

January 20, 1954

Mr. Benjamin Fine  
The New York Times  
New York, New York

Dear Mr. Fine:

Your request for information concerning the enrollment of Negro students in North Carolina State College has been referred to the office of President Gordon Gray. We are a component of the University of North Carolina and it will probably be President Gray's desire that a single statement be issued concerning the enrollment of Negro students in all three divisions of the University of North Carolina. We operate under a single Board of Trustees and are subject to the same rules and regulations concerning the admission of Negro students.

Sincerely yours,

Carey H. Bostian  
Chancellor

CHB:M

cc: Mr. William Friday

TELEGRAM

Received January 19, 1954

Am planning education story on Negro students in Colleges in South. Would deeply appreciate your cooperation in answering following questions by February 1st. Please indicate whether your name may be used for direct quotation:

1. How many Negro students in your institution: Undergraduate? Graduate? Professional? In 1943-44; 50-51; 51-52; 52-53; 53-54?
2. What is attitude of student body toward Negro students on your campus?
3. What is attitude of faculty members?
4. Any change in attitude in recent years?
5. Please explain how your institution has adjusted to Negro students in these areas:
  - a. <sup>Class</sup> ~~Bed~~ room.
  - b. Living Conditions
  - c. Cafeteria
  - d. Athletic Contests
  - e. Social Activities

Please cite specific instances of Attitude of College authorities, faculty and students in the above areas.

6. What has been the reaction of neighborhood <sup>ing</sup> community toward <sup>admission</sup> ~~admission~~ of Negro students?
  - a. Attitude of local citizens ?
  - b. Attitude of parents ?
  - c. Attitude of Trustees ?
7. Are Negro students eligible for scholarships on same basis as white students?
8. Do you believe that the number of negro students in your institution will increase appreciably in coming years?
9. Any further comment.

Benjamin Fine  
New York Times

April 16, 1954

Mr. John K. Weiss, Assistant Vice President  
The Fund For The Advancement of Education  
575 Madison Avenue  
New York 22, New York

Dear Mr. Weiss:

We are greatly pleased to know that fellowships have been awarded to two members of our staff, Messrs. Keith F. McKean and David Lowenthal. We are confident that they will return to our staff after a year of study with renewed enthusiasm and improved qualifications for their duties.

We are grateful to the Fund for the Advancement of Education for making these fellowships possible.

Most sincerely yours,

Carey H. Bostian  
Chancellor

CHB:H

cc: Mr. Rudolph Pate

P.S. Rudolph:

Please obtain additional information from Dean Shirley and make an announcement of these awards.

C. H. B.

THE FUND FOR THE ADVANCEMENT OF EDUCATION

ESTABLISHED BY THE FORD FOUNDATION

575 MADISON AVENUE

NEW YORK 22, N. Y.

OFFICE OF THE  
ASSISTANT VICE PRESIDENT

April 8, 1954

Chancellor Carey H. Bostian  
North Carolina State College  
Raleigh, North Carolina

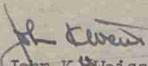
Dear Chancellor Bostian:

The Committee on Faculty Fellowships of The Fund for the Advancement of Education has now completed its review of the large number of applications submitted to it for fellowships and has made its recommendations after a most thorough and comprehensive study.

There are enclosed copies of letters to Messrs. Keith F. McKean and David Lowenthal, whom you recommended for consideration and who have received a favorable decision by the Committee. In view of the Committee's recommendations, the Fund is unable to make a favorable decision on the applications of Messrs. Manuel A. Bromberg and Cleon W. Harrell.

The Committee on Faculty Fellowships and the Fund are deeply appreciative of your assistance and the assistance of your staff in handling applications under this program.

Sincerely yours,

  
John K. Weiss  
Assistant Vice President

Enclosures

KARL T. WRIGHT, President  
Michigan State College  
East Lansing, Michigan

TRUMAN R. NODLAND, Vice-President  
University Farm  
St. Paul 1, Minnesota

JOSEPH ACKERMAN, Director  
600 South Michigan Avenue  
Chicago 5, Illinois

MELVIN H. HAZALEUS, Director  
Colorado A & M College  
Fort Collins, Colorado

MERLYN HOUCK, Director  
Stillwater, Oklahoma

WARREN W. SAHS, Director  
University of Nebraska  
Lincoln, Nebraska



C. PEAIRS WILSON, Director  
Kansas State College  
Manhattan, Kansas

## NATIONAL FARMHOUSE FRATERNITY

BUILDER OF MEN

H. K. WILSON, Secretary-Treasurer  
255 East Irvin Avenue  
State College, Pennsylvania

PRESTON W. McDANIEL  
Editor, Pearls and Rubies  
3740 Kenwood Avenue  
Memphis, Tennessee

April 2, 1954

Dr. Carey H. Bostian, Chancellor  
North Carolina State College  
Raleigh, North Carolina

Dear Doctor Bostian

On behalf of the officers of The FarmHouse Fraternity  
may I express our sincere appreciation for the letter of  
endorsement given to The FarmHouse Club on your campus.

Those of us who are interested in agriculture are most  
proud of the advancements of yourself and Dr. Hilton. They  
are well deserved recognitions.

I hope that I may have the pleasure of seeing you when  
I come to Raleigh for the installation on May 15.

Sincerely yours

H. K. Wilson  
Secretary-Treasurer



April 23, 1954

Mrs. Margaret J. Fernandez, President  
Eastern Philippines Colleges  
Baguio City, Philippines

Dear Mrs. Fernandez:

We are in sympathy with the aims and ideals of the request you have made for books and equipment for the Eastern Philippines Colleges. Your request has been referred to Mr. E. S. King, President of our Y.M.C.A. He is in charge of our activities in this area.

For several years our students have been assisting the University of Indonesia as a special project because of the contributions made to establishing peace in that country by our former President, Dr. Frank P. Graham.

Sincerely yours,

Carey H. Bostian  
Chancellor

CHB:H

cc: Mr. E. S. King



THE UNIVERSITY OF NORTH CAROLINA , *Consolidated Office*

University of North Carolina in CHAPEL HILL • North Carolina State College of Agriculture and Engineering in RALEIGH • The Woman's College in GREENSBORO

GORDON GRAY, *President*

CHAPEL HILL

October 29, 1954

MEMORANDUM TO: Chancellor Graham  
Chancellor Bostian ✓  
Chancellor House

I very much appreciate the cooperation  
being given to Dr. Claiborne S. Jones in connection with  
Operation Faculty Handbook. I am sure you will be  
interested in the copy of the memorandum Dr. Jones  
has written to Dr. Purks.

Gordon Gray  
President

cc: Dr. Jones

C  
O  
P  
Y

October 28, 1954

Dr. Harris Purks  
South Building

Dear Dr. Purks:

In a memorandum of October 12 concerning the projected Faculty Handbook, I requested your approval of my plan to seek first of all an exploratory conference with each of the Chancellors; and outlined the topics which I felt should be discussed in these initial conferences with a view to reaching common understanding and agreement on objectives and methods.

This is to report that I have now conferred with Chancellors Bostian, Graham, and House on this matter; that each chancellor has expressed with evident enthusiasm his unreserved endorsement of the Faculty Handbook project; and that each has offered every possible assistance in the task of assembling the necessary materials.

More specifically, the three chancellors have:

1. Confirmed my initial understanding that the immediate objective is to ascertain and record the facts of current policy and practice affecting faculty membership in the three institutions.
2. Agreed to distribute at once to their respective faculty and staff members an announcement of the nature and intent of the handbook project, together with a request for full cooperation.
3. Approved, as a working outline, my "Suggested Topical Index".
4. Approved the intent of the method suggested in my "Proposed Form of Work-Sheet" for recording data collected.
5. Expressed their desire that, as necessity arises, I approach deans, directors, department heads, faculty and other staff members directly (or through the Office of the Chancellor if this appears in any case to be more desirable and feasible).
6. Offered full access to all available files, records, and documentary sources as needed.
7. Authorized their administrative assistants to deal directly with me in supplying requested information or services, unless in my judgment the request should have the specific approval of the Chancellor concerned.

I must add that I am tremendously encouraged by the extremely cordial reception which the Chancellors have given to the handbook project in these initial conferences. Not only will the rate of progress be substantially accelerated by the generous help which they have offered; but, in addition to this, I am



Dr. Purks  
October 28, 1954  
Page 2

convinced that the effect as well as the future effectiveness of the project will be most favorably influenced by the atmosphere which their warm reception should engender.

As agreed, I shall now plan to go ahead, as soon as may be, with the accumulation of information on the three campuses by means of conferences and consultation of records. As this proceeds, I hope to work closely with the office of each Chancellor, keeping each one informed by periodic memoranda of the progress of the project on his campus. Copies of each memorandum will be sent also for your information and records.

I am attaching four copies of this letter for your use in the event that you should wish to forward copies to the President and the three Chancellors.

Yours sincerely,

Claiborne S. Jones

[FIVE-DAY WEEK]

North Carolina State College of Agriculture and Engineering  
of the  
University of North Carolina  
Raleigh

OFFICE OF THE CHANCELLOR

June 9, 1954

Dean M. E. Campbell  
Dean D. W. Colvard  
Dean H. L. Kamphoefner  
Dean J. B. Kirkland  
Dean J. H. Lampe  
Dean R. J. Preston

Dean J. W. Shirley  
Dean D. B. Anderson  
Dean J. J. Stewart  
Mr. J. G. Vann  
Director Gertrude Cox  
Director E. W. Ruggles

MEMORANDUM CONCERNING WORKING HOURS

On May 24 the Executive Committee of the Board of Trustees approved a recommendation from a special committee which had been appointed to consider working hours. The Trustees reaffirm a working week of  $5\frac{1}{2}$  days with a minimum of 39 working hours for all employees. They gave the Chancellor of each institution authority to make informal arrangements whereby every employee would not be required to work every Saturday, as approved by the President.

A recommendation has been made to President Gray and approved by him that we make informal arrangements with members of our staff with the following stipulations:

1. The following offices will be open every Saturday throughout the year: Admissions, Registration, Dean of Students, Student Personnel, College Extension Division, Coliseum, Institute of Statistics, Foundations, Chancellor, Business Office, Deans of Schools, Directors of Instruction of Schools, Directors of Experiment Stations, and Director of Agricultural Extension Service.
2. All offices involving students will be open every Saturday during those periods when classes are being held.
3. Every employee shall work at least one Saturday each month, unless special permission is obtained.

It should be understood that these informal arrangements will be subject to review and change, but it may be assumed that the above arrangements may be tried for at least one year beginning immediately.

Please see that this information is made available to all administrative units under your direction.

Carey H. Bostian  
Chancellor

North Carolina State College of Agriculture and Engineering  
of the  
University of North Carolina  
Raleigh

OFFICE OF THE CHANCELLOR

May 5, 1954

C O P Y

Mr. Edwin Pate  
Z. V. Pate, Inc.  
Laurinburg, North Carolina

Dear Mr. Pate:

Following our conference last Friday concerning working hours for members of our staff, I wish to submit the following proposals:

The normal work week shall be considered to be  $5\frac{1}{2}$  days with a minimum of 39 hours, exclusive of lunch periods. With the understanding that all administrative offices will be kept open on Saturdays until 12:30 p.m., we would like to have administrative discretion for making informal arrangements with personnel whereby they would not be required to work every Saturday.

1 { The following offices <sup>will</sup> would be open every Saturday throughout the year: Admissions, Registration, Dean of Students, Student Personnel, College Extension Division, Coliseum, Institute of Statistics, Foundations, Chancellor, Business Office, Deans of Schools, Directors of Instruction of Schools, Directors of Experiment Stations, and Director of Agricultural Extension Service.

2 { All offices involving students <sup>will</sup> would be open every Saturday during those periods when classes are being held.

We would also like to have the privilege of having some research laboratories work on a 5-day, 40-hour per week schedule.

We are very desirous of rendering maximum service to the people of the State. We believe that it is necessary to keep many offices open on Saturday mornings. We are confident, however, that it is not necessary to keep every office open throughout the year on Saturday mornings.

We would also like to have the understanding that whatever arrangements we make are subject to continuing study and are subject to review if any evidence becomes available that we are not rendering the best possible service to the citizens of the State.

Sincerely yours,

Carey H. Bostian  
Chancellor

## Recommendation for Work Schedule

### at North Carolina State College

#### The Problem:

The trend toward the 5-day work week in the vicinity of Raleigh and throughout North Carolina was greatly accelerated when the State Personnel Department initiated a six-months trial with the 5-day week for state offices on January 2, 1950 and when this pattern was permanently adopted beginning June 1, 1950. The result was that most major employers of stenographic and clerical workers in the city and its environs adopted a 5-day week. Indeed some mercantile and other businesses have already followed suit. Furthermore, it is known that the banks of Raleigh are seriously planning to this end.

As a result of this situation State College has found it increasingly difficult to compete with most of the other employing agencies for personnel, especially stenographic and clerical. This has resulted in increased salary cost in order to attract competent workers, or the necessity of having to accept the less competent employee.

It is the understanding of this committee that the management survey made by the firm of Cressup, McCormick and Paget, management engineers, has recommended the adoption of the 5-day work week at State College and the Woman's College at Greensboro, because of these local conditions and their belief that efficiency would be improved if the college could compete on equal terms for competent employees. There is a definite trend for employees of the college not stationed in Raleigh to adopt the 5-day work schedule. County agents, home demonstration agents, and other employees find it necessary to conform to the work schedules of local county governments. Federal employees operate on a 5-day basis. Federal, county, and state employees frequently occupy the same buildings and gain efficiency by operating on a common schedule. More and more these groups are adopting the 5-day schedule.

#### Successful Experience with 5-day Week for Non-teaching Personnel:

In the summer of 1951, as a trial, the college went to a 5-day work week but returned to the normal 5-1/2-day work week with the beginning of the fall term of school. In the meantime the state had adopted the 5-day plan for its personnel, including both clerical and professional, and again on March 1, 1952, with administrative approval the college again went to the 5-day work week with the express purpose of trying it out under full academic working conditions for a period of six months. From this experience it can be said with confidence that no major problems were encountered, and this committee is confident that it is the consensus on the campus that general efficiency was improved. Of particular importance is the fact that there was no recognized problem in the area of student contacts with the respective faculty advisers and offices of the college during this period. North Carolina State College was at that time operating, as it is at present, on a 5-1/2-day teaching schedule.

#### Gains in Time and Effectiveness by Use of 5-day Week:

As has been pointed out in previous discussions, under a 5-day plan the college would immediately become competitive with most other employers in the area.



Under the 5-1/2-day week, employees work 39 hours weekly. Under the 5-day week all employees would work 40 hours, or 2-1/2 percent more hours, and lose 16-2/3 percent less from the necessary "stop" and "start" periods, coffee breaks, etc.

Under the 5-day week employees would revert to the state's schedule of 15 days vacation rather than the 16-1/2-day schedule applicable to 5-1/2-day workers.

It is understood that under this plan, just as under the present plan, stenographic, clerical and other workers would be expected to perform such emergency work on Saturdays or other irregular hours as may be found necessary.

It should be pointed out that under this proposal the group usually thought of as weekly or hourly employees, such as farm workers, cafeteria and laundry workers, janitors, etc., are not involved, and that services in these areas will remain unaffected.

#### Recommendations:

In view of these facts it is the unanimous recommendation of this committee that North Carolina State College be permitted to adopt the 5-day work week for non-professional employees during the regular school year, and that for the summer months, beginning approximately June 1 and ending August 31, all employees, professional and otherwise, subject to the demands of summer school assignments, be granted the 5-day work week.

While it is the firm belief of this committee that a 5-day week for all non-teaching personnel would be feasible and in the best interests of the college, it should be emphasized that this recommendation involves only non-professional personnel during the regular school term, that the professional staff will remain on the usual 5-1/2-day schedule, and that therefore all major offices will be open for taking care of the needs of students, parents, visitors, etc.

It is the hope of this committee that the Trustees' committee will find it possible to recommend to the Executive Committee the adoption of the 5-day week. However, if the Trustees' committee believes that this is not wise, then we would recommend that the college be permitted, under administrative guidance, to work out a plan that would assure the functioning of all major offices 5-1/2 days per week with necessary non-professional employees present on Saturday mornings, and that a feasible rotation plan be worked out subject to approval of the administration. If the committee sees fit to proceed along the lines of this proposed alternate, we then earnestly recommend that the 5-day proposal for the summer months outlined in the first proposal above be included in their recommendation.

Respectfully submitted,

M. E. Campbell \_\_\_\_\_

J. G. Vann \_\_\_\_\_

D. W. Colvard, \_\_\_\_\_  
Chairman



## REASONS FOR FIVE-DAY WEEK AT N. C. STATE COLLEGE

### I. Offers more continuity of work effort

- a. Eliminates lost time in starting and stopping
- b. Makes the work day longer.

According to the October 1951 Directory of the College there are approximately 1100 employees at State College. In the five-day week each employee works one hour more per week than in the 5 $\frac{1}{2}$  day week. This gives 1100 more working hours per week of 55,000 per year.

- c. Reduces absenteeism
- d.

### II. Offers consistency with local area

- a. The State Federal, and City offices operate on a five-day week, as well as many industries in this area. Many people therefore feel we at State College can accomplish more by keeping hours consistent with others in the area.
- b. In many cases with our staff some member of the family works down town and another at State College and inconsistency in the work week presents a great handicap. This is a very important factor in keeping capable and efficient people filling our positions.

### III. Increases morale of staff

- a. Employees need two full days of rest
- b. Many clerical employees are married women with homes to keep and they find two full days offer more continuity for their home duties.
- c. Means more time with their family
- ? d. Means more personal freedom

North Carolina State College of Agriculture and Engineering  
of the  
University of North Carolina  
Raleigh

OFFICE OF  
J. G. VANN, ASSISTANT CONTROLLER  
AND BUSINESS MANAGER

January 16, 1954

Dr. C. H. Bostian, Chancellor  
Campus

Dear Dr. Bostian:

This is in response to your request for an outline of my ideas in connection with the possibility of a 5-day week for our clerical staff. It is my understanding that under certain limitations this privilege might also be extended to maintenance personnel. As I understand it, however, there is no thought at this time of making any change in the academic schedule.

My comments in some instances will be purely personal opinions. In other instances, however, they will be representative of what I have found to be the prevailing opinion among staff members.

In looking at this proposal, we should first remember that there might be some inconvenience occasioned by the absence of full clerical and maintenance staffs at times when the instructional staff will be in their offices. This would be particularly true in the matter of telephone service. There are, however, many factors which in my opinion make a transition to a 5-day week desirable.

Common Practice

Raleigh is now, with the exception of mercantile business, almost entirely on a 5-day week. Included in this category are state, county and city offices, public utilities, most insurance companies, and a number of others. The trend is steadily toward the 5-day week in Raleigh, and I believe within a few years practically every non-mercantile firm will be on this basis.

Change Has Been Popular

In the main those firms which have changed to a 5-day week would not think of going back to their old schedule. The employees like the system very much, and the employers recognize the fact that morale has been greatly improved since a change was made. These observations are based upon conversations which I have had with several state department heads.

Present Plan Only Partially Effective

It occurs to me that we do not now have a fully effective 5 $\frac{1}{2}$ -day week, insofar as joint activity of professional and clerical staff is concerned.

My personal experience is that Saturday morning is not an effective time for accomplishment of work. Normal routine generally calls for opening of mail early in the morning, dictation during the middle of the morning, transcription by the secretary on into mid-afternoon, and signing and mailing of letters as almost the last thing on the day's schedule. This cannot be accomplished in a half-day, and speaking personally for myself I try to avoid dictation on Saturday. Rather, I use Saturday morning for trying to clean up odds and ends around my desk, and actually more or less mark time until the closing hour has been reached. I think also that it will be found, particularly during the vacation months, that a full force is actually not present on Saturday morning. In order to have extended week-ends for trips many employees take a half-day's vacation on Saturday morning. I have never attempted a survey, but would venture the guess that our average Saturday force during the summer months would be little more than 50%. It is also true that business between the college and other agencies is now considerably reduced on Saturday morning. Our telephone switchboard operator estimates that only about half the normal number of outside calls are received on Saturday morning up to 11:00 A.M., and that after this hour such calls are practically non-existent.

#### Change Would Promote Efficiency

We are faced here at the college with an increasingly difficult job in trying to induce prospective first-rate clerical employees to join our staff. If the same salary is offered by another agency operating on a 5-day week there are few instances in which we are successful in securing the services of employees. I fear that within 10 or 15 years, as our present group moves out and new ones come in, we will end up with a second-rate staff. On the matter of efficiency we can also find statistical proof that the 5-day week will permit more work to be accomplished. As you know, under the present schedule each employee works 39 hours per week. Under the 5-day week, each employee would work 40 hours per week. After allowances for holidays and vacations, I have found that our clerical staff works during the year a total of 1,844 hours, whereas the employees of the state departments on a 5-day week actually work 1,888 hours. Another interesting fact is that less time is lost in starting and stopping work. It probably requires five minutes in the morning for a person to prepare his desk for work, and it takes him five minutes in the afternoon to close up for the day. On the 5 $\frac{1}{2}$ -day week, after allowances for holidays and vacations, each employee comes to the office on 284 days. On the 5-day week, after similar allowances for holidays and vacations, each employee comes to work on 235 days, or 49 days less. At ten minutes per day for starting and stopping, there is a time saving of 490 minutes per year, or over eight hours, in favor of the employee on a 5-day week. Taking these last two factors which I

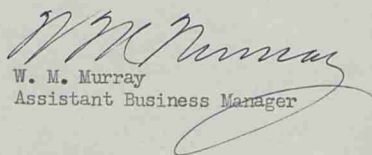
mentioned together, it would appear that the employee on the 5-day week puts in about 52 extra hours of work during the course of a year. Certainly this time could be used to advantage.

Adjustments Can Be Made

It is obvious, of course, that certain essential operations must be manned on Saturday, but we should be able to work this out with a minimum of difficulty. As a matter of fact, we know that this can be done. You will recall that for a period of six months several years ago we did operate on a trail basis on a 5-day week and experienced very little difficulty,

There are doubtless a number of pros and cons which can be added to this summary. In the main, however, I feel very strongly that all evidence points to the desirability of the adoption of a 5-day week for as many of the members of our staff as possible.

Very sincerely yours,

  
W. M. Murray  
Assistant Business Manager

WMM:jb

North Carolina State College of Agriculture and Engineering  
of the  
University of North Carolina  
Raleigh

SCHOOL OF AGRICULTURE  
RESEARCH EXTENSION  
RESIDENT TEACHING

OFFICE OF DEAN AND DIRECTORS

Nov. 4, 1952

Dr. J. H. Hilton, Dean  
School of Agriculture  
Campus

Dear Dr. Hilton:

I should like to ask that steps be taken as promptly as possible to request the Executive Committee of the Board of Trustees to re-consider their recent action relative to the five-day week, giving them a full analysis of the effects of the two alternative policies as we see them.

When the offices of the Federal agricultural agencies in this vicinity went on the five-day week a few years ago, I personally, was frankly skeptical regarding the wisdom of the procedure. During the last two summers we have operated for short periods of time on a five day, forty-hour week basis for our clerical staff. My experience during that period has led me to the conclusion that this is a very wise move.

I feel that it is very desirable for us to return to a five-day week for the clerical staff for the following reasons:

1. A work week of five eight-hour days provides for a working week of 40 hours and does not represent a reduction in the amount of time worked by the employees. As a matter of fact our experience has led us to the conclusion that the eight-hour day is actually a more effective working unit than the seven-hour day and it is my opinion that fully as much if not more work is accomplished in the five eight-hour days than is accomplished in the five and a half seven-hour days.
2. The offices of all Federal agencies located in Raleigh and the offices of the major portion of the State agencies, other than the North Carolina State College, are now operating on a five-day week. The clerical staff definitely prefer the five-day week and we are put at a distinct disadvantage in employing and holding employees in the clerical categories when we operate on a five and a half day week in competition with other agencies of the State and Federal governments in the city who operate on a five-day week. We have already lost some of our employees for this reason and are at a distinct disadvantage in employing well qualified new people to fill our vacancies.
3. Many of our clerical workers have family responsibilities. While they are working it is necessary for them to employ someone to take care of children and family responsibilities at home. Many of these people really need the Saturday morning period for taking care of their obligations at



Nov. 4, 1952

at home and their working during this period requires some real sacrifices and serious inconveniences.

4. With a five-day, forty-hour week for clerical staff it would not be necessary to go to a five-day week for classes nor would it be necessary for the professional staff to go on a five-day week. It would still be possible to keep a skeleton staff of clerical workers and professional staff on duty on Saturday morning. Classes could still go on as usual and arrangements could be made to provide service to off campus visitors as at present.

If the proposal resulted in a reduction of the working week or a reduction in the efficiency or effectiveness of operation of our program of work I would personally be opposed to changing back to a five-day week. However, I am fully convinced that none of our present services would be impaired. In fact, in my opinion, the efficiency of our organization would be strengthened. I sincerely trust that the Trustees will be willing to reconsider their action and permit an adjustment on the above basis.

Sincerely yours,

*R. W. Cummings*  
R. W. Cummings  
Director of Research