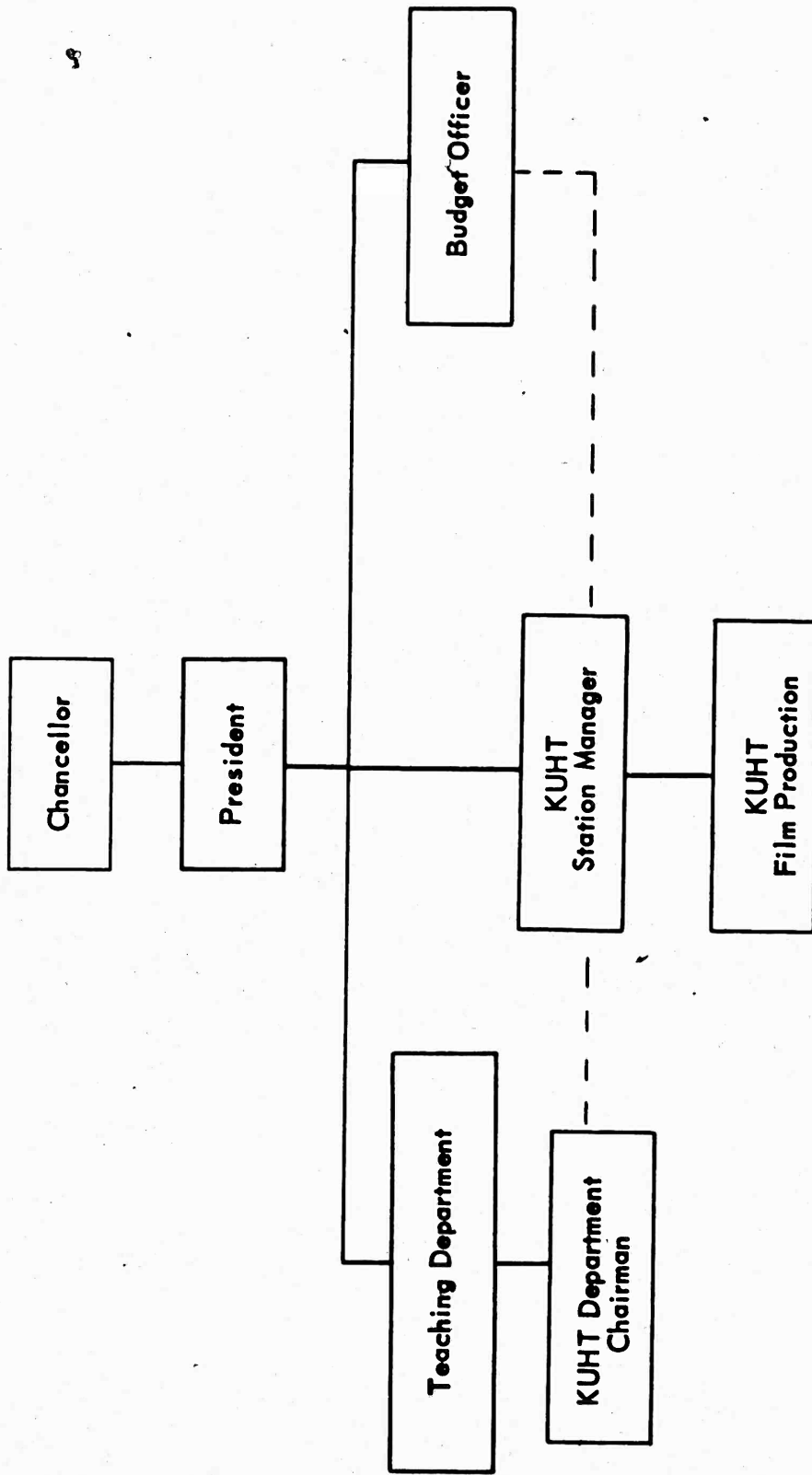
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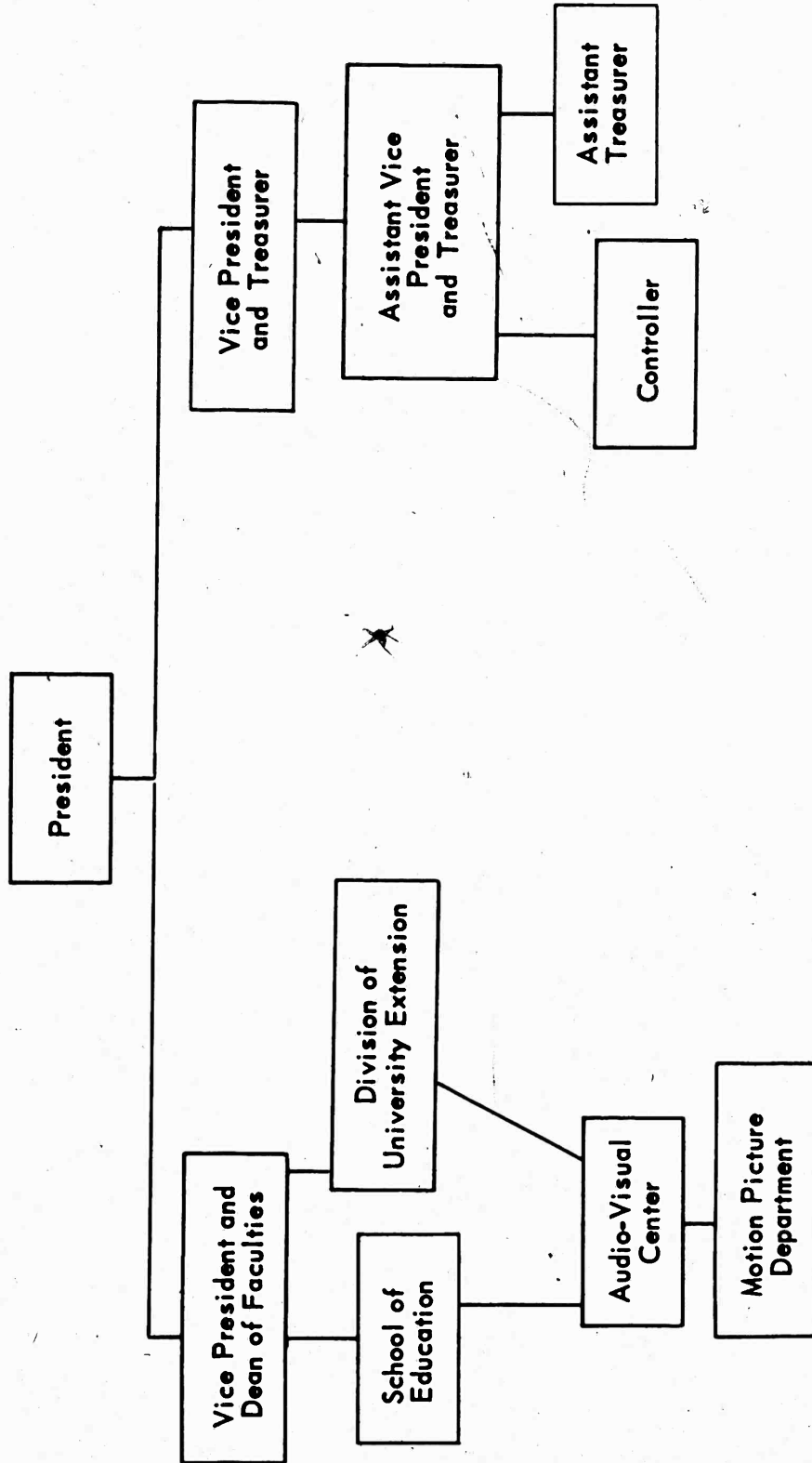
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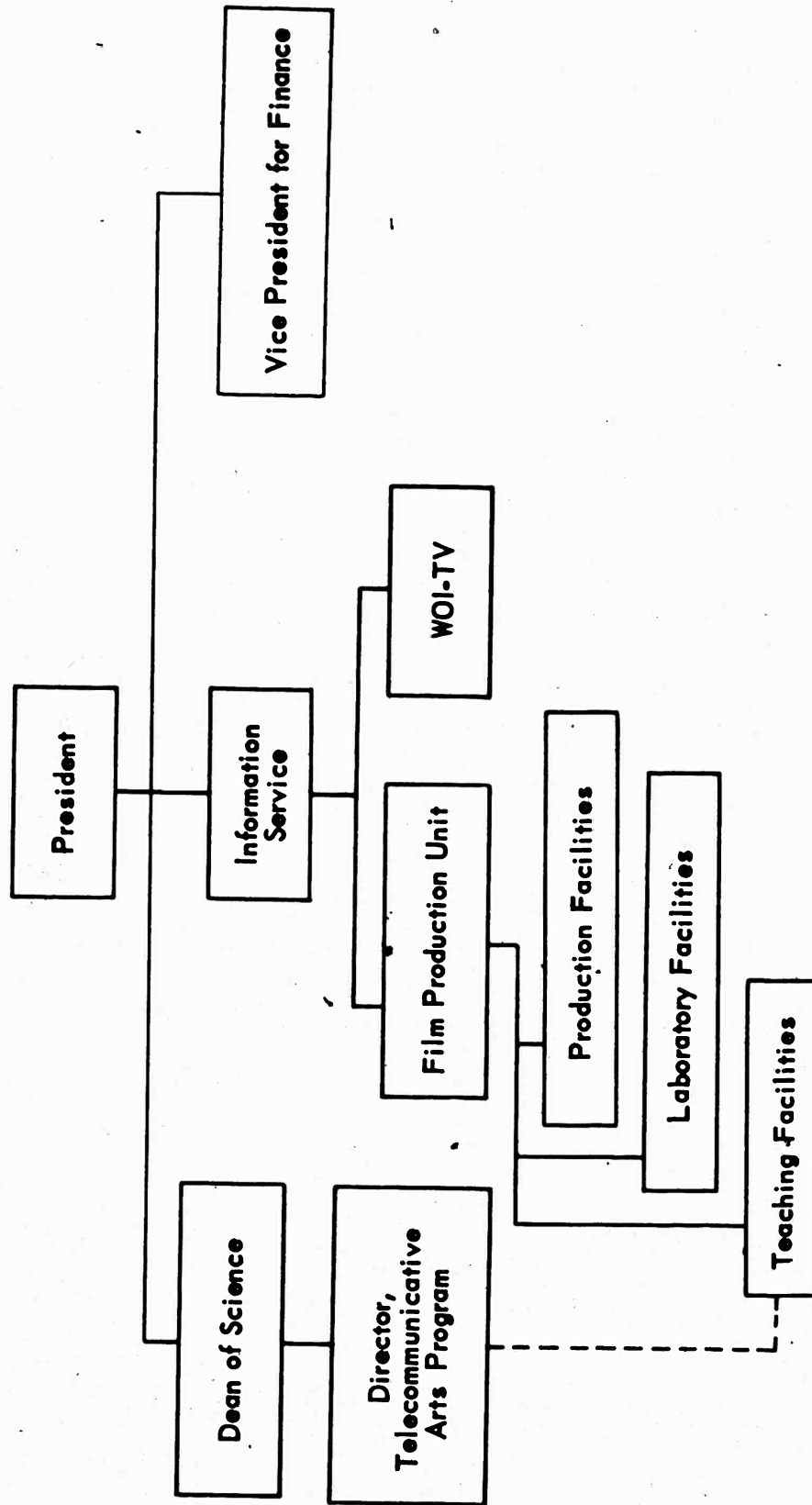
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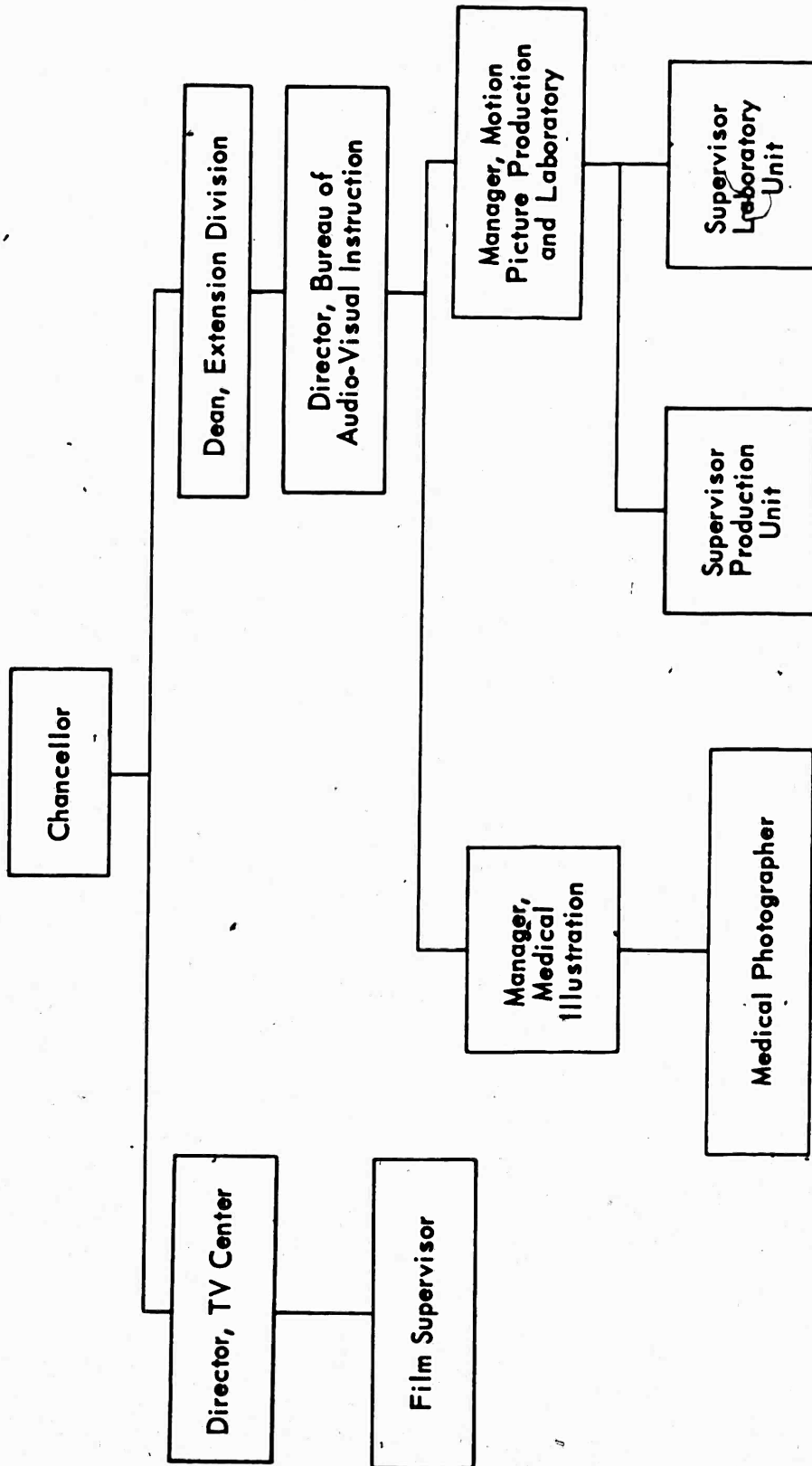
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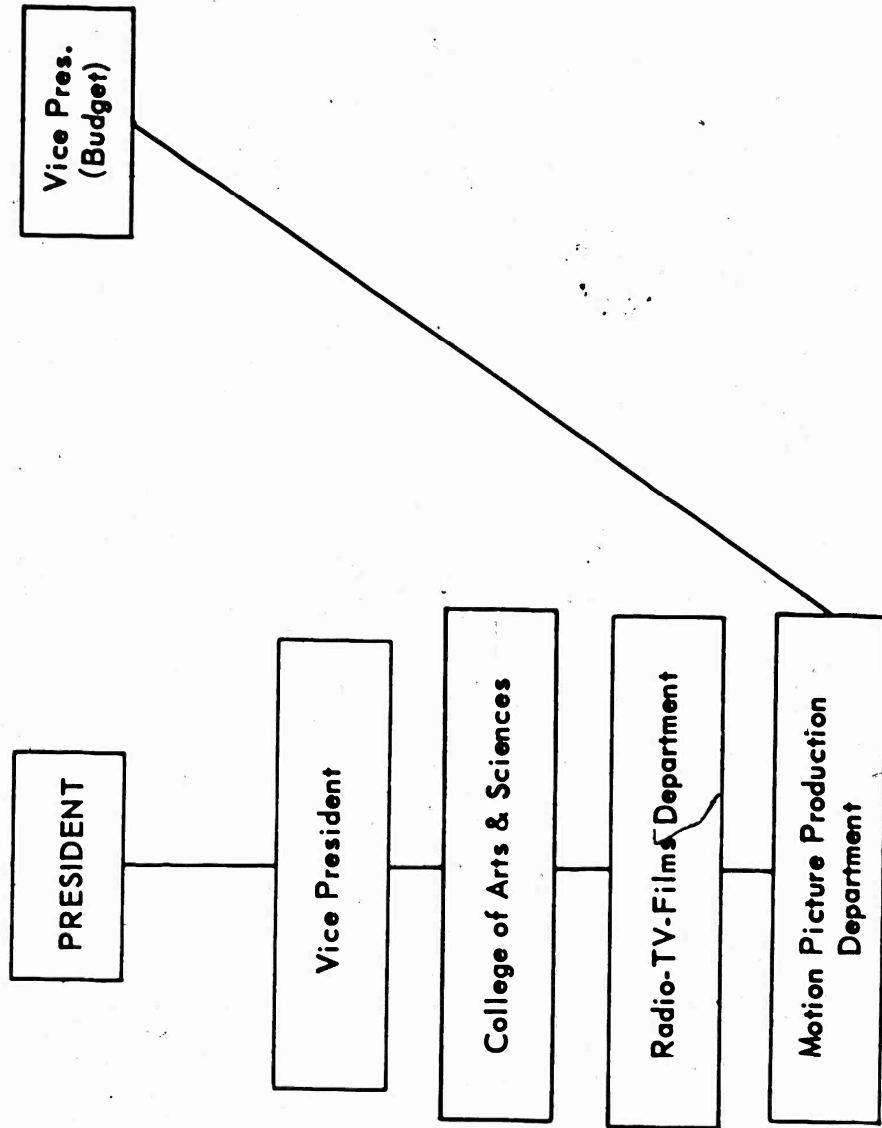
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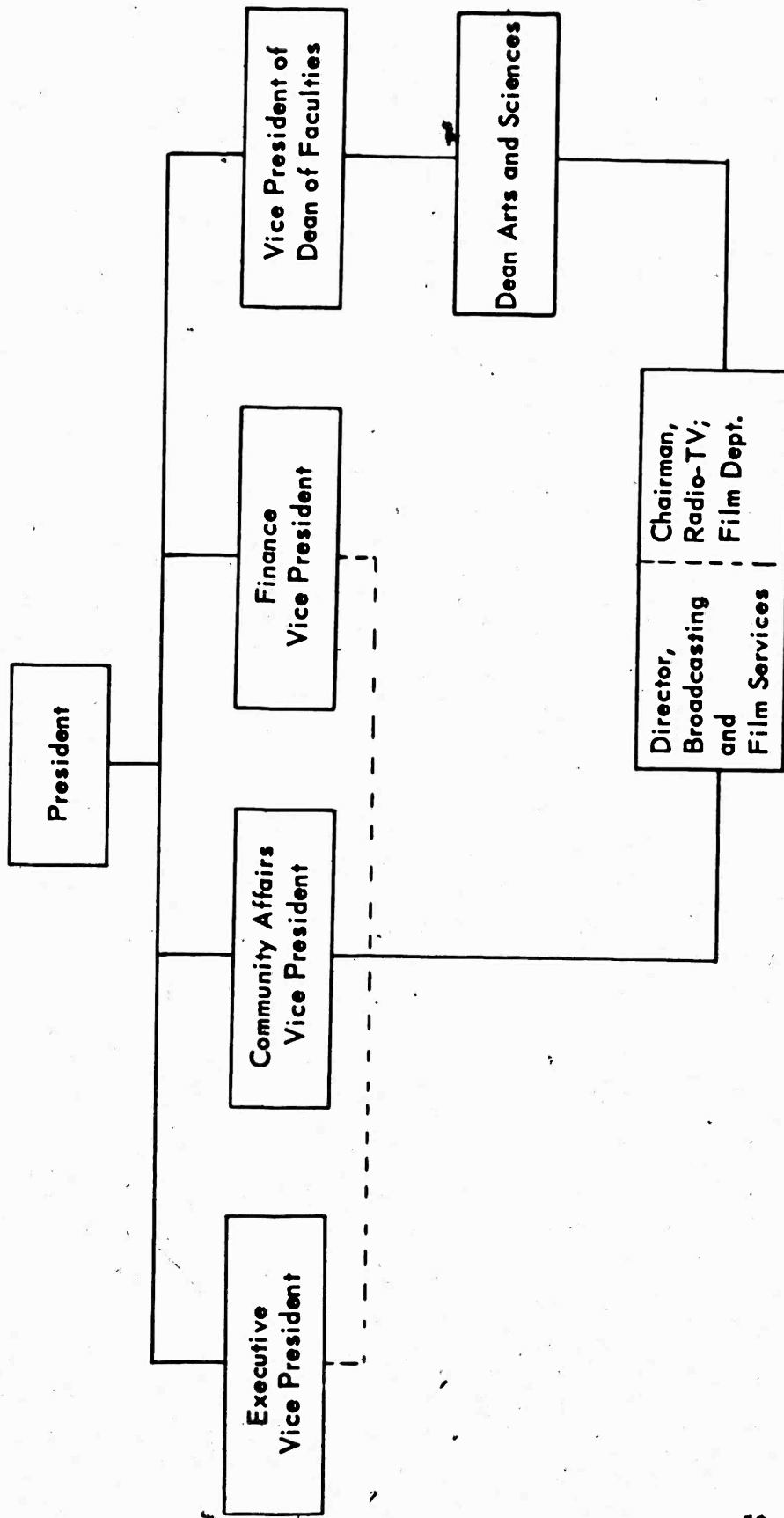
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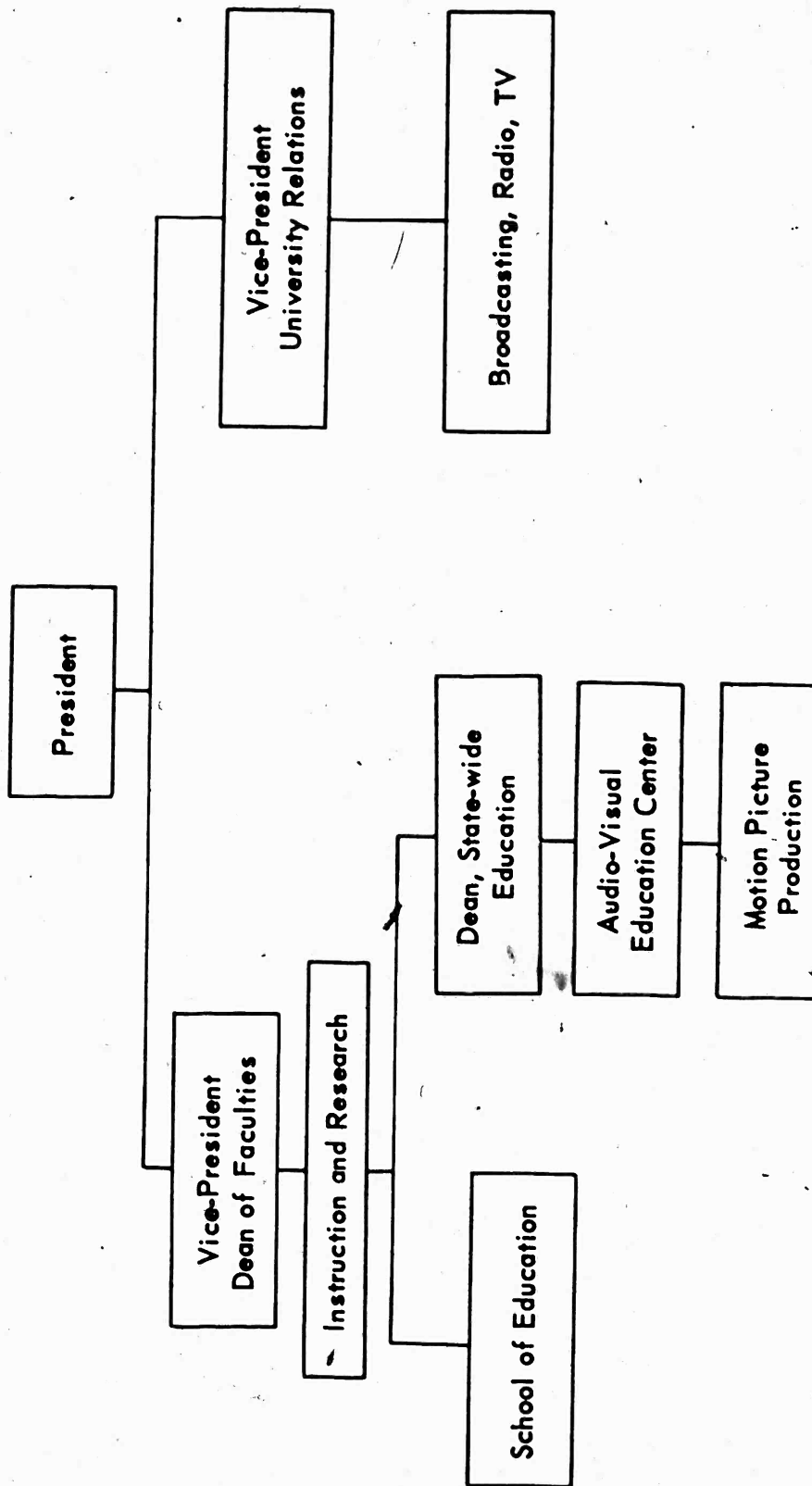
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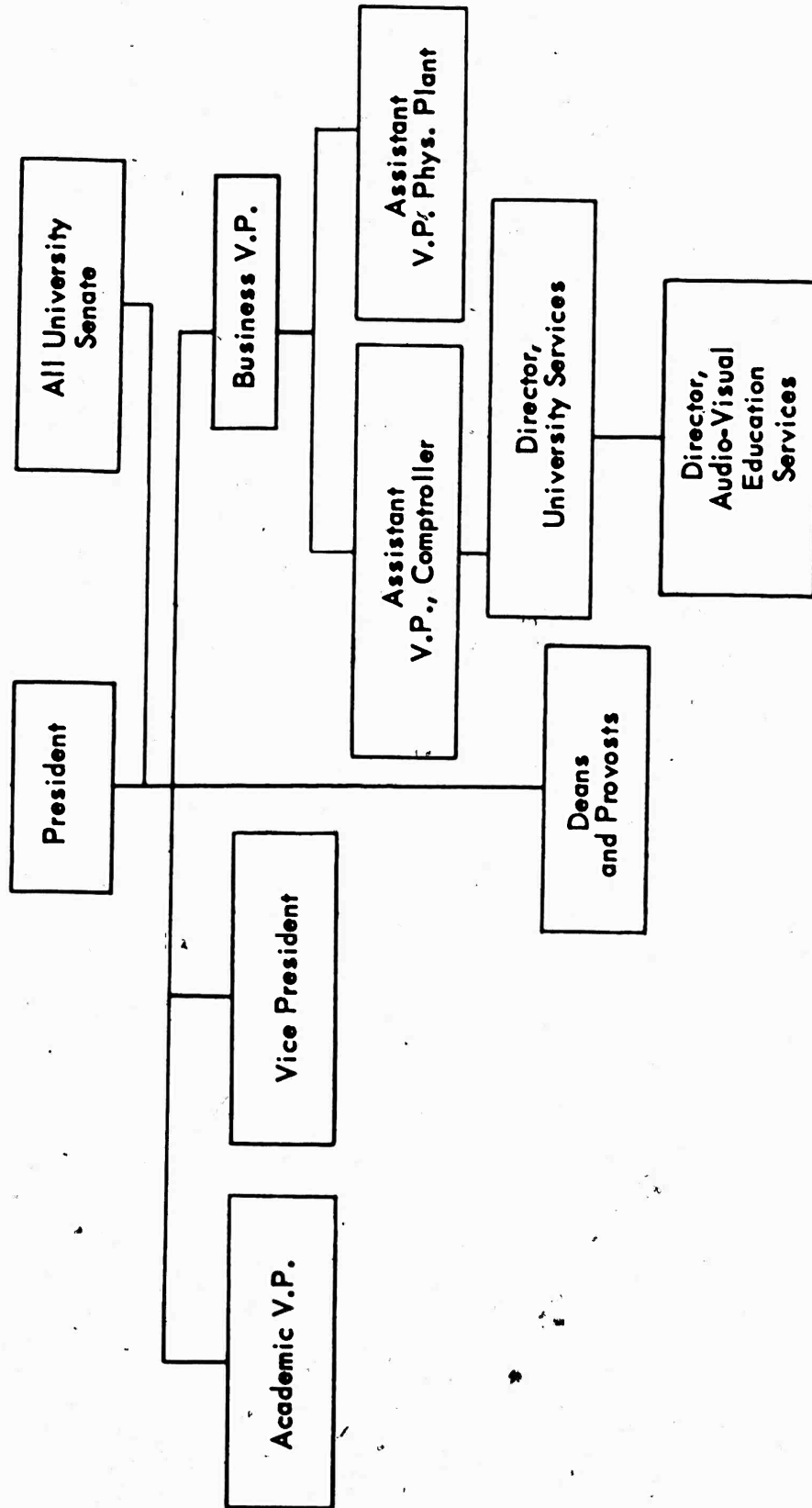
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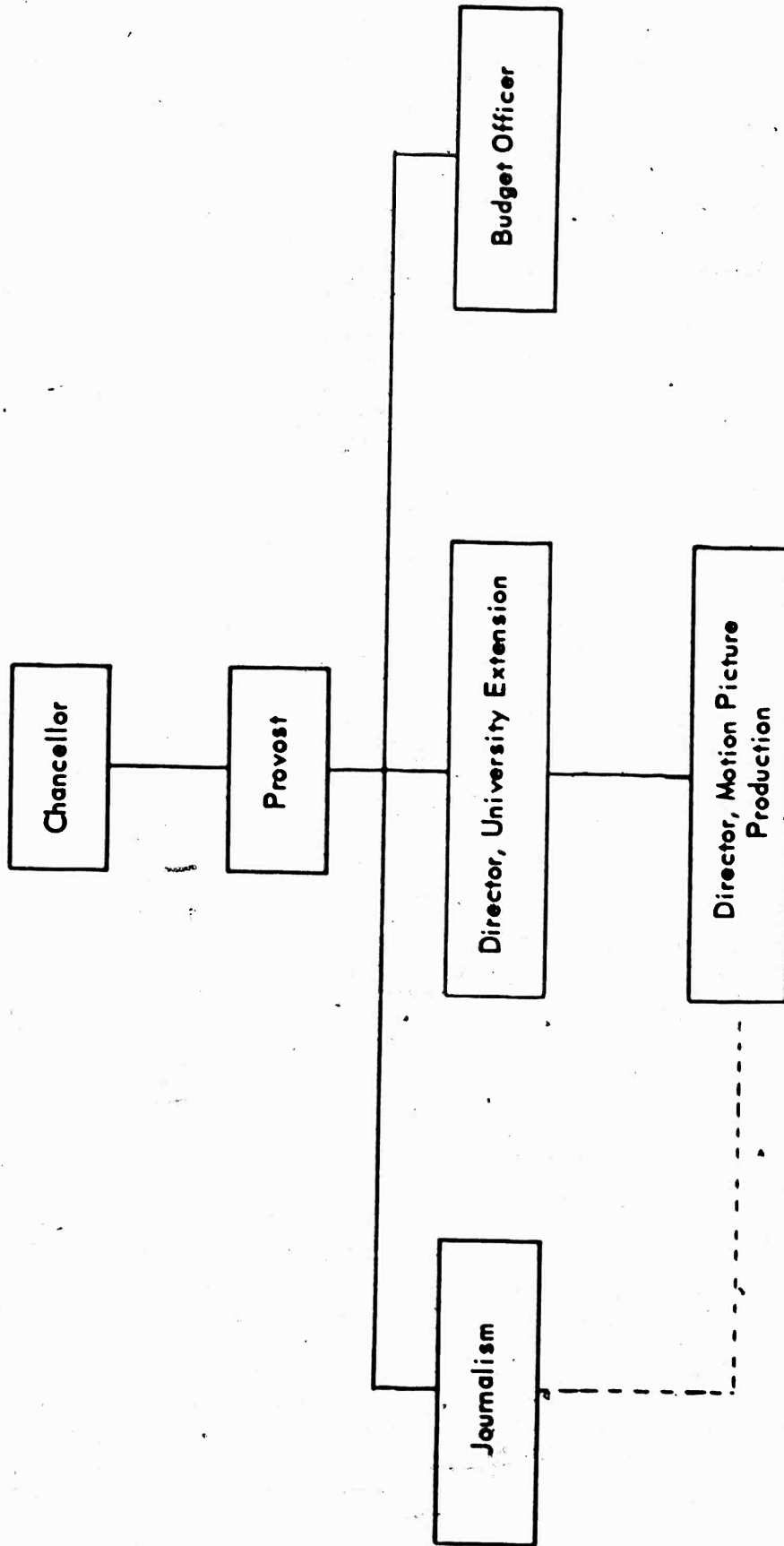
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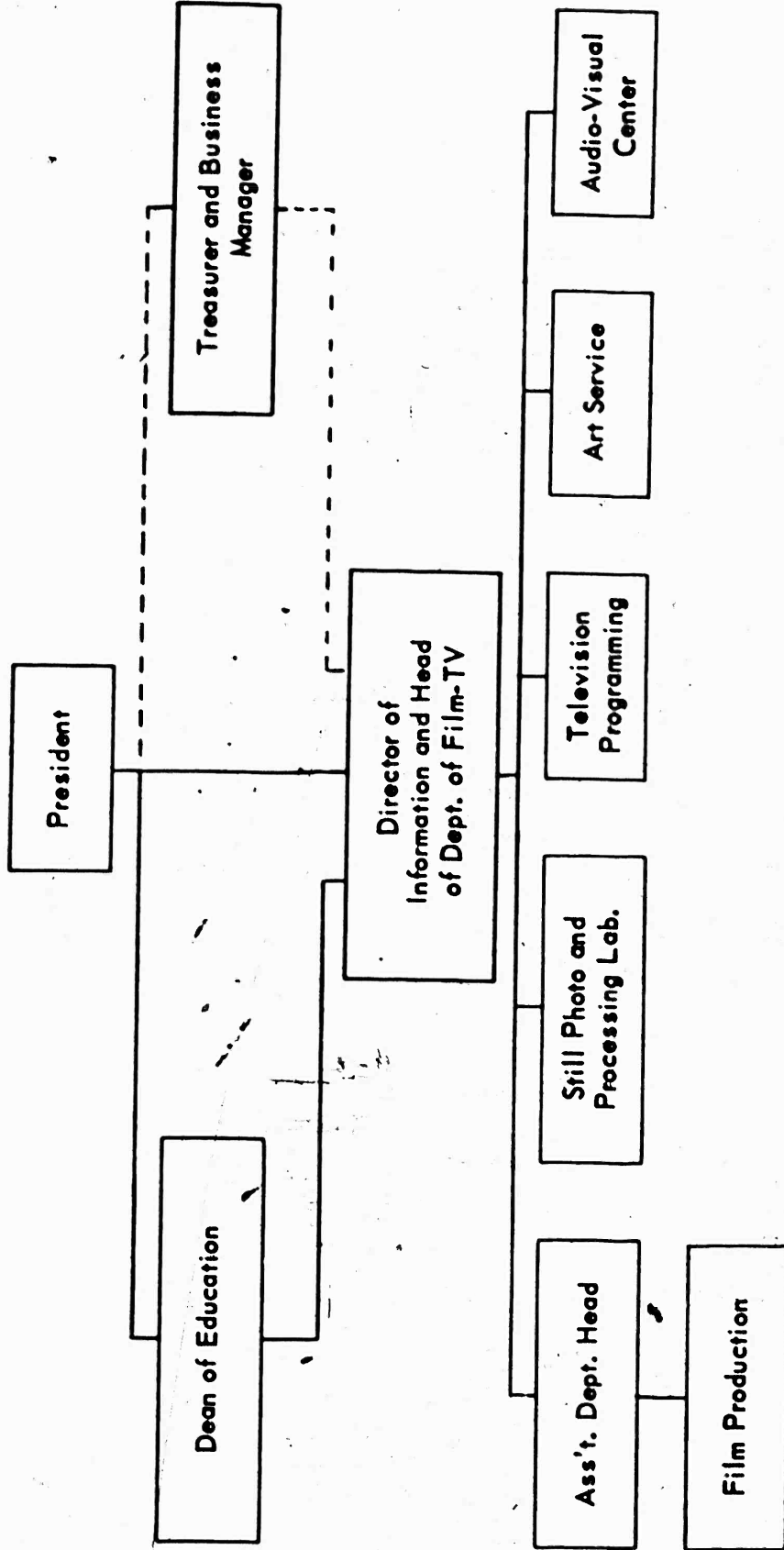
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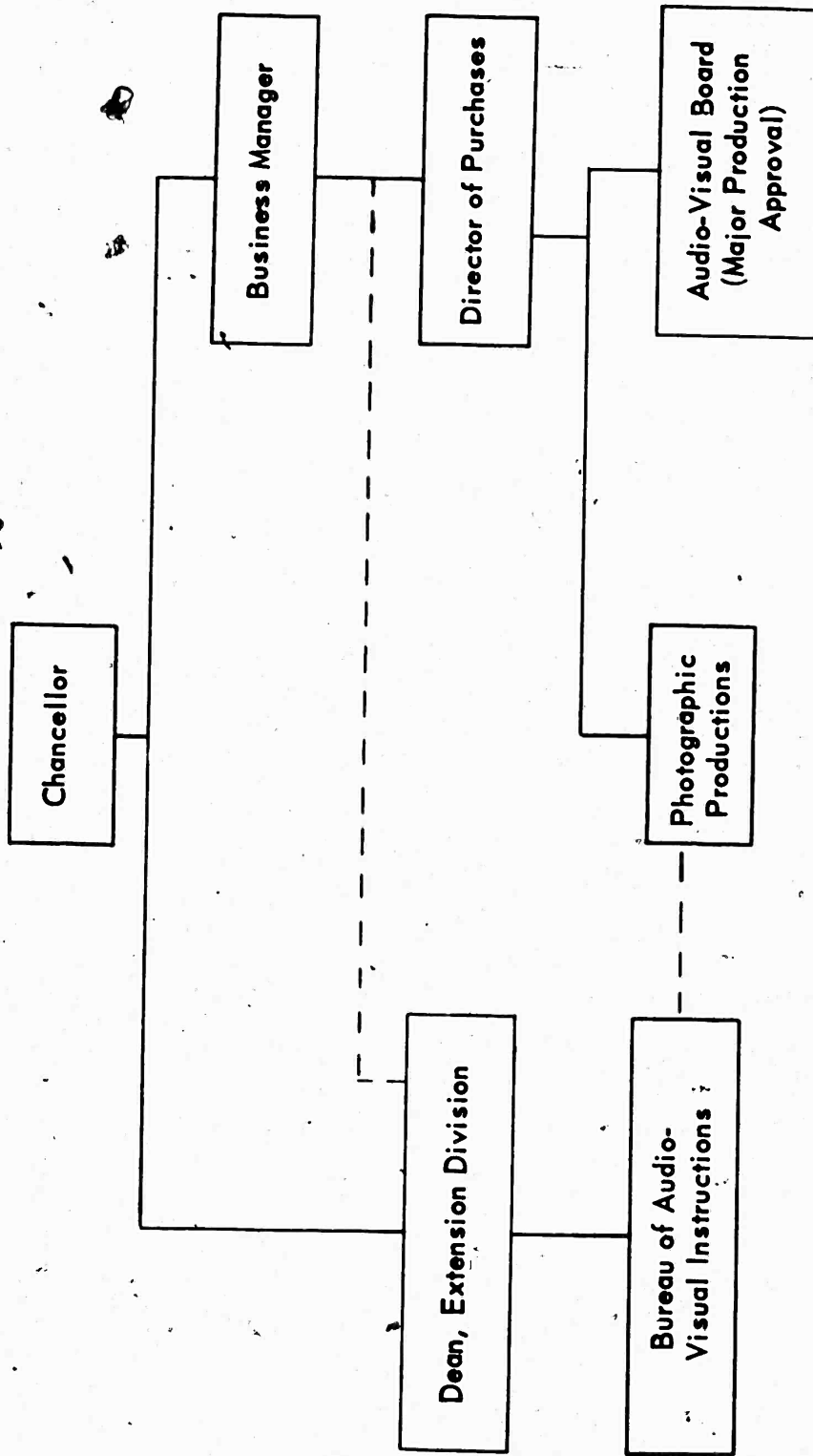
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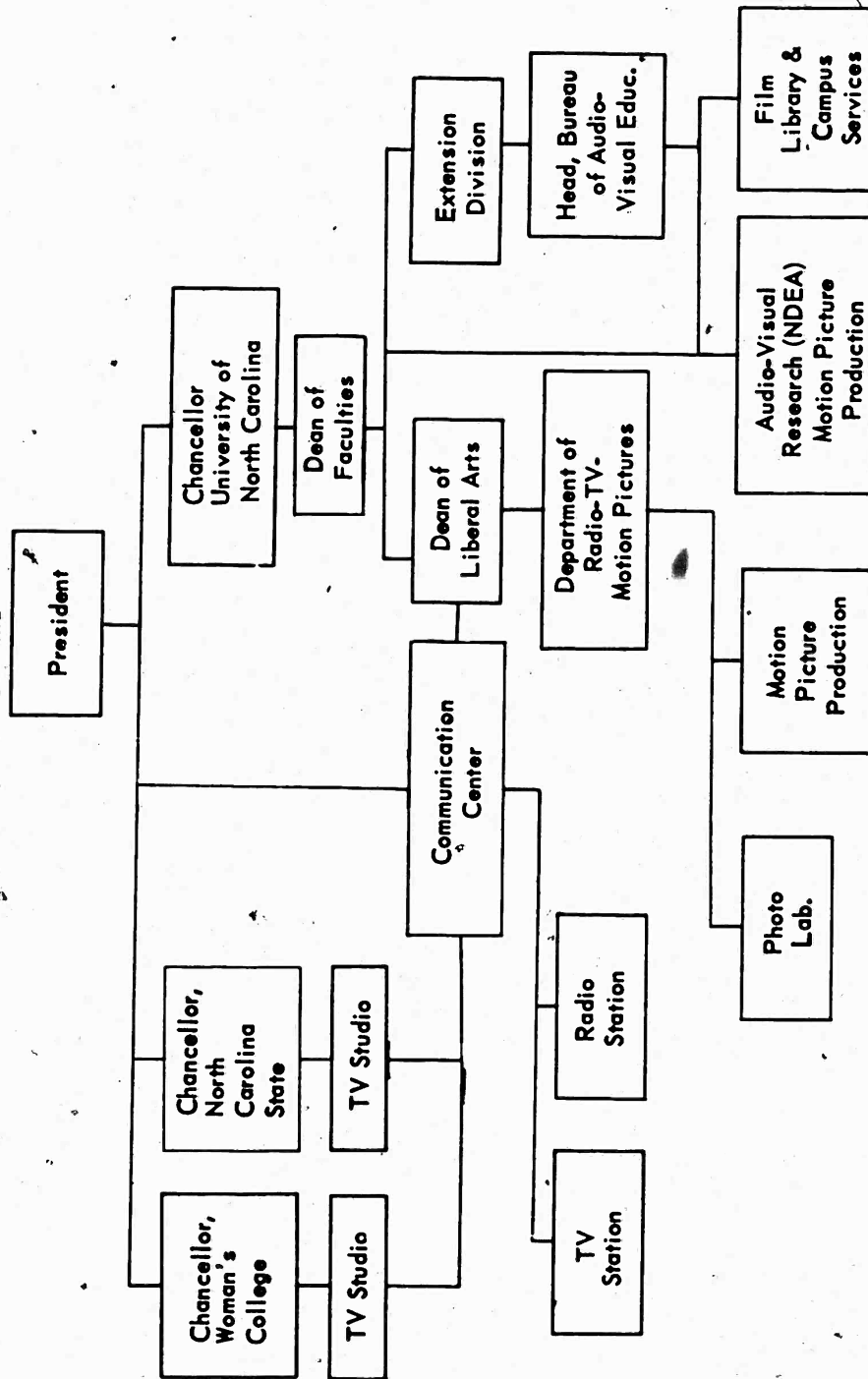
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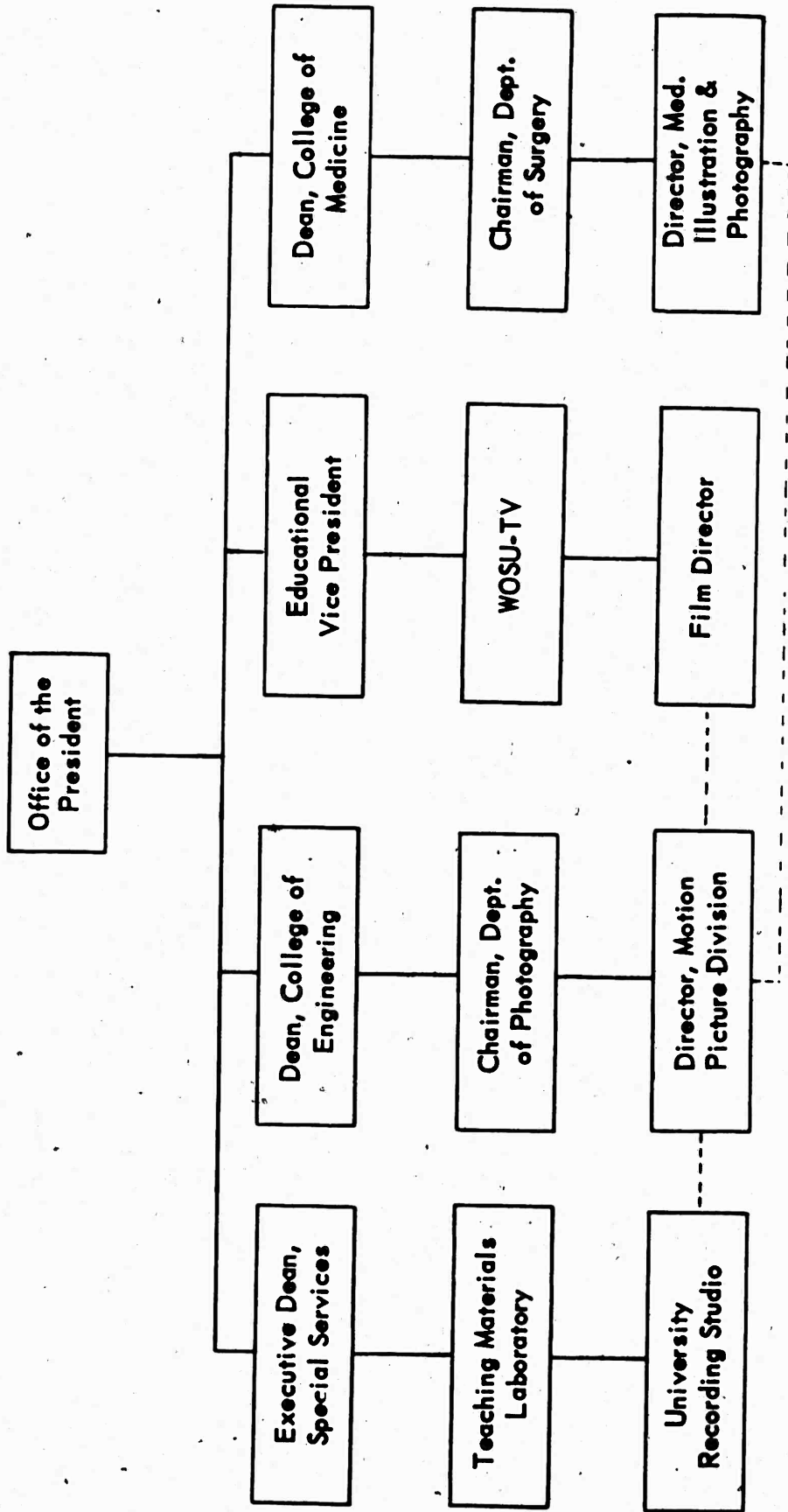
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Lincoln, Nebraska



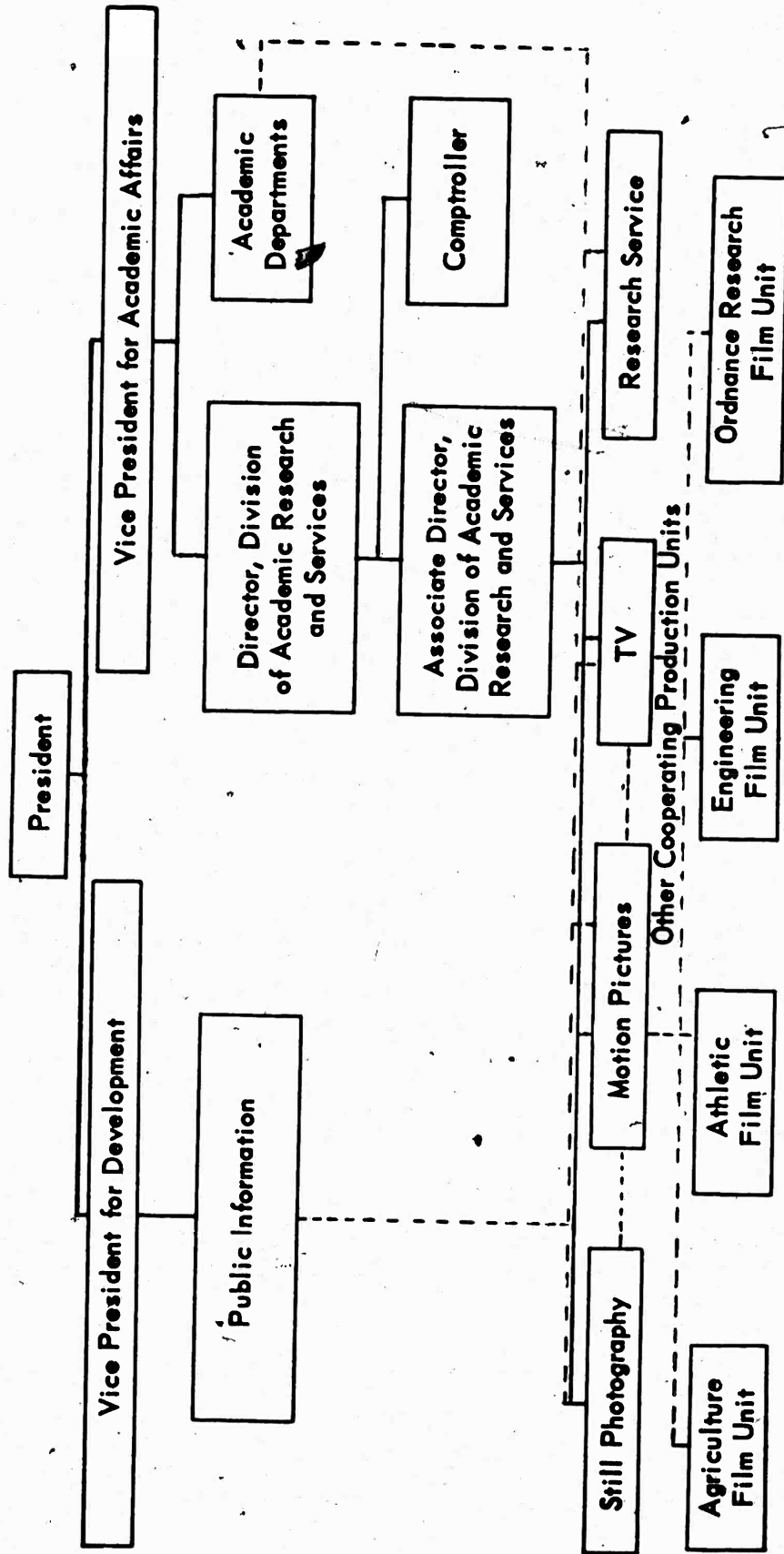
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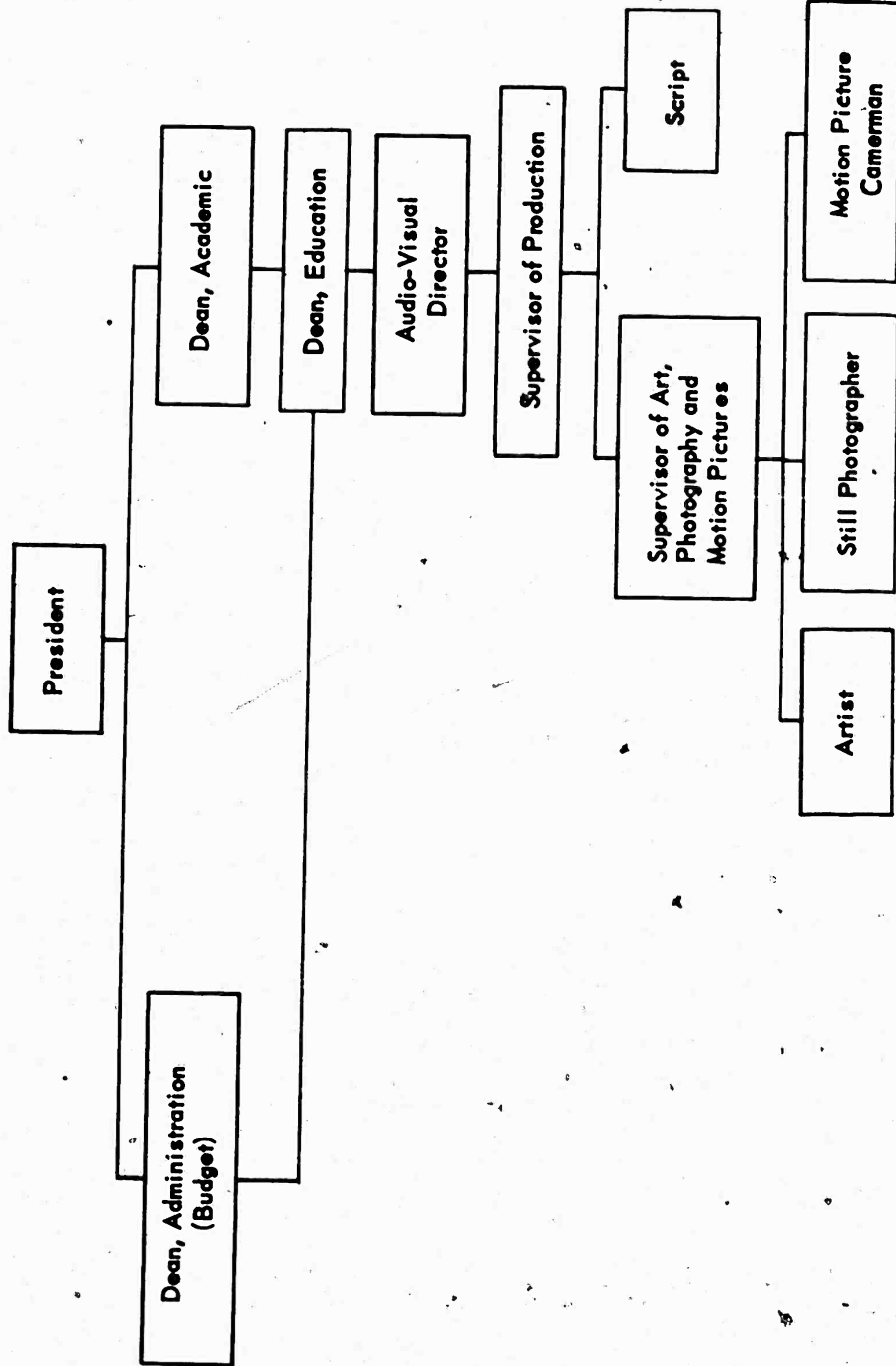
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Columbus, Ohio



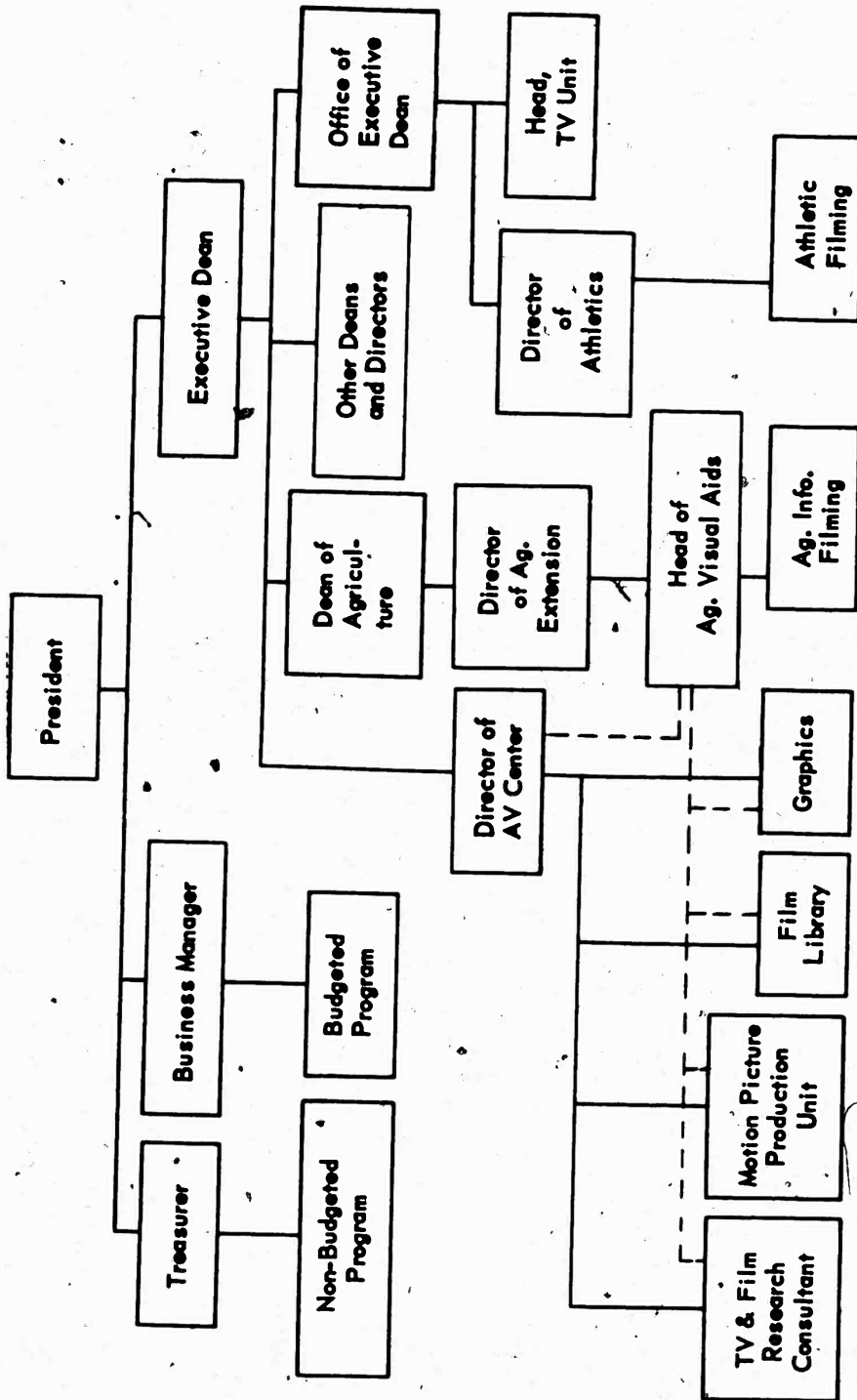
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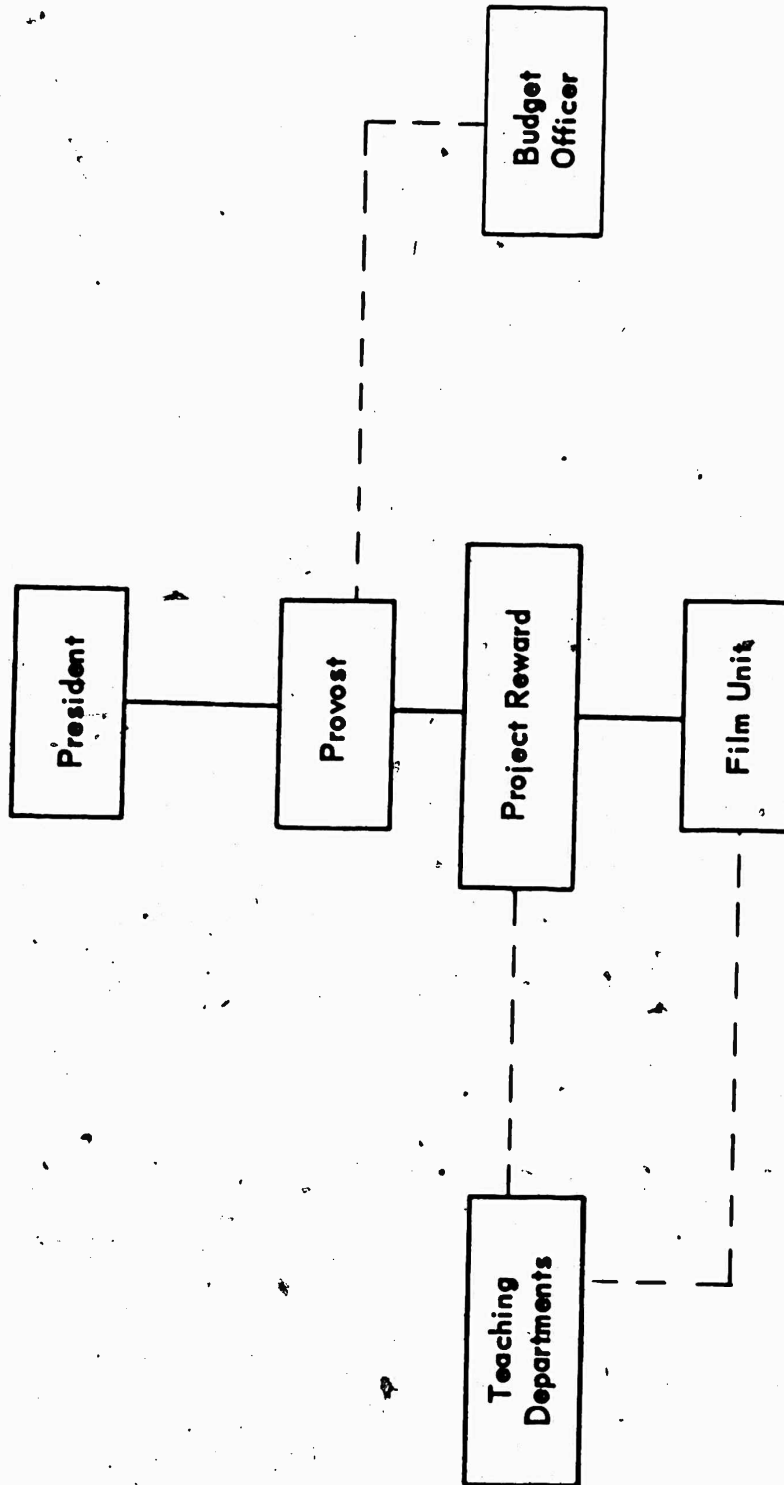
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Rio Piedras, Puerto Rico



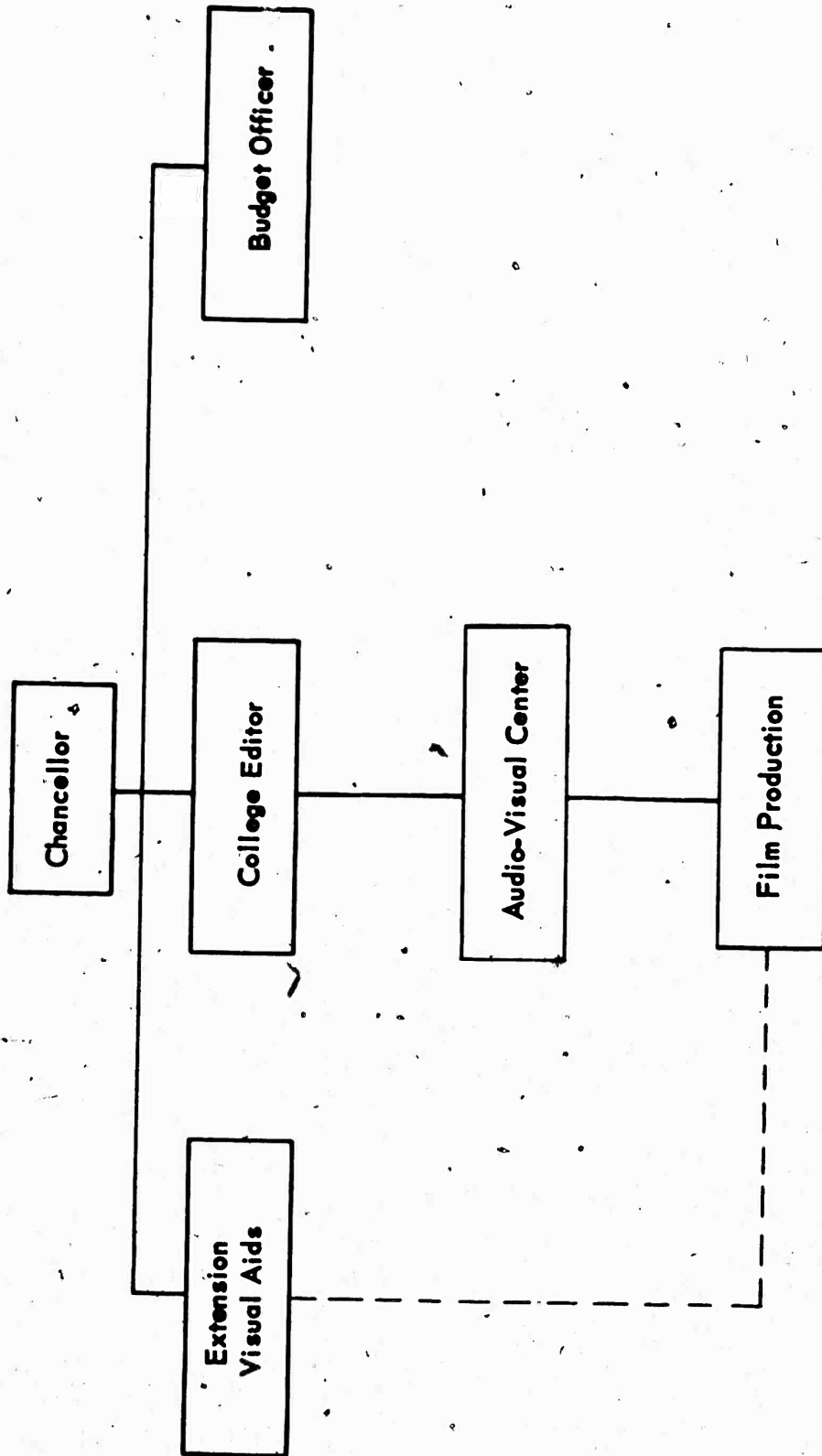
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Lafayette, Ind.



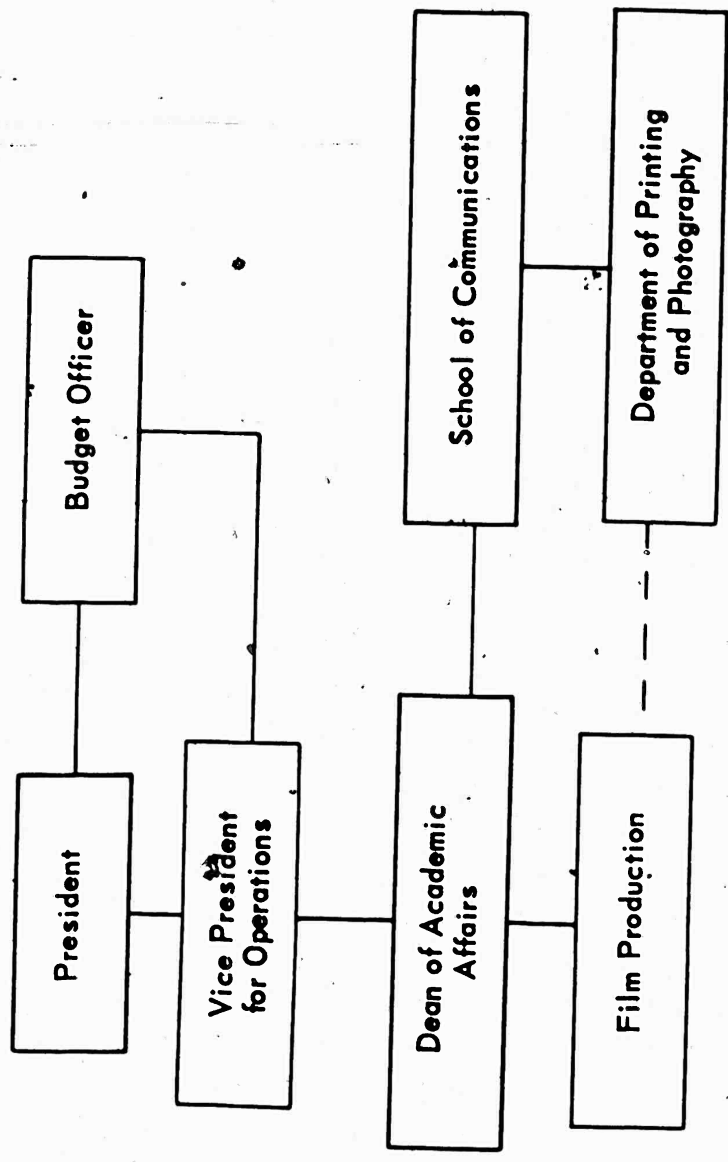
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Troy, New York**



South Dakota State College
Brookings, South Dakota

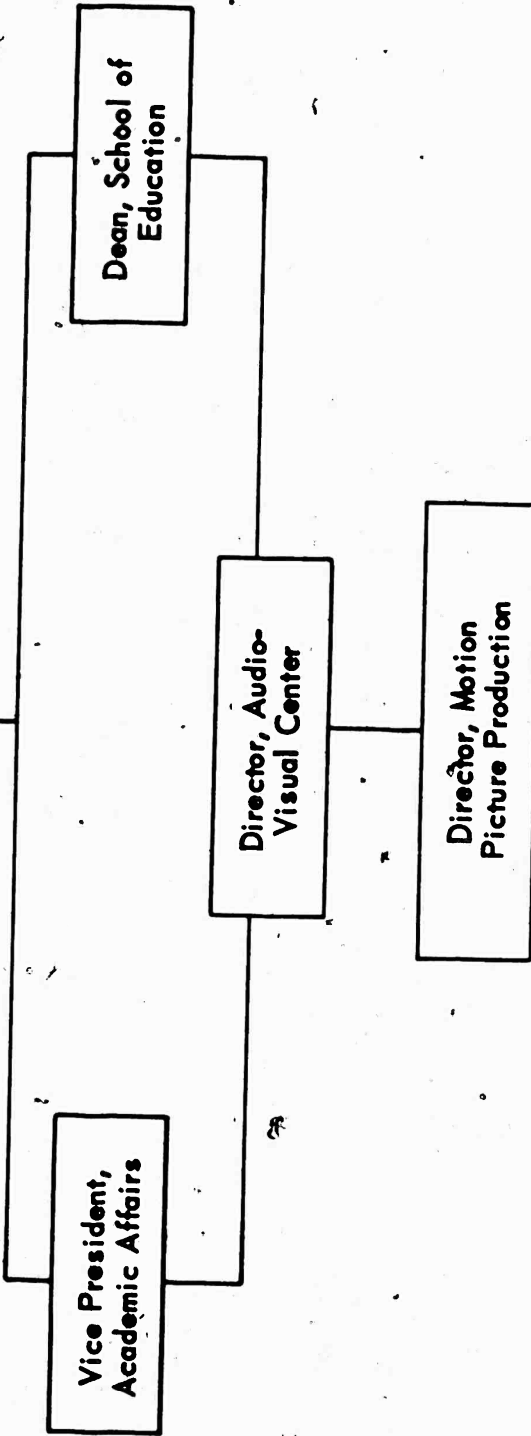


University of Southern
Illinois
Carbondale, Illinois

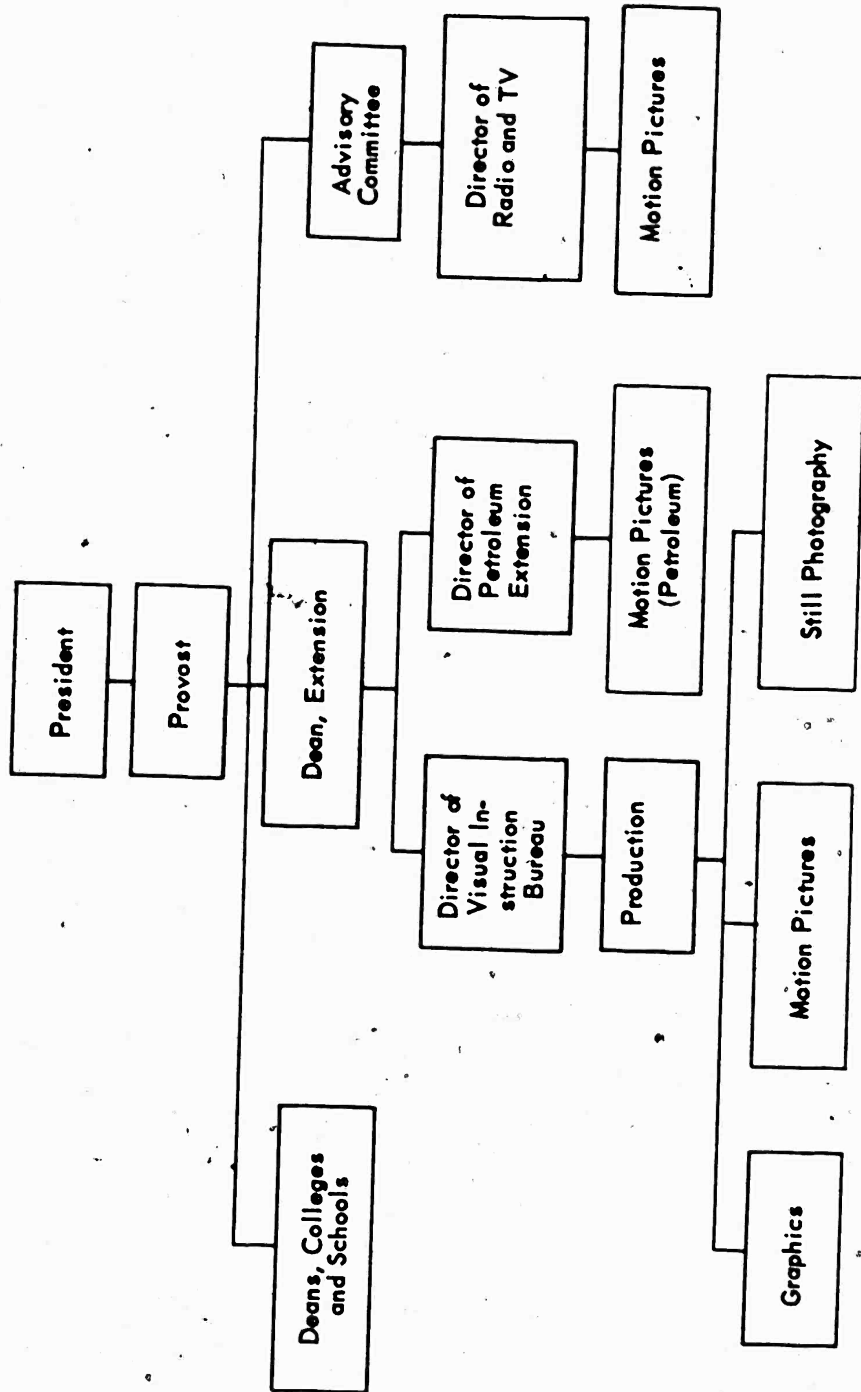


Syracuse University
Syracuse, New York

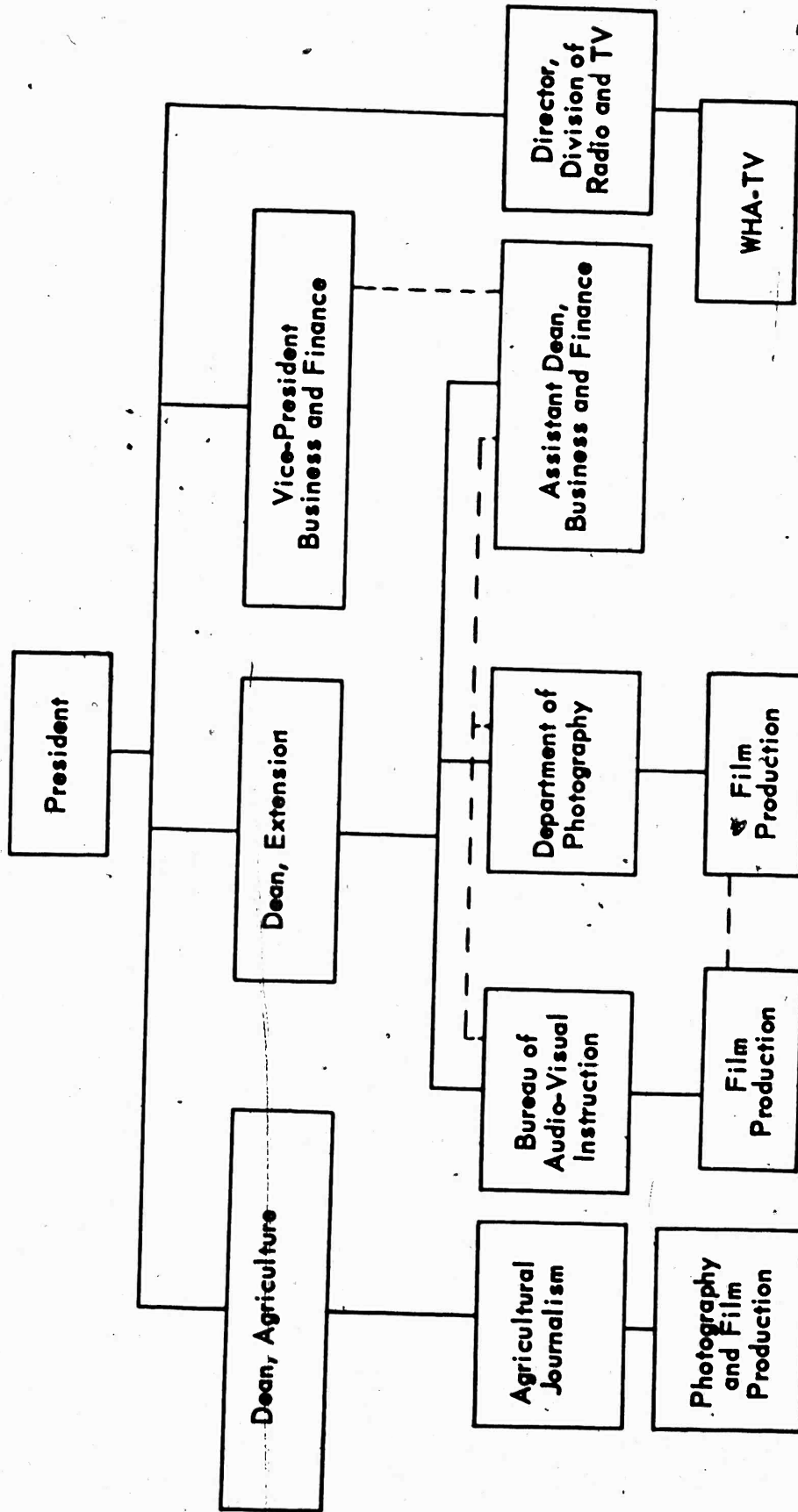
Chancellor

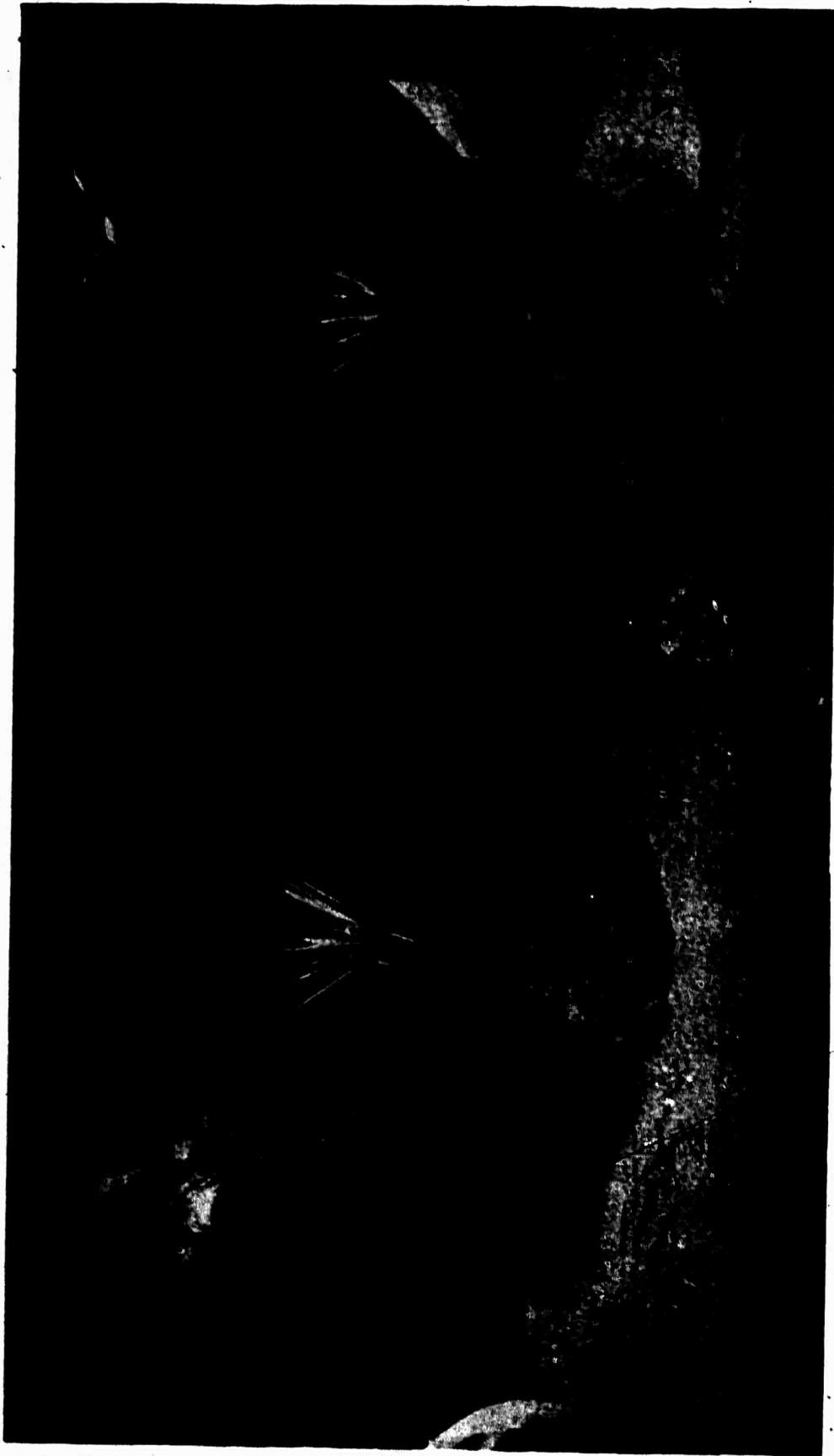


University of Texas
Austin, Texas



University of Wisconsin
Madison, Wisconsin





University of Oklahoma. Miniature model of an authentic Indian village.

NEED FOR RE-EXAMINATION OF ROLE OF FILM UNIT

When film unit heads were asked to arrange an interview with the president of the university for the investigator, it was not uncommon for them to say that while this was possible, the president knew very little about the operation of the unit. This was not found to be true.

The president might know little about the day to day details of operation, but in the great majority of cases he knew a great deal about the unit -- vastly more than the film unit head thought.

In roughly half the cases, the communication between the motion picture unit and university administration was excellent. Even where it was not, the administrator knew what he wanted the film operation to accomplish. In a few cases, he actually was more aware of over-all goals than was the unit head.

In general, the administrator wanted the motion picture unit, first, to produce materials to improve instruction on campus. Other goals included: to keep alumni informed about the growth, development, and needs of the university; to serve off-campus patrons of the university (in the case of the state-supported university); to be of assistance to those departments which need motion pictures to conduct and record research; and, in about one-fourth

of the institutions, to train young people to produce motion pictures.

These aspects of the university administrator's knowledge and support of motion picture production were positive and encouraging. On the negative side were some disturbing features, suggesting questions to which there are no easy answers. One of these is: if the primary purpose of the film unit is improvement of instruction on campus, why is there such general emphasis on recovery of budget?

There is considerable disparity between the opinions of university administrators and department heads about the amount of actual support given the film unit. There is at least some lack of understanding on the part of the university administrators that budget to provide staff, equipment, and space cannot be effective unless budget is also provided to allow staff to use their equipment and space to produce films. The greatest economy is achieved when the staff is kept productively busy.

It appeared that many of the units started as small, one or two-man units to serve a specific, limited purpose, and that they had grown into comparatively large and expensive operations with personnel of academic stature. Yet, during this growth, there has been no re-thinking of where and how the expanding film unit could best serve the university.

Film production staff, as a whole, are not just

technicians; rather they are interested in educational communications and qualified to render services in instructional planning. However, there was disturbingly little evidence of administrative recognition that motion picture production could be charged to over-all improvement of instruction with cost amortized over the total number of students benefited. Administration will purchase a \$6,000 piece of engineering equipment and feel that this is a normal expenditure, even though the equipment will be used only by a small group of graduate students. A motion picture costing the same amount is regarded as very expensive, even though it is shown to several thousand students. Few administrators have really thought through the financing of the motion picture unit in terms of improvement of instruction, with production costs considered in relation to the total number of students served.

Only one administrator definitely made a point of the fact that the motion picture unit was one of the resources which he expected to enable him to handle his rapidly increasing enrollment with a proportionate decrease in financing. He was budgeting both his motion picture and television program in this light. Two or three others were making some tentative moves in this same direction. Considering the responses to the questions about goals, it is somewhat surprising that more of the administrators are not contemplating re-direction of the film program.

The investigator feels that this is basically a matter of lack of attention, for re-examination of the function of motion picture units, in terms of growth that has occurred and the services that units are capable of providing, would almost certainly suggest changes in the administrative structure to make better use of their assets.

Since the survey was conducted, Dr. John A. Hannah, President of Michigan State University, has proposed to his faculty a much fuller use of all resources, including the film unit. The following excerpt from his speech of March 27, 1961, is pertinent to the question of re-examining the role of the film unit:

We believe that research into the learning process and recent technological developments offer tremendous opportunities as yet unrealized on this campus for improving the undergraduate teaching-learning process.

There is ample evidence to the point that many of these new teaching resources can be a valuable adjunct to classroom teaching methods and can expedite the learning process. We would be doing an injustice to ourselves and our students if we did not avail ourselves of every legitimate assistance in performing the enormous educational task before us.

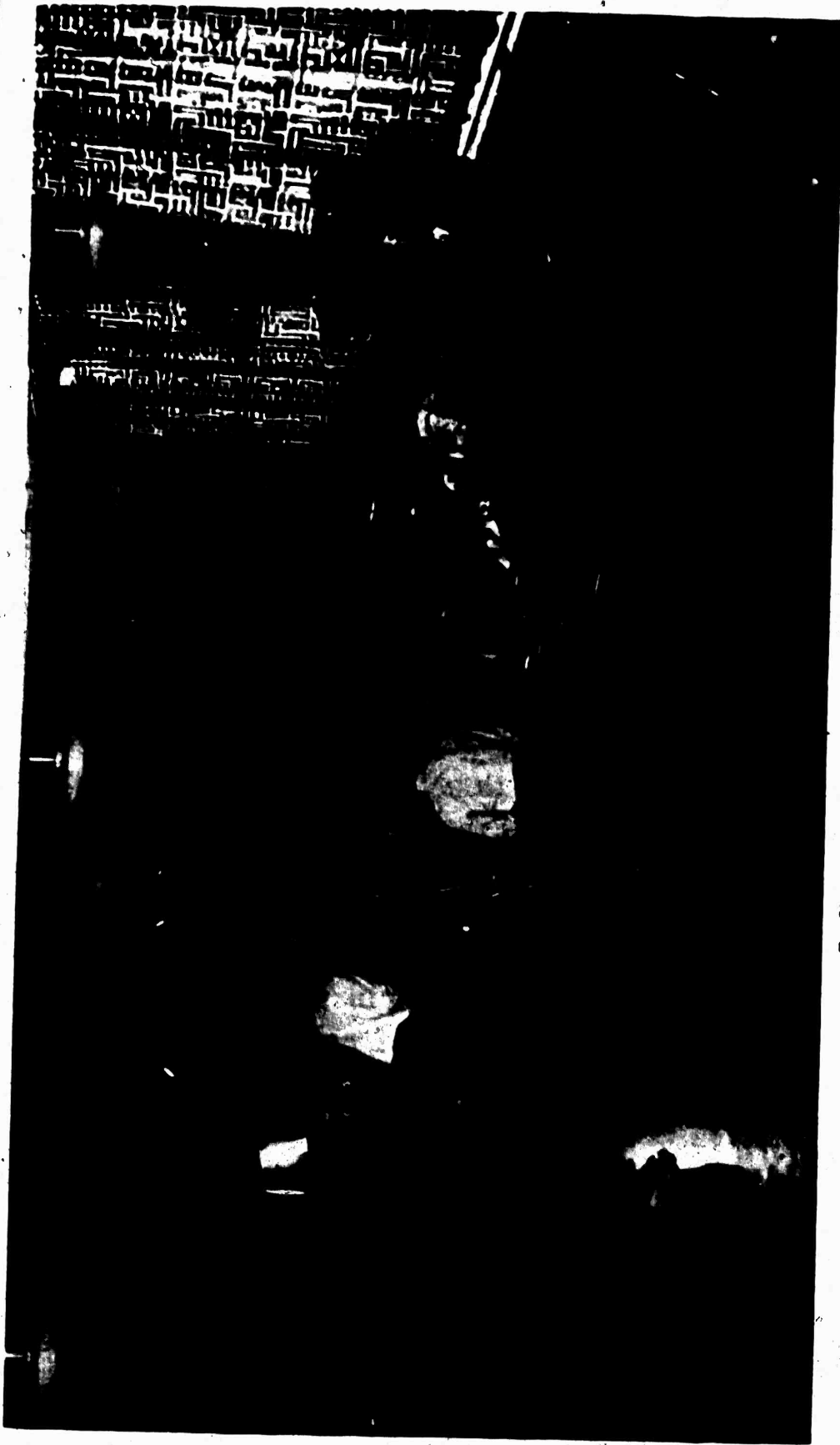
We believe that the various units which may provide faculty and students with teaching and learning aids and can assist in developing new materials and the means to use them should be organized in a way to insure their maximum utility.

.....

A specific proposal is to establish what, for purpose of convenience, we will call a Learning Resources Center. It would include facilities to encourage greater uses of closed-circuit television, films, programmed studies, so-called teaching machines, and other materials and facilities not yet envisaged.

Such a center would not be a mere regrouping of forces and facilities. It could -- and should -- become a dynamic center of experiment and development leading to accomplishments beyond our present power to envisage. Programming for a teaching machine or presentation of a course on television tapes is not a casual undertaking. Such projects entail a great deal of intensive work, minute reexamination and rearrangement of course content, and intimate familiarity with both the art of teaching and the process of learning. They require substantial investments of effort and money, but experience to date shows that they pay substantial dividends in many ways, including the freeing of faculty from repetitive teaching and drill in many areas and a speeding up of the learning process.

Such a Learning Resources Center should not be planned for this campus alone. We believe that an organization of this nature could provide national and international leadership in the development of instructional materials and aids, could stimulate research into the learning process, and could encourage interchanges that would bring to this University resources of the highest caliber from all parts of the world. There is reason to believe that we could attract substantial financial support from foundations and other sources for such an enterprise, seriously undertaken.



Indiana University, Production.

CHAPTER 2

ADMINISTRATION

Part II: Organization and Operation of the Film Unit

After the role of the film unit had been discussed with administrative officials, an attempt was made to get an over-all picture of the internal organization and operation of the film unit. It was found that there is as much variation in internal administration as there is in relationships of the units to their university administration.

At each institution, the administration of the unit was discussed in detail with the head of the film unit, and as much information as possible was elicited from him. With certain of the smaller and newer units, some of the information sought simply was not available; in fact, even with some of the larger and older units, the lack of information about certain areas of the operation was very great. This accounts for the fact that in many places in this report the total number of responses to an item is not equal to the number of units surveyed. In some cases, the head of the unit had not had experience with the problem being discussed, and so had no response or reaction to it. In some cases, no policy had been established, and so no answer could be given. In still others, the unit head did not want to commit himself on a specific question.

On all campuses except one it was possible to interview the dean or other administrative officer to whom the head of the film unit reported. From these additional interviews, it was possible to gather considerable supplementary information regarding budget control, financing, staffing, and internal structure. This information is not reported separately, but is incorporated into this chapter on administration.

Two universities with film production facilities were not in production and no figures are included for them in this section. Because resumption of production in the near future was contemplated, information from the chancellor's interview was included in Chapter 1, "Administration, Part I: University Administration and the Film Unit." This accounts for the fact that 42 interviews are reported in Chapter 1 while data from 40 institutions are presented in this chapter and in Chapter 3 through Chapter 6.

The 40 universities are:

Arizona State University, Tempe, Arizona
University of Arizona, Tucson, Arizona
Bob Jones University, Greenville, South Carolina
University of Buffalo, Buffalo, New York
Brigham Young University, Provo, Utah
University of California, Berkeley, California
University of California, Los Angeles, California
University of Colorado, Boulder, Colorado
University of Denver, Denver, Colorado
Florida State University, Tallahassee, Florida
University of Houston, Houston, Texas
Indiana University, Bloomington, Indiana
Iowa State University, Ames, Iowa
University of Iowa, Iowa City, Iowa
University of Kansas, Lawrence, Kansas
University of Kentucky, Lexington, Kentucky
University of Miami, Coral Gables, Florida
Michigan State University, East Lansing, Michigan
University of Michigan, Ann Arbor, Michigan
University of Minnesota, Minneapolis, Minnesota
University of Mississippi, Oxford, Mississippi
University of Missouri, Columbia, Missouri
Montana State College, Bozeman, Montana
University of Nebraska, Lincoln, Nebraska
University of North Carolina, Chapel Hill, North Carolina
Ohio State University, Columbus, Ohio
University of Oklahoma, Norman, Oklahoma
Pennsylvania State University, University Park, Pennsylvania
University of Puerto Rico, Rio Piedras, Puerto Rico
Purdue University, Lafayette, Indiana
Rensselaer Polytechnic Institute, Troy, New York
South Dakota State College, Brookings, South Dakota
University of Southern California, Los Angeles, California
University of Southern Illinois, Carbondale, Illinois
Syracuse University, Syracuse, New York
University of Texas, Austin, Texas
University of Utah, Salt Lake City, Utah
Wayne State University, Detroit, Michigan
University of Wisconsin, Madison, Wisconsin
Yale University, New Haven, Connecticut

These do not include the many specialized units which were found to exist in such fields as medicine, business administration, physical science, research, petroleum engineering, agriculture, dentistry, athletics, public relations, geology, oceanography, human development, psychiatry, and psychology. Such specialized units were not included in the survey, because their major function was intra-departmental service rather than all-university service, even though they are making vital contributions to research and instruction.

LOCATION OF THE UNIT

The 40 units surveyed in detail were located in various departments of the university. Six were separate and independent departments; 34 were part of a larger department, with 13 different departments named.

<u>Film Unit Located in</u>	<u>Number of Cases</u>
Audio-Visual Department	15
Extension Division	6
Radio-TV-Film	6
Separate Department	6
Photographic	3
Information or Public Relations	2
Agriculture	1
Academic Research and Services	1

When asked if the film production service started in response to a need in a particular department,

28 replied that this was the case. Thirteen felt that this had not been the case, that the unit was located in its present department for reasons other than a need growing out of that department; i.e., because of administrative decision, foresight on the part of some individual in the department, or because it was a logical location for motion picture production. (In some cases "logical" turned out to mean that this department could find the budget for film production.)

Effectiveness of the Location

Because of the heterogeneity of locations, the question arose whether one location might be more effective than another, in terms of ease of operation and services rendered.

Unit administrators were asked, "If you were starting again, would you choose the present location as the best spot within the university administrative organization for fulfilling the objectives of the unit?" Interestingly enough, 33 said they would. Only four indicated that they would not. One replied that he would leave production in its present location, but would move the teaching function to a different department.

The four who felt some other location would be better for the unit were asked where they would prefer to locate. Two felt that they would like to move to a communications department, one would like to be directly under general university adminis-

tration, and one would like to move into an academic department in order to increase the academic status of the department.

Unit administrators were further asked if they had ever considered trying to move the film unit. Only six replied that they had, indicating an interest in such departments as speech and television, speech and drama, audio-visual, communications, journalism, and photography as possible new locations.

ADMINISTRATIVE RELATIONSHIPS WITHIN THE UNIT

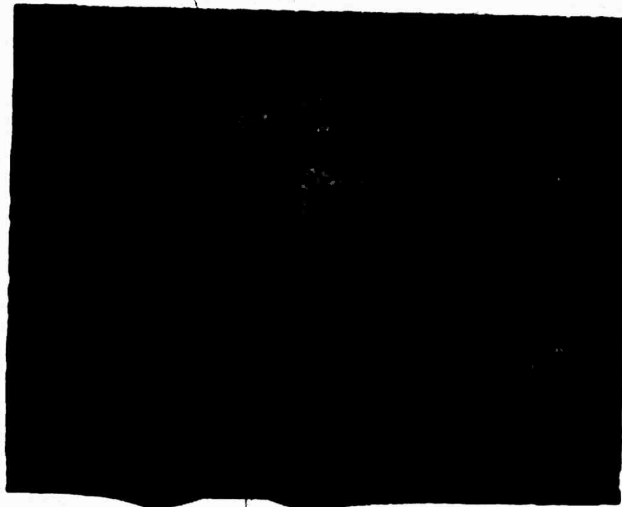
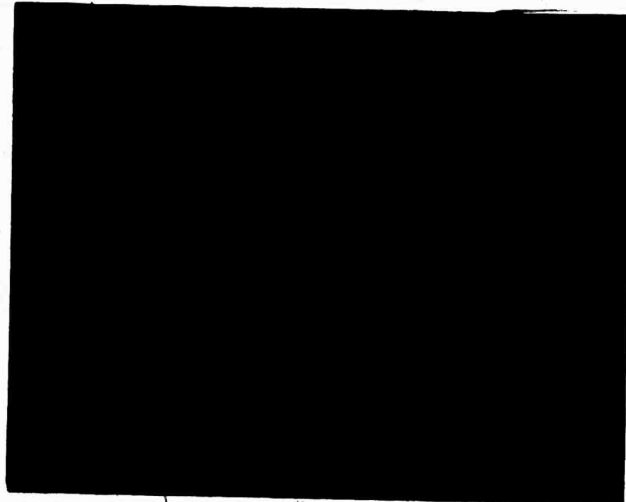
While many of the units were too small to have a formally-structured internal administration, and others had an extremely flexible and informal administrative organization, a sizeable number had lines of authority and responsibility which were formal enough to allow diagramming.

It should be remembered that each of the administrative structures reflected in the diagrams has been developed because of the particular conditions on a given campus. Before any one of these diagrams is considered as a model for either the establishment or expansion of a film unit by another university, it should first be determined whether or not both universities have similar objectives, problems, needs, and functions.

In the diagrams selected for publication, solid lines represent relationships with direct adminis-

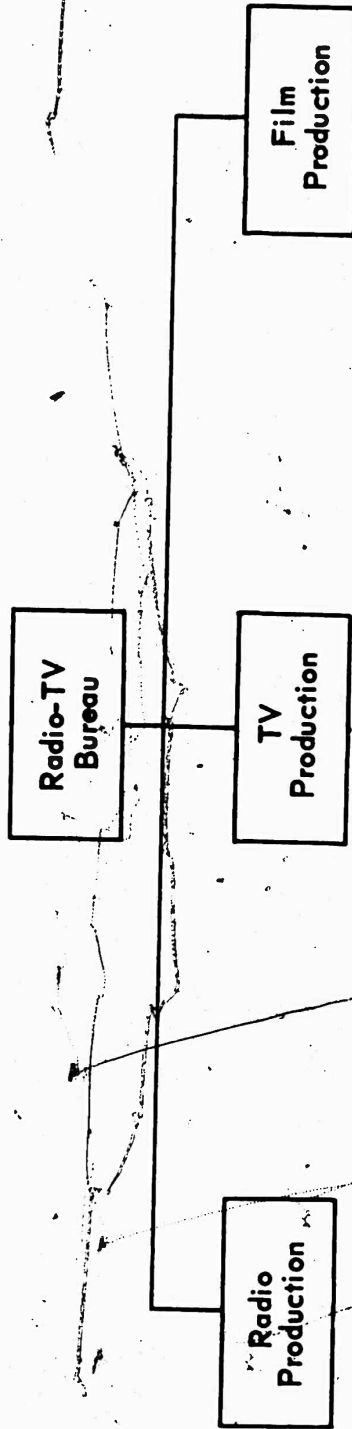
trative authority and responsibility; dotted lines, relationships without direct authority.

See Following Page

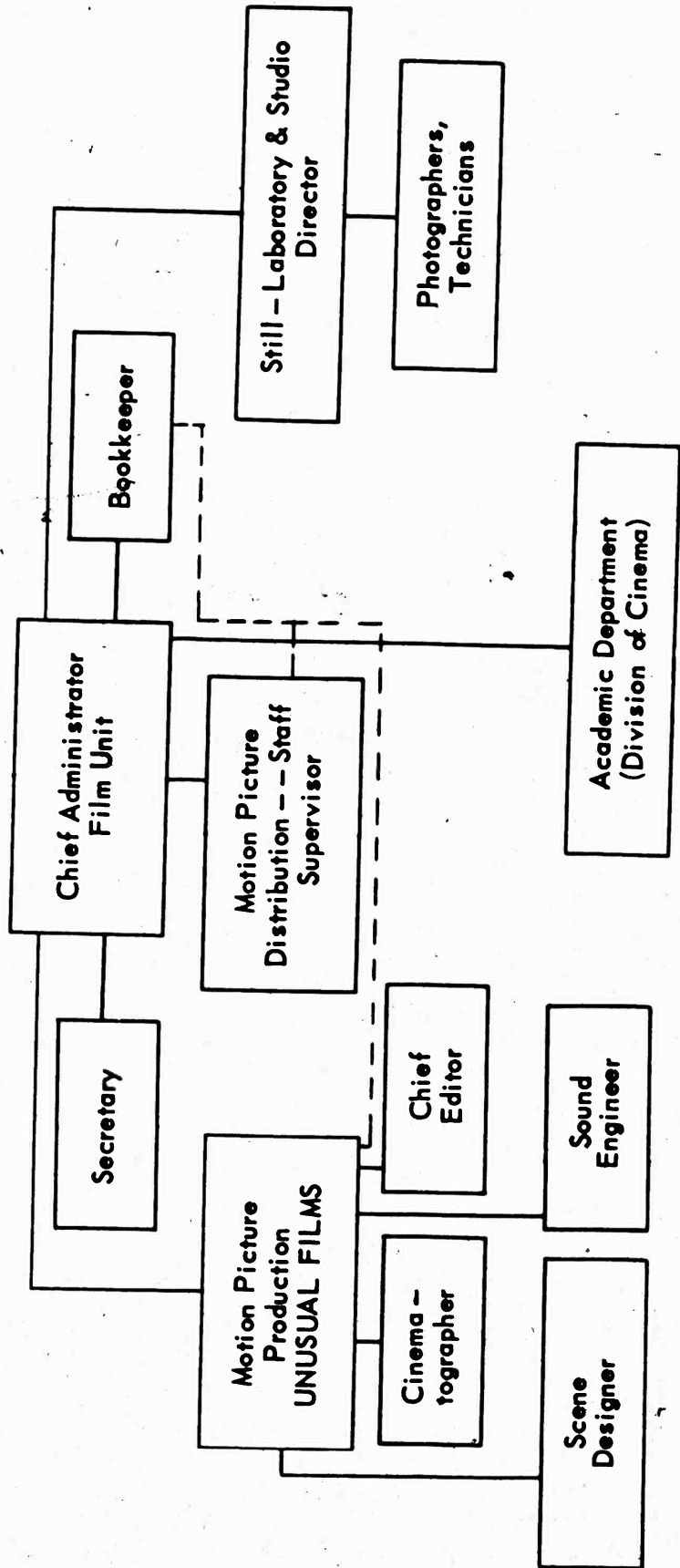


Florida State University. Rotary display board for television studio use. Unit may be used as a free standing display board or in conjunction with a regular studio flat.

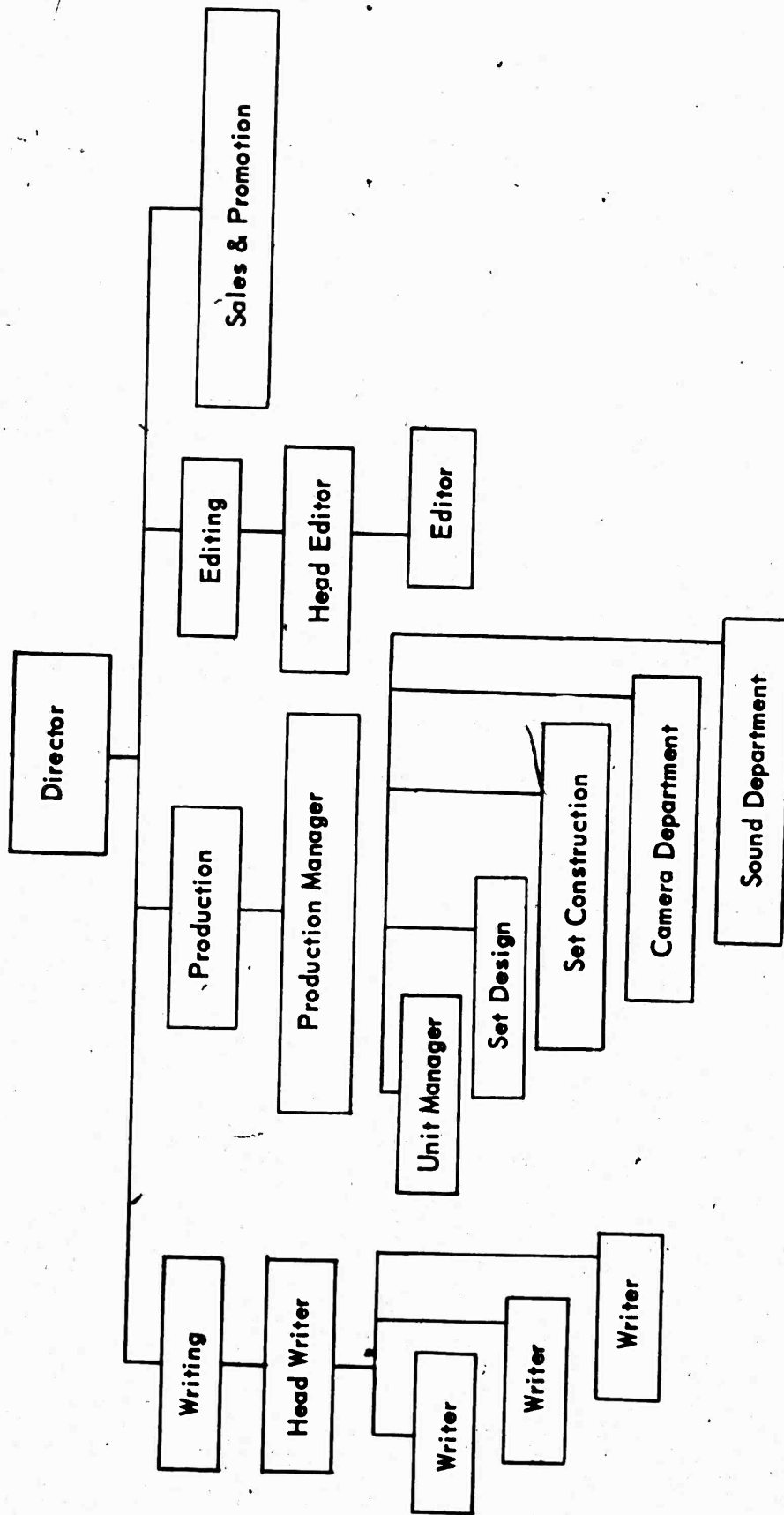
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Tuscon, Arizona**



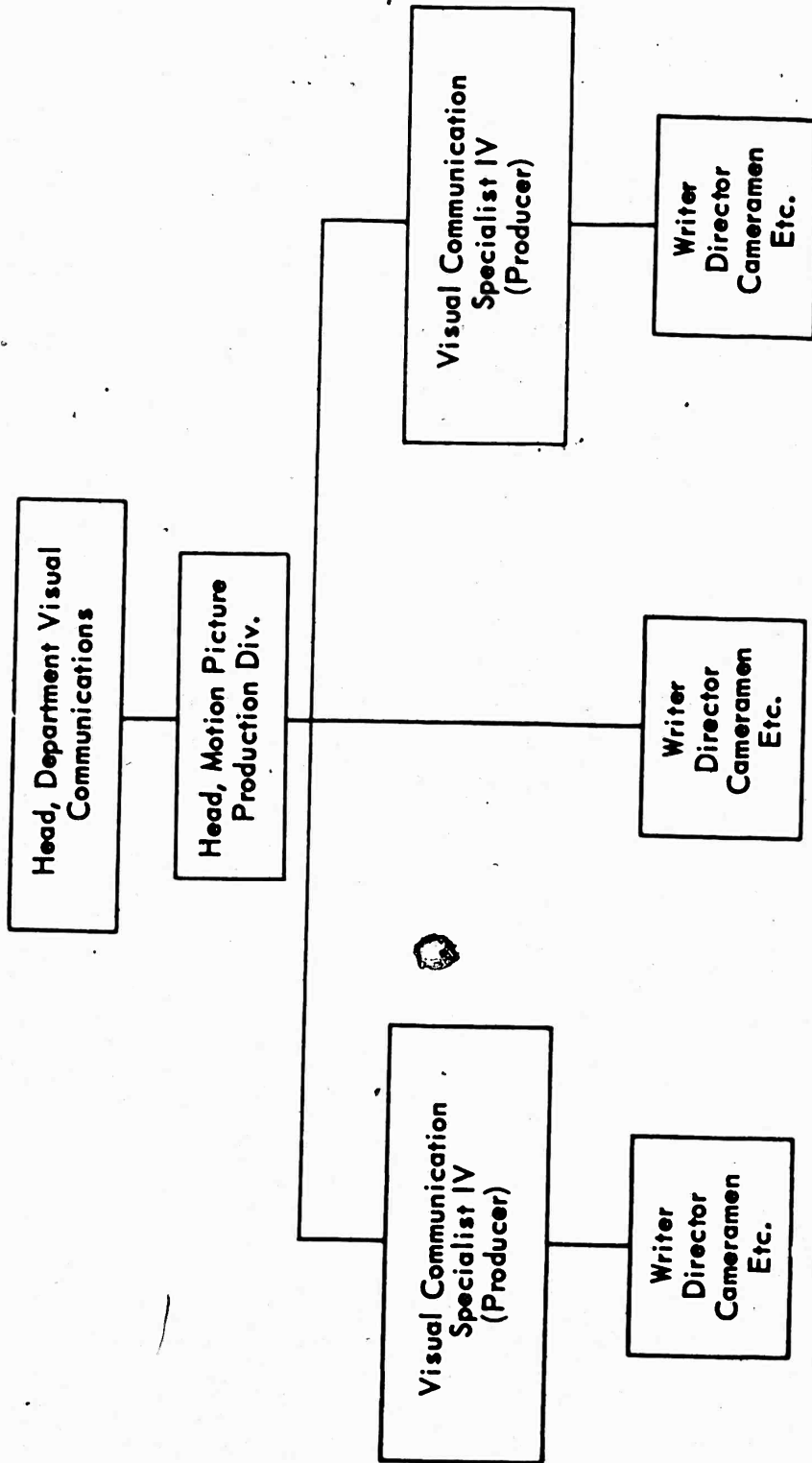
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Greenville, South Carolina



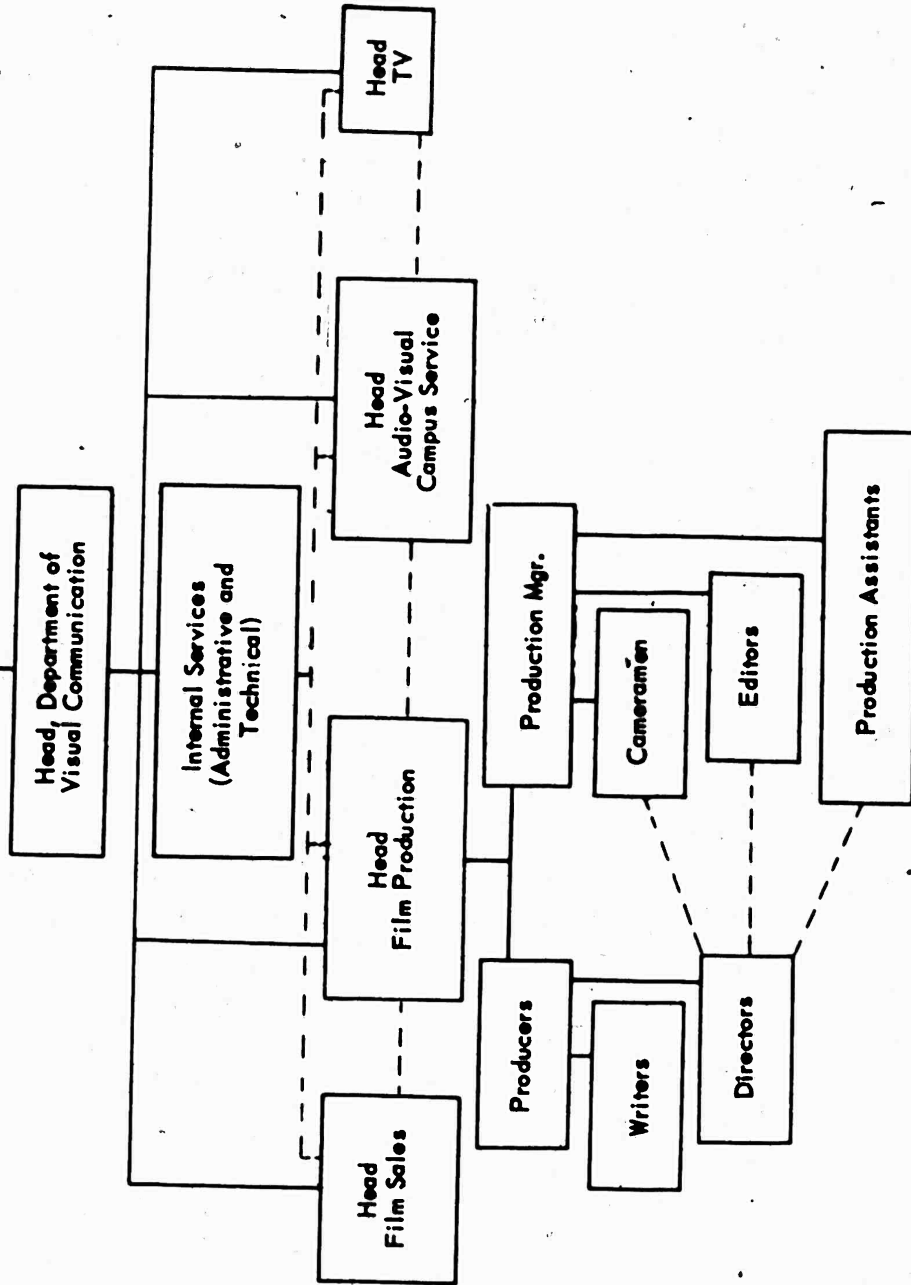
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Provo, Utah



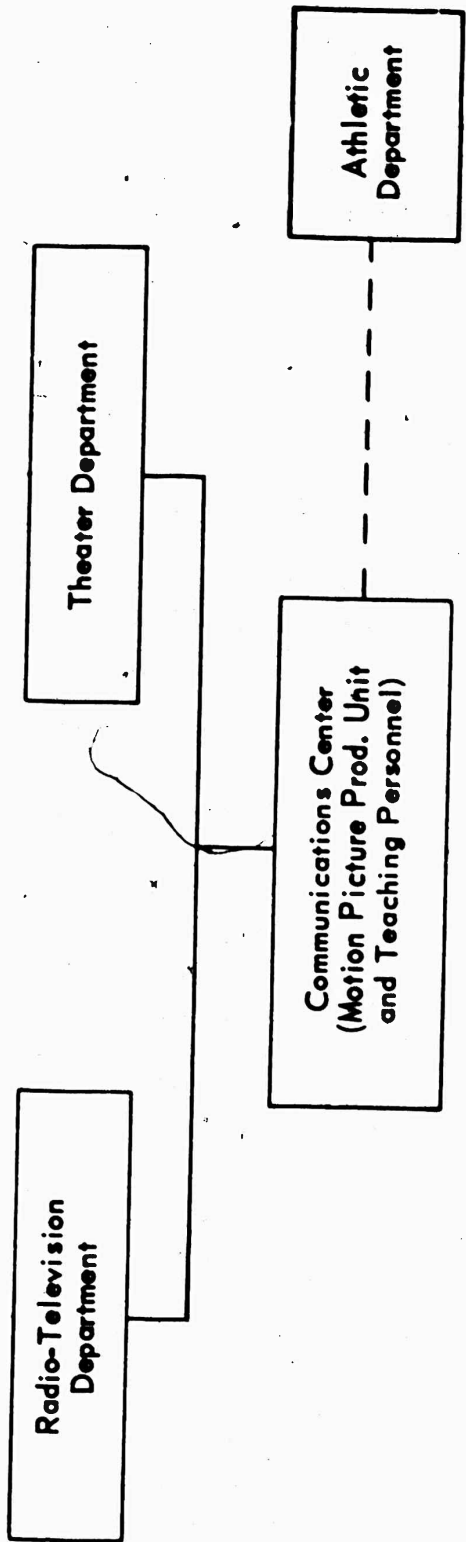
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Berkeley, California



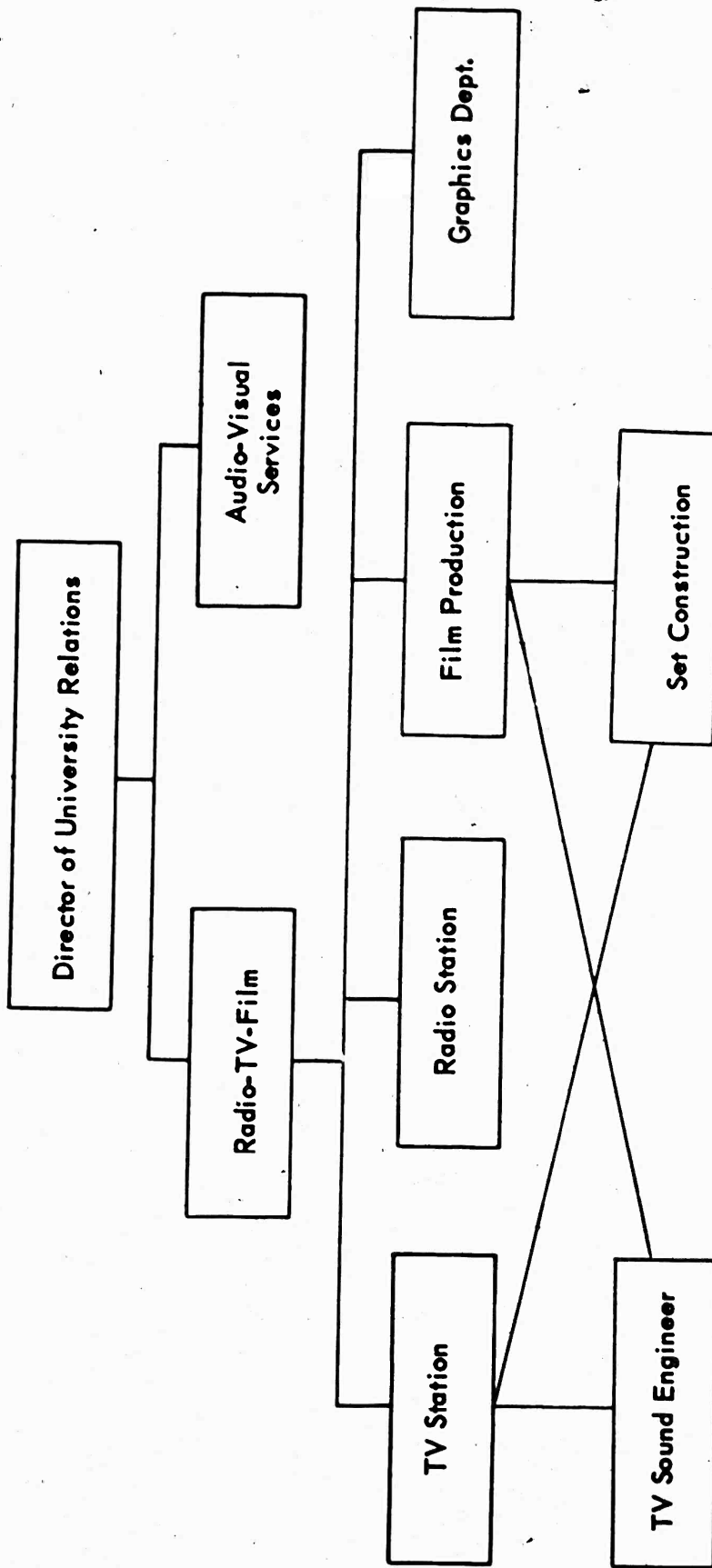
University of California
Los Angeles, California



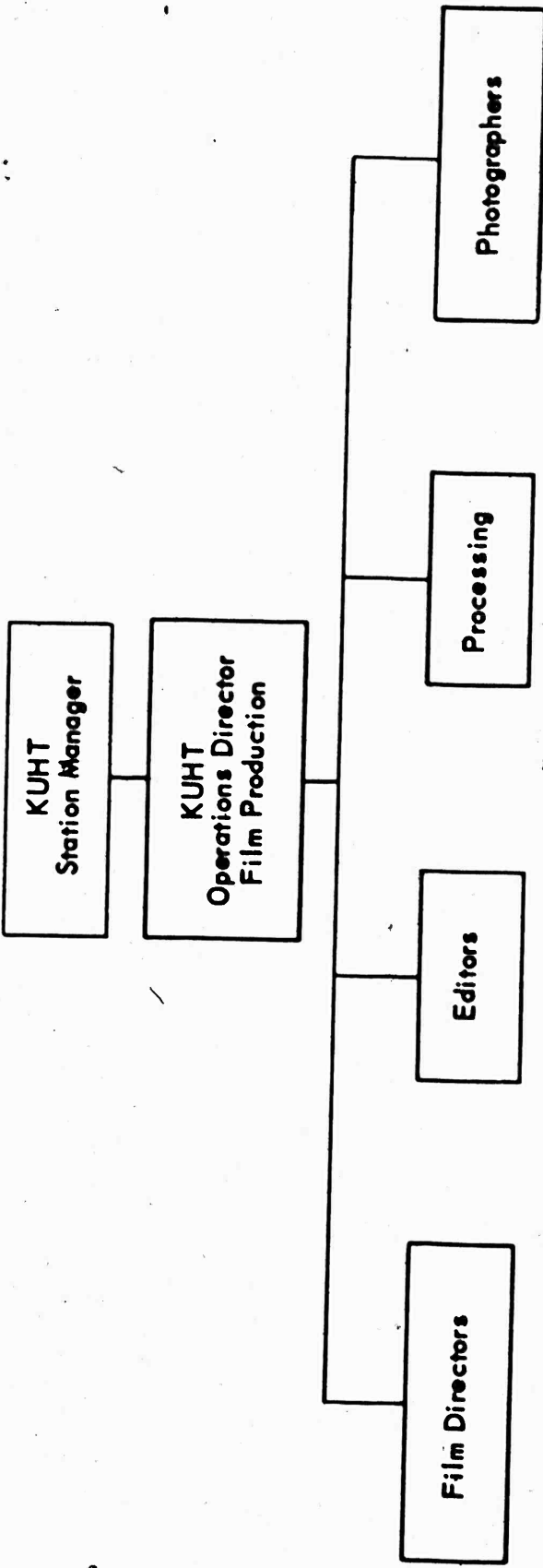
University of Denver
Denver, Colorado



Florida State University
Tallahassee, Florida

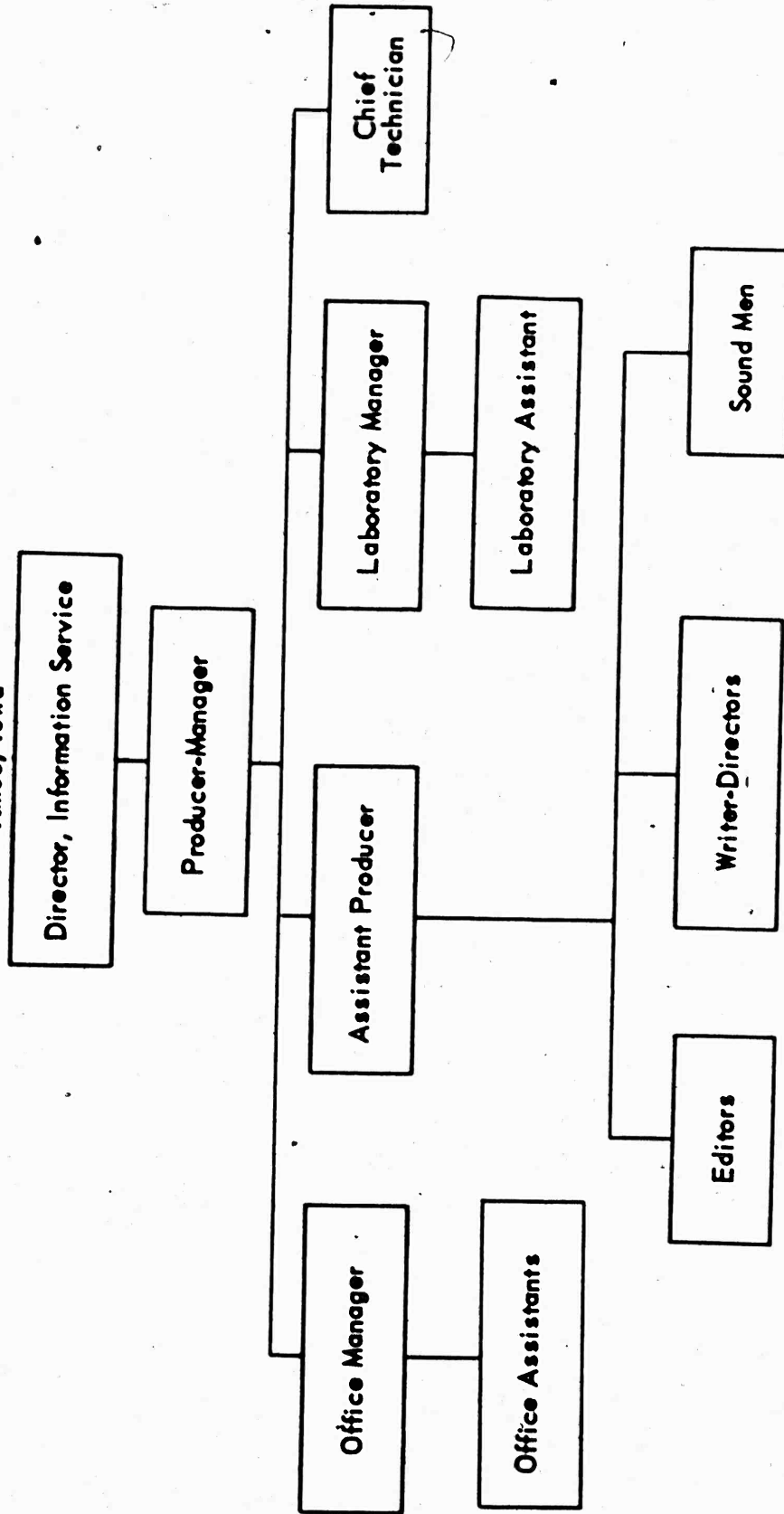


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Houston, Texas

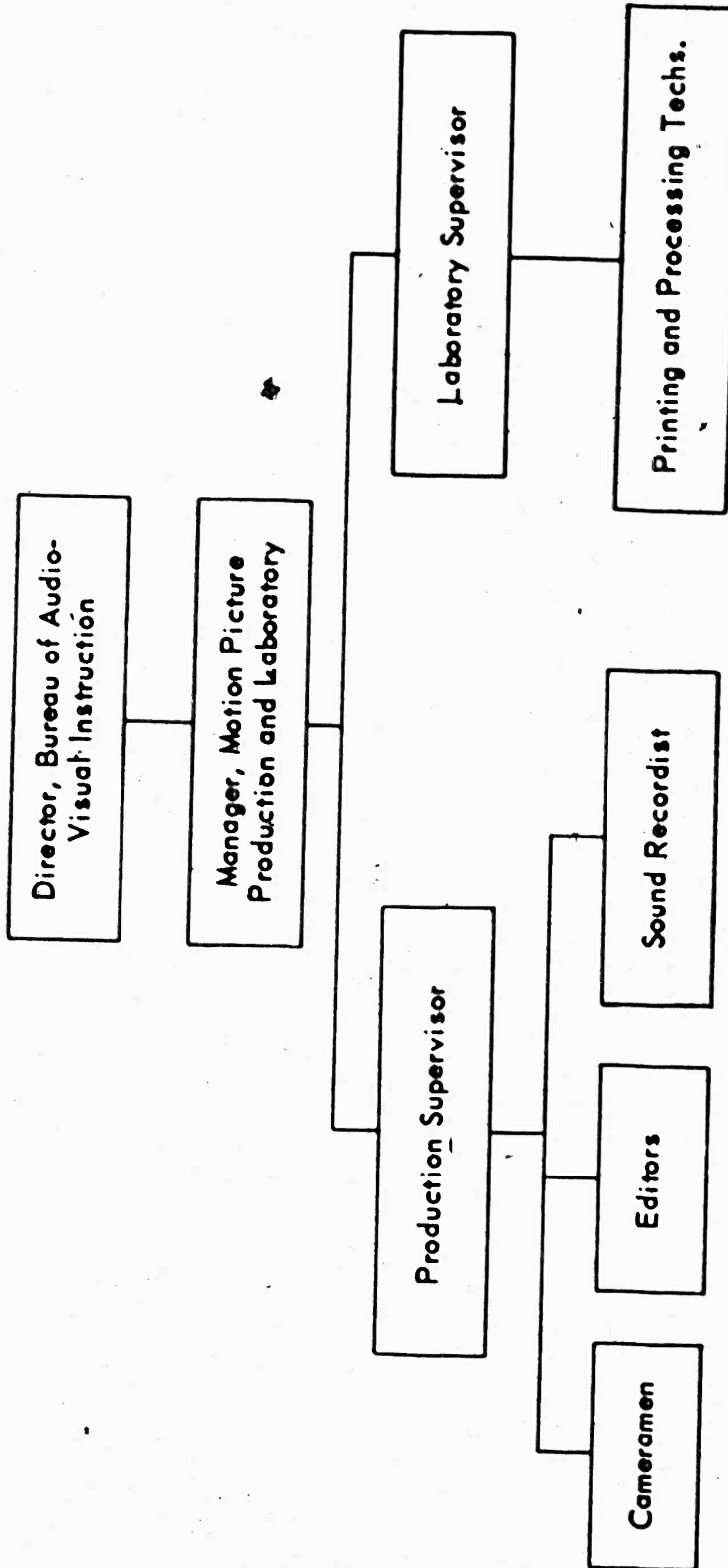


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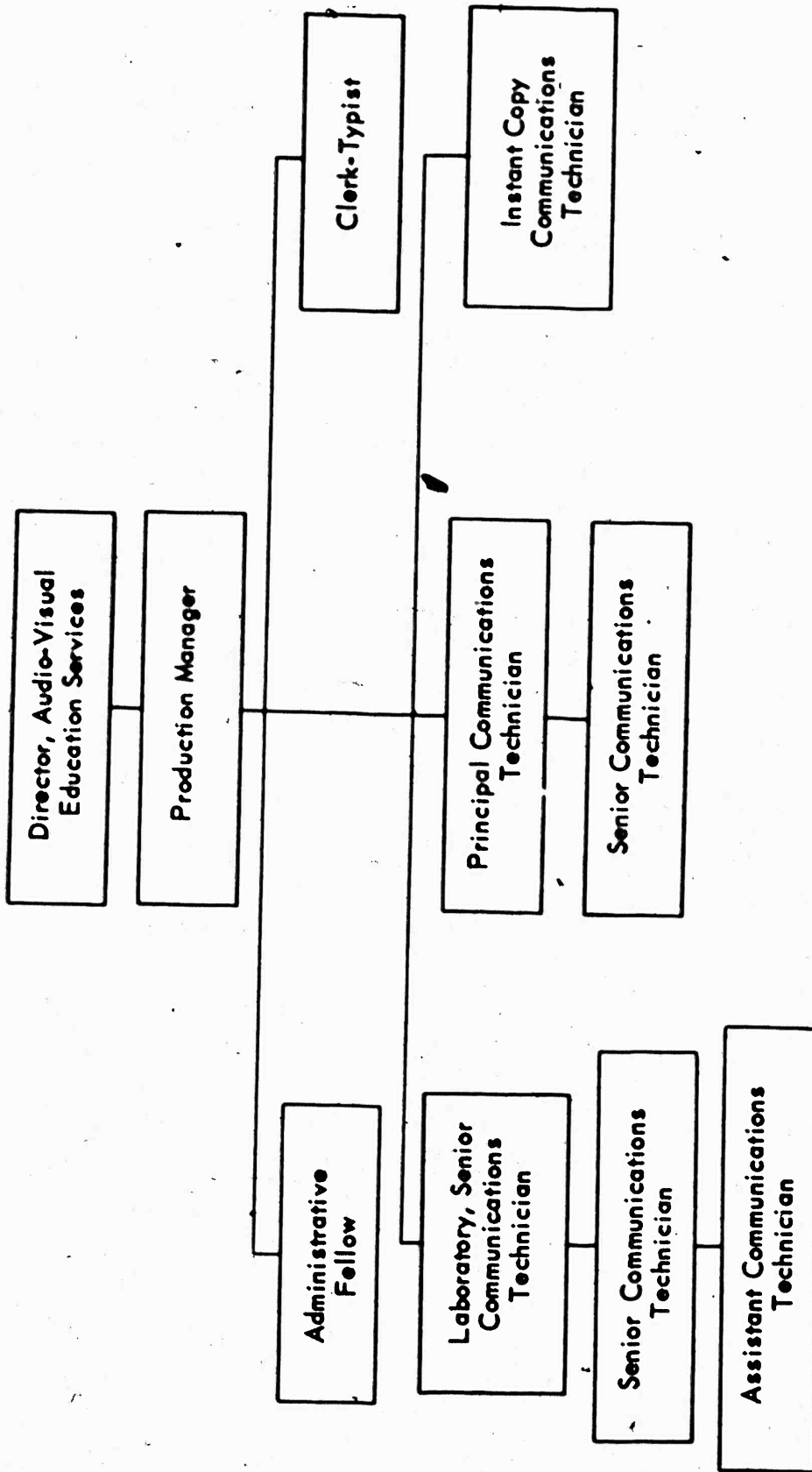
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Science and Technology
Ames, Iowa



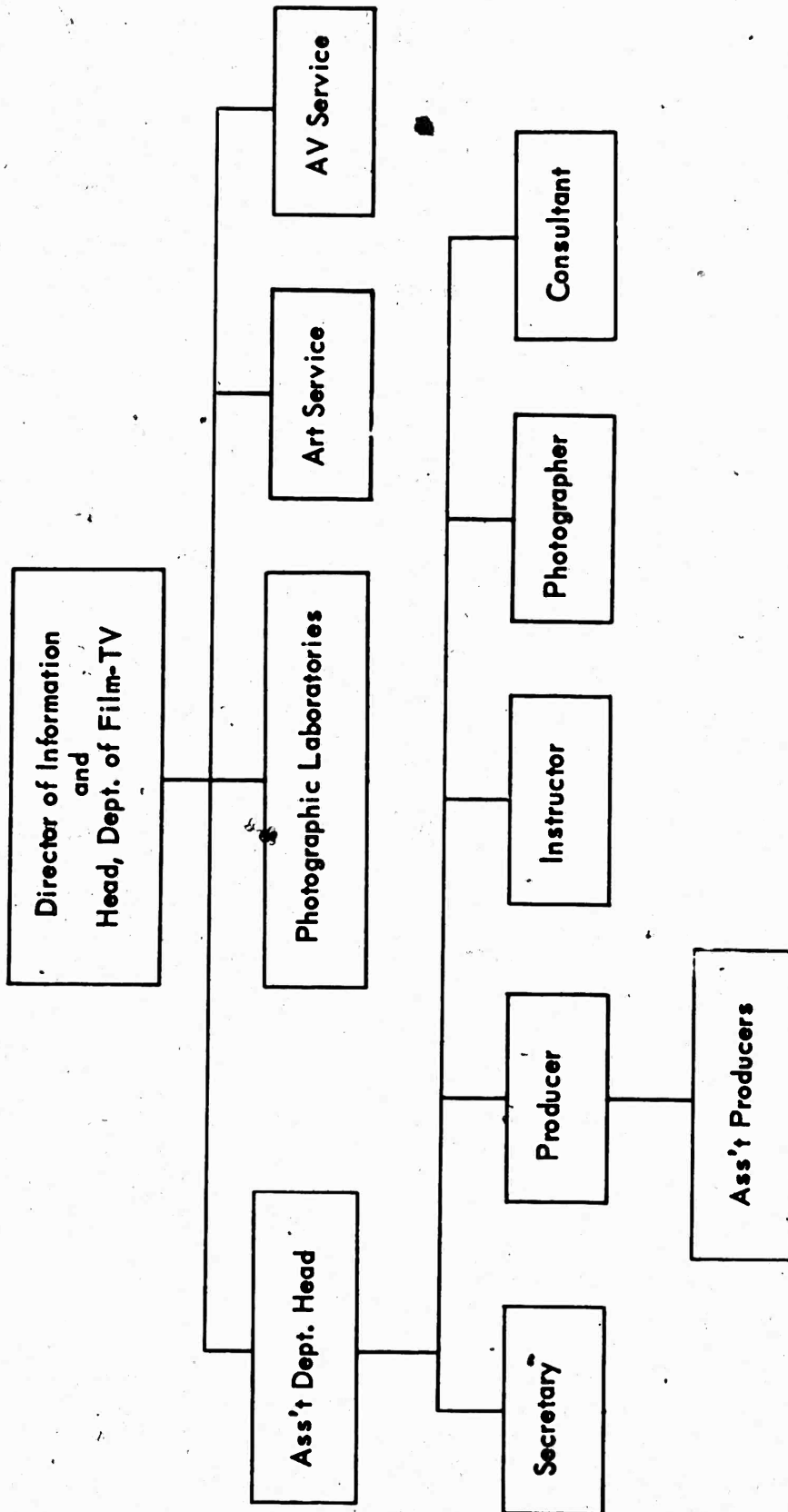
State University of Iowa
Iowa City, Iowa



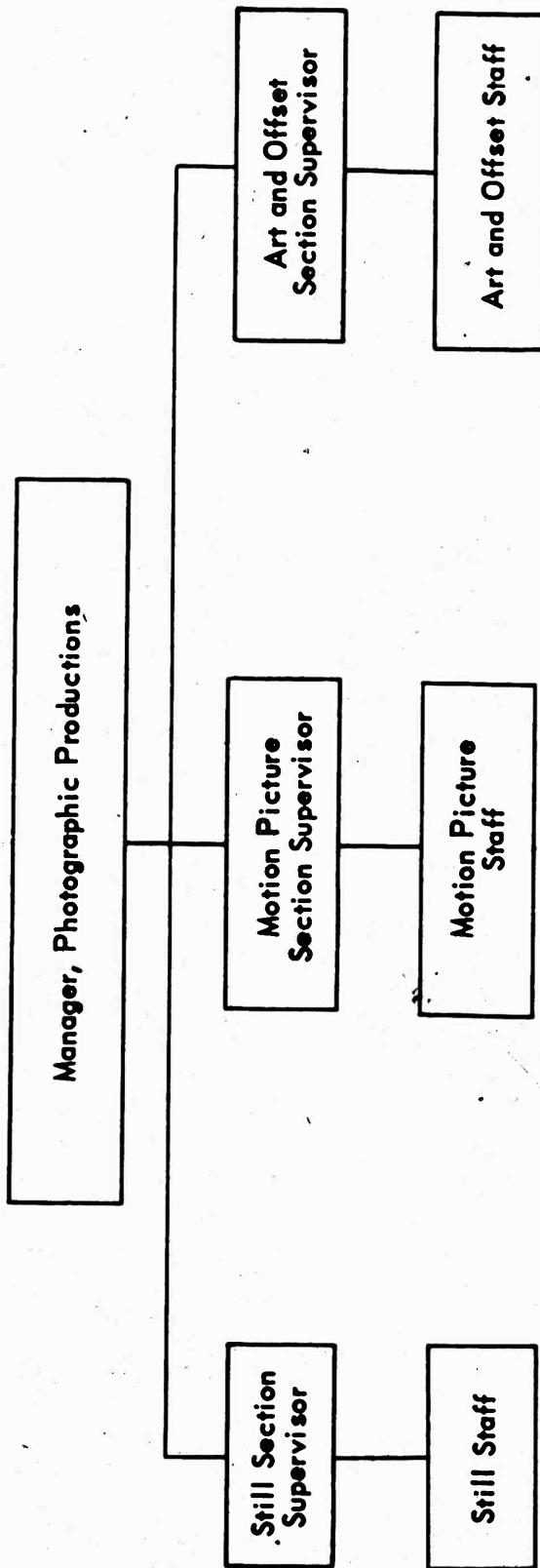
University of Minnesota
Minneapolis, Minnesota



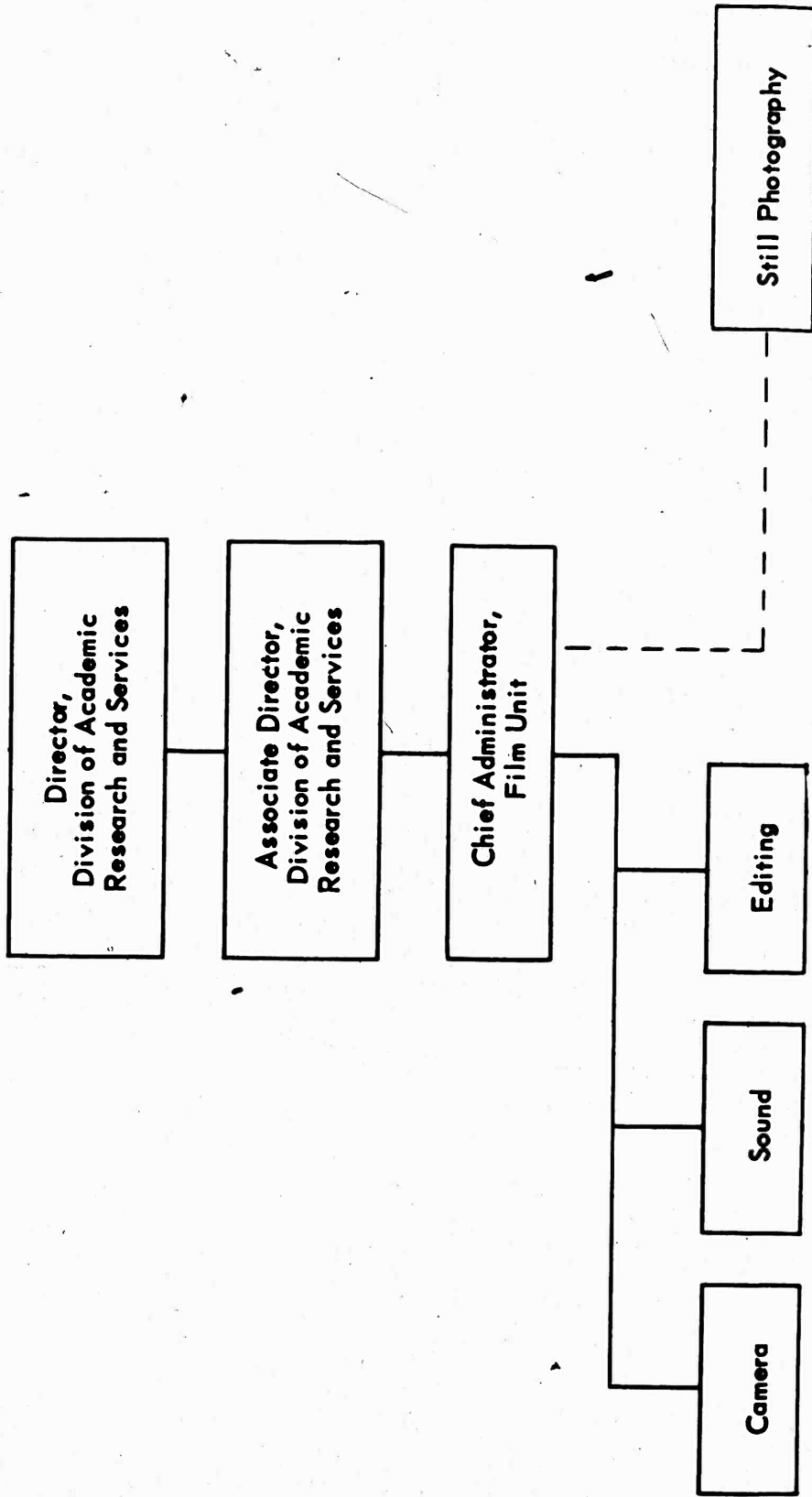
Montana State College
Bozeman, Montana



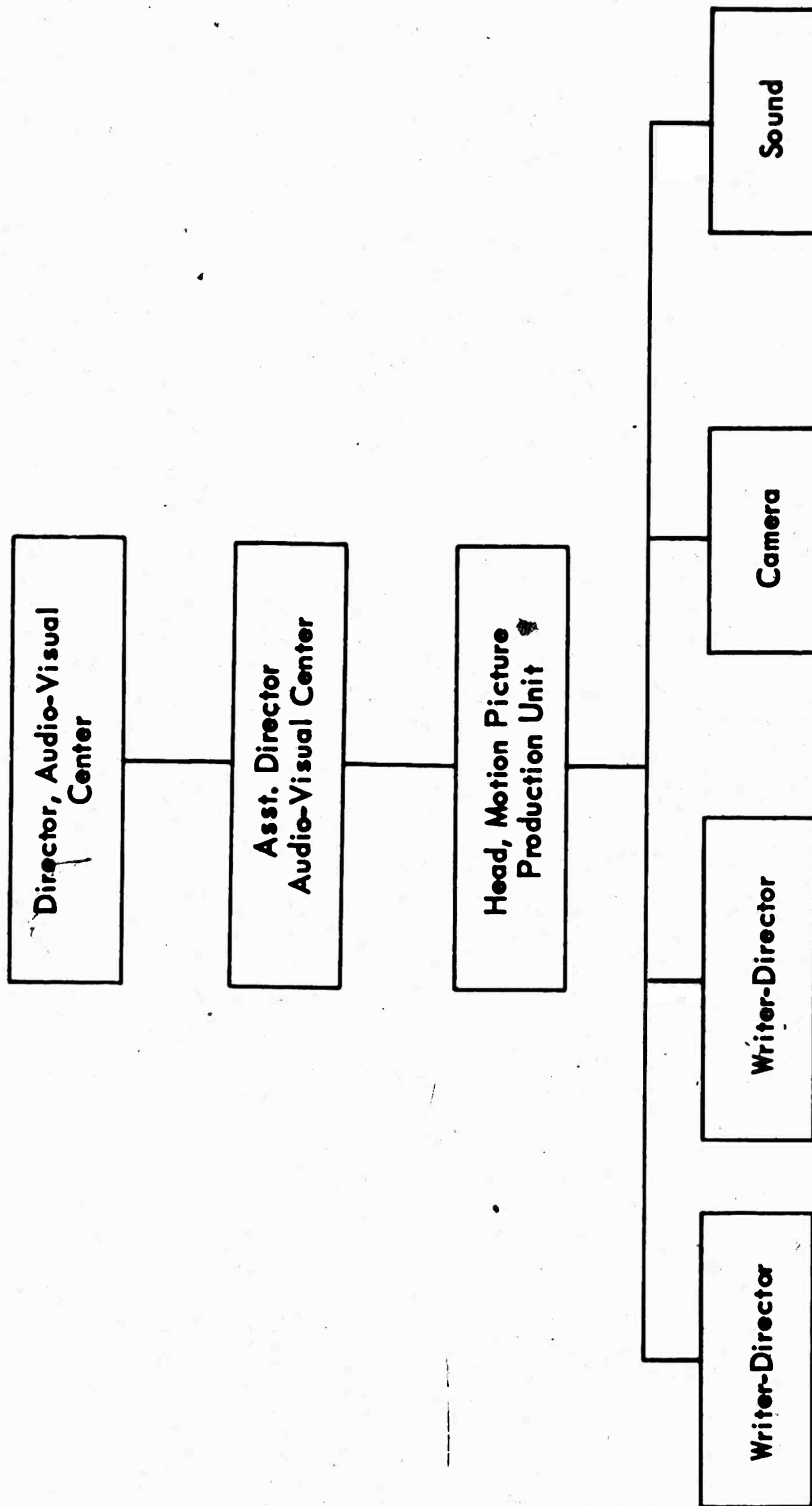
University of Nebraska
Lincoln, Nebraska



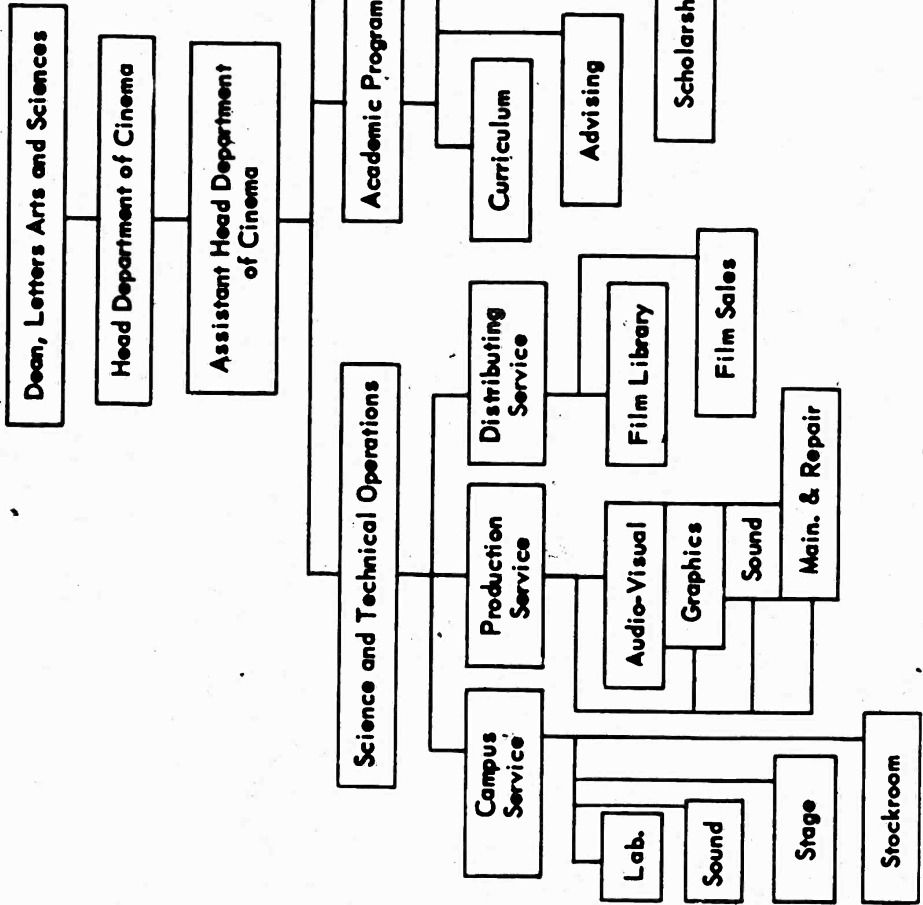
**Pennsylvania State University
University Park, Pennsylvania**



Purdue University
Lafayette, Ind.



University of Southern California
Los Angeles, California



SERVICE TO THE UNIVERSITY

Unit administrators were asked if the unit performed a university-wide service. Thirty-four indicated that it did. Five gave a qualified "yes," recognizing that, while the service was available to the whole university, it was not actually used by the whole university. Two of these indicated that they served most of the university, except for departments which had their own specialized film services. In these two cases, eventual consolidation of all film services was anticipated.

FINANCING THE FILM PRODUCTION SERVICE

It has long been a goal of many university film units to operate on a revolving-fund basis, under which they could plow back into production at least a part of their income from outside production and sale of prints, thus establishing a source of funds for experimental or risk production. A question was asked to determine how many had actually succeeded in setting up a revolving-fund operation.

Eighteen reported that they were operating on a revolving fund; four entirely so, and 14 in part.¹

Source of the Revolving Fund

Those 18 with a revolving fund were asked how

¹One unit reported that in that state, a revolving fund was illegal at a state university.

they accumulated money for it. Four said that money originally came entirely from a university allocation. Thirteen said it came from surplus funds from production. Seven said it came from a surplus from print sales. Others cited such sources as surpluses from still photography, from the film laboratory, and from audio-visual. In most cases, the revolving fund was built up from more than one source.

Asked for what purposes they were allowed to use the revolving fund, 12 indicated that it could be used to finance risk production. That is, if the film unit and an academic department decided that a particular film needed to be made, and if they felt that enough prints could be sold to recover part of the cost of production, the revolving fund could be used to underwrite the cost of production.

Thirteen indicated that they were permitted to use the revolving fund to purchase supplies. Seven could use it for staff salaries. One indicated it could be used for experimental production; and one said that it could be used for "any legitimate purpose." Nine were allowed to use it to acquire equipment for which the university had not allocated funds in the regular equipment budget.

And here a warning was sounded by several unit heads who operated on a revolving fund. Units should guard against too heavy dependence on the revolving fund as a source of equipment purchase.

lest the university come to expect them to be able to finance too large a part of the film operation. The providing of the equipment necessary to carry on departmental functions is an obligation of the university. True, the "luxury" items may justifiably be purchased from sources other than the usual university budget, but the unit which successfully provides for its own needs may one day find that it is expected to do so.

Limiation on Revolving Fund

Unit heads were asked if there was any limit to the amount that could be accumulated in the revolving fund. Two felt that there was probably a common sense limit, if the revolving fund became "too large." One did not know. One said that the university deducted 3 1/2% from the revolving fund each year. Twelve said that the university did not deduct anything and felt that there was no limit to the amount that could be accumulated; one of these had a revolving fund of over \$60,000.

Obviously no unit has built up its revolving fund to a point where the amount in it has become a matter of concern.

Funds from Sources Outside the Regular University Budget

Unit heads were asked if they received any funds for film production above and beyond the regular funds from the university budget. Sources of sup-

plementary funds mentioned included: income from film sales that could be applied directly to budget; grants for production, scholarships, research, and special projects; gifts for special purposes; government contracts; and special appropriations from general university funds for some special project. These are the usual and common sources of extra funds for any department.

In addition, an increasing amount of financial support is being contributed by academic departments receiving outside grants for research involving motion picture production. The total amount of non-university funds reported by the units for 1957-58 was \$366,000; for 1958-59 the total was \$493,000; and for 1959-60 the total was \$643,000. This support was spread over approximately 20 of the universities and the amount reported varied from \$300 to \$100,000. This gain was attributed to the sharp increase in the number of grants received by academic departments from foundations, such as the National Science Foundation, and from government sources such as the Department of Health, Education, and Welfare under the National Defense Education Act. An increasing number of these grants involve some type of motion picture work as a part of the research. If this kind of outside assistance can be obtained by more of the units, it will provide the kind of support which university administrators generally felt was necessary to stimulate and sustain film production at the university.

Proposals and grants for programs involving film production require even closer working relationships between academic departments and film units than those which normally exist. This closer relationship can be an important first step in reaching the goal of improvement of instruction. Faculty members who become accustomed to using the services of the film unit in research are likely to use the same services in their teaching.

Areas Where Increased Budget Is Needed

Before the survey was begun, it was thought that the film unit's needs for increased budget might be different from those of the academic department. The survey revealed that this was not true. Increased appropriations were needed for: general operating funds, staff salaries (both increased salaries for present staff and funds for additional staff), space, equipment, and travel to professional meetings. The purposes for which additional funds are needed would probably have been the same if the survey had covered engineering and language departments instead of film production units.

BUDGETS

In considering the growth potential of any division of the university, a major factor that must be considered is its budget structure. One of the first problems encountered was the complete lack of uniformity in university budgets. The wide disparity

in systems of making up budgets and accounting for expenditures -- and, in fact, in how much a department actually knows about its own budget -- becomes a major problem when an attempt is made to compare the budgets of several universities.

The disparate nature of budget procedure has been apparent in the university film field ever since the university film units have been in a position to exchange information, and has furnished a basis for at least one discussion at each annual meeting of the University Film Producers Association.

A very few years ago, many of the units had only a vague idea how much it actually cost them to produce a film. While this is not so true now, it seems that some of the units will probably never know their true production costs, because some of the figures (such as overhead charges for power, heat, janitorial service, etc.) are maintained in the university's central administrative offices and are not released to the units.

Some comprehensive budget figures were available from 33 universities and certain budget figures were available from others. Some of the units did not wish to make public their budget figures, even though they were assured that no unit would be identified by name in this report. (In this section, as in others, the total number of responses will not always add up to 40, because not all units responded to all questions.)

Total Annual Budget

Total annual budgets ranged from a low of \$3,000 to a high of \$150,000 with a median of \$50,000. The budget of \$3,000 did not include the salaries of two people who worked part-time in production but whose total salaries were budgeted in the audio-visual department; these two people could not make a firm estimate of the amount of salary which should be allocated to production. In all other cases, the budget figure given included salaries.

TABLE 1

Budgets of 33 University Film Units

Budget	No. of Units	Budget	No. of Units
\$ 3,000	1	\$ 60,000	1
5,000	2	70,000	2
5,500	1	75,000	1
10,700	1	80,000	1
12,000	1	82,000	1
20,000	2	82,500	1
22,400	1	89,000	1
25,000	2	100,000	2
30,000	3	120,000	1
32,000	1	126,000	1
45,200	1	133,000	1
50,000	3	150,000	1

Eighteen were "lump-sum" budgets, given annually at the beginning of the university fiscal year. Eleven were based on salaries plus the number of films planned for production during the year, and the remaining four were based on other formulas (depending partly on what services academic departments had requested) and were subject to change during the year.

Units were asked what specific items were entirely covered by the budget.

Where only partial coverage was provided by the university allocation, the film unit was expected to cover the rest of the funds needed. The major source of these additional funds was in charges to other university departments for film production services rendered. Other sources mentioned were the revolving fund, income from film production for non-university sponsors, and print sales.

Recovery of Budget Through Charges for Service

Units were asked whether or not they were required to recover a part of the budget allocation through charges made for their services. Ten replied that they were not expected to recover any of their budget; 25 replied that they were expected to recover a part of it.¹

¹This figure is smaller than that reported by university administrators. These 25 were reporting only film production while the university administrator might also consider the rest of the department.

TABLE 2
Items Covered by 33 Film Unit Budgets

Item	Number of units reporting 100% coverage	Number of units reporting partial coverage
Overhead	24	9
Staff salaries	27	6
Equipment	27	6
Supplies	25	8
Equipment repair	28	5
Travel for production of films	26	7
Travel to professional meetings	19	14
Production services	24	9

Asked about disposition of any income they might receive, 18 said that it was applied directly to their budget, 13 that it went into a revolving fund, and six that it went into the general university budget. One replied that income was applied to an indebtedness which the department had been allowed to incur from the university reserve funds.

SATISFACTION WITH THE KIND AND QUALITY OF FILMS MADE

Twenty-three unit heads reported that they were satisfied with the kind or type of film which the unit was called upon to produce. They felt that the variety was great enough during the year to maintain the interest of the staff and that some of the films were very challenging.

Two were "somewhat" satisfied. On the other hand, eight reported dissatisfaction. They felt that the university as a whole had not realized the full scope of production which was possible, and as a result the unit was limited in the kind of film it was called upon to produce.

The rest felt that they were not, or should not, be satisfied as long as there were experimental methods or new formats to be tried. As one put it, "Until we know more about learning, we can't be satisfied with the present educational films. And that means we are going to be dissatisfied for a long, long time."



Bob Jones University - Scenes of the miniature sea scene and set used in the UNUSUAL FILMS production, WINE OF MORNING.

When they were asked what specific kinds of films they felt they should be making, they listed: films with more creative treatment or more significant subjects, experimental and research films, instructional films, films for adult discussion groups, and film clips. One unit, specializing in dramatic films, wanted to make instructional films; three, making instructional films, wanted an opportunity to make some dramatic public relations films -- all of which seems to indicate that the grass is still greener elsewhere.

In response to a question regarding the quality of their production, 11 unit administrators said they were never completely satisfied, but always felt that they should or could have done better. There were 12 who expressed unqualified satisfaction with the quality of production.

With a few exceptions, those units which were completely satisfied with their films were too inexperienced to have established high professional standards. It is to be hoped that added maturity will bring with it a recognition of the possibilities for improvement. Two or three of those who were satisfied with quality are good -- and know it.

What Is Needed for Improvement

The one thing most needed for improvement was specialized staff; 27 placed this at the head of the list. At most of these units, the staff had grown, or

was growing, and people with all-around production ability had been selected. Now, with the increase in special purpose production, they are faced with problems which require highly-trained specialists in fields such as lighting, camera, animation, sound recording, editing, and high-speed photography. It is difficult to find a man who has not only such high professional qualifications, but also the academic background which will allow him to progress up the university salary and rank scale, to be granted tenure, and to assume responsibilities for teaching. In many units, the need for this kind of staff member is pressing.

Also cited as needed for improvement were: additional equipment, eight units; more liberal budget for each picture, 12 units; and more adequate studio space, six units. In addition, many need more space of all kinds -- office, editing, and recording, as well as studio.

PRODUCING FOR UNIVERSITY DEPARTMENTS

Unit administrators were asked, "When you make a film for another department and at its request, do you charge that department for the work done?"

Only three replied that no charge was made; 33 replied that the other department was charged.¹

¹Ten indicated earlier that they were not required to recover any of their budget. This discrepancy probably means that some of the ten charged the sponsoring department for supplies and out-of-pocket expenses.

However, of the 33, three added that they did not always have to charge the department; sometimes the university administration approved production of the film from the film budget.

Seven said that they did not charge full cost. Some charged for materials and supplies, but not for salaries; others charged for salaries but not for materials and supplies. Six reported that although full cost of production was not charged, overhead was added to some items (such as supplies, out-of-pocket expenses, or salaries) before they were billed to the sponsoring department.

Twenty-six of the 33 responded that they charged the "full" cost of the film to the sponsoring department. However, closer examination revealed that not all used the same criteria for determining "full" cost.

Twenty-one reported charging full cost plus a mark-up to cover overhead. Sixteen reported the amount of overhead charged; the range was from 5% to 100%. Charging of full cost, but without a mark-up for overhead, was reported by five. This variation makes comparison of university costs almost impossible, especially when one unit reported charging overhead "if possible."

TABLE 3

Amount of Overhead Charged by 16 Units

No. of Units	%
1	5
2	10
5	15
2	20
2	25
2	30
1	60
1	100

PRODUCING FOR THE NON-UNIVERSITY SPONSOR

From time to time, the university units have been criticized by commercial film companies for making films for sponsors outside the university. This was thoroughly discussed with the heads of the university units surveyed. Basically, this question is one that is usually answered within the policy of the individual university. There was no unit

which could make films indiscriminately for any sponsor, nor could any bid competitively against a commercial company for a film job.

Twenty-nine of the units will make films for sponsors other than university departments; nine will not; the remaining two only make such films under very special circumstances.

Nearly all answered that they could make films only for a non-profit organization or foundation; or, if a film was made for a profit-making organization, the film had to be under the complete control of the university. For example, if a farm equipment manufacturer wanted an agricultural extension film unit to make a film showing the effect of a newly-developed piece of machinery, it would first have to make a grant to the agricultural department which would test the machine under its own controlled experimental conditions, photograph the progress of the experiment, and present the results completely and accurately. The agriculture department would maintain complete control of both the research experiment and the content of the film which reported it.

Units were generally permitted to make films for state and federal government agencies, and for educational, religious, public service, and other non-profit organizations -- provided the films were of an educational nature, and within the general goals of the university. Outside "sponsorship"

through a research grant to an academic department or the film unit was acceptable. Some could only make films when there was a special request to the university and with specific approval of either an academic department or university administration. Some reported a definite policy of making "outside" films only when there was no competition with commercial producers.

Units were not permitted to make commercial television or advertising films; non-educational, political, industrial, partisan, and business promotion films; films not related to an academic department; and films not consistent with the philosophy of the university.

In general, most of the films produced for groups outside the university are made because the sponsor wants the educational resources and integrity of the university as much as, or even more than, he wants the production facilities of the university unit -- it is this combination that brings him to the university.

Very little of this kind of business would go to a commercial producer, regardless of his equipment and general competence.

In reality, the university film production group represents very little competition to the active, intelligent, well-equipped, education-oriented commercial producer. It is the research-film combination, or the academic-film combination, that is

the source of the university unit's unique contribution to the educational film field. While it is true that the commercial producer could hire the university faculty as consultants, in the kind of production common at the university collaboration between consultant and film-maker is at the convenience of the consultant and may take place over a period of months or even years. This arrangement would be prohibitively expensive and inconvenient for the commercial producer. Moreover, few commercial sponsors can afford to be interested in the specialized subject-matter, low budget, and research-oriented film which promises only a relatively small print sale. This is the type of film which at present makes up the bulk of university production.

PUBLIC RELATIONS

As a whole, university units are neither public relations nor publicity conscious. Only 12 reported news releases sent to local papers; ten reported articles placed in subject matter journals; 16 reported articles in alumni publications; eight had been written up in feature articles by writers from outside the university. Twenty-one reported information about the unit published through the university's news bureau. These usually added up to two or three articles a year, although one reported 12, one 20, and one 26. Only six reported a total of five or more in any one year.

Clearly, the interests of film production personnel

are so concentrated on production, and staff time is so occupied by production, that little attention is given toward publicizing either the films produced or the unit itself, even though the value and importance of such activity is recognized.

For example, all agreed that "premiere" showings of films would be a good public relations device, and 26 held such showings for at least some of their films; but in many cases the audiences were limited to those who worked on the film, staff of the sponsoring agency or department, or members of the general university administration.

A striking exception to the general picture is one university with an extensive and well-organized marketing program which has the publicizing of the product as its prime objective. As many as 400 items of information about its films are placed each year by this organization. It should be noted that this organization is separate from the production organization and that it makes no attempt to publicize the unit, concentrating its efforts on the films produced.

University units would do well to recognize the value of the publication of information about their activities, information which helps build interest and support -- from alumni groups, friends of the university, university trustees, and the university family -- for a comparatively young field with a large potential for growth.

PLANS FOR EXPANSION

Although most of the university administrators interviewed gave their endorsement to the growth and expansion of the campus film unit, only 16 of the film unit administrators had plans for such development. Of these, only four said that they had definite administrative approval of their plans for expansion; four felt that they had approval of the idea, but still had to sell the budget to administration; and four felt that they had approval of the administration, provided they did not push too fast.

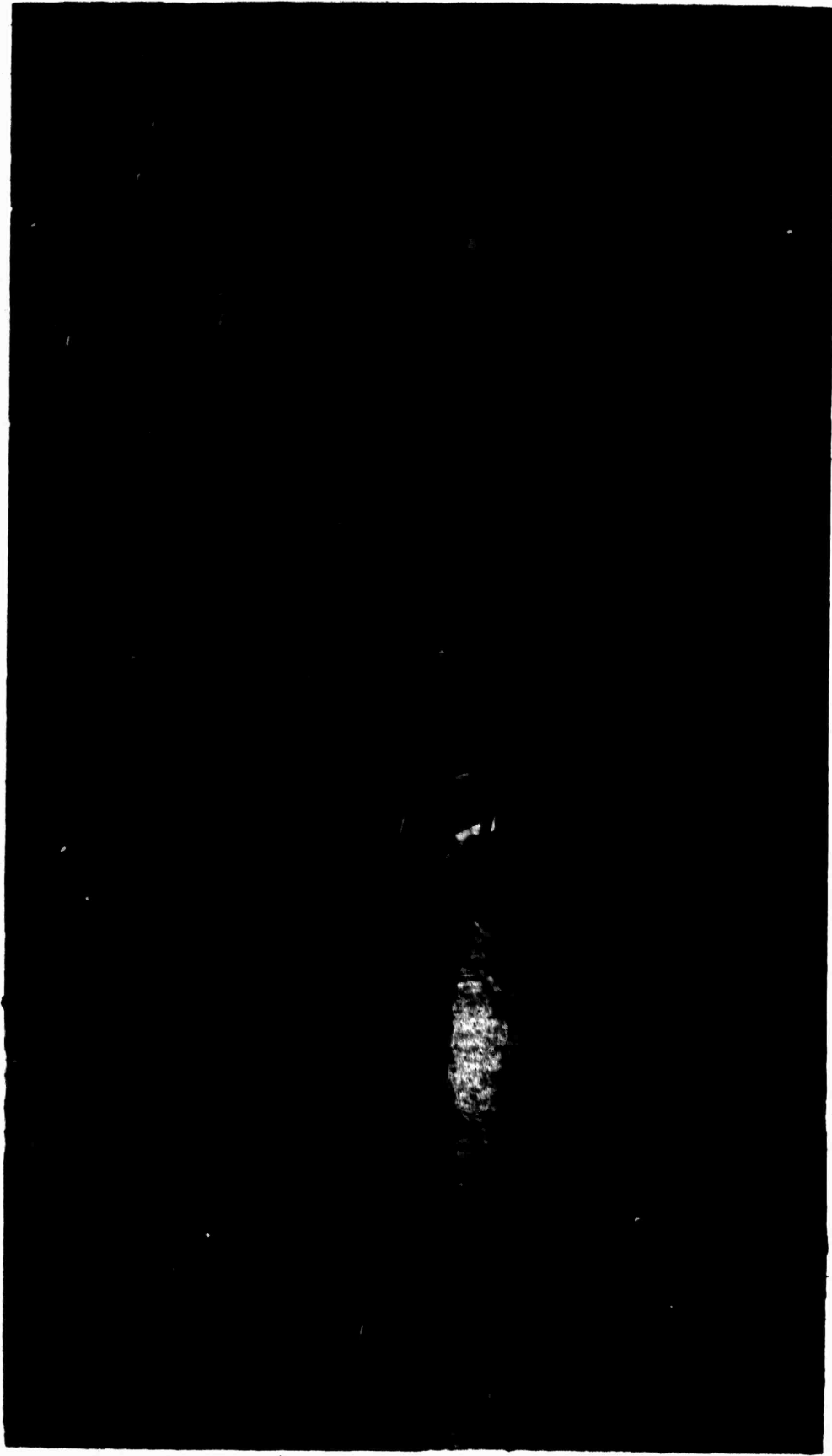
Twenty-one felt that the principal deterrent to growth was lack of funds. This was in agreement with the ranking of deterrents by university administrators. Eleven of the 21 felt that there were funds available on campus, but that the motion picture unit did not have high enough priority to obtain them. Only two felt that their immediate superiors were not in favor of expansion. Four felt that top university administration was not really in favor of expansion and had no plans for it although they gave lip-service to the idea.

Ten unit heads listed an over-all shortage of space on campus as a deterrent to expansion. On many campuses, there is a critical shortage of space, and as a rule classrooms and laboratories have priority on any new space that becomes available. Motion picture production space is generally specialized, and hence expensive in terms of total use.

Thirteen felt that faculty members did not understand the role of the instructional film and that this lack of understanding was a factor holding back the film unit's development; 16 did not feel there was enough lack of understanding to have an adverse effect on growth. It should be remembered that university administrators, as a whole, felt that there was almost no lack of understanding or appreciation of the use of films on the part of the faculty.

The difference between university administration and unit administration evaluation of the factors which deter expansion may be due to the fact that faculty members are more likely to express their real attitudes to a colleague than to the chancellor of the university. It may also be that chancellors are reluctant to report to an outsider that their faculty members are not making use of the newer educational media.

Whatever the reason, film unit administrators as a group felt that a considerable portion of the university faculty is tied to the literary tradition and would not give a hearing or trial to other methods of teaching. They also suggested that the university administrator may be more enthusiastic about motion pictures in discussions with visitors from off-campus than he is when this enthusiasm on his part may be transmuted into staff requests for increased budget appropriations to produce films.



Bob Jones University. Exterior shot on the location set built on
the campus for the production "Wine of Morning."

CHAPTER 3

EQUIPMENT AND FACILITIES

In the production of a motion picture -- whether its purpose be to communicate factual information, develop a concept, influence attitudes, or record an event -- there are three factors that affect the quality of production: the equipment and facilities available, the budget, and the imagination and skill of the film-maker.

Budget practices and staff qualifications are discussed in other chapters. This chapter will cover equipment and facilities, and certain other information on production and laboratory practices that are related to the use of the equipment.

As recently as ten years ago, shortage of equipment was one of the major problems of most university units. This no longer seems to be true. Nearly all of the units were found to be as well equipped as commercial and industrial units of comparable size. Some, because of the diversity of film work they are called upon to do, were better equipped.

All the university units are adequately equipped to do the type of production they are presently undertaking, and there is evidence that as they are called upon for more special kinds of film footage (time lapse, for example) ways will be found to acquire necessary equipment.

Answers from 40 units were used in this chapter. However, not all units responded to every question, so the number of responses does not always add up to 40.

CAMERAS AND LENSES

While it may be said that the university group produces entirely in 16mm, eight units reported owning a total of sixteen 35mm cameras. Of these, 12 were Bell and Howell (seven Eyemos and five Standards). A total of 27 lenses for 35mm cameras was reported. These ranged from 20mm to 250mm. Two of the units which used their 35mm camera to copy film strips reported only one lens each, but the others had a relatively good range of lenses. No unit reported using its 35mm camera for regular production. Rather, their main function seemed to be in teaching, to give students some familiarity with 35mm equipment and emphasize that the basic techniques of camera operation are the same for both 16mm and 35mm. One other unit reported that it had about ten 35 mm cameras that were used for museum and demonstration purposes.

The 8mm camera has had even less effect on the units. At the present time, only five units own 8mm cameras and, with the exception of San Jose State College and Stephens College (see Chapter 8), there has been almost no experimentation with the use of 8mm. When this was discussed with the heads of several units, their general reaction was that they

were still struggling for more 16mm equipment and did not want to introduce a new element into the battle, even to make experimentation possible. In addition, they had nothing in the way of auxiliary equipment to work with and would have to purchase not only cameras but also editing equipment and projectors. They felt that if 8mm really makes an impact on the educational film field, their 16mm productions can always be reduced to 8mm, and reduction printing seems to be the present trend in laboratory practice. The head of one film unit said, "We can now get really good quality with 16mm, so why switch to 8mm and have to fight the battle for good technical quality all over again?" It would seem that if there is to be experimentation with 8mm production, it will be up to new units with no prior investment in equipment to do it.

16mm Cameras, Lenses, and Accessories

The universities are well equipped for production. The 40 universities included in this portion of the survey reported a total of 302 16mm cameras. No unit owned less than two cameras and one unit owned 26; the median number owned was six. (Table 1 shows the distribution of cameras by units.)

TABLE 1
Number of Cameras Reported by University Units

Number of Cameras	Units Owning	Number of Cameras	Units Owning
2	3	9	1
3	4	10	2
4	7	13	3
5	4	14	1
6	4	16	2
7	3	18	1
8	4	26	1

As might be expected, most of the units owning 13 or more cameras were units with teaching functions. Two were not. These two units had been able to acquire a number of cameras at low prices and were holding them in hope of being allowed to start a film training program, which would require cameras for student use.

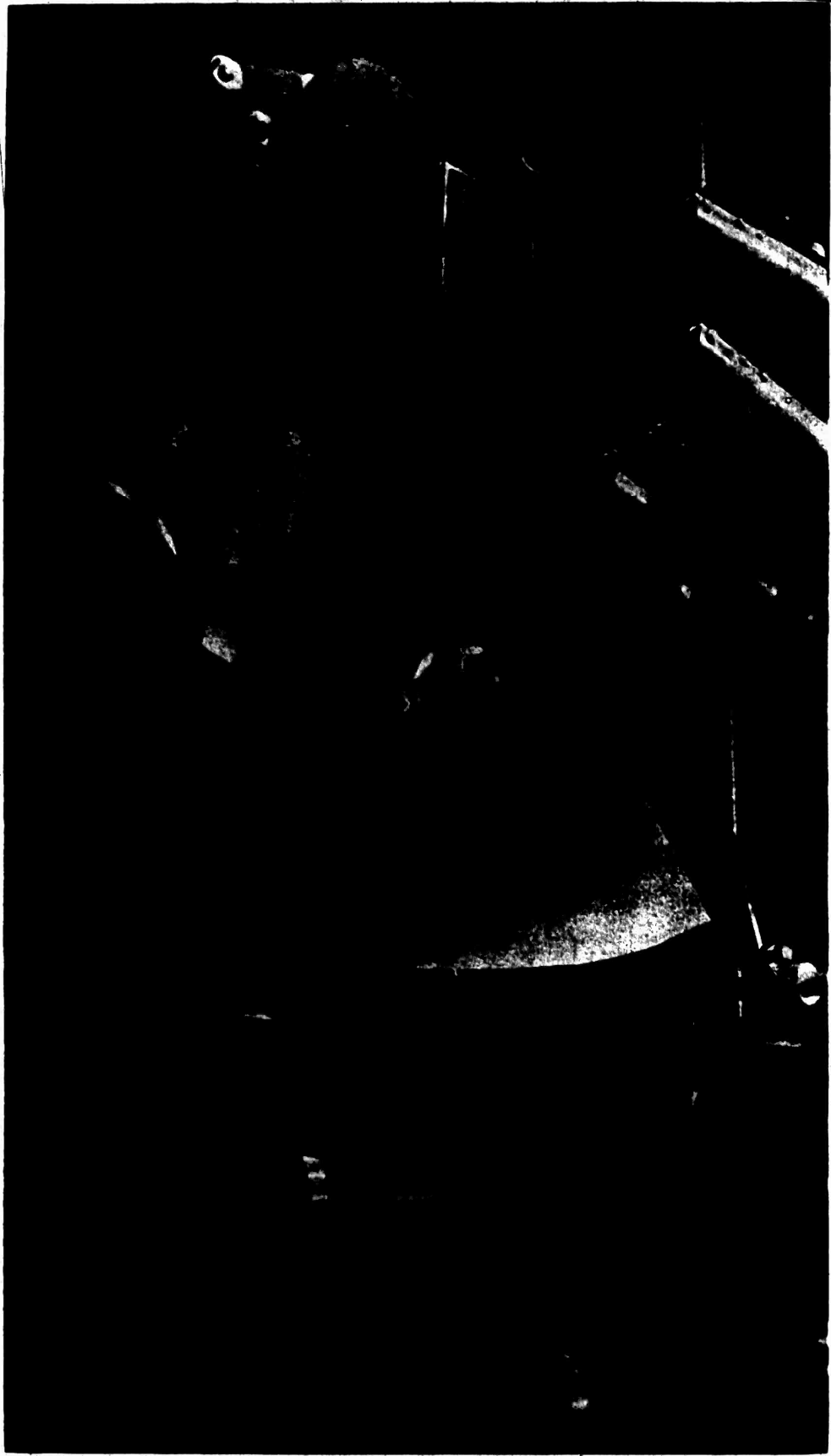
Table 2 gives the number of cameras by unit and manufacturer. It appears that the Cine Special is still the work horse of most units. The Bell and Howell was the camera most frequently mentioned for student use.

TABLE 2
Cameras in Use at University Units

Make of Camera	Number in use
Arriflex	24
Auricon	45
Bell and Howell ¹	84
Bolex	37
Eastman Kodak Cine Special	71
Maurer	8
Mitchell	11
Miscellaneous	24

Cameras owned by individual universities is reported in Table 3.

¹Of these, 1 was adapted for single frame and 1 for high speed.



Indiana University - Animation Stand

TABLE 3
Cameras in Use at University Units

University	Bell and							Miscellaneous
	Arriflex	Auricon	Howell	Bolex	Special	Maurer	Mitchell	
Arizona State University		1	3		2			
Arizona, University of		2	1		1			
Bob Jones University						1	1	2 K-100
Buffalo, University of		1	1	2				
Brigham Young University	1		1				1	1 Acme
California, University of (Berkeley)	1		1		3			
California, University of (Los Angeles - Visual Communications)	1	1	1	2				
Colorado, University of	1				3			
Denver, University of	1	1	1	1				
Florida State University	1	1					1	
Houston, University of		2	8	7	4	1		1 Osberry 3 K-100
Iowa State University	1	1	4		2		1	
Iowa, University of		1	6	3	4	1		1 Fairchild
Kansas, University of	1	1	1		3			
Kentucky, University of		1	2	1			1	

Cameras in Use at University Units (con't)

University	Arriflex	Auricon	Bell and Howell	Bolex	Cine Special	Maurer	Mitchell	Miscellaneous
Miami, University of	1	1	4		1		1	
Michigan State University		1	3		2		1	
Michigan, University of		1			1			
Minnesota, University of		2		1	1	1		1 Fastax
Mississippi, University of			2	1	1		1	
Missouri, University of	1		2					
Montana State College		2	2	4				
Nebraska, University of		2	5	1	4			1 Kodak Hi-Speed
North Carolina, University of			3	2	2			
Ohio State University	1	1	5	1	3	1		2 Revere 1 Fastax 1 Kodak Hi-Speed
Oklahoma, University of		4	2		3		1	
Pennsylvania State University	1	2	3	1	5	1		
Puerto Rico, University of	1			1	1			
Purdue University	2	2	1	1	2			2 Fastax
Rensselaer Polytechnic Institute	1				1			
South Dakota State College	1	2	4					
Southern California, Univ. of		1	7	1	4		1	1 Revere 1 Acme 2 K-100

Cameras in Use at University Units (con't)

University	Arriflex	Auricon	Bell and Howell	Bolex	Cine Special	Maurer	Mitchell	Miscellaneous
Southern Illinois, Univ. of	1	3			2			
Syracuse University			8	1	4	1		
Texas, University of	1				1		1	
Utah, University of					2			
Wayne State University	1	2		2	1			2 Keystone 1 Oxberry
Wisconsin, University of	2	2	1	2	4	1		1 Fastax
Yale University	2			1	1			
TOTAL	24	45	84	37	71	8	11	24

For the cameras using magazines, a total of 323 magazines were reported. These included:

Arriflex 400'	49	Cine Special 100'	84
		200'	50
Auricon 400'	9	Maurer 400'	19
600'	13	1200'	3
1200'	27		
B & H 400' adapted	26	Mitchell 400'	22
		1200'	11

An attempt was made to find out if the cameramen in the various units had a real preference for certain makes of camera. However, cameras are a very personal matter with cameramen and there was no real general preference indicated, even for the very expensive cameras. There was a tendency for the lighter camera to be preferred for location work -- a natural preference, since in the small unit, the cameraman ordinarily has to carry his own equipment.

The units own a wide array of lenses ranging from 10mm to 300mm in focal length, plus a number of variable focus or zoom lenses. A total of 653 lenses was reported. The smallest number owned by a unit was four fixed focus and one zoom lens. Other units had as many as 30 for teaching and production use. It is not possible to give a wholly accurate tally of lenses by manufacturer and focal length, as some

units did not give complete specifications on all lenses. However, Table 4 can be regarded as reasonably accurate as to focal lengths and total numbers.

The lens most frequently specified was the Eastman Kodak Ektar with a total of 229. The units reported 87 Wollensack lenses as the next most frequently owned.

A total of 50 zoom lenses were reported. Of these, 30 were PanCinor and 12 SOM Berthiot.

See Following Page

TABLE 4

Lenses in Use at University Units

Mm.	No. of Lenses	Mm.	No. of Lenses	Mm.	No. of Lenses
10	11	25	201	75	47
11.5	4	30	1	85	4
12.5	6	35	3	100	25
13	22	38	2	102	22
15	69	40	32	125	2
16	27	50	91	152	18
17	16	60	1	250	2
20	3	63	34	300	3

TABLE 5**Zoom Lenses in Use at University Units**

<u>Mm.</u>	<u>Number of Lenses</u>
15.5 to 70	8
17.5 to 70	26
20 to 60	6
25 to 100	6
25 to 75	2
17 to 85	1
38 to 150	1

These lenses are often used in athletic photography where they give the cameraman a quick change from a wide field to cover a kicking situation to a smaller field for line play. They also give cameramen flexibility on studio set or on location. In scientific films, the zoom lens makes it possible to get in closer than would be possible with mechanical movement of the entire camera.

They should not, however, be regarded as an adequate substitute for the dolly in normal production. A dolly is not limited to a "straight

ahead" shot. Further, the dolly shot is characterized by a constantly changing perspective in the scene being photographed which is important to the illusion of depth which motion picture photography strives to maintain.

Many cameramen prefer to own and use their own personal light meter; about two-thirds do so. However, a total of 175 meters owned by units was reported, with no unit having less than two, which makes it possible to check one against the other for accuracy. As was the case with lenses, it is not possible to make a completely accurate tally of the light meters by models. Units reported a total of 81 Norwood-Brockway, 65 Weston, and 29 General Electric meters.

Eighteen of the units use color temperature meters. However, several cameramen expressed dissatisfaction with the difficulty of using color meters, feeling that it was preferable to check voltage and use only new bulbs when shooting color. Twenty-nine of the units regularly use a volt meter to check voltage, especially when shooting outside their own studio.

LIGHTS

It seems advisable to report the lighting facilities in terms of total kilowatts of lighting equipment, under three major categories.

Included in the first category are those units which use Colortran lighting, with only a few auxiliary spots and floods. (Group 1 in Table 6.) In the second category are those which have a considerable amount of additional lights, both spots and floods, but with less than 15 KW available in standard voltage spotlights. These units can light one large set or two small sets. (Group 2 in Table 6.) Units in the third category (Group 3 in Table 6) have more than 15 KW of standard spotlights available; some have as much as 60 to 80 KW. These units can handle almost any lighting situation encountered at a university. It would be possible for them to shoot on one large set and at the same time handle two or even more locations.

All the units in both Group 2 and Group 3 had the necessary scoops, flats, and broads to accompany their other lighting, most of them even without their Colortran equipment.

Only two universities did not report Colortran lighting equipment.

See Following Page

TABLE 6

Lighting Equipment of University Units

Group 1	Group 2
Arizona State University	University of Iowa
University of Arizona	University of Miami
University of Buffalo	The Ohio State University
University of California at Los Angeles (Visual Communications)	Rensselaer Polytechnic Institute
University of Colorado	South Dakota State College
University of Denver	University of Texas
Florida State University	University of Wisconsin
University of Kentucky	Syracuse University
University of Missouri	
Montana State College	
University of North Carolina	
University of Puerto Rico	
University of Utah	

Group 3

Bob Jones University	University of Mississippi
Brigham Young University	University of Nebraska
University of California at Berkeley	University of Oklahoma
University of Houston	Pennsylvania State University
University of Indiana	Purdue University
Iowa State University	University of Southern California
University of Kansas	University of Southern Illinois
Michigan State University	Wayne State University
University of Michigan	Yale University
University of Minnesota	

Only two universities did not report Colortran lighting equipment. However, no other single item of equipment caused so much controversy among cameramen. They were either wholeheartedly in favor of using it or unalterably opposed to it. It seems odd that there should be such a complete division of opinion. No reason other than "we like it" or "we don't like it" could be discovered.

It should be remembered that lights, cameras, and sound equipment can be rented by any producer. Some of the university units regularly rent for short periods equipment whose outright purchase they cannot justify. (Some commercial producers make it a practice to rent lights whenever they go on location, because they consider it more economical to rent them than to transport them for any distance.)

EDITING

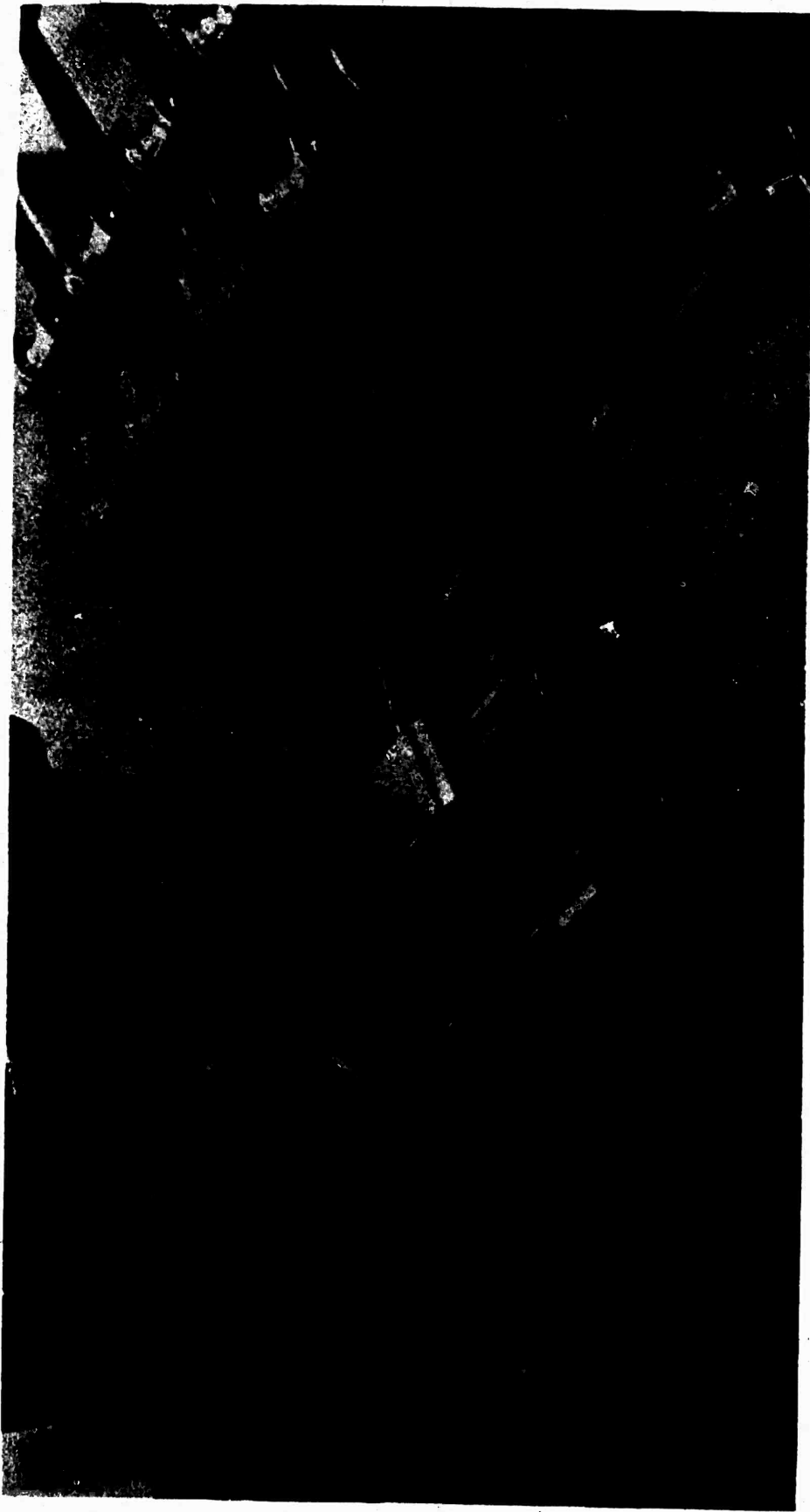
The principal items of equipment necessary for editing are Moviolas, viewers, splicers, synchronizers, footage counters, and sound readers, along with adequate space in which to work.

Thirty-six units reported having one or more Moviolas with a total of 57. Of these 20 were picture only and 37 were picture and sound. Ten had multiple sound heads in various combinations.

Thirty-seven units reported using viewers for editing, with 28 considering them satisfactory. Nine of these, however, qualified by adding "for some



**An Unusual Editing Bench - Developed at Brigham
Young University Motion Picture Unit. Three
Synchronous Sound heads and one picture head.**



**Brigham Young University - Viewer with synchronized
sound readers.**

films" or "normally." Twelve units did not consider viewers adequate and two never used them, while 10 used them for rough cutting and the Moviola for final cutting.

A total of 125 viewers were reported. Of these, 26 were Craig, 17 Bell and Howell, and nine S.O.S. Makes of the other viewers were not specified. Some units had added magnetic sound readers to their viewers and by using this equipment in combination with a synchronizer provided a picture-sound editing device that gave very satisfactory results. Some of the units which owned Moviolas were also using this arrangement because of its simplicity and ease of use.

A total of 181 splicers was reported. Of these, 79 were Bell and Howell hot-splicers. There were also many Griswold splicers reported, but these seemed to be primarily used for splicing workprint, or by students.

A total of 69 footage counters and 102 synchronizers were reported, with Moviola and Neumade in the majority.

There were 148 separate editing set-ups, plus 74 reserved solely for student use. There were five units with complete 35mm editing facilities.

One of the major problems in handling film particularly original, or negative, is the need for

keeping the film, and the places where it is stored and handled, clean and free of dust. Twenty-two units had air-conditioned editing rooms, with 12 reporting some form of dust control, usually through a filter on the air-conditioning system. Three more stated that they were installing air-conditioning and dust-control during the coming year. All units observed the routine precaution of using editing gloves when handling original and negative.

All units reported that they do their own picture editing and 38 that they do their own sound editing. Two units regularly had sound editing done by a commercial lab.

Workprint was generally used in editing. Thirteen units reported that back and white workprints were ordered from color camera footage; 14 ordered color workprints; the rest used either black and white or color, depending on the nature of the film and the budget available.

Timed workprint was always ordered by three units, untimed by 20. The rest ordered either timed or untimed, again depending on the nature of the film and the budget available.

Nearly all units used edge-numbered workprints. Three units had their own edge-numbering machines.

Thirty-four of the units regularly conformed original, four did so occasionally, and two secured

this service from a commercial film lab. All but two units used A and B rolls for printing, using as a guide the specifications prepared by the Association of Cinema Laboratories or by the particular laboratory with which they work.

The units obtained their optical effects through the use of either traveling mattes or A&B rolls, as is standard practice in the commercial motion picture industry.

While many of the units edited their narration and dialogue sound tracks using the original magnetic, nine commonly re-recorded to optical and used the optical in editing, and 19 made a magnetic workprint or protection print before they began to edit. Thus, 28 of the units protected their original sound recording in case something went wrong during editing.

SOUND RECORDING

Before the advent of magnetic film equipment for sound recording, most universities obtained voice, music, and effects tracks from commercial motion picture laboratories with production service departments. This limited most units to voice-over narration.

When 16mm magnetic film recorders were introduced, sound recording was made practical for the units themselves. For the first time, units were able to do their own recording and mixing of sync



State University of Iowa. Editing a multiview show, using a Moviola with two sound heads and three picture heads.

sound and music. The greatest single advantage offered by magnetic recording was that it was possible to play-back the sound for an immediate check of its quality--to listen at once to the results of recording and mixing, and re-do it if it proved unsatisfactory. With optical, it had been necessary to wait at least several days to find out the results; and then it was often too late to re-do a track that was found to be unsatisfactory.

Every university surveyed, with the exception of two which regularly rent recording facilities as needed, had some type of recording equipment.

Table 7 reports the various types and makes of recorders in use at the various universities. Not all units owning Auricon cameras specified that they were adapted to single system recording. However, as all of these can be adapted, they are included in the listing of recording equipment, and a check of the camera list in Table 3 will show how many Auricons are owned by various units.

TABLE 7

Sound Recording Equipment

University	Auricon	Optical	Magnetic Film	1/4" Magnetic Tape
Arizona State Univ.	X		Magnasync	
Arizona, Univ. of	X		Magnasync	Magnecorder (2) Wollensack
Bob Jones Univ.			Stancil Hoffman(3)	
Buffalo, Univ. of	X		Stancil Hoffman	Ampex
Brigham Young Univ.			Stancil Hoffman(5) Magnasync	Concertone
California, Univ. of (Berkeley)			Magnasync	
California, Univ. of (L.A., Visual Comm.)	X		Magnasync	
Colorado, Univ. of			Magnasync	Ampex
Denver, Univ. of	X	Rents	Rents	
Florida State Univ.	X		Magnasync	
Houston, Univ. of	X		Magnasync(3)	Topak Custom Magnecorder*
Indiana, Univ. of	X		Reeves(3) Stancil Hoffman**	
Iowa State Univ.	X	Maurer	Stancil Hoffman(2) Magnasync	Magnecorder
Iowa, Univ. of	X	Maurer	Magnasync(3)	
Kansas, Univ. of	X		Magnasync	Magnecorder* Magnalite Wollensack(5)
Kentucky, Univ. of	X		Magnasync	

* Sync attachment

**17 1/2 mm

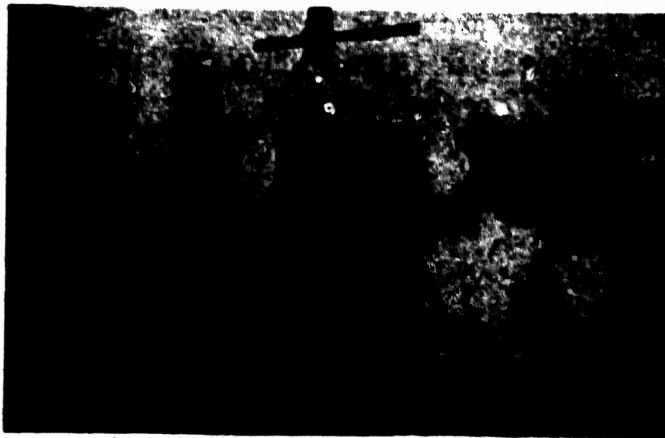
Table 7, Sound Recording Equipment (con't)

University	Auricon	Optical	Magnetic Film	1/4" Magnetic Tape
Miami, Univ. of	X	Maurer	Stancil Hoffman Hallen	Presto Ampex Magnecoorder
Michigan State Univ.	X		Stancil Hoffman Kinevox	Ampex(2)
Michigan, Univ. of	X		Stancil Hoffman	Ampex(2)
Minnesota, Univ. of	X		Stancil Hoffman(2)	Ampex
Mississippi, Univ. of			Magnasync	
Missouri, Univ. of			Magnasync	Apex
Montana State College	X		Stancil Hoffman(2) Hallen	Ampex Revere(2)
Nebraska, Univ. of	X		Stancil Hoffman Magnasync	
North Carolina, Univ. of			Hallen	
Ohio State Univ.	X	Maurer	Magnasync Kinevox**	
Oklahoma, Univ. of	X		Magnasync(2)	Magnecoorder(4)
Penn. State Univ.	X	Maurer	Stancil Hoffman Magnasync	Magnecoorder Apex
Puerto Rico, Univ. of			Stancil Hoffman	Magnecoorder
Purdue Univ.	X	Maurer	Stancil Hoffman(3)	Ampex
Rensselaer Polytech.			Stancil Hoffman	Crown Broadcaster Wollensack
South Dakota State College	X		Magnasync	Magnecoorder(2)
Southern Calif., Univ. of	X	Maurer	Stancil Hoffman(5) Magnasync	Ampex Stancil Hoffman
Southern Illinois, Univ. of	X		Magnasync	Ampex* Magnecoorder
Syracuse Univ.			Magnasync	Wollensack Crown

7

Table 7, Sound Recording Equipment (con't)

University	Auricon	Optical	Magnetic Film	1/4" Magnetic Tape
Texas, Univ. of			Stancil Hoffman Magnasync	Magnecorder
Utah, Univ. of		Rents	Rents	
Wayne State Univ.	X		Stancil Hoffman** Stancil Hoffman	Stancil Hoffman* Ampex
Wisconsin, Univ. of	X		Magnasync(3)	
Yale Univ.			Magnasync	Wollensack Crown



State University of Iowa. Plastic Tent used for Dust and humidity control for a time-lapse set-up.

Then number of channels that could be mixed ranged from two to ten. The majority (eighteen units) could mix either three or four channels.

The units reported a total of 191 microphones, with RCA the most popular with 63. A total of 38 Electro-voice and 27 Shure microphones were reported.

The units had 46 microphone booms. The largest number of one make was Mole Richardson with eight.

Thirty-three units had turn-tables used for music or mixing music. The most popular turn-table was the Presto with 10, followed by the Rek-o-cut with nine. However, eight of the units reporting turn-tables did not specify make.

Only three units did not own a blimp. Of these, one was a new unit which had not had occasion to use one; the other two rented a blimp when it was needed.

The rest of the units owned a total of 58 blimps. Included in these were 17 self-blimped Auricons, 12 Arriflex, 10 Mitchell, 6 Maurer, 4 "home-made" blimps for use with the Maurer, and 9 of various makes that were used with the Cine Special.

The units reported owning 42 synchronous projectors. Eleven of these were Bell and Howell. For synchronizing their tracks, most depended upon

mechanical coupling, although 11 used Rangertone or a similar method of pulse generation to determine sync.

Eight sometimes recorded directly on optical, and 38 used magnetic film with 23 using 1/4 inch tape at times for music background or sound effects. All were able to mix through their consoles and dummies.

For film music, 30 units owned music libraries; 15 of these were on records, and three on tape, while 12 indicated that they had both record and tape libraries. One unit had four music libraries and two had three. The rest had either one or two.

The most-used commercial music library was Langlois with 12. Boosey and Hawks and Chappel were each used by seven units. Several units indicated that they occasionally had a commercial film lab edit and mix music for them, and 24 indicated that they usually bought music and edited their own tracks.

Many of the universities have active music schools, and it was quite common for the film units at these universities to have special music composed for certain films. Twenty-nine units indicated that they have had special musical scores composed. Campus musical groups were frequently used to perform these special scores.

University of Houston - Equipment includes two Magnasync dummy
playbacks, Magnasync portable recorder, Magnacord 1/4" tape
with Rangertone playback, Gates turntable and Gates Consolette.

In addition to the music libraries, 21 institutions had sound effects libraries. A few of these had been collected or produced by the unit's staff on magnetic tape. However, most of the units purchased a basic library and augmented it from time to time with effects made or bought for a particular film.

In the area of sound recording, all units were well-equipped with their own equipment, or had good equipment available by rental, and could handle most of the recording problems they normally encountered. Some units had equipment that was in advance of staff skill, and consequently did not utilize their equipment to its fullest capacity. Although magnetic recorders have brought recording within the capacity of the film unit, good sound quality is still dependent on a skilled soundman--one who knows how to build a track comparable in quality and film-sense to the photographed image.

ANIMATION

Twenty units, 50% of the units making up this portion of the survey, reported owning animation stands. Of these, nine were commercially built, and 11 "home-made" or built in the university shops to the unit's specifications. Three others have done some animation by "make-do" set-ups.

Of the commercially built stands, four were Oxberry, two were Acme, and one was a Richardson-Bocolds. No make was specified for the other two.

Some of the custom built equipment was very elaborate, equivalent to the commercial stands available.

Animation footage produced by the units has increased 350% in the last year, from 3,530 feet in 1958-59 (11 units reporting) to 12,625 feet in 1959-60 (18 units reporting).

STUDIO SPACE

Typically, the shooting done by a university unit is on location. Only 12 units shot in the studio 50% or more of the time, and only three used their studio 90% of the time, while 10 units indicated that 90% of their shooting was on location. This is partly due to the fact that much of the film work is related to academic activities which can be more easily and realistically photographed in the real setting. However, there are a few units that have unusually fine studio facilities and shoot a major portion of their footage in the studio.

Square footage of studio space was divided into three categories: up to 1,000 feet; 1,000-1,500 feet; and more than 1,500 feet. Table 8 gives the university units by square foot of studio space available.¹

¹The following universities either borrow or rent studio space: University of Texas, Arizona State University, University of Arizona, University of Colorado, University of Denver, and University of California at Berkley.

In addition, 31 of the universities had sound-proof recording studios or booths, ranging from a 5x5 booth for the recording of narration to a 22x30 sound recording studio.

The studios had from 200 to 2400 amperes of electrical current available, with 400 amperes the median. Nearly all the studios provided for the use of ceiling or overhead lights, and in several cases the lighting could be controlled from a central console. Some of these studios had been converted from space intended for some other purpose. Eight of the units felt that the acoustics were so poor that the studio could not be used for recording synchronous sound.

Seven units were able to use rear projection in the studio to extend the range of their production capacity. There were only eight units which reported separate facilities for make-up; while most of the units use make-up, few had special rooms set aside for it.

TABLE 8

Studio Space Available at Units

Up to 1,000 square feet

University of Missouri
University of Nebraska
University of Puerto Rico
Purdue University
University of Utah
University of Wisconsin
**University of California
(Los Angeles)**
University of Iowa
Iowa State University*
Michigan State University

1,000 - 1,500 square feet

Montana State College
University of North Carolina
Ohio State University*
University of Oklahoma*
Pennsylvania State University
South Dakota State College
University of Southern California
Wayne State University
Yale University
Syracuse University
University of Buffalo
University of Michigan

More than 1,500 square feet

University of Mississippi
Rensselaer Polytechnic Institute
Bob Jones University
Brigham Young University
Florida State University
University of Houston
Indiana University
University of Kansas
University of Kentucky
University of Miami
University of Minnesota*

***Has an additional, smaller studio.**

PROCESSING AND PRINTING LABORATORIES

All of the processing and printing done by the universities is 16mm; none is at present handling 35mm in its laboratories, although six can release films in 8mm if called upon to do so.

Fourteen units reported operating a laboratory. All had facilities for processing and printing black and white. Two, the University of Houston and the University of Kentucky, reported all of their processing to be reversal; the Ohio State University lab processes both reversal and negative-positive; the rest use negative-positive processing. Although some indicated that they made release prints from a duplicate negative, others used a master positive, and some used either, depending upon the characteristics of the original and the type of release prints desired. None of the university laboratories process color, although three (Iowa State University, the University of Miami, and the University of Southern California) print some of their own color and have the processing done at a commercial laboratory.

Table 9 shows the laboratory equipment reported by the university unit.

All of the units with lab facilities did printing and processing for other campus departments which used motion pictures. In one case, the athletic department had its own lab, entirely separate from that of the film unit.

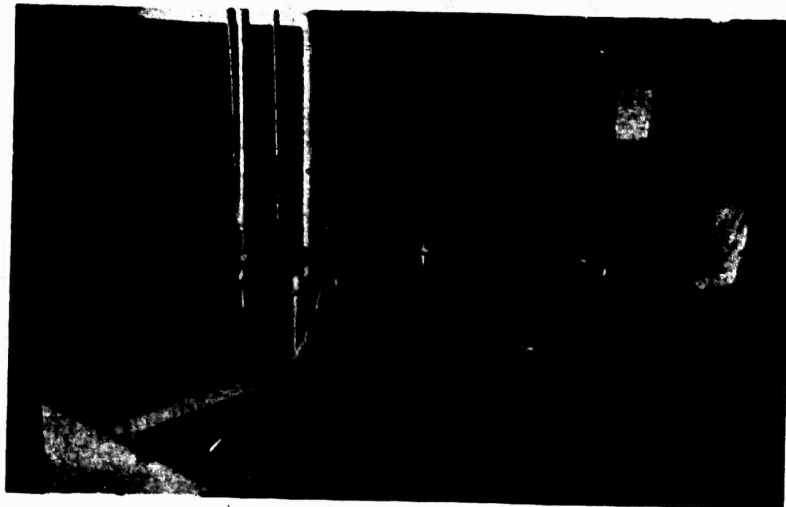
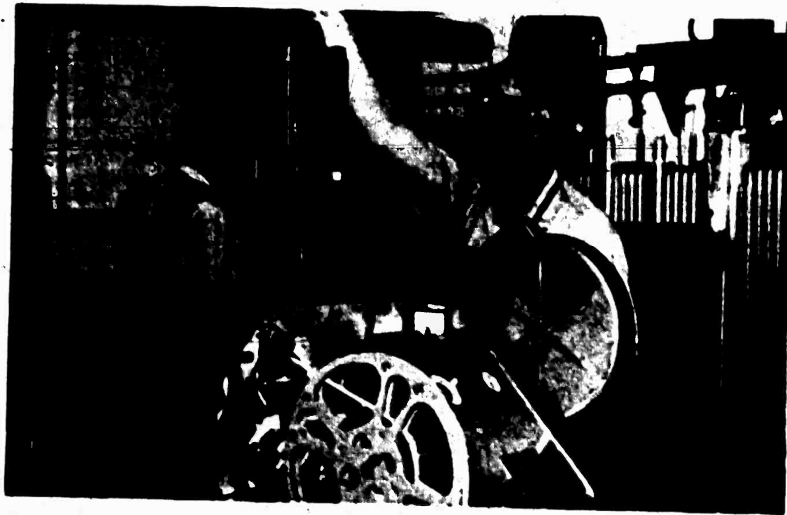
TABLE 9
Laboratory Equipment

University	Processor	Printer
Buffalo, University of	Bridgmatic, Model RA	Tel-Amatic, Model 1545; Model 1541 B Fader
Houston, University of	Houston Fearless, 11B	Bell and Howell, Model JA
Iowa, University of	EDL DM-7, negative-positive; EDL DM-8, positive; Filmline R-15 TC	Bell and Howell, Model J; Peterson sound head Bell and Howell, Model JM, Peterson fader
Iowa State University	Houston 22B, used negative only; EDL, used positive only	Bell and Howell, Model J, Peterson sound head, Peterson fader
Kentucky, University of	Houston Fearless Filmline	Bell and Howell, Model J
Miami, University of	Houston Labmaster, negative- positive Custom, used positive only	Bell and Howell, Model JA, Par fader, Peterson sound head
Minnesota, University of	Houston, Model 22, negative; Houston Labmaster, positive	Bell and Howell, Model JA, sound head
Montana State College	Houston 8-28	Tel-Amatic
Nebraska, University of	Fonda Continuous, negative- positive	Bell and Howell, Model J
Ohio State University	Houston Labmaster	Bell and Howell, Model J
Southern California, Univ. of	Cinema Arts and Crafts Custom- built, negative-positive	2 Bell and Howell, Model J, modified
South Dakota State College	Houston Fearless K-1A	Tel-Amatic
Texas, University of	Houston Fearless Filmline; TV Special 3980	Uhler continuous
Syracuse University	Houston Fearless K-1A	Tel-Amatic, Model 1545

Seven of the units reported the amount of printing stock used by their lab, and this information is presented in Table 10. While these seven are 50% of the units with lab facilities, it is not justifiable to say that the total footage used by the 14 would be twice the total footage reported by the seven as there is no accurate way to assess comparative volume.

The operation of a laboratory did not seem to depend upon the size of the unit, nor upon the amount of work it did. Some large and some small units had labs; some large and some small used commercial labs. There were many factors (such as location, ease of transportation to and from a commercial lab, need for rapid processing of footage) which influenced the unit's decision to handle its own printing and processing. An important factor seemed to be the experience of the unit administrator with labs. Some frankly stated that running a lab was too much of a headache for the advantages to be gained. Those who operated labs emphasized that it required considerable skill, experience, and practice, plus infinite attention to detail and control procedures. Some reported a lengthy shakedown period, during which the lab did not function either smoothly or efficiently.

It is essential that a competent lab technician be added to the staff if a lab is to be operated. Special training and experience are necessary, as well



1-2. Iowa State University
3. State University of Iowa. EDL positive processor in use.

as interest in this type of operation. No cameraman or director can adequately perform this specialized, highly technical job in addition to other duties, even if he should have the requisite interest and ability.

This is one phase of production which should be entered into only after the unit has carefully studied its own objectives, its staffing pattern, the actual volume of service the campus will require, and the problems of laboratory operation.

See Following Page

TABLE 10
Printing Stock Used by Seven Units

Manufacturer	Number	Description	1959-60	1958-59	1957-58
Eastman	7375	Sound recording	130,816	123,812	100,310
Eastman	7302	Fine grain positive release	2,577,688	2,479,800	1,863,800
Eastman	7234	Fine grain duplicate negative	4,000	30,000	10,000
Eastman	7504	B/W Reversal	108,492	163,860	97,465
Eastman	5269	Kodachrome duplicate	124,870**	100,000	81,400
Eastman	7374	TV recording	50,000	50,000	30,000
Gevaert	561	Positive release	--	10,000	--
*Dupont	930, 931	B/W Positive release	15,500	20,000	30,000
Dupont	802	Sound recording	1,200	1,200	--
Ansoo	238	B/W Reversal release	3,000	--	--
* Combined total reported			3,015,566	2,978,672	2,212,975

**Nearly all university labs have their color printing done by commercial laboratories. None of this footage appears here. The 124,870 feet was reported by the three universities which do their own printing and then send the film in to a commercial laboratory for processing.

OTHER ACCESSORIES

Scattered throughout the inventory sheets were many small items which were not expensive, but their absence would indicate a lack of planning or a lack of knowledge of the finer points of production techniques. From these were selected 32 items that indicate some sophistication in the purchase of equipment. These were organized into two groups.

Group 1: reflectors, butterfly frames, scrims, barn-doors, flags, and other lighting accessories; incandescent and arc filters; voltmeters; extension tubes; and various types of camera filters (including color, haze, and neutral density).

Group 2: extension tubes, booster lights, dimmer equipment, color temperature meters, matte boxes, view finders corrected for special purposes, and follow-focus devices.

Data for each unit was collated on a single page to make it possible to check whether any had overlooked this kind of equipment. None had. Even the relatively small units had a respectable amount of such accessories; the older, more established units had a wealth of them. On-the-scene observation during the personal visits to the units revealed that items appropriate to a particular production situation were in use as needed.

Eight of the units owned generators to take on location for auxiliary lights or for fill lighting for

shooting out-of-doors.

The units were especially well-equipped with tripods, reporting 182 regular tripods of which 67 would handle blimped cameras and 24 had gyroscope or similar type heads that assist in smooth panning. (Also reported were 31 baby tripods and 53 high-hats. It is possible that some of these were included in the total number of tripods reported by the unit.)

Nearly all of the units had some type of dolly. A total of 42 were reported. Some were simple tripod-type while others were of the more elaborate type used to carry both a cameraman and an assistant cameraman. A few units have dollies with cranes or lifts (two with hydraulic and eight with mechanical), or "crab" dollies.

AUXILIARY DEPARTMENTS

The university production unit has one unique resource. All the array of staff talent and physical facilities that are a necessary part of a university are available to it. It can call upon faculty members to serve as technical advisors and educational consultants. The carpentry and machine shops, repair and maintenance services are available to the film unit just as they are to any other university department. The skills and know-how of academic departments can be used to contribute to the making of a film. The drama department can be called upon

for help in make-up, costuming, set design, and acting. The art department can supply designs and art work for titles and other graphics. The music department can furnish composers and performers of musical scores. Scientific equipment which may be needed for production purposes can be secured right on campus, along with people who know how to operate it.

Often the academic departments make a major contribution to production by bringing together the film staff and the subject matter expert who is interested in relating his own subject matter field to that of cinematography. This can result in the production of significant films in an academic area where there may be a dearth of filmic material for record and teaching purposes. It may also result in the recruitment of these subject matter specialists into the film production field.

There are a number of auxiliary services which the units must be able to obtain -- art work, still photographs, sets, equipment repair. Unit administrators were asked whether the unit had such departments attached or if such services were available on campus. Usable responses are reported in Table 11. Other units either did the work themselves or obtained it from free-lance or commercial sources.

TABLE 11

Auxiliary Departments Servicing Film Production

<u>Department</u>	<u>Attached to Unit</u>	<u>Available on Campus</u>
Art	2	34
Still Photography	12	24
Set Construction	6	21
Equipment Repair	5	15

Art Department

Two film units reported art departments attached and primarily concerned with preparing graphics (titles, animation, brochures, etc.) for films.

Nineteen film units were a part of a larger department (audio-visual, radio-television, extension, etc.) which had an art and graphics service either for the department or for the entire campus.

Where there were art departments on campus, but separate from the film unit, their services were still available to the film unit through inter-department requisition. Since both were in the university family, the fact that they were separate was not a handicap. The art staff took an interest in the film unit's problems and projects and gave generously of its time in the pre-planning, careful execution, and revision that is such an essential part of successful film making.

Art departments varied all the way from a one-man department to a well-equipped visual presentation department with five or six full-time staff people capable of almost any type of illustration that might be needed.

Two units reported use of free-lance artists, either local commercial artists or members of the faculty working on their own time.

Still Photography

University administration seemed to see more relationship between motion pictures and still photography than between motion pictures and other auxiliary services, for there were 12 units which reported having a still photographer, or photographers, and complete dark-room facilities as a part of the unit. Some of the still photographers also acted as motion picture cameramen when additional help was needed on a large production.

There were 24 units which had still photographic departments available to them. Two reported that their own staff did whatever still work they needed.

Photographic departments ranged from one all-around photographer with basic equipment and dark-room facilities to large departments handling thousands of prints, both black and white and color, each month.

Set Construction

Set construction was a somewhat different matter. Some of the units did not use sets as such, but did their filming on location on the campus, in homes, and in near-by schools. The limited amount of studio space generally available restricted the units in their use of sets.

Only six units reported a department that could be properly labeled a set construction department.

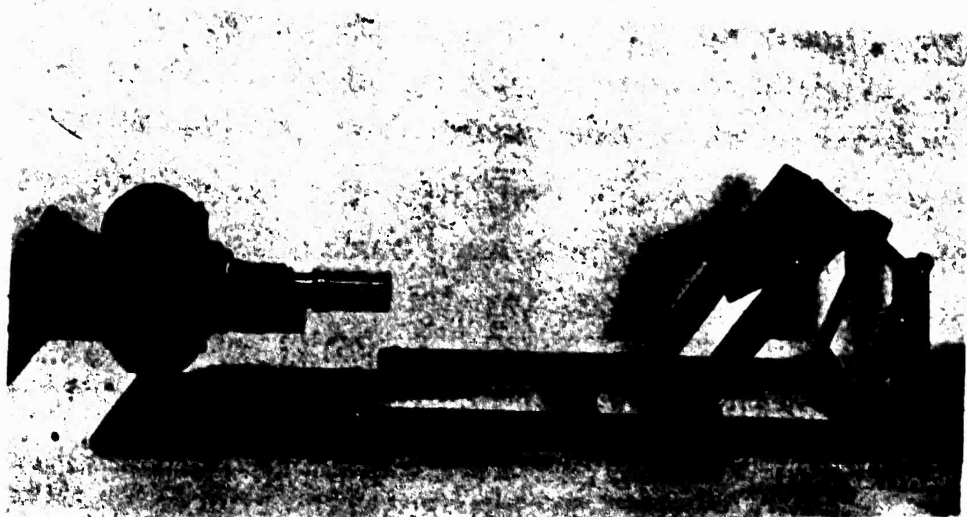
However, 21 said that such work was available to them through the drama department or the university carpentry shop. For the rest, set construction was a do-it-yourself project. When a set was needed, the production staff built it.

Equipment Repair

Five units reported equipment repair departments attached to the unit, and 11 said that some repair services were available on campus. In addition, there were four universities that had so organized the repair of scientific, sound, television, motion picture, and audio-visual equipment that all except the most specialized repair could be done right on campus. However, all of the units stressed the fact that when something in the nature of a major disaster happened to a camera or sound recorder, they sent it back to the manufacturer for repair.

It is safe to say that, with the exception of the four universities which have centralized and extensive repair service, two-thirds of the units did most of their own minor repairs, cleaning, and general maintenance of equipment, but on complex repair or complete overhauls, they depended on the manufacturer or his service representative.

University facilities were not used only for repair, but also for adapting or even building equipment to do a specialized job. There were "home-made" devices to allow shooting around corners, animation stands, time lapse installations -- and-



University of Missouri -
Overhead device for photographing surgery.

while they might not be beautiful to behold, they were doing a more than adequate job, sometimes at a fraction of the cost of a manufactured piece of equipment. Throughout the university it is common to find items of equipment needed to do a particular job being made by staff using the basic facilities provided by the university.

The campus-built custom-made piece of equipment is not always an "inexpensive" piece of equipment. One unit administrator felt that the animation stand that had been built for him on campus had probably cost more than a manufactured stand, particularly if staff time were figured into the cost. Additional work was needed, and the stand would still have some limitations that would be a handicap in producing animation. Under such circumstances, purchase of a commercial stand would be more economical.

OBTAINING SPECIAL ITEMS OF EQUIPMENT

Units which need a specialized piece of equipment for a short period of time, or for only one film, would do well to consider renting it rather than buying it outright. The film unit head should consider how much the equipment will be used, over a long period of time, before making the decision to purchase it. Although rental rates may seem high, an expensive piece of equipment lying idle is false economy. A number of units had equipment, purchased especially for one film, which had

been used infrequently, or not at all, since that film was completed.

The university units have such a wide variety of equipment that an exchange of detailed equipment lists and an arrangement for exchange of individual items might be mutually beneficial.

MINIMUM AND ADEQUATE EQUIPMENT

Lists of items suggested as minimum and adequate equipment comprise Appendix A. No optimum list is included, for the unit which can afford all the equipment it wants needs no guidance in its selection. The minimum list is intended to help the small or beginning unit select the basic, essential items; the adequate list is for the unit which is extending its range of activity. The lists are for guidance and evaluation purposes; they are not intended for acceptance without reference to special individual conditions and problems.



Indiana University. On location for "Long Journey West: 1820."