To: Dean D. E. MacDonald
From: Professor F. Dow Smith
Subject: Annual Report - Physics Department 1954-55

The academic year just completed can accurately be categorized as a year of growth and solidification of departmental activities in accordance with basic plans. In a general sense two things stand out: (1) The growth of key faculty members in professional and university affairs, and (2) The increase in the number of high caliber students being attracted to physics at Boston University. These gains are definite and are reflected in the summaries given below. These summaries must be considered with some caution, however, since they do not reflect, for example, the percentage shift of students from part-time to full-time basis in the graduate program. A much better criterion can be found in the degree of participation in the Physics Colloquium also discussed below. There is some concern that departmental needs in terms of facilities are growing more quickly than solutions are being found so that an already serious situation worsens somewhat.

This report covers only those activities in physics which have been under the direct supervision of the Chairman of the Physics Department, and excludes therefore the significant and extensive contributions of the Physical Research Laboratory. Notwithstanding this division of administrative responsibility, there has been close interchange of information and of personnel. Physical Research Laboratory personnel have contributed significantly to the teaching program and workshops. Graduate students have found opportunities for study and research on assistantships offered through the sponsored research program. Undergraduates have been given increased opportunity to view the activity of the laboratory, this resulting in a noticeable extra stimulus to their work.

Teaching Faculty for 1954-55

Primarily undergraduate:
Professor L. B. Taylor
Professor L. A. Brigham

Undergraduate and graduate:
Visiting professor C. Aschenbrenner
Assistant Professor F. D. Smith
" F. Agerberg
" J. Josephs
Mr. Hatton Howell

Primarily graduate:
Research Professor K. Fostrecov
Assistant Professor W. Hasner
" A. Siegel
Mr. R. L. Passant
Dr. E. O'Neill
Mr. G. Wellner
Mr. J. Gordon
Mr. J. Watson
Dean Duncan E. Macdonald

F. Dow Smith

Annual Report

July 9, 1956

Dear Dean Macdonald:

The following recommendations are extracted here from my annual report to you submitted in June. They include some urgent matters on which immediate decisions are necessary. These particular matters have been marked with asterisks with comment made below. The following recommendations appear on Page 11 of this report:

1. Administrative reorganization to make possible a total physics budget.
2. Approval of the following goal for 1957-58 for regular faculty.

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Professor</td>
<td>8000</td>
</tr>
<tr>
<td>1 Associate Prof.</td>
<td>8000*</td>
</tr>
<tr>
<td>1 Associate Prof.</td>
<td>7500</td>
</tr>
<tr>
<td>1 Associate Prof.</td>
<td>7000</td>
</tr>
<tr>
<td>1 Assistant Prof.</td>
<td>6500</td>
</tr>
<tr>
<td>1 Assistant Prof.</td>
<td>6000 (50% carried by CIA)</td>
</tr>
<tr>
<td>1 Assistant Prof.</td>
<td>5600 (50% carried by CIA)</td>
</tr>
</tbody>
</table>

**TOTAL CIA BUDGET 42,800 (not including department chairman)**

Currently we have:

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Professor</td>
<td>6800</td>
</tr>
<tr>
<td>1 Associate Prof.</td>
<td>5700   (have recommended adjustment to 6200)</td>
</tr>
<tr>
<td>1 Associate Prof.</td>
<td>3300 (GIA budget burden—no base rate assigned)</td>
</tr>
<tr>
<td>1 Assistant Prof.</td>
<td>5200</td>
</tr>
<tr>
<td>1 Assistant Prof.</td>
<td>5000 (GIA budget 1250, adjustment to 5300 has been recommended)</td>
</tr>
</tbody>
</table>

Will attempt to hire by September 1956:

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Assistant Prof.</td>
<td>at up to 6000 ***</td>
</tr>
<tr>
<td>1 Assistant Prof.</td>
<td>at up to 6000 (GIA budget 3000) ***</td>
</tr>
</tbody>
</table>

**TOTAL CIA BUDGET FOR REGULAR FACULTY OF ALL RECOMMENDATIONS APPROVED $31,750 (includes 3300 toward salary of department chairman)**

This goal implies the hiring of only one additional person for 1957-58 and assumes the return and promotion to associate rank of Professor Ajsenber-Selove.

3. Authorization to use 11,000 square feet of space in the FRL building for academic physics purposes. (This space can be made available through conversion of space now used for storage.)

4. Approval of: 3 Graduate Teaching Assistantships at 1800 for academic year plus tuition.
   3 Graduate Research Assistantships at 1800 for academic year plus tuition.
 Approval of this specific appointment is urgently requested. A man of the highest possible caliber is known to us who will be available for an appointment to begin July 1, 1957. It will be necessary, however, to give him a firm offer (not necessarily formalized) almost immediately. This can be Dr. Walter Selove, currently on a sabatical leave from Harvard University. I believe you are fairly familiar with the total implications of this appointment both in terms of its own merits and in terms of the total departmental picture involving the retention of Professor Ry Ajsenbergs-Selove.

We have a first-class man available for this position, Dr. Robert E. Poschet, graduate of Harvard and Cambridge Universities, currently working on theoretical solid state physics at Lincoln Laboratory. He is interested in an academic position which provides him free time for academic research in the summer, particularly in the first years of appointment. The problems on which he wishes to work are not suitable for obtaining immediate sponsorship, but have great potential for the future. He is willing to accept a reduction of $1000 on his current salary (this salary is $7500 and is essentially a free grant for research providing him complete freedom within a general field. This rate is therefore much lower than would be available to him in other areas at Lincoln Laboratory.) An academic salary of $6500 will be required. This represents an increase in our planned budget, but is unavoidable. This rate is consistent with my recommended scale for 1957-58. If this rate is tentatively approved as a basis for negotiation, I would like to invite Dr. Poschet to meet with the Dean and with Vice-President Yes, Wednesday, July 16. This is the subject of a separate memorandum to you.

We have been attempting to fill this position with a man who could be interested in one of our research areas in the Physical Research Laboratories. We have been having considerable difficulty in doing this. Our search has narrowed down to two men, one of whom quite definitely could not be supported in this way. Both men currently under consideration represent a possible ultimate replacement for Professor Lincoln Taylor and would contribute primarily to the undergraduate program. Approval is requested for permission to negotiate with applicants for this particular position on the basis of either full-time or half-time support from University funds. In the case of one individual involved, it will be necessary for me to give you by July 15 whether or not appointment can be made on a full-time basis.

Item 3 concerning the use of space in the HDR building for physics is also urgent from the point of view of both Physics Department planning and HDR planning. If authorization is given, I believe it would be quite feasible to hold the intermediate physics classes in HDR beginning in September 1956, thus releasing classroom space in the College of Liberal Arts with the transfer of the undergraduate laboratories to take place not later than the beginning of the second semester 1956/57.

The above recommendations have been singled out because of the particular urgency which applies to them. This is not to imply that early approval of the total recommendations is not needed. One area of importance has not been stressed in my annual report primarily because the specific needs will not be clear until faculty appointments are solidified. This has to do with the departmental research budget. It has been adequate over the last two years only because we have not had substantial research activity in the Department requiring need of such funds. This is an item which should be kept in mind for future budget planning.
Research Appointments

In addition formal action on the following appointments is required (subject of separate memoranda in your hands.)

Assistant Research Professor of Physics
  effective September 1, 1956........George Stroke

Associate Research Professor of Physics
  effective July 1, 1956........Ray Ajsenberg-Selove

One other appointment to Associate Research rank is under consideration (Arthur Kohlenberg.) No recommendation is offered at this time.
To: Dean D. E. Macdonald

From: Professor F. Dow Smith

Subject: Annual Report - Physics Department 1955-56

Dear Dean Macdonald:

This report is being submitted following your request of May 15, 1956. I am grateful for this invitation to report at a time when we can look back on many accomplishments achieved, but also at a time when we face serious problems. Some of these problems are not new, but as is so often the case, there comes a time when the accumulation of problems may lead to a total situation, a crucial situation, which can only be considered in totality. Physics at Boston University faces such a situation today. I am therefore presenting this report in two parts—one dealing with the activity of the academic year just completed and the other with long range aims and needs. To provide a consistent picture I include as well certain aspects of the undergraduate program relevant to graduate problems.

**Teaching Faculty for 1955-56**

**Primarily Undergraduate Courses:**
- Professor L. B. Taylor
- Professor L. A. Brigham (astronomy courses, no direct participation in Physics Dept.)

**Undergraduate and Graduate:**
- Associate Professor F. D. Smith
- Associate Professor A. Siegel
- Assistant Professor F. Ajzenberg-Selove
- Assistant Professor J. Josephs
- Visiting Professor Aschenbraner
- Dr. E. L. O'Neill
- Mr. Rutson Novall
- Mr. William Davis
- Mr. John Cerdes
  - Research Associates
    - FRI—each teaches one course

**Graduate:**
- Research Professor Pestrecov
- Assistant Professor Hanauer
- Mr. R. Claflin (evening program only)
- Mr. R. L. Dunsmult (Institute of Air Photography)
- Mr. G. Sofer (evening program only)

**Enrollments (1955-56)**

- Students in Elementary Courses: 200
- Undergraduate Physics Majors: 50
- Masters Candidates: 20
- Ph. D. Candidates: 27
Degrees Awarded August 1955 & June 1956

Bachelor of Arts 12
Master of Arts 6
Doctor of Philosophy 0 (three students have dissertation
in final draft stage)

Graduate Assistants

Teaching Fellows 3
Part-time 1
Research A 5

The program of the Physical Research Laboratory has broadened its base of support through working with a wider group of supporting agencies. Contractual obligations as of May 31, 1956, total $... In addition, contracts within the Physics Department for basic research total $26,990.

The following reports have been published from 31 May 1955 to 31 May 1956:

Contract No. AF 33(616)-432
The Science of Aerial Photography

Technical Note No. 120, The Effect of Increase in Base/Height Ratio on Height Judgments, June 1955.
Technical Note No. 121, A Quantification of Textures on Aerial Photographs, June 1955.

Quarterly Progress Reports of the Director
No. 39 - for the First Quarter of 1955.
No. 40 - for the Second Quarter of 1955.
No. 41 - for the Third Quarter of 1955.

Contract No. AF 19(604)-857
Spectroscopic Recording Techniques

Quarterly Status Reports
No. 7 - for the period ending 31 March 1955
No. 8 - for the period ending 30 June 1955
No. 9 - for the period ending 30 Sept. 1955
No. 10 - for the period ending 31 Dec. 1955
No. 11 - for the period ending 31 March 1955
Contract No. AF 19(604)-1030
System 119L

Quarterly Status Reports
No. 1 - for the period ending 31 Dec. 1954
No. 2 - for the period ending 31 March 1955
Final Report - July 1955

Contract No. AF 19(604)-1547
Optical Navigational System

Scientific Report No. 1 (Includes Quarterly Status Report No. 1 and No. 2 Dec. 1955
Quarterly Status Report No. 3, for the period ending 31 March 1956.

Contract No. AF 04(645)-60
Photographic Visibility Study

Monthly Progress Reports
No. 1 - for the month of Dec. 1955
No. 2 - for the month of January 1956
Final Report - A Survey of Photographic Visibility Problems at Patrick Air Force
Range February 1956
Bi-monthly Progress Report for the period ending 30 April 1956

Contract No. AF 19(604)-1725
Application of Communication Theory to Radar Antenna Scanning

Quarterly Status Report No. 1 - for the period ending 30 April 1956

Note - 422(03)
Radar Target Simulation Study

Radar Target Simulation (Special Report), March 1956

P. O. No. 6108 - 2470
Effect of Thermal Shock on Aerial Camera Focus

Final Report

P. O. DDL - 2576 and P. O. DDL - 2947
Reversal Processing

Final Report (Part I), July 1955
Final Report (Part II), April 1956

During the year members of the laboratory have participated in many symposia and
meetings, many of them of international scope and prestige.
The following is a partial list of papers presented by members of the Physical Research Laboratories:


The following publications were made by regular members of the Physics Department (February 1955 through February 1956):

"The Analysis and Synthesis of Linear Coherent and Incoherent Optical Systems," (Now being reviewed by editorial board for publication in the Transactions of the Institute of Radio Engineers (professional group on Information Theory)).


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Physics Department faculty participated in the following symposia, meetings, and activities among others:

Summer term, Physics Department, Columbia University

Physics Department, National University of Mexico, Mexico City

Smith-Kundt Fellowship Program, U. S. Department of State

Subcommittee on Nuclear Constants, National Research Council

Steering Committee, Conference on Cooperative Emulsion Research, National Science Foundation

Newsletter of the Conference on Cooperative Emulsion Research

Nuclear Data group, National Research Council

Grenoble Conference on Cooperative Emulsion Research, March 1955

Washington Meeting, American Physical Society, April 1955

Conference on Nuclear Structure, University of Michigan, June 1955

Mexico City meeting, American Physical Society, August 1955

New York meeting, American Physical Society, January 1955.
Part II: Physics at N. U.—Problems and Objectives

I should like to discuss at this time some more general aspects of the program in physics at Boston University. The following comments, a condensation of more lengthy notes which I have prepared on the subject, are in abbreviated form which I hope will therefore be more usable. This does mean, however, that in certain cases further amplification or detail may be desirable. I shall be happy to provide any additional comment or information as may be required.

This report may be considered in the context of:

2. Letter Report to President Case from F. D. Smith, June 15, 1954
3. Annual Report to Dean of the Graduate School, June 1955.

It is consistent with the general tenor of all of these. It differs in that certain problems raised previously have been essentially solved, that other problems have assumed different proportions, and that new problems have arisen.

1. Basic University Policy toward Physics

Physics can play a significant role in the future of Boston University. As discussed in my article in the April 1956 issue of the Graduate Journal, we face a situation in which our society is organized more and more in ways depending on technological developments. Yet we also face a deterioration in the teaching of science and its meaning. These things were once considered a significant part of a liberal education. If anything, that significance increases, yet real understanding of what science is about decreases steadily. Boston University is in a particularly appropriate position to contribute toward reversing this trend.
Part I of this report shows a healthy activity in physics. It is a record of accomplishment. Yet this accomplishment is not necessarily synonymous with the establishment of a situation advantageous to the University over the long run.

Over past years the physics program has suffered from lack of a definitive policy to guide its actions. The reports mentioned above, particularly the first two, are essentially invitations for administrative action toward the setting up of short and long-term goals. No such action has been forthcoming.

I have assumed in my planning, consistent with your own announcements to faculty, that we are aiming at a Graduate program of the highest possible caliber. This does not mean we should plan or even wish to compete on a full scale basis with established departments like Harvard or MIT. Neither can we accept a caliber of instruction or research that is in any sense lower than that of such established groups. It does mean consolidation of our efforts toward specialization in relatively fewer fields of research within the broad field of physics.

Graduate education in physics is a highly expensive form of education. This is not recognized at Boston University. The caliber of research expected from graduates in physics is high, and can be achieved only through the activities of a faculty of the very highest caliber. Administrative policies yield many instances which reflect the lack of consideration given to indirect support of the graduate program.

As a trivial example to show how far we are from realizing the basic necessities I might point out that we operate under administrative restrictions where obtaining a telephone for a faculty member (a specific case in which the individual has a research contract for $9,000 for the year, paying overhead of $2,220 to the University) can become a major problem requiring special action and significant amount of time on the part of the department chairman. The effects of problems of this kind on faculty morale are impossible to dispel.

As another example let me refer to a situation in which the department chairman spent four days at a meeting of the American Physical Society. During this period he spent one-half hour presenting a paper to the American Association of Physics Teachers and almost the entire balance of time interviewing prospective candidates for faculty positions. The University's contribution to his total expenses consisted of payment of coach fare round trip. The incident would be laughable were it not a reflection on the general administrative atmosphere within which a department chairman must operate.

These incidents are by-products of a failure of the administration to establish a definitive policy consistent with its announced generalized objectives.

2. The Status of Physics at B.U. on a Competitive Basis

I believe that the University administration is not aware of how far we actually need to go. It is difficult to get data with which to compare our effort. The following is, however, of relevance. The figures for Harvard are given as typical of a major department. The figures for Illinois are given since this is the only department for which accurate figures are available.
Harvard University (Physics & Applied Physics)

Professors 33
Associate Professors 20
Assistant Professors 12
Instructors & Lecturers 12

University of Illinois

**Faculty (Physics)**

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td>15</td>
</tr>
<tr>
<td>Associate Professors</td>
<td>6</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>10</td>
</tr>
<tr>
<td>Instructors</td>
<td>4</td>
</tr>
<tr>
<td>Research Professors</td>
<td>2</td>
</tr>
<tr>
<td>Research Assoc. Prof.</td>
<td>1</td>
</tr>
<tr>
<td>Research Asst. Prof.</td>
<td>1</td>
</tr>
</tbody>
</table>

**Students (Physics)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Courses</td>
<td>600</td>
</tr>
<tr>
<td>Undergraduate Majors</td>
<td>125</td>
</tr>
<tr>
<td>Graduate Physics</td>
<td>140</td>
</tr>
<tr>
<td>Post-Doctoral Research</td>
<td></td>
</tr>
<tr>
<td>Associates or Fellows</td>
<td>15</td>
</tr>
</tbody>
</table>

**TOTAL** 45

(Research Associates not included)

Boston University (1955-6)

**Faculty**

<table>
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<tr>
<th>Position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td>1</td>
</tr>
<tr>
<td>Associate Professors</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>3</td>
</tr>
<tr>
<td>Instructors</td>
<td>1</td>
</tr>
<tr>
<td>Research Professors</td>
<td>1</td>
</tr>
</tbody>
</table>

**Students**

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Courses</td>
<td>200</td>
</tr>
<tr>
<td>Undergraduate Physics Majors</td>
<td>50</td>
</tr>
<tr>
<td>Graduate Physics</td>
<td>47</td>
</tr>
</tbody>
</table>

**TOTAL** 8

(Research Associates not included)

The ratio of students between Illinois and Boston is of the order of three to one, the ratio of faculty is between five and six to one. The ratio, if weighted for the greater efficiencies (e.g., larger classes) which come with a larger student group, would be even less favorable to us. In fairness it must be pointed out that a sizable fraction of the B. U. graduate group are part-time students. We can, however, anticipate a continuing trend toward increasing the number of our full-time students.

Our ability to attract good graduate students suffers from what we can offer in terms of assistant-ships and fellowships.

As typical examples:

- **University of Kentucky**—Graduate Teaching Assistants up to $2000 (academic year)
- **Graduate Research Assistants**—$1600 to $2000 (academic year)
- **Penn State University**—to $1770 plus tuition (academic year)
- **Wayne University**—$1900 plus tuition
- **U. of Notre Dame**—up to $2200 plus tuition (academic year)
- **U. of Illinois**—$1500 plus tuition (academic year)
- **Case Institute of Technology**—$2200-3000 (academic year)
Carnegie Institute of Technology—$1500–2100 plus tuition (academic year)
Rutgers University—$1500 minimum plus tuition (academic year)
Stevens Institute—$1500 plus tuition (academic year)

Many departments announce lower offers than this, particularly the established
departments. Physics at P. U. is not, however, established. It desperately needs
high caliber students to act as the trigger in stimulating our total activity. This
year we have made three offers to new students of our $1200 teaching assistantships.
All were turned down. Two of these will be accepted by students already here. One
remains open. I am recommending, therefore, not only that we should match our
competition, but that we make available for 1957-58 the following:

3 Graduate Teaching Fellowships at $1800 for the academic year plus tuition
3 Graduate Research Fellowships at $1800 for the academic year plus tuition
(over and above those available through sponsored research)

It is further recommended that the name of these awards be changed from "Fellowship"
to "Assistantship" to be more consistent with usual practice.

With regard to faculty we must revise drastically our ideas on what must be paid as
basic academic rates. This is discussed further below. Our offers to prospective
faculty this year have been consistently too little and too late.

3. The Role of Sponsored Research

Sponsored Research has given us the position we now have and the substantial beginning
toward establishment of a first rate department of Physics.

Sponsored Research of the programmatic type cannot continue to exist without the
support of a first class academic department.

An academic department serving physics as a field cannot be built on personnel paid
primarily from funds arising from restricted areas of sponsored research.

Sponsored Research cannot continue to be regarded as a profit-making enterprise alone.
Substantial amounts of reserve funds must be diverted toward building the academic
program. If this is not done the sponsored program will itself not be able to survive.

4. Status of Personnel in Sponsored Research

We have been asked many times why it is that no retirement plan is available for PRL
personnel. Many other universities offer such plans, e.g. MIT in its DTC and Lincoln
Laboratory.

In addition we need to broaden the concept of appointments to the rank of assistant
Research Professor, Associate Research Professor and Research Professor for personnel
of appropriate stature.
6. Eleven-Sevenths

The eleven-sevenths formula for determining a total annual salary for faculty involved in research has now outlived its general usefulness. It was initiated, wisely, as a device for creating competitive salaries from completely inadequate base rates. There are still inadequacies, but we now have specific cases where the formula creates total salaries which are too high.

We should therefore work with a method which allows separate computation of research salary independently from the academic rate.

It will probably be desirable for some time to come to retain some flexibility in the manner of computing research salaries.

6. The Role of the Department Chairman

Under existing administrative procedures the department chairman is very seriously limited in the extent to which he can act effectively in forming and building his own program.

He has no budget. He is asked once a year for a general recommendation concerning the salaries of his faculty. If he puts these in the form of specific recommendations on his own initiative, he is not consulted concerning them. He is not informed what, if any, action is to be taken on them. Then re-appointments are made, he is not informed. His most effective method is to inquire directly from the faculty member in question.

He is given no guidance in balancing his own recommendations with those of other departments, or with anticipated University policy. Recommendations were made by the department chairman for new physics faculty members in February and later in April 1956. These recommendations were made on the basis of the current salary distribution at that time. They should have been coordinated with general budget changes then being planned.

The department chairman is seriously limited in his freedom to hire new personnel. He must negotiate each appointment separately and by a tortuous procedure in which he never knows clearly until a very late stage of the proceedings what his offer can be.

7. Limitations of Physical Space

Physics urgently requires 11,000 square feet of floor space for establishment of laboratory space, efficient classroom space and office space. Physics would release all space now held in the Stone building and all classroom space in CIA except for the facilities used by the General Physics course for non-physics majors.
6. Specific Recommendations (will require approval of both CIA and Graduate School)

1. Administrative reorganization to make possible a total physics budget.
2. Approval of the following goal for 1957-58 for regular faculty.

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Professor</td>
<td>$8000</td>
</tr>
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<td>$500</td>
</tr>
<tr>
<td>1 Associate Professor</td>
<td>$4000</td>
</tr>
<tr>
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<td>$4000</td>
</tr>
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<td>$5000</td>
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<td>$5000</td>
</tr>
<tr>
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<td>$5000</td>
</tr>
<tr>
<td>1 Assistant Professor</td>
<td>$5000</td>
</tr>
</tbody>
</table>

Total CIA Budget: $42,000 (not including department chairman)

Currently we have:

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Professor</td>
<td>$6000</td>
</tr>
<tr>
<td>1 Associate Professor</td>
<td>$5000</td>
</tr>
<tr>
<td>1 Associate Professor</td>
<td>$3000</td>
</tr>
<tr>
<td>1 Assistant Professor</td>
<td>$5000</td>
</tr>
<tr>
<td>1 Assistant Professor</td>
<td>$5000</td>
</tr>
</tbody>
</table>

Will attempt to hire by September 1956:

<table>
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<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Assistant Professor</td>
<td>$6000</td>
</tr>
<tr>
<td>1 Assistant Professor</td>
<td>$6000</td>
</tr>
</tbody>
</table>

Total CIA Budget for Regular Faculty: $31,750 (includes $3,000 toward salary of department chairman)

This goal implies the hiring of only one additional person for 1957-58 and assumes the return and promotion to associate rank of Professor Ajsenbarg-Salove.

3. Authorization to use 11,000 square feet of space in the PL building for academic physics purposes. (This space can be made available through conversion of space now used for storage.)

4. Approval of: 3 Graduate Teaching Assistantships at $1800 for academic year plus tuition
   3 Graduate Research Assistantships at $1800 for academic year plus tuition.

9. Conclusion

The recommendations in this report have been arrived at through a long process of

*Approval of this specific appointment is urgently requested. A man of the highest possible caliber is known to us who will be available for an appointment to begin July 1, 1957. It will be necessary, however, to give him a firm offer (not necessarily formalized) almost immediately.
sifting, experimentation, and discussion. They result, too, from a close examination of the experimentation and improvisation which have taken place over recent years. They are a consistent extrapolation of gains already made in faculty position and in the total status of physics at R.U. I urgently request they be approved in their entirety and that this approval be granted at the earliest possible date.

Let me express my very great appreciation of the real support that has been given me by all members of the administration. The preceding report may, in some respects, appear critical. We have great aims before us; we must from time to time take real and specific strides toward realization of those aims.

It's, it seems to me, the responsibility of the department chairman who, after all, is closest to the problems, to interpret and to recommend action when he sees the need. My criticism is of a situation, not of individuals nor the actions of individuals.

Respectfully submitted,

F. Dow Smith
Chairman, Physics Department