The Board of Trustees met in regular session on January 9, 1981 at 9:00 a.m., following a presentation by the Head of the Department of Physics, Dr. F. D. Schowengerdt.

Trustees present: Dr. Fogarty, Miss Leaver, Messrs. Schwartzberg, Stockmar and Wilson. Messrs. Grynberg and Pascoe entered the meeting later as noted.

Absent: Mr. Coors.

President McBride presided.

Also attending the meeting were Vice Presidents Mueller, Scott, and Welles, Dean Golden, Dean Nyikos, and other staff members, visitors, and a representative of the press.

Miss Leaver introduced several student visitors who had been invited by her to attend the Board of Trustees meeting.

Previous Minutes. The minutes of the meeting held on December 12, 1980 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Peter A. Scholle
Adjunct Associate Professor of Geology
$5,000 for the spring semester of the 1980-81 academic year

Daniel T. Teitelbaum
Adjunct Associate Professor of Environmental Sciences
3,000 for the spring semester of the 1980-81 academic year

Reappointment:

R. Theodore Hurr
Adjunct Associate Professor of Geological Engineering
3,000 for the spring semester of the 1980-81 academic year

Continuation of Appointments:

John D. Wright
Part-time Instructor in Petroleum Engineering
6,500 for the spring semester of the 1980-81 academic year

Richard C. Walker
Adjunct Assistant Professor of Mathematics
2,000 for the spring semester of the 1980-81 academic year

January 9, 1981
Change in Appointments:

Joan N. Brooks
Assistant Professor of Civil
Engineering (assigned to the
Department of Basic Engineering)

Professor Brooks has requested a change in appointment for the spring semester 1980–81 from full time to half time basis in order to complete her work for the Ph.D. degree at the University of Colorado.

Mark S. Trasko
Adjunct Assistant Professor
of Basic Engineering

Mr. Trasko has asked for a change of appointment from Visiting Assistant Professor to Adjunct Assistant Professor for the spring semester of the 1980–81 academic year at one-half salary.

Faith Williams
Part-time Instructor in the
Department of Humanities and
Social Sciences

$2,500 increase for the
spring semester of the
1980–81 academic year

Second Notice of Appointment:

Earl K. Madsen
Adjunct Associate Professor of
Mineral Economics

3,675 for the 1980–81 academic year

Dr. Madsen's appointment was authorized by the Board at the July 1980 meeting, but was not properly executed.

Resignation:

Stanley M. Guralnick
Associate Professor of
Humanities and Social
Sciences

Dr. Mueller called the Board's attention to the fact that Dr. Guralnick's resignation has not yet been accepted, and Mr. Stockmar inquired about the significance of not accepting the resignation. President McBride's response was deferred to the Executive Session.

Financial Reports. Mr. Scott made available the monthly reports as follows: Time Deposits and Investment Reports as of December 31, 1980; Current Funds - Summary by Fund For the Six Months Ending December 31, 1980; and Current Funds Comparison with Budget for the Six Months Ending December 31, 1980. He told the Board that the School is operating within the financial plan. He explained that the new twin tower dormitory reflects expenditures in excess of budget and will continue to do so for the year due to the method of reporting interest expense. Operating expenses are within the range estimated. He stated that $225,000 of the pooled investments was reinvested for 176 days at 15-1/4 percent.

Admissions. Mr. William Young, Director of Admissions, reported an increase at this time of 16% in applications received over

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last year. He said that there will be a detailed account of minority and female applications by February 1.

Dean Nyikos called the Board's attention to the memorandum dated January 6, 1981, written to Mr. Schwartzberg by Mr. Young, providing information on the recruiting programs for women and minority students. At the suggestion of President McBride, each Trustee agreed to send a copy of the memorandum to each CCHE Commissioner with whom he has been in contact.

ASAP. Mr. Russell White of the Foundation reported to the Board that the month of December has been the second best month of record in terms of donations received. He said that the annual giving of the alumni during the last two months is greater than in the last two years. He has no specific figures, but says that approximately $110,000 is earmarked for ASAP.

He announced to the Board that Mr. Tom Manhart will be the National Chairman of the ASAP fund raising program.

Mr. White stated that he hopes to have a complete ASAP report for the Board next month.

Capital Construction, Steam Line. Mr. Scott reported that this was highlighted to the JBC on January 6, but that we may not have a response from them until spring. The Acting Director of the State Department of Energy is very interested in the project and is encouraging us to seek assistance from the Department of Energy. The assistance might either be in lieu of state appropriation or as matching funds. Financing is less desirable because of interest costs. Mr. Scott said that he hopes that the project can begin in March or April in order to have heat for the winter of 1981-82. He provided a brief description of the routing of the line and told the Board that the request has been approved by the CCHE.

Sale of Surplus Land—Acceptance of Appraisal. Mr. Scott told the Board that the sale of the remainder of Wild Horse Park was authorized by legislation in 1978-79. At that time, the appraised value was $150.00 per acre and on that basis the state attempted, unsuccessfully, to negotiate a sale. The new real estate officer for the state had a new appraisal made of the property, which is one-half of the original appraisal, or $75.00 per acre, and he believes this to be a fairer appraisal. Mr. Scott asked the Board if it had an opinion as to the value of the property and if it wished to authorize the sale of the property at the lower appraised price. He told the Board that the funds received from the sale of the property would be retained by the School.

Mr. Stockmar moved to approve the sale of the land on the condition that the mineral rights are reserved. The motion was seconded and passed.

Mr. Grynberg entered the meeting at this time.

Colorado Energy Report. Mr. Robbins presented to the Board as his annual CERI report the presentation made by the Colorado Energy Research Institute to the JBC on January 6 last. He discussed the major policy issues facing the Institute in the future, the independence of the Institute and the problem of funding. Mr. Robert Case of the Institute opined that the Legislature is not convinced that money ought

January 9, 1981
to be spent by any such agency from year to year, only in times of crisis.

Mr. Robbins pointed out that the Institute has a strong relationship with the Public Utilities Commission and is serving as its research arm. In response to inquiry by Mr. Stockmar, Mr. Robbins said that the Institute is funded with its own appropriation which does not relate to the Colorado School of Mines. He explained that the Institute has an interdisciplinary staff and that the average salary is $32,000 per year on a 12-month basis. He said that the demands on the Institute are changing and that they are no longer managing contracts but are managing research.

He described various reports that are sent out by the Institute and discussed issues that come up on research programs. He explained to the Board the scholarship and fellowship programs.

He said that some of the questions facing the Institute in terms of the direction it is taking are: do we want a continuation of what we have, do we want to expand the scope of what we cover, and do we want to expand who we serve or do we want to restrict whom we service and become strictly a legislative group.

Mr. Welles asked if there should be an interim committee on this. Mr. Robbins stated that he has asked for presentation time with both Committees, and that there must be some changes in the legislation. He told the Board that the Institute reserves the right to set its own research agenda and that it does not take positions on pieces of legislation.

Mr. Schwartzberg commented that the Institute has a tremendous amount of flexibility, probably more than any other state agency. President McBride asked about the nature of the Institute's fiscal control. Mr. Robbins said that although they do make the expenditures match the appropriations, internal accounting for research costs is a major problem; e.g., they do not currently bill all of the staff time and they need to know what the real costs are. Mr. Case commented that the money that is not used is "rolled forward." Mr. Robbins said that they received services from the School and that they pay for these services. He said that they have been able to utilize a diverse number of the faculty.

President McBride thanked Mr. Robbins and Mr. Case for their excellent report.

Senior Management Institute, Grant Award. Mr. Welles told the Board that the Union Pacific Foundation has granted first phase funds of $112,000 to support the planning and development of the Senior Management Institute. He said that a Director will have to be employed and a program for recruiting will have to be designed. He said that Dr. Woolsey's brochure on the complementary program, Mineral & Energy Executive Program, should be available either today or early next week.

Report on JBC/CSM Budget Hearing January 6, 1981. Mr. Robbins reported that there seems to be a serious misunderstanding on the part of the members of the JBC as to what the Mines Plan is all about. He said that we assumed that there would be an understanding of the Plan after the December 15, 1980 briefing of the JBC and that we would just have to address the budget issue. But he said apparently relatively little was
retained from the campus session. He explained the major concerns of the various members of the JBC which surfaced during the January 6 hearing.

Discussion followed, during which it was decided that specific plans emanating from this discussion would be deferred to the Executive Session.

Executive Session. The Board then adjourned the regular meeting at 10:30 a.m. and went into Executive Session.

[Signature]
Secretary

January 9, 1981
The Board of Trustees met in regular session on February 13, 1981 at 9:00 a.m.

Trustees present: Mr. Coors, Miss Leaver, Messrs. Pascoe, Schwartzberg, Stockmar and Wilson.

Absent: Mr. Grynberg.

Mr. Coors presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, and Welles, Dean Golden, Dean Nyikos, and other staff members, visitors, and a representative of the press.

Mr. Coors asked that a moment of silence be observed out of respect for the memory of Dr. Charles Fogarty. President McBride read a tribute to Dr. Fogarty and asked that it be adopted by the Board. It was unanimously adopted by the Board, with the addition of the words "Adopted February 13, 1981." The tribute reads as follows:

"Charles Franklin Fogarty (1921-1981)
E.M.(1942), Sc.D.(1952)

The members of the Board of Trustees of the Colorado School of Mines have learned in sadness and sorrow of the untimely death on February 11, 1981 of their friend and fellow Trustee, Charles Franklin Fogarty.

Dr. Fogarty's love for and devotion to the Colorado School of Mines knew no limits. He often said, "I came to Mines an orphan, and the School quickly became and remains my father, my mother, and my home." He served the School in many, many ways over the years and was regarded and esteemed worldwide as a leader in School and Alumni affairs. This leadership culminated in his truly outstanding performance as a member of the International Development Council of The Resource Fund of the Colorado School of Mines Foundation.

Although it is impossible even to begin to list the characteristics of mind and spirit and person which underlay his greatness and which brought him to first rank among us, three will be especially remembered: His care for people as fellow human beings—expressed not only in warm friendship but in his concern for every person in the School, alumni, and corporate areas in which he moved. This concern caused and enabled each to be more, in many cases much, much more, than he could otherwise have been.
Second, his clear and reasoned judgement in every sphere of business, professional, and personal life - he made sound decisions and effected them with discipline and vigor.

Finally, his bone-deep integrity, rooted in the faith and training of strong personal religion - no man's word came closer to being his bond than did Charles Fogarty's, and this was true in every great and small thing of his life.

For all these reasons, and many others, the memory and spirit of Charles Fogarty will remain alive with us and with the worldwide community of the Colorado School of Mines. We shall hold him and his family in our minds and hearts.

Adopted February 13, 1981"

Miss Leaver introduced several student visitors who had been invited by her to attend the Board of Trustees meeting.

Mr. Stockmar told the Board that Joey Tucker, Emeritus Trustee, had called to offer his condolences on the death of Dr. Fogarty.

Previous Minutes. The minutes of the meeting held on January 9, 1981 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

- J. William Geise Adjunct Assistant Professor of Environmental Sciences $3,000 for the spring semester of the 1980-81 academic year
- Elizabeth Gibbs Assistant Professor of Basic Engineering 10,000 for the spring semester of the 1980-81 academic year
- Mossayeb Jamshidipour Instructor in the Physics Department 8,000 for the spring semester of the 1980-81 academic year
- Hossein Kazemi Adjunct Associate Professor of Petroleum Engineering 2,500 for the spring semester of the 1980-81 academic year
- Joan Knapp Part-time Instructor in Humanities and Social Sciences 2,500 for the spring semester of the 1980-81 academic year
- James C. Smart Adjunct Associate Professor of Chemistry and Geochemistry Appointment is for the 1980-81 academic year with no stipend
- Warren A. Spaulding Assistant Professor of Military Science Appointment is for the spring semester of the 1980-81 academic year with no stipend

February 13, 1981
Reappointments:

David Fleming
Adjunct Assistant Professor of Geophysics

$ 2,000 for the 1980-81 academic year

Thomas R. LaFehr
Adjunct Senior Lecturer in the Department of Geophysics

3,000 for the spring semester of the 1980-81 academic year

George T. Merideth
Adjunct Professor of Geophysics

4,500 for the spring semester of the 1980-81 academic year

Larry E. Wells
Adjunct Assistant Professor of Petroleum Engineering

2,200 for the spring semester of the 1980-81 academic year

Continuation of Appointment:

Steven A. Russell
Part-time Instructor in the Department of Mathematics

4,000 for the spring semester of the 1980-81 academic year

Change in Appointments:

Robert H. Frost
Assistant Professor of Metallurgical Engineering

Change from Instructor at $17,520 for fall semester to Assistant Professor at $20,500 for spring semester of the 1980-81 academic year. Dr. Frost received the Ph.D. Degree from Colorado School of Mines in December 1980.

Karen B. Wiley
Assistant Professor of Humanities and Social Sciences

Change from Instructor at $16,000 for fall semester to Assistant Professor at $17,000 for spring semester of the 1980-81 academic year. Request for change is based upon the conferring of Ph.D. Degree by University of Colorado in December 1980.

Mineral Economics Department Head. Dr. Mueller reviewed the candidates who have been considered for this position. He said that he now recommends, President McBride concurring, the appointment of Dr. Charles W. Berry to this position. He further stated that Dr. Berry has had substantial experience in the AMAX organization and is well qualified for the position.

It was moved, seconded and passed to confirm the appointment of Dr. Berry.

Nathan M. Avery Professorship in Petroleum Engineering. Dr. Mueller informed the Board of the appointment of Professor Bill J. Mitchell to be the Nathan M. Avery Professor of Petroleum Engineering for the 1981-82 academic year at a salary of $42,500 per academic year. In response to an inquiry by Mr. Coors, Dr. Mueller said that Professor Mitchell will relinquish the Grace Professorship.

February 13, 1981
Financial Reports. Mr. Scott made available the monthly reports as follows: Current Funds Comparison with Budget for the seven months ending January 31, 1981; Current Funds - Summary by Fund For The Seven Months Ending January 31, 1981; and Time Deposits and Investment Report. Mr. Scott told the Board that the School is operating within the financial plan. He said that we are receiving consideration for a utility supplemental, but he does not know the amount.

Mr. Scott reported that the School has received the amount of $93,601.58 in settlement of the H. K. Tucker Estate and that he is seeking the advice of the Investment Committee with regard to these funds.

Admissions and Enrollment. Mr. Bill Young reviewed the Admissions Report for the Board. He said that applications for admission of women and minorities are up significantly from last year.

Mr. Wilson asked whether we face a cap on enrollment by the JBC. President McBride stated that our numbers are to be determined by the House and Senate Education Committees. He said that we have asked for 3,014 FTE, including 2,199 resident FTE, and both committees have taken the request under advisement.

Dr. Harold Cheuvront, Registrar, reported the spring 1980-81 enrollment statistics to the Board. Board President Coors and President McBride reviewed the events and understandings leading to our present enrollment situation: Following an initial Trustee decision to expand the School to 3,000 headcount students (2,500 undergraduate and 500 graduate), this goal was validated by the CCHE and embedded in its statewide plan now in effect. The School feels that the 3,000 number, although somewhat confused by the changing relationship between fall headcount and average FTE due to part-time students, is present state policy. These statements were confirmed in the meeting by Dr. Catherine Joseph of CCHE, a visitor at the meeting.

Student Financial Assistance. Dean Nyikos reviewed Financial Aid and Scholarship Request, 1981-82, for the Board.

Discussion followed, during which Dean Nyikos told the Board that approval is being asked for an upcoming 1981-82 request to the Colorado School of Mines Foundation for $865,000: $706,800 for financial aid (loans and grants for need-based students) and $158,700 for scholarships (Board of Trustees and E-Day programs for no-need students).

It was moved, seconded and passed to approve the motion.

Cooperative Education and Placement. Mr. Warren Spaulding explained that Co-op is an educational program in which the student alternates study at the Colorado School of Mines with supervised, option-related work experiences. The program is now in its third full year of operation. He highlighted the three points of each program--Co-op and Placement.

Mr. Coors asked how this affects our headcount. Dr. Cheuvront responded that Co-op students are considered full-time for insurance purposes, but are not considered full-time in headcount.

Discussion followed, during which Mr. Spaulding asked the Board to confirm its intention to continue the CSM Cooperative Education Program at the same or an increased level after federal financial assistance ends.

February 13, 1981
He said that confirmation of continued support of the CSM Placement Service would also be appreciated. President McBride stated that this is a continuation of the effort that the Board has undertaken and that the School is committed to continuing cooperative program.

It was moved, seconded and passed to continue the CSM Cooperative Education Program and to continue the support of placement service.

ASAP. Mr. Jay Lange of the Foundation reported that as of February 12, 1981, the Foundation had received commitments of $225,853. He said that the goal is $500,000 and that they are hoping for a challenge grant from a single alumnus so that they will have a matching program.

Mr. Lange said that the Foundation has hired a communications person, Mr. David Smith-Garbett, who has initiated a newsletter which relates the activities of ASAP.

Mr. Lange stated that in January Mr. Tom Manhart had accepted the chairmanship of the ASAP fund raising program.

In response to a question on the support for student assistance coming from corporate, non-alumni sources, Mr. Lange said that the Foundation has received $19,000 in student assistance from non-alumni. Five-year pledge cards have been distributed.

Mr. Warren Mason, Financial Aid Officer, said that one-half of the funds will be a loan to the student.

Mr. Leeds of the Foundation said that he will have a further report at the next Resource Fund meeting regarding student financial aid and scholarships.

Report on Proposal for a National Academy of Natural Resources Management. Mr. Welles reported to the Board that the program was awarded to the Universities of Idaho and Washington State, jointly. He said that a total of eighteen proposals were submitted.

Request for Academic Leave. Dr. Mueller recommended to the Board that Professor Oded Rudawsky and Professor D. L. Williamson be granted academic leave at half salary for the academic year 1981-82. He said that each individual satisfies the established requirements for consideration of academic leave. He stated that each plans work that will be appropriate to his particular discipline.

Dr. Mueller distributed a summary sheet of estimated costs of sabbaticals for Professors Rudawsky and Williamson and recommended that the requests be approved.

Mr. Schwartzberg stated that it is his understanding that the agreement is to serve for an academic year after academic leave is granted and asked what the Faculty Handbook says. President McBride said that faculty members are expected to serve for a year after academic leave is granted and that the language contained in the letter that will be used in the future will be more rigid than that which is contained in the Handbook.

It was moved, seconded and passed to approve the requests for academic leaves of Professors Oded Rudawsky and D. L. Williamson, subject to the reasonable availability of funds in the 1981-1982 budget.

February 13, 1981
President's Report, Nonrenewal of Professor Robert A. Walsh. President McBride told the Board that Professor Walsh was given timely notice of nonrenewal and that the mandated review procedure has been completed. As the final action under this procedure, a President's Report has been duly prepared and distributed. Professor Walsh has a copy of the report and he has been duly advised of the Board meeting. He stated that Professor Walsh has been specifically invited to be in attendance if he chooses.

Since Professor Walsh was not present, Mr. Pascoe asked whether there was anyone else present who could speak about the matter. President McBride introduced Dr. William Schneider, Chairman of the Faculty Review Committee. Dr. Schneider told the Board that the committee's recommendation is against the nonrenewal for the reasons stated in its report. He said that he has no other comments, but would be glad to answer any questions that the Board members might have.

Mr. Coors discussed his correspondence with Professor Walsh and, particularly, Professor Walsh's letter to him of February 5.

President McBride made it clear to the Board that he has no personal differences with Professor Walsh. He is only interested in Professor Walsh cooperating in fulfilling the goals of the School under reasonable administrative and collegial direction.

Mr. Pascoe said that the question seems to be whether a person wants to participate in the general welfare of the institution. He stated that running throughout the document (President's Report) there is a feeling of total noncooperation.

Mr. Coors stated that he recommends that the Board stand behind the letter that President McBride wrote and hopes that Professor Walsh will accept the letter in good faith.

President McBride said that the action required of the Board is indicated on page 1 of the document.

Mr. Stockmar stated that he would consider President McBride's letter as having been rejected by Professor Walsh and recommended approval of the report.

Mr. Coors asked what is being approved, and President McBride responded that the Board would be approving the entire report including all of the recommendations. He stated that he believes the Appendix to the report contains all of the documents relative to this case. He asked Mr. Lopez, Affirmative Action Officer, if all necessary documents were in the report. Mr. Lopez said that subsequent faculty letters are not in the report. President McBride said that they had not been received as of the time of the hearing.

It was moved, seconded and passed that the report be approved in toto.

Requested Park Use by City of Golden. Mr. Scott said that a memorandum and maps explaining park use request were sent to the Board for its consideration.

February 13, 1981
Discussion followed, during which it was agreed that the School would reserve the right to continued compatible uses of the land.

President McBride said that a detailed agreement for the Board’s approval will be prepared and presented; the Board approved the request in principle subject to proper consideration of the final agreement.

Capital Construction, Steam Line. Mr. Scott reviewed for the Board the proposed methods for proceeding with the construction of the steam line. He said that the state energy officer has presented a capital construction request to the Department of Energy. An alternate method would be for Coors to construct the steam line and for us to buy it in place by selling revenue bonds. He said that it would be desirable to proceed with construction by late spring in order to have it in place for use in 1981-82. The cost of the steam line is currently estimated to be $800,000.

Discussion followed, during which President McBride said that the Board is being asked to approve proceeding with the steam line, that engineering charges be reported monthly, and, if necessary, be paid out of local gift funds.

It was moved, seconded and passed to proceed.

Closing Notices. Mr. Pascoe said that Governor Lamm had offered his condolences on the death of Dr. Fogarty. Mr. Coors stated that there will be a memorial service for Dr. Fogarty tomorrow at St. Joseph’s Church, Golden, at 10:00 a.m.

Mr. Stockmar said that the question had been raised whether the Colorado School of Mines is a land grant college. He stated that he has determined that the School is not a land grant college.

Mr. Wilson said that Mr. Frank Lee of the Foundation continues to be hospitalized in intensive care.

Executive Session. The Board then adjourned the regular meeting at 11:20 a.m. and went into Executive Session.

February 13, 1981

Secretary
The Board of Trustees met in regular session on March 6, 1981 at 9:00 a.m.


Absent: Miss Leaver.

Mr. Grynberg presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, and Welles, Dean Golden, Dean Nyikos, and other staff members, visitors, and a representative of the press.

Dean Nyikos introduced Roger Johnson, Vice President of the Student Body, who presented the members of the Board with the CSM Annual, Prospector 1980.

Mr. Coors introduced students invited by Miss Leaver to attend the Board meeting.

Previous Minutes. The minutes of the meeting held on February 13, 1981 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Charles W. Berry
Head of Department and Professor of Mineral Economics

James F. Ely
Adjunct Associate Professor of Chemical and Petroleum-Refining Engineering

Frank D. Iannella
Instructor in the Department of Humanities and Social Science

Charles R. Kroll
Assistant Professor of Physical Education and Athletics

Thomas B. Reed
Adjunct Associate Professor of Basic Engineering

$44,000 for the 1981-82 academic year

No salary for the spring semester of the 1980-81 academic year

8,000 for the spring semester of the 1980-81 academic year

6,134.52 for the spring semester of the 1980-81 academic year

1,800 for the spring semester of the 1980-81 academic year

March 6, 1981
Reappointments:

Michel Dagbert
Adjunct Assistant Professor of Mining Engineering
$1,800 for the spring semester of the 1980-81 academic year

Jean-Michel Rendu
Adjunct Associate Professor of Mineral Economics
1,500 for the spring semester of the 1980-81 academic year

Additional Assignment:

Carl Kallansrud
Instructor in Mineral Economics
No additional compensation

Inquiry was made as to why Dr. Woolsey is not going to continue as Head of Department of Mineral Economics, and President McBride responded that Dr. Woolsey had agreed to serve for only two years in that capacity. Dr. Berry will assume the position of Head of Department of Mineral Economics in September 1981.

Financial Reports. Mr. Scott made available the monthly reports as follows: Current Funds Comparison with Budget for the eight months ending February 28, 1981; Current Funds - Summary by Fund For the Seven Months Ending February 28, 1981; and Time Deposits and Investment Report. He said that we are awaiting resolution of the supplemental appropriation for utilities. The proposed bill as printed would provide us with $75,000 against a need of $159,880, but a technical amendment will be submitted by JBC staff to the committee when the bill comes out in draft form. Otherwise, we expect to complete the year within the financial plan.

Status Report on Dormitory Financing. Mr. Scott reported that interim notes will mature on June 30 and that he will ask the Board for approval to proceed with interim financing. He said that it would be desirable to have a gift in place because less money would have to be borrowed. There is little likelihood of any government funding.

Recognition of Mr. Leeds. It was announced that this is the last Board meeting that Mr. Leeds will be attending. On behalf of the Board, Mr. Gryenberg thanked Mr. Leeds for his efforts, for his numerous contributions and for always being available.

Admissions. Mr. Young reviewed the Admissions Report for the Board. He said that applications are up significantly from last year. He stated that since mid-February, no Colorado resident applications have been processed. In this connection President McBride explained that the setting of our FTE resident budget base for next year is a combined effort of the JBC, the House and Senate Education Committees and the CCHE. The minimum number which has been "suggested" in any of these committees is 2,092 FTE for the year, and he said that in order to meet a possible constraint to this number, we have had to suspend admission of new resident students. The number of 2,199 has been approved by both committees, and 2,185 has been suggested by CCHE.

Discussion ensued in which it was recognized that as we approach a specific limited number of undergraduate and graduate students, and of resident and non-resident students, we may need to alter our "rolling" admissions policy, perhaps even going so far as to institute a fully competitive admissions process.

March 6, 1981
It was agreed that the Admissions Office would prepare and mail to the Board a brief report on our current procedures in admissions.

Mineral Economics Executive Program. Dr. Woolsey presented status report on the program. He said that 19 enrollees are confirmed and that there are five prospective enrollees. He said that, financially, the program has broken even and he is projecting a profit on the program at this time.

Proposed New Graduate Degree, Mine Industrial Health and Safety. President McBride pointed out that this item had received preliminary Board approval at the December 1980 meeting.

Dean Golden reviewed updated proposal with the Board. He said that there is approximately $60,000 remaining of the original $100,000 grant and that he does not expect to receive further funding. He stated that there will be sufficient funds to operate for the coming year, and he will then seek industrial funding. He is not requesting state support.

He said that he is requesting Board approval to proceed to CCHE with the proposal.

Discussion followed, during which it was moved, seconded and passed to advance the proposal to CCHE.

Use of Chauvenet Hall. Dean Golden discussed the proposals of the Alumni Association and Earth Mechanics Institute (EMI) to move into Chauvenet Hall, paying the appropriate costs. He emphasized that our agreement is that we use the building at no cost to the state.

President McBride said that his position is that if we use Chauvenet Hall, we will ask permission to use it on a no-cost-to-the-state basis and emphasized that the Colorado School of Mines will on that account not be able to provide financial assistance, as in case of emergency repair, to any organization that uses Chauvenet Hall.

Mr. Coors expressed concern about the deterioration of Chauvenet and Stratton Halls, and Mr. Scott said that there is no agreement with the State Building Department regarding maintenance of these two buildings.

Discussion followed, during which Mr. Stockmar moved that we determine what we can expect from the state in terms of outside maintenance of the building and, assuming that the state is willing to do something, that we move EMI into Chauvenet Hall and defer a decision on the Alumni Association's proposal.

Colonel Leckie of the Alumni Association said that he shares President McBride's concern regarding the costs involved and his Association's ability to maintain its share of the building. He stated that if something went wrong, the Association would have to ask the Foundation for assistance. The Association is willing to move into Chauvenet on a "tenant beware" basis.

Discussion followed, during which it was moved, seconded and passed to allow EMI to move into Chauvenet Hall on a "tenant beware" basis. We will work with the state concerning its view of our obligations with regard to the building.

March 6, 1981
President McBride said that a decision on the Alumni Association's proposal to move into Chauvenet Hall is deferred.

Steam Line Report. Mr. Scott told the Board that there have been no expenditures to date and no encouragement from the Department of Energy concerning funding. He said that the Adolph Coors Company is having internal discussions on how it wishes to proceed.

Mr. Coors indicated that whereas the initial steam line design had envisioned a line of appropriate size to permit 400 psig inlet steam to produce, under maximum demand conditions, 120 pounds psig steam delivery, it has been recognized both that supplying 50 pound psig steam to CSM would be adequate for most heating purposes and that the 50 psig steam is available in excess at Coors. Consideration is now being given to redesigning the line to produce 50 psig steam at the discharge. The initial cost of the line may be higher, but the cost of steam provided will be lower.

Closing Notices. Mr. Stockmar told the Board that he has been approached by a committee of the Alumni Association regarding changing the color of the CSM tie. He said that they want the tie to be darker blue in color. He discussed the costs involved.

Recognition of Trustees. President McBride pointed out that this is the last regularly scheduled meeting for two Trustees, Mr. Stockmar and Mr. Grynberg. He said that we honor them for what they have done for the School, and he expressed the hope that they will continue as Trustees until their successors are appointed and confirmed. He stated that he does not have any knowledge whether they will be reappointed or not.

President McBride asked that the minutes reflect the thanks of the Board and of the School for the service they have rendered.

Executive Session. The Board then adjourned the regular meeting at 10:40 a.m. and went into Executive Session.

March 6, 1981

Secretary
The Board of Trustees met in regular session on April 9, 1981 at 9:00 a.m.

Trustees present: Mr. Coors, Miss Leaver, Messrs. Schwartzberg, Stockmar and Wilson. Trustee Designate Don K. Henderson was also present.

Absent: Mr. Grynberg.

Miss Leaver presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, and Welles, Dean Golden, Dean Nyikos, and other staff members, visitors, and a representative of the press.

Miss Leaver welcomed Trustee Designate Don K. Henderson.

Miss Leaver introduced candidates for next year's student Trustee.

Miss Leaver introduced Mr. David Crawford, new Executive Director of the Alumni Association.

President McBride announced that Mr. Frank Lee, President of the Mines Foundation, had passed away yesterday morning (April 8, 1981). Services for Mr. Lee were noticed.

Previous Minutes. The minutes of the meeting held on March 6, 1981 were approved as distributed.

Appointment of Trustees. President McBride noted that Trustee Designates Mr. Don K. Henderson and Mr. J. N. Warren will be considered for confirmation by the Senate Education Committee on April 16, 1981 at 1:30 p.m. Dr. Fogarty's seat has not been filled, but it is understood that the Governor has in mind a particular person to fill that seat and that the appointment will be announced at an appropriate time.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

- Nils Christensen, Visiting Professor of Metallurgical Engineering: May 1 through July 31, 1981 at no salary
- Robert H. King, Associate Professor of Mining Engineering: Appointment beginning March 16, 1981 for the balance of the 1980-81 academic year at the rate of $26,600 AY

April 9, 1981
Reduced Teaching Load:

W. Rex Bull
Professor of Metallurgical Engineering

Dr. Bull has requested a reduced-load contract for the 1981-82 academic year. His course work will be covered by other full time and adjunct faculty.

Change in Appointments:

A. R. Brown, Jr.
Computing Center, Mathematics

Dr. Brown has asked to be relieved of his position as Director of the Computing Center effective August 31, 1981. His appointment as Professor in the Department of Mathematics is to be continued. Dr. Brown's 1981-82 contract will be adjusted to change from 12-month contract to academic year schedule.

Michael B. McGrath
Computing Center, Basic Engineering

Dr. McGrath, currently chief consultant for the Computing Center, will assume the duties of Director of the Computing Center effective September 1, 1981. His appointment as Associate Professor of Basic Engineering is to be continued.

Bill J. Mitchell
Professor of Petroleum Engineering

Beginning the 1981-82 academic year, Dr. Mitchell will serve as the Nathan M. Avery Professor of Petroleum Engineering at a salary of $42,500 for the academic year. In accepting the Avery Professorship, Dr. Mitchell relinquishes the Grace Professorship which he has held since 1976-77.

Dr. Mueller announced that the Mapco Professorship is being awarded to Professor Woolsey, who will be stepping down as Department Head of Mineral Economics.

Dr. Mueller told the Board that our problem is becoming more critical with respect to retention of faculty and the matter of salaries to attract new faculty.

Financial Reports. Mr. Scott made available the monthly reports as follows: Current Funds Comparison with Budget for the nine months ending March 31, 1981; Auxiliary & Self Funded Activities and CERI for the nine months ending March 31, 1981; and Time Deposits and Investment Report, March 31, 1981. He said that when the utilities supplemental appropriation is available he expects to complete the year within the financial plan.

Dormitory Financing. Mr. Scott reported that Boettcher and Company Investment Bankers is working on the long-term financing of the existing new dormitory. He said that the issue will be addressed at greater length at the May Board of Trustees meeting.

Steam Line. Mr. Scott said that he is awaiting proposal from Adolph Coors Company regarding the method for proceeding. There have been no expenditures to date.

April 9, 1981
Proposed Bator Room, Brown Hall. President McBride recalled to the Board that Professor Bator had passed away in May 1979, one year after his retirement and noted that his concern for the students had persuaded him to use his own funds to create a scholarship fund. He called the Board's attention to a letter dated March 4, 1981 from student Dennis Curtin, Executive Council SME/AIME, Student Chapter, asking that the Trustees approve the naming of a room in the mining building after Professor Bator. It is a room that has been designated as student study and computing room. President McBride recommended approval.

Mr. Wilson moved that the Board accept the recommendation made by the Student Chapter of SME/AIME to name the particular room in George R. Brown Hall after Professor Bator.

It was moved, seconded and passed to name the room that is in use as student study and computer room after Professor Bator.

Easements on Survey Field, City of Golden. Mr. Scott introduced request from the City of Golden to be granted an easement(s) to accommodate water lines and a pump station to be located on the Survey Field east of the City Reservoir. He reported that he had discussed the request with the Basic Engineering Department and that the requested easement(s) did not interfere with the use of the field for instruction. President McBride commented that, although the proposed location did not seem to be the best engineering solution, he understood the City had urgent need to proceed and had indeed awarded contracts based upon the proposed location. He therefore recommended that the Board President be authorized to execute such easement agreement(s) when prepared, and recommended that Mr. Scott be instructed to prepare the necessary legal documents and to present them at a subsequent Board meeting.

It was moved, seconded and passed to proceed subject to reversion.

Mr. Pascoe entered the meeting at this time.

Suggested New Stationery. Mr. Welles showed the Board the proposed new stationery design and said that he is not asking for formal approval, but asked that any objections be registered.

Mr. Schwartzberg said that he is in complete agreement.

There was no further discussion concerning the proposed new stationery.

Legislative Affairs. Mr. Robbins reported that the JBC is formulating a new plan for financing higher education. The JBC would like to have one plan for all of higher education. He said that the JBC is attempting to get a commitment from all governing boards approving this plan. It wants a commitment from this Board not to lobby for change in the plan once agreed to. The JBC has not agreed to seven percent general fund increase.

Discussion ensued, during which it was agreed that the School should both endeavor to be excluded from the plan and to receive a fair general fund appropriation (capitation).

April 9, 1981
Discrimination Suit. President McBride noticed to the Board the sex discrimination complaint which has been filed by the Women's Equity Action League with the Department of Labor and said that he would appreciate responses from the individual Trustees as to what the School's posture should be if it is pushed on this.

Mr. Stockmar stated that he feels the suit should be defended vigorously and suggested hiring outside legal counsel.

Mr. Scott said that we need to seek approval from the Attorney General's office to hire counsel outside of that office.

Discussion followed, during which it was agreed that Mr. Coors will consult with President McBride concerning the selection of counsel to proceed with the defense of the complaint and the receiving of approval from the Attorney General's office.

The meeting adjourned at 12:00 noon.
Golden, Colorado
May 8, 1981

The Board of Trustees met in regular session at 2:00 p.m., May 8, 1981, at the Denver Club, Denver.


Mr. Pascoe presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott and Welles, Dean Golden, Dean Nyikos and other staff members, visitors and a representative of the press.

Oath of Office. Mr. Don K. Henderson and Mr. Jasper N. Warren, having been confirmed by the Senate on April 20, 1981, took the oath of office.

Previous Minutes. The minutes of the meeting held on April 9, 1981 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Akiva Flexer
Visiting Professor of Geology
No salary for the 1981-82 academic year

John M. Gary
Professor of Mathematics
$36,000 for the 1981-82 academic year

Reduced Teaching Load:

Charles A. Kohlhaas
Professor of Petroleum Engineering

Dr. Kohlhaas has requested a reduced load contract for the 1981-82 academic year, and he and Dr. Van Kirk have agreed upon a one-half load arrangement.

Change in Appointment:

R. E. D. Woolsey
Appointed MAPCO Foundation Professor of Mineral and Resource Management
$42,000 for the 1981-82 academic year.

Dr. Mueller reported that, after analysis by an ad hoc evaluation committee, the members of the Basic Engineering Department and representatives of other departments, he has recommended that Dr. Harry Emrick, who has been acting Department Head of Basic Engineering, be appointed the permanent Department Head of the Basic Engineering Department.

President McBride recommended that the Board concur in this selection and appointment.

It was moved, seconded and passed to concur in the appointment of Dr. Harry Emrick to be Department Head of the Basic Engineering Department.
Student Representative on Board of Trustees. Miss Leaver introduced students Sandra Craig, elected Student Trustee, effective July 1, 1981, and Ann Hanson.

Financial Reports. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the ten months ending April 30, 1981; Colorado School of Mines Auxiliary & Self Funded Activities and CERI for the ten months ending April 30, 1981; and Colorado School of Mines Time Deposits and Investment Report. He stated that after passage of supplemental appropriations bill in current form, the School will be operating within the approved spending level.

Admissions. Mr. Young reviewed the current Admissions Report for the Board, stating that applications for enrollment are up 25 percent over last year and that the admissions target is 610 students, approximately 500 of which will be freshmen and the remainder transfer students. Sixty-seven percent of incoming freshmen will be residents. Mr. Young noted that the quality of incoming students should be better than ever.

Mr. Schwartzberg requested that a final report on women and minority enrollment be submitted to CCHE when enrollment is closed (this is customary).

Mr. Henderson asked how the School handles matter of rejection of applicants for admission. Mr. Young stated that he believes it is wrong to reject a candidate without offering an alternative, adding that Mines has a working arrangement with other schools of various kinds to which students are referred.

Candidates for Degrees. Distribution was made of lists of candidates for degrees as recommended by the regular and graduate faculties.

Upon motion made, seconded, and unanimously passed, the following were approved for degrees on the dates specified, subject to the completion of all academic requirements and continued compliance with school requirements and regulations.

BACHELOR OF SCIENCE (MINING ENGINEERING) — MAY

Barnett, Mark Jeffrey
Beckett, James Wyatt
Brinkmann, Philip Edward
Cochetas, George S.
Corkick, Jon Charles
Cosolo, David Anthony
Criss, Kurt Eugene
Cufman, Kenneth Wyatt
Curstin, Dennis Martin
Deatherage, Kevin Lee
Downer, Edwin Eduen, Jr.
Evans, Bryan Jeffrey
Farinelli, Joseph Augustine
Flatland, Mark E.
Freiemmuth, David Otto
Giusti, Paul Anthony
Groven, Paul Allen
Haver, Nelson Alan
Hedlund, Jon Peter

Jones, Douglas Matthew
Jones, Susan Ruth
Lampert, Thomas Kent
Law, Russell Alan
Ledbetter, Donald Ray
Netschke, Gregory Wade
Orton, Robert Graves, III
Rasmussen, Lynn Kathryn
Redmond, Patrick Charles
Rose, William Robert
Saco, Guy Edward
Smith, Steven Paul
Storrs, John Paul, Jr.
Strasser, Elmer Charles Patolot
Thieking, Bruce Howard
Turner, Clarke Dayton
Tyler, William David
Warmack, William Andrew
White, David Rex

May 8, 1981
BACHELOR OF SCIENCE (METALLURGICAL ENGINEERING) - MAY

Aitken, Mary Jean
Brandt, Michael Kergan
Bristow, Bryan Merritt
Chitwood, Gregory Byron
Dughman, Terry Lee
Filho, Antonio Ermirio de Moraes
Johnson, Roger Preston
Lira, Jorge Carlos
Martinez, Marty Lee
Noble, David B.
Ring, Bradley Alan
Rodriguez, Nicolas
Scrivner, Charles Daniel
Smith, Barbara Jean
Vasilius, Charles John
Wersich, William George
Zifferer, Scott Coleman

BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - MAY

Anderson, Philip Wells
Angell, Wendy Lee
Balleiger, John Patrick
Bettencourt, Dan C.
Blaha, Charles Alan
Carter, Ruth A.
Coubrough, Robin
Doebrich, Jeff Lee
Goforth, Alexander C.
Hedges, Phillip Lewis
Hunsaker, Ernest Leon, III
Jensen, Terence Lee
Johnson, Mark Allen
Kordziel, Walter Roy
Leaver, June
Monell, Tanell Leila
Perniciaro, Frank Thomas
Pregel, Steven Lawrence
Ramirez, Carlos Daniel Paiz
Redlien, Roger Frederick
Roberts, Mary Elizabeth
Schmidt, Gregory Norman
Shockey, Jean Marie
Sikorski, Daniel Lewis
Spencer, Frederick, Robert
Spencer, Gregg Kevin
Sullivan, Michael Joseph

GEOPHYSICAL ENGINEER - MAY

Edington, Dwaine, Hugh, II

BACHELOR OF SCIENCE (PETROLEUM ENGINEERING) - MAY

Albertson, Scott Lyle
Atencio, Nicholas Wayne
Bell, John Francis
Browne, William Louis, Jr.
Buell, Richard Scot
Burkhalter, David Samuel
Carter, Mark Elliot
Coombs, Steven Frederick
Deines, Timothy Alan
Enzer, Steven Richard
Feghi, Farag Abdulrazak
Freeman, Stephen Carter
Ginest, Noel Howard
Goodrich, Jeffrey Leland
Green, Janet Elizabeth
Harrison, Alan Clyde
Hesketh, Robin Edward George
Howard, Jack Lee
Jensen, Christian J.
Kasischke, William Fredrick
Kelly, Timothy S.
Kugler, Bruce Alan
McGehee, Michael David
McMican, Michael Leroy
Mighton, Timothy Matthew
Miklius, Raymond Anthony
Moos, Marvin Charles
Rives, Stephen Christopher
Schroeder, Frederick Anthony
Smith, Scott Sherman
VanAllen, Charles Andrew
Vincent, Robert Stewart
Weber, James Henry
Wilson, Matilda Jane
Wolfe, Stephen Rucker
Wylie, James Michael

May 8, 1981
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BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - MAY

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<td>Irminger, Steven Edward</td>
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BACHELOR OF SCIENCE (MINERAL ENGINEERING CHEMISTRY) - MAY

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May 8, 1981
BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - MAY

Green, Jean Edward
Martin, Michael Scott
McCormick, Michael John
Said, Tayeb Mahmoud

BACHELOR OF SCIENCE (MINERAL ENGINEERING PHYSICS) - MAY

Kloeppeer, Fred Robert
Mobley, Kenneth Joe

BACHELOR OF SCIENCE (MINERAL ENGINEERING) - MAY

Ammernan, Ravel P.  Hollingsworth, David Edward
Arndt, Rolf Bronson  Jelden, Dennis James
Boucher, Jon Wesley  Meiers, Robert Joseph
Brown, Candace Sue  Moore, Rebecca Susan
Coumough, Gary John  Patterson, Kevin White
Dalvit, Sherri Kathleen  Schultz, Scott Quintin
Fisher, Karl Franklin  Smith, Mark Alan
Goebel, Steven Michael

BACHELOR OF SCIENCE (MINING ENGINEERING) - JUNE

Pundari, Mohan N.

BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - JUNE

Chapman, John Judson, Jr.
Rodriguez, Jaime F.
Stank, Kevin R.

BACHELOR OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING) - JUNE

Boening, Diana June
Cobb, William Edmund
Ellison, Arlo Eugene
Stackable, Michael James
Strauch, Mark Stephen

BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - JUNE

Bremkamp, Stephen William
Martin, Walter Fleming
McGuire, Michael Herbert
Weiss, Kent Edgar

BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - JUNE

Goodrich, Jeffrey Leland

May 8, 1981
BACHELOR OF SCIENCE (MINERAL ENGINEERING PHYSICS) - JUNE

Baumgaertel, Walter Theodore
Ketchum, David Clark

BACHELOR OF SCIENCE (MINING ENGINEERING) - AUGUST

Bills, Theodore Clyde
Brinkmann, Monika Huck
George, David Franklin
Henze, James Lee
Hillman, Richard Vaughan

Lockhart, James Leo
Ludwig, Mark James
Tidquist, Marc Alan
Townsend, William Otto
Wassum, David Lee

BACHELOR OF SCIENCE (METALLURGICAL ENGINEERING) - AUGUST

Kohut, Stephen John
LaGreca, Philip Damien
Suman, Christopher Charles

BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - AUGUST

Harper, Jere Blaine
Smith, Curtis R. Ward
Snow, Stuart Evans
Young, Thomas Lee

BACHELOR OF SCIENCE (PETROLEUM ENGINEERING) - AUGUST

Kleckner, James Joseph
Snow, Stuart Evans
Stash, Sandra Mary

BACHELOR OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING) - AUGUST

Black, Michael Dean
Lee, Keith Alan
Prieditis, Janis

BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - AUGUST

Grimmett, Todd Thatcher
Perrell, Susan Maireadh

BACHELOR OF SCIENCE (MINERAL ENGINEERING CHEMISTRY) - AUGUST

Mees, Donna Ellen

BACHELOR OF SCIENCE (MINERAL ENGINEERING) - AUGUST

Gartenberg, Gary Davis

May 8, 1981
MASTER OF ENGINEERING (ENGINEER OF MINES)
Cline, Robert Lee

MASTER OF SCIENCE (MINING ENGINEERING)
Coker, Robert Joseph
Gorman, Patrick W.

MASTER OF SCIENCE (METALLURGICAL ENGINEERING)
Lawson, Richard David
Millet, Paul Robert
Paredes Delgado, Harold T.
Spencer, Robert Ernest
Sutton, Gerald Eugene
Yaney, Deborah L.

MASTER OF ENGINEERING (GEOLOGICAL ENGINEER)
Bigarella, Laertes Paulo

MASTER OF SCIENCE (GEOLOGY)
Afifi, Abdulkader M.
Emme, James Joseph
Farmer, Cathy L.
Gibbs, William Kirk, Jr.
Hartner, John Dennis
Peters, Douglas Cameron
Rath, Bruce A.
Thomas, Mark Howard

MASTER OF ENGINEERING (PETROLEUM ENGINEER)
de Andrade, Glauco Barbosa
Machado, Ney Tadeu Araujo

MASTER OF SCIENCE (PETROLEUM ENGINEERING)
Costamilan, Luiz Carlos Lemos

MASTER OF SCIENCE (CHEMICAL AND PETROLEUM-REFINING ENGINEERING)
Angelos, Cris Paul
Eaton-Snodgrass, Wanda J.
Ahmed, El-Azhary Omar
Johnson, Jeffrey Jay

MASTER OF SCIENCE (GEOPHYSICAL ENGINEERING)
Garg, Nek R.
Plikk, Martin

MASTER OF SCIENCE (GEOPHYSICS)
Bond, Marc Andrew
Gu, Cindy Kuei-Ding
Olm, Mark C.
Strack, Kurt-Martin

May 8, 1981
MASTER OF SCIENCE (CHEMISTRY)

Ezzine, Djebar Kamel
Rees, Terry Francis

MASTER OF SCIENCE (GEOCHEMISTRY)

Tuttle, Michele L.
Wanty, Richard Bruce

MASTER OF SCIENCE (MINERAL ECONOMICS)

Baker, Leanne Marie
Carlson, Richard Julian
Gordon, Ray Curtis, III
Jabri, Sargon Karim
Posner, David Michael
Sampson, Jay Allen
Tscharbun, Donald B.
Young, Robert Charles

DOCTOR OF PHILOSOPHY (GEOLOGY)

Cress, Leland Durwin
Lopez, David A.
Sonnenberg, Stephen A.

DOCTOR OF PHILOSOPHY (CHEMICAL AND PETROLEUM-REFINING ENGINEERING)

Furlong, Mark W.

DOCTOR OF PHILOSOPHY (GEOCHEMISTRY)

Chatham, James Randall
Smith, Linda F.

DOCTOR OF PHILOSOPHY (APPLIED PHYSICS)

Forrest, Joel Stephen

DOCTOR OF PHILOSOPHY (MINERAL ECONOMICS)

Ballen, Roger Franklin
Donald, Dennis W.
Heydari, Mir Nassir
Rasey, Stephen Merritt
Sengupta, Dipak

DOCTOR OF PHILOSOPHY (GEOPHYSICS-PHYSICS)

Lin, Hung-Liang

May 8, 1981
1981-1982 Preliminary Budget. President McBride stated that after negotiation by Messrs. Welles, Scott and Robbins, and with the concurrence of Mr. Coors, the decision was made to sign the Memorandum of Understanding Between the Board of Trustees of the Colorado School of Mines and the Legislative Joint Budget Committee on April 30, 1981.

Mr. Scott distributed and explained the document entitled "Budget Analysis - Fiscal Years 1980-81 and 1981-82, Colorado School of Mines, Education and General." President McBride asked that the Board pay particular attention to footnote 2 of the document which concerns faculty salary increases. He stated that this item needs Board consensus approval.

Messrs. Robbins and Welles reported that Senator Sam Barnhill and Dr. Lee Kerschner of the CCHE were extremely helpful during the bargaining negotiations with the JBC.

Mr. Schwartzberg asked that the minutes acknowledge recognition of Messrs. Scott, Welles, Robbins and Ingels for their efforts in the appropriation process.

Dormitory Financing. Mr. Scott informed the Board that the $4,525,000 in Anticipation Warrants financing the new residence hall and student center addition will mature July 1, 1981. Payment in full will be required at that time.

Boettcher & Company recommends issuance of new three-year warrants bearing a 10 percent interest rate as preferable to long term financing in the current market. The net proceeds of the proposed issue will be $4,420,000, following deduction of the Boettcher fee of $80,000. In addition, accumulated earnings in the amount of $105,000 will be applied to retire the current issue.

Mr. Dunn Krahl, general partner of Boettcher & Company, tendered an offer to purchase Dormitory and Student Center Revenue Anticipation Warrants, according to the terms included in the copy appended to these minutes.

Discussion followed. It was moved and seconded that the offer be accepted and that the President and Secretary of the Board be authorized to execute the document in behalf of the Board. Motion carried.

Departmental Status for Environmental Sciences. President McBride reminded the Board that the School undertook several years ago to begin appropriate application of environmental sciences instruction to engineering practice and education by inviting Dr. Beatrice Willard to join the faculty at Mines. He said that this last year the School had a top-level visiting committee appraise the program and that the School has received that committee's report. He stated that, acting on that report and on discussions with Dr. Mueller, an extensive proposal has been prepared and that it will be mailed to the Trustees in advance of the June 12 Board meeting. He indicated that a recommendation for departmental status for environmental sciences will be an agenda item for the June meeting.

Emeritus Status for Mr. Stockmar and Mr. Grynberg. It was moved, seconded and passed to name Mr. Stockmar and Mr. Grynberg Emeritus Trustees.

May 8, 1981
Stanley Kemper Resolution. Upon the recommendation of Dean Nyikos, the Board approved the following resolution:

The members of the Board of Trustees of the Colorado School of Mines at this the 107th Commencement wish to remember Stanley Kemper, a member of the class of 1981. A candidate for the degree Bachelor of Science (Mining Engineering), Mr. Kemper lost his life near the conclusion of the Fall semester. By this resolution, the Trustees join with the family of Stanley Kemper in recognition of his achievements and express regret at his passing.

Notice. Mr. Wilson announced that Mr. Russ White is the new President of the CSM Foundation. He stated that the Board wishes Mr. White good luck.

The meeting adjourned at 2:50 p.m. for executive session.

May 8, 1981
Boettcher & Company

828 Seventeenth Street
P.O. Box 54
Denver, Colorado 80201
(303) 629-2020

Board of Trustees
Colorado School of Mines
Golden, Colorado

For $4,500,000 legally issued Dormitory and Student Center Revenue Anticipation Warrants Bonds of the Colorado School of Mines delivered to us in Denver, Colorado, dated June 1, 1981, and to mature and bear interest as follows:

All warrants to mature on June 1, 1984 with interest at the rate of 10% per annum.

Warrants will be callable beginning June 1, 1982 at 100%, and on any interest payment date thereafter at 100.

said bonds to be in the denomination of $5,000, bearing interest as shown above, payable semi-annually, both principal and interest payable at a Colorado bank or trust company of our choice.

WE WILL PAY $4,420,000 and accrued interest from the date of the bonds to the date of delivery to us.

Prior to our accepting delivery of said Securities, you agree to furnish a certified transcript of all legal proceedings requisite to their issuance and delivery, including a signature and non-litigation certificate in the customary form, evidencing the legality of said Securities and the security provisions relating thereto to the satisfaction of Tallmadge, Tallmadge, Wallace and Hahn.

whose unqualified approving legal opinion in the customary form shall accompany said Securities at delivery.

These bonds are to be delivered to us on or before July 1, 1981, or thereafter at our option.

The cost of the printing of these bonds will be paid by Boettcher & Co., and the fees of approving attorneys will be paid by Boettcher & Co.

We hereunto bind you as evidence of our good faith in complying with the terms and conditions of this proposal which is to apply as part payment for said bonds when the legality of same has been approved by our attorneys, and to be forfeited or fully liquidated damages should we fail or refuse to take up said bonds as above provided. Said check is to be returned to us if this proposal is not accepted; or if the above attorneys should decline to approve the legality of the issue. This offer is for immediate acceptance unless otherwise specified above.

Respectfully submitted,

Boettcher & Company

By General Partner

ACCEPTED for and on behalf of the Colorado School of Mines, pursuant to authorization by its governing body, and receipt of the above mentioned check acknowledged, on this date, May 8, 1981.

Attest:

Signature

Secretary, Board of Trustees (SEAL)

Signature

President, Board of Trustees (Official Title)
Boettcher & Company
Investment Bankers Since 1910

828 Seventeenth Street
P.O. Box 54
Denver, Colorado 80201
(303) 629-2020

Board of Trustees
Colorado School of Mines
Golden, Colorado

For $4,500,000 legally issued Dormitory and Student Center Revenue Anticipation Warrants Bonds of the Colorado School of Mines delivered to us in Denver, Colorado, dated June 1, 1981, and to mature and bear interest as follows:

All warrants to mature on June 1, 1984 with interest at the rate of 10% per annum.

Warrants will be callable beginning June 1, 1982 at 100 1/2, and on any interest payment date thereafter at 100.

said bonds to be in the denomination of $5,000,000 bearing interest as shown above, payable semi-annually, both principal and interest payable at a Colorado bank or trust company of our choice.

WE WILL PAY $4,420,000 and accrued interest from the date of the bonds to the date of delivery to us.

Prior to our accepting delivery of said Securities, you agree to furnish a certified transcript of all legal proceedings requisite to their issuance and delivery, including a signature and non-litigation certificate in the customary form, evidencing the legality of said Securities and the security provisions relating thereto to the satisfaction of Tallmadge, Tallmadge, Wallace and Hahn.

whose unqualified approving legal opinion in the customary form shall accompany said Securities at delivery.

These bonds are to be delivered to us on or before July 1, 1981, or thereafter at our option.

The cost of the printing of these bonds will be paid by Boettcher & Co., and the fees of approving attorneys will be paid by Boettcher & Co.

We herewith hand you as evidence of our good faith in complying with the terms and conditions of this proposal which is to apply as part payment for said bonds when the legality of same has been approved by our attorneys, and to be forfeited if fully liquidated damages should we fail or refuse to take said bonds as above provided. Said check is to be returned to us if this proposal is not accepted, or if the above attorneys should decline to approve the legality of the issue. This offer is for immediate acceptance unless otherwise specified above.

Respectfully submitted,
Boettcher & Company

By: General Partner

ACCEPTED for and on behalf of the Colorado School of Mines, pursuant to authorization by its governing body, and receipt of the above mentioned check acknowledged, on this date,

May 8, 1981

Attest:
Signature
Secretary, Board of Trustees

Seal

Official Title

Signature
President, Board of Trustees

Official Title
RECORD OF PROCEEDINGS

Golden, Colorado
June 12, 1981

The Board of Trustees met in regular session on June 12, 1981 at
9:00 a.m.

Trustees present: Messrs. Coors and Henderson, Miss Leaver,

Mr. Schwartzberg presided.

Also attending the meeting were President McBride, Vice Presidents
Mueller, Scott and Welles, Dean Golden, Dean Nyikos and other staff members,
visitors and a representative of the press.

Election of Officers. At the outset of the election procedure,
it was noted that the resolution concerning dormitory financing, which is
to be considered per agenda later in the meeting, has been written with the
present slate of officers. It was agreed, therefore, that the election of
new officers take effect at the conclusion of today's meeting, and that this
agreement be reflected in the minutes. (It was later noted that this
consensus decision also applied to the park lease to the City of Golden.)

Nominations were properly made, seconded, and the following
officers were unanimously elected:

James C. Wilson, President
Fred R. Schwartzberg, Vice President
Don R. Henderson, Secretary

Previous Minutes. The minutes of the meeting held on May 8,
1981 were approved as distributed.

Recognition of Miss Leaver. Mr. Schwartzberg asked that the
minutes reflect the recognition of the Board of the outstanding service which
Miss Leaver has rendered during her term as a member of the Board of
Trustees.

Faculty Appointments. Dr. Mueller reviewed the new appointments
to the faculty as follows:

David E. Fletcher
Visiting Professor of
Mineral Economics
$34,000 for the 1981-82
academic year

Barry B. Hughes
Adjunct Associate Professor of
Humanities and Social Sciences
$2,500 for fall semester
of the 1981-82 academic
year

Lawrence L. Kazmerski
Adjunct Professor of Physics
$2,000 for the 1981-82
academic year

Karen E. Kieselbach
Librarian
$15,000 for the calendar
year

G. W. Rayner Canham
Visiting Associate Professor of
Chemistry and Geochemistry
$6,100 for the 1981-82
academic year
Reappointment:

A. W. Schlechten
Director of the W. J. Kroll Institute for Extractive Metallurgy
$27,500 for September 1, 1981 through August 31, 1982

Resignations:

James M. Riddle
Assistant Professor of Mining Engineering
Resignation effective May 9, 1981

Ching H. Wu
Associate Professor of Petroleum Engineering
Resignation effective May 9, 1981

Duane R. Sanders
Assistant Professor of Basic Engineering
Resignation effective May 9, 1981

Financial Reports. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the eleven months ending May 31, 1981; Colorado School of Mines Current Funds Summary by Fund for the eleven months ending May 31, 1981; and Colorado School of Mines Time Deposits and Investment Report, May 31, 1981. He stated that upon receipt of the supplemental appropriation within the next few days, the School will finish the year within the approved spending level.

Admissions. Dean Nyikos called the Board's attention to the significant increase in the number of minority applicants.

Mr. Young reviewed the current Admissions Report and stated that based upon the number of students who have indicated an intent to enroll, and based upon the number accepted, admissions for next fall were closed effective June 1. He said that his office is no longer evaluating or accepting students who apply for admission except as a courtesy to assist them in securing admission elsewhere.

Cooperative Education and Placement. Mr. Warren Spaulding reviewed the Cooperative Education and Placement Status Report 1980-81. He said that the response to the program indicates that Mines students are in demand.

Discussion followed, during which the Trustees thanked Mr. Spaulding for his report.

Departmental Status for Environmental Sciences. Dr. Golden presented to the Board the proposal that the existing program in environmental sciences be established as the Department of Environmental Sciences and Engineering Ecology. This department will not only continue in its "service" role but will have permission to proceed with the planning of an interdisciplinary Master of Science degree. The Department is to be headed by Dr. Beatrice E. Willard.

It was pointed out that this has been discussed previously and approval was recommended.

June 12, 1981
Discussion ensued on the importance of providing a balanced program in environmental sciences and engineering ecology. It was noted that it is important not only to assist students to evaluate the environmental consequences of engineering activities but to provide them with an appreciation of the economic consequences of environmentally related actions.

In response, Dr. Willard noted that the current program reflects her personal philosophy as to the necessity for proper balance in environmental judgments and that she has tried to be extraordinarily careful to "fit" the program into the existing campus disciplines. For example, the environmental sciences people have been working closely with those in the Mineral Economics Department with regard to the cost effectiveness of environmental programs.

It was moved, seconded and passed to approve the establishment of a Department of Environmental Sciences and Engineering Ecology.

The Chairman asked for and received affirmative consensus regarding proceeding with the planning of an interdisciplinary Master of Science degree, stating that it does not require formal action.

The Trustees recognized Dr. Willard's vigorous and successful leadership of the environmental sciences program.

Mining Hall of Fame Progress Report. President McBride presented a brief history of the proposed Mining Hall of Fame and Museum, stating that the existing option to lease agreement required that $150,000 be raised by a certain date (December 5, 1980, extended by Trustee action to June 5, 1981) and devoted to certain specified steps in carrying forward the program. The Board is to receive a progress report on this situation from Mr. Doug Watrous, President of the Mining Hall of Fame and Museum.

Mr. Watrous reported to the Board that to date they have raised $154,000 (evidenced by bank statement of deposit) and have pledges for $14,000 more. Supporting data and a list of contributors were distributed, and the Board was told that a Board of Governors has been emplaced.

The attorney for the Mining Hall of Fame requested a signed letter of acknowledgment that the goal of $150,000 has been met, which will aid them in future fund raising efforts. It was agreed that such letter be provided, subject to review by the Board of Trustees attorney, and that the minutes of this meeting reflect that proof was offered of having met the original terms of the option to lease by the actual raising of $150,000.

Catalog Revision to Limit Enrollment by Option. Dr. Mueller distributed "Proposed Catalog Statement Effective June, 1981" on this point, and President McBride told the Board that the administration and faculty have discussed the likelihood of having to limit enrollment in some options, a limitation which does not exist at the present time. Such a limitation, usually enforced by a quota and selection procedure, is common practice in engineering schools across the country. It was noted that this establishes in our published material advance notice that such a system may come into effect.

Discussion ensued, during which it was moved, seconded and passed to authorize the administration to include this statement in the next CSM catalog (1982-1983).

June 12, 1981
School Budget 1981-1982, Including Establishment of Tuition, Fees, Dorm Charges, etc. Mr. Scott distributed Recommended Budget for Fiscal Year 1981-82 Education and General in the amount of $15,903,000.


Mr. Pascoe asked whether the tuition charge per credit hour for part-time students was sufficient to cover the cost of services and facilities provided. Mr. Scott said that the rate per hour, 1/30 of the academic tuition for full-time students, was consistent with the tuition policies in effect at the other Colorado higher education institutions. Mr. Pascoe suggested that this policy may have to be reviewed in view of the new financing plan.

Mr. Scott reviewed the rental increases for the residence halls, for Prospector Village and for Mines Park, noting that there are several interested persons at the meeting who may wish to address this issue.

Roger Hudson, a resident of Prospector Village #26, expressed concern over the amount of the increase and presented a comprehensive tenant petition on this point, which is appended. He noted that in spite of past and proposed rent increases that the maintenance of the area is, in his opinion, appalling. He stated that, for example, the residents were promised a playground for their children by June 1 and that ground has not yet been broken. He stated that he was told by Mr. Fawcett that the rent increases will be going to pay for Twin Towers and for food service. That most students are unable to work because of demands of school, that over the last three years the rent has increased over 67 percent, and that a 20-25 percent increase would be more reasonable.

Several other residents of Mines Park who were present expressed concern about the large rent increase. They voiced no major concerns regarding maintenance.

Mr. Scott explained that the food services are self-supporting and that there is no rental contribution to food service. He also explained the method of financing for student housing and the manner in which the money is repaid. In response to questioning by Mr. Warren, Mr. Scott said that all possibilities for student financial assistance, although not specific to school tenants, would be brought to the attention of the students.

Trustees expressed concern about the safety of the housing being provided in response to Mr. Hudson's statement that he feels that the School is not providing safe housing due to lack of maintenance and due to the fact that the students have been bothered by mice, rats, etc.

Discussion followed, during which certain Board members questioned the Board's responsibilities for providing student housing.

June 12, 1981
Mr. Pascoe moved for approval of the recommended budget for Fiscal Year 1981-82 and of tuition and fees. He asked that the minutes reflect that the Board heard the complaints of those living in Mines Park and Prospcctor Village and asked the administration to give special attention to any forms of financial assistance available to ease the burden. This was seconded and passed.

The Chairman requested that the administration investigate the complaints and report at the next Board meeting.

The Chairman referred to a letter written to the Board by Bruce Smith, a resident of Prospctor Village, requesting that preferential treatment be given to Colorado residents in assessing housing charges. Legal opinion was heard to the effect that there is nothing in state law to prevent the School from charging nonresident students higher rent, but that the provisions of most government loans, perhaps effective as to these rents, prohibit discrimination.

TUITION AND FEES
FY 1981-82

<table>
<thead>
<tr>
<th>Student Load</th>
<th>Res.</th>
<th>Nonres.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.5 &amp; over</td>
<td>874</td>
<td>2622</td>
</tr>
<tr>
<td>8.5 - 9.0</td>
<td>522</td>
<td>1575</td>
</tr>
<tr>
<td>7.5 - 8.0</td>
<td>464</td>
<td>1400</td>
</tr>
<tr>
<td>6.5 - 7.0</td>
<td>406</td>
<td>1225</td>
</tr>
<tr>
<td>5.5 - 6.0</td>
<td>348</td>
<td>1050</td>
</tr>
<tr>
<td>4.5 - 5.0</td>
<td>290</td>
<td>875</td>
</tr>
<tr>
<td>3.5 - 4.0</td>
<td>232</td>
<td>700</td>
</tr>
<tr>
<td>2.5 - 3.0</td>
<td>174</td>
<td>525</td>
</tr>
<tr>
<td>1.5 - 2.0</td>
<td>116</td>
<td>350</td>
</tr>
<tr>
<td>1.0</td>
<td>58</td>
<td>175</td>
</tr>
</tbody>
</table>

Fees

- Infirmary $18.00
- Student Health Insurance
- Associated Students $13.25
- Athletic $15.00
- Student Center $35.00

Total $81.25/Sem.

Orientation, New Stu $ 3.50

Summer Session Field Courses

| Tuition, 6 weeks | 348 | 1050 |
| Infirmary Fee, on-campus | $ 5.00 |
| Stu Ctr, on-campus | 13.25 |

Summer Session Academic Courses

| Tuition, same as regular academic sem. |
| Infirmary Fee | $ 9.00 |
| Student Center Fee | 17.50 |

June 12, 1981
Mandatory Accident Ins.

Mining 318, semester $5.00

Intensive English Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 01</td>
<td>1400</td>
<td></td>
</tr>
<tr>
<td>EN 02</td>
<td>700</td>
<td></td>
</tr>
</tbody>
</table>

Tuition, 11 weeks

<table>
<thead>
<tr>
<th>Fee Type</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infirmary Fee</td>
<td>$12.00</td>
</tr>
<tr>
<td>Student Center Fee</td>
<td>17.50</td>
</tr>
<tr>
<td>Summer Activity Fee</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Graduate Sessions

Fees are the same as for undergraduate students, with the following exceptions:

Thesis Research - Summer

Tuition, Min. 3 sem/hrs
(Tuition is same for
14 weeks as 8 weeks)

* Infirmary Fee
  - 14 weeks $12.00
  - 8 weeks $9.00

Stu Center Fee, if on
  - campus 17.50

Thesis Fees

The charges for the binding of theses are included in the graduation fee.

Graduation Fees

<table>
<thead>
<tr>
<th>Degree</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors</td>
<td>$25.00</td>
</tr>
<tr>
<td>Professional Engineers</td>
<td>25.00</td>
</tr>
<tr>
<td>Masters</td>
<td>76.00</td>
</tr>
<tr>
<td>Doctors</td>
<td>96.00</td>
</tr>
</tbody>
</table>

* Student Health Insurance Plan (nonmandatory)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Annual Fee. Entire Year Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>$138.00</td>
</tr>
<tr>
<td>Spouse</td>
<td>151.52</td>
</tr>
<tr>
<td>Spouse &amp; Child(ren)</td>
<td>288.61</td>
</tr>
<tr>
<td>Child(ren) Only</td>
<td>137.16</td>
</tr>
<tr>
<td>Optional Maternity</td>
<td>220.00</td>
</tr>
</tbody>
</table>

Insurance also available for Summer Session only, $35.

June 12, 1981
### FY 1981-82 - ROOM AND BOARD CHARGES

<table>
<thead>
<tr>
<th>Residence Halls*</th>
<th>Present Rate</th>
<th>Proposed Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PER STUDENT</td>
<td>PER STUDENT</td>
</tr>
<tr>
<td><strong>Academic Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bradford, Randall, Morgan, and Thomas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Room</td>
<td>$780</td>
<td>$1180</td>
</tr>
<tr>
<td>Single Room</td>
<td>880</td>
<td>1280</td>
</tr>
<tr>
<td>Twin Towers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Room</td>
<td>980</td>
<td>1400</td>
</tr>
<tr>
<td>Single Room</td>
<td>1030</td>
<td>1450</td>
</tr>
<tr>
<td><strong>Meal Plans, Academic Year</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-meal Plan</td>
<td>985</td>
<td>1100</td>
</tr>
<tr>
<td>15-meal Plan</td>
<td>885</td>
<td>1000</td>
</tr>
<tr>
<td>10-meal Plan</td>
<td>845</td>
<td>940</td>
</tr>
<tr>
<td><strong>Residence Hall Activity Fee</strong></td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Field Session</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Randall Hall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room Only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Room</td>
<td>150</td>
<td>225</td>
</tr>
<tr>
<td>Single Room</td>
<td>175</td>
<td>250</td>
</tr>
<tr>
<td><strong>Summer Session</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Randall Hall*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Room</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Single Room</td>
<td>230</td>
<td>330</td>
</tr>
<tr>
<td>Twin Towers*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double Room</td>
<td>250</td>
<td>355</td>
</tr>
<tr>
<td>Single Room</td>
<td>270</td>
<td>375</td>
</tr>
<tr>
<td><strong>Meal Plans, Summer Session</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-meal Plan</td>
<td>250</td>
<td>280</td>
</tr>
<tr>
<td>15-meal Plan</td>
<td>225</td>
<td>255</td>
</tr>
<tr>
<td>10-meal Plan</td>
<td>215</td>
<td>240</td>
</tr>
<tr>
<td><strong>Prospector Village (monthly rate)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married Student Apartments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-bedroom</td>
<td>160</td>
<td>200</td>
</tr>
<tr>
<td>2-bedroom</td>
<td>180</td>
<td>225</td>
</tr>
<tr>
<td>3-bedroom</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Furnished</td>
<td></td>
<td>Add 30</td>
</tr>
</tbody>
</table>

*Residence Hall Students must choose either the 5-day 15-meal Plan or the 6-day 18-meal Plan.

June 12, 1981
Residents are not responsible for irrigation of yards.

Student Association Budgets. Mr. Scott referred to the document submitted to the Board, noting the approval and endorsement of the document by Dean Nyikos.

It was moved, seconded and passed to approve the Student Association budgets.

Progress Report on Stratton and Chauvenet Halls. President McBride recommended deferral due to time constraints, no Board action being contemplated.

Keystone Conference, Final Notice and Schedule. Mr. Welles reaffirmed to the Board that the Conference is scheduled for July 16-19 and asked that anyone who has not made a reservation do so in the near future. The program will be devoted to Department Heads--roles, skills, and challenges facing them and planning issues for the coming year. A list of the participants will be available at the meeting. The guest speaker will be Victor Perkiss of Georgetown University.

Dormitory Financing. Mr. Scott asked for approval of the resolution distributed to the Board members authorizing issuance of dormitory and student center revenue anticipation warrants in the principal amount of $4,500,000, with interest at ten percent, at a cost of $450,000 per year. The resolution, appended, was adopted unanimously.

Park Land use by City of Golden, Resolution. Mr. Scott said that this item has been discussed previously by the Board and needs its approval. Golden City Councilman James Brown and City Manager Chuck Goudge were present to answer questions.

The City has asked for a 75-year lease and has budgeted $100,000 for improvements on the land.

Mr. Scott said that there is an escape clause on both sides. The cancellation provision is notification one year in advance.

It was moved, seconded and passed to approve the document subject to legal review.

The meeting adjourned at 12:05 p.m. for executive session.

June 12, 1981
Prospector Village  
Golden, Colorado  80401  
June 5, 1981  

Board of Trustees  
Colorado School of Mines  
Golden, Colorado  80401  

Gentlemen:  

We, the residents of Prospector Village, protest the proposed rent increases for our housing area. Many of us can barely afford the present rent, and the proposed increase would produce unwarranted financial hardship. These increases are unreasonable for the following reasons:  

1) The two previous rent increases have been about 15% each, while apartment houses in the Golden area have averaged slightly less than 10% in rent increases each year during the same period. This year's proposed rent increase for Prospector Village is 25%. Compounded over the last three years, this makes a 67% increase during that period of time, and is far out of line with any increases that would be due to inflation.  

2) The buildings and surrounding grounds in Prospector Village are poorly maintained. This past winter we did not have heat or hot water on more than a dozen occasions. There is no insulation in the buildings and they are so loosely constructed that winter winds blow through many of the apartments strongly enough to flap the drapes. Rocky, bare areas in the grounds have never been seeded or sodded. Trenches and large cracks in the ground go for as much as a year before they are filled. Open trenches have been left without fencing, and when they were finally fenced, the fences were not child proof by any means! The street lights were all out for approximately one year before they were fixed. Complaints to the Housing Office are often unheeded. Please note the attached personal complaints.  

3) We do not believe that the tenants in married student housing should be charged high rental rates in order to subsidize the operating expenses of the cafeteria, the dormitories, and the loan for the twin towers dorm (information provided by the Director of Housing).
Married student housing is supposed to consist of modest apartments that have modest rents that student couples can afford to live in. If you do increase the rent to a level close to those of commercial apartments in Golden, then the Housing Office should improve and maintain Prospector Village so that it is comparable to commercial complexes in the area. However, you will find that many married students can no longer afford to attend the Colorado School of Mines.

Sincerely,

THE TENANTS

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]
RESOLUTION

A RESOLUTION AUTHORIZING COLORADO SCHOOL OF MINES DORMITORY AND STUDENT CENTER REVENUE ANTICIPATION WARRANTS IN THE PRINCIPAL AMOUNT OF $4,500,000 TO PROVIDE FUNDS TO LIQUIDATE OUTSTANDING WARRANTS DATED JULY 1, 1979; PROVIDING FOR PAYMENT OF THE NEW WARRANTS AND THE INTEREST THEREON; AND PROVIDING OTHER DETAILS IN CONNECTION THEREWITH.

WHEREAS, the Board of Trustees of Colorado School of Mines (the "Board") is empowered by virtue of its organization under the Constitution and laws of the State of Colorado, particularly Title 23, Articles 5 and 41, Colorado Revised Statutes 1973, as amended, to have general control and supervision of Colorado School of Mines, at Golden, Colorado (the "School"), and power to do all things incidental thereto, including the power to contract for the advancement of moneys for the construction and equipping of housing and dining facilities and the purchase of land at the School and to issue revenue bonds or interim warrants to evidence the advancement of moneys, and generally the power, within statutory limits, to bind itself to the performance of obligations; and

WHEREAS, the Board has constructed and equipped a student dormitory to house approximately 245 students and purchased land therefor, and constructed and equipped additional student center facilities (the "Project") on the campus of the School at Golden, Colorado; and

WHEREAS, the Board has heretofore issued its Dormitory and Student Center Revenue Anticipation Warrants dated September 1, 1977 in the principal amount of $3,785,000, due and payable September 1, 1979 (the "1977 Warrants"), to provide part of the funds for this purpose; and

WHEREAS, the 1977 Warrants were redeemed and liquidated and
the Project completed with the proceeds of Dormitory and Student Center Revenue Anticipation Warrants dated July 1, 1979 in the principal amount of $4,525,000 (the "1979 Warrants"); and

WHEREAS, the 1979 Warrants provide that they may be paid and redeemed from, among other sources, the proceeds of additional Warrants; and

WHEREAS, the Board proposes to procure the funds to liquidate the 1979 Warrants by issuing revenue anticipation warrants payable from the sources hereinafter specified, but without liability or obligation otherwise; and the Board hereby authorizes its President, Secretary, and Treasurer to execute, on behalf of the Board, Revenue Anticipation Warrants in an aggregate principal amount of $4,500,000, in the form and manner hereinafter particularly set forth.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF COLORADO SCHOOL OF MINES, IN LAWFUL MEETING ASSEMBLED:

1. That for the purpose of liquidating the 1979 Warrants, the proceeds of which were used for paying part of the cost of constructing and equipping the Project on the campus of the School at Golden, Jefferson County, Colorado, and for costs and expenses incidental to the issuance thereof, the Board shall exercise its power under the Constitution and laws of the State of Colorado to issue its Anticipation Warrants each to be designated "Colorado School of Mines Dormitory and Student Center Revenue Anticipation Warrant" in the principal amount of $4,500,000, bearing interest at the rate of 10% per annum, payable December 1, 1981 and semiannually thereafter on June 1 and December 1 each year, until maturity, evidenced by bearer coupons attached to said warrants.

2. The warrants shall be dated as of June 1, 1981; shall consist of 900 warrants in the denomination of $5,000 each, numbered 1 to 900, inclusive; and shall mature on June 1, 1984. The principal of and interest on said Warrants shall be payable in lawful money of the United States of America, at the United Bank of Denver, National Association, in Denver, Colorado.
The Warrants may be redeemed prior to maturity at the option of the Board on June 1, 1982 and on any interest payment date thereafter, by lot if less than all are redeemed, at par, accrued interest and a premium of 1/2 of 1% of principal if redeemed June 1, 1982 and at par and accrued interest if redeemed December 1, 1982 or thereafter.

3. That each Warrant shall be executed in the name of and in behalf of the Board by the facsimile signature of its President; a facsimile of the seal of the Board shall be thereunto affixed, attested by the manual signature of the Secretary of the Board; and the coupons shall be executed with the facsimile signature of the Secretary of the Board. The Warrants shall be the valid and binding obligations of the Board when executed by persons in office at the time of execution even though such persons are not in office at the time of the actual issuance of the Warrants.

When said Warrants have been properly executed, they shall be delivered to the purchaser thereof upon payment of the agreed purchase price. The proceeds of the Warrants authorized herein shall be used solely for the purpose hereinbefore specified, but neither the purchaser of said Warrants nor any subsequent holder or owner of any of them shall be obliged to see to the proper use or application of the proceeds of the Warrants.

4. That said Revenue Anticipation Warrants and the coupons to be attached hereto shall be in substantially the following form:
(Form of Warrant)

UNITED STATES OF AMERICA
STATE OF COLORADO
COLORADO SCHOOL OF MINES
DORMITORY AND STUDENT CENTER REVENUE ANTICIPATION WARRANT

No. ______ $5,000

The Board of Trustees of Colorado School of Mines, having control and supervision of Colorado School of Mines at Golden, Colorado (the "Board"), for value received hereby promises to pay to bearer on the 1st day of June, 1984, but solely from the sources hereinafter specified, the principal sum of FIVE THOUSAND DOLLARS and to pay interest thereon from the date hereof at the rate of ten percentum (10%) per annum, payable December 1, 1981 and semiannually thereafter on June 1 and December 1 each year until maturity, as evidenced by interest coupons hereto attached. Both the principal of and the interest on this Warrant shall be payable in lawful money of the United States of America, at the United Bank of Denver, National Association, in Denver, Colorado, upon presentation and surrender of said coupons and this Warrant as they severally become due.

Warrants of this issue may be redeemed prior to maturity at the option of the Board on June 1, 1982 and on any interest payment date thereafter, by lot if less than all are redeemed, at par, accrued interest and a premium of 1/2 of 1% of principal if redeemed June 1, 1982, and at par and accrued interest if redeemed December 1, 1982 or thereafter.

This Warrant is one of a series of Warrants of like tenor and effect, totaling Four Million Five Hundred Thousand Dollars ($4,500,000), consisting of 900 Warrants in the denomination of $5,000 each, numbered 1 to 900, inclusive, issued for the
purpose of liquidating outstanding Colorado School of Mines Dormitory and Student Center Revenue Anticipation Warrants, dated July 1, 1979, which outstanding Warrants were issued to secure an advance of funds for completing the construction and equipping of a student dormitory to house approximately 245 students and purchasing land therefor, and constructing and equipping additional student center facilities (the "Project"), on the campus of Colorado School of Mines, at Golden, Colorado; and for paying necessary incidental expenses, said Warrant being issued under the Constitution and laws of the State of Colorado, and particularly Title 23, Articles 5 and 41, Colorado Revised Statutes 1973, as amended, and secured by and payable from the net revenues of the Project, student fees, from the proceeds of revenue bonds or warrants, from government subsidy grants or loans, from private funding sources, cash or any combination of these sources, to be issued or available prior to June 1, 1984.

This Warrant and the interest hereon constitute a special obligation of the Board, and is payable solely from the above-described sources and does not constitute an indebtedness of the State of Colorado. The holder hereof shall never have the right to demand payment of this Warrant or the interest hereon out of any funds raised or to be raised by taxation, and said Warrants shall never evidence or become a charge or claim against the State of Colorado, the Warrant holders' sole right and remedy for payment being confined to the sources herein specified.

This Warrant shall be a negotiable instrument in accordance with the laws of the State of Colorado, and shall be transferable by delivery.

It is hereby declared and represented that this Warrant was duly authorized by the Board at a regular meeting held on June 12, 1981, and that in issuing this Warrant, and while such Warrant is outstanding and unpaid, the Board has covenanted and agreed that it will pay this Warrant and the interest hereon from the source or sources specified herein.
It is hereby certified and recited that all acts, conditions and things required to be done precedent to and in the issuance of this Warrant have been properly done, have happened and have been performed in regular and due time, form and manner as required by the Constitution and the laws of the State of Colorado, and that this Warrant does not exceed any constitutional or statutory limitation, and that provision has been made for the payment of principal of and interest on this Warrant by an irrevocable pledge of the funds specified herein.

IN WITNESS WHEREOF, the Board of Trustees of Colorado School of Mines has caused this Warrant to be signed with the facsimile signature of the President of said Board, sealed with a facsimile of the seal of said Board, sealed with a facsimile of the seal of said Board, attested by the manual signature of the Secretary thereof, and the coupons to be signed with the facsimile signature of the Secretary of the Board, and this Warrant to be dated as of June 1, 1981.

(FACSIMILE SEAL)

COLORADO SCHOOL OF MINES

By (Facsimile Signature) President

ATTEST:

(Do Not Sign)

Secretary

7
June,

On the 1st day of December, 19--- (unless the Warrant to which this coupon is attached has been called for prior redemption), the Board of Trustees of Colorado School of Mines will pay to the bearer out of the sources designated in the Warrant to which this coupon is attached, but without liability or obligation otherwise, the amount shown hereon, in lawful money of the United States of America, at the United Bank of Denver, National Association, in Denver, Colorado, being interest then due on its Colorado School of Mines Dormitory and Student Center Revenue Anticipation Warrant dated June 1, 1981, bearing

No. _________

(Facsimile Signature)
Secretary

8
Insurance as would customarily be carried by a prudent person.

Any combination of these sources prior to June 1, 1984, from private funding sources, from available cash or from the net revenue of the project, from student fees, from the proceeds of revenue bonds or warrants, from government grants or

(c) To pay the warrants and the interest thereon from the project.

fees and all other expenses incident to the operation of the

maintenance charges, insurance premiums, the paying agent,

and all necessary operating expenses, current

maturation the project in good condition and replete.

of the warrants to the purpose hereinafter specified and to

(a) To devote the entire proceeds realized from the sale

outstanding warrants, as follows:

warrants and coupons so long as any of said warrants are

contractors, owners and agree with each holder of said

said warrants and of the resolution, the Board hereby

performance of and compliance with the terms and conditions of

of execution of agreements, or otherwise, and to secure the

property of any warrant over another on account of actual time

holders of such warrants and coupons, without any preference or

authorized heretofor, and for the equal and indefeasible benefit of the

6. For the purpose of assuring payment of the warrants

or indemnity as may be required by the Board.

or destruction and shall also furnish such security

conforms shall furnish to the Board evidence of its satisfaction

loss of destruction, the applicant for a substituted warrant and

bearing the same number and the same denomination. In case of

and coupons, a new warrant and coupons of like face and date,

or in lieu of or in substitution for a lost or destroyed warrant

delivery, upon cancellation of the mutilated warrant and coupons,

destroyed or lost, the Board in its discretion may issue and

coupons thereto appurtenant, shall become mutilated.

5. That in case any warrant issued heretofore, with the
institution owning a similar property having a like value in the same vicinity. Such insurance shall be in such amounts and in such responsible insurance companies as may be satisfactory to the purchaser of said Warrants, its successors or assigns, and shall be payable in the event of loss to the Treasurer of the Board, for the purposes hereof. In case any loss should occur under any or all such policies of insurance, the Treasurer shall collect the insurance money payable thereon and hold the same in a separate fund, and upon receipt of a proper voucher from the Board showing that a sum or sums at least equal to the amount of the insurance money requested to be paid over has been expended in replacing or repairing the property lost or damaged, or in building, acquiring or erecting property of similar capacity and use as a substitute therefor, or if the Board shall show to the Treasurer that it has incurred an indebtedness in repairing the property lost or damaged, or in replacing a property of similar capacity and use as a substitute therefor, then the Treasurer, out of said insurance money, and only to the extent thereof, will reimburse the Board or pay such indebtedness on behalf of the Board, as the case may be.

(e) To protect and defend the validity of this Resolution and of the trusts created thereby, and of the Warrants issued hereunder, against all attacks from whatsoever source, and in the event litigation should be commenced on account thereof, promptly to notify the Warrant holders and allow such holders to participate in the defense of any such litigation; provided, however, that any such participation by the Warrant holders shall be at their own expense.

(f) That it will make no use of the proceeds of said Warrants which might cause such obligations to be arbitrage bonds within the meaning of Section 103(c) of the Internal Revenue Code of 1954, as amended, and the Regulations proposed and in effect thereunder.

7. That no owner or holder of any of the Warrants authorized herein shall ever have the right to demand payment of any of said Warrants or interest thereon out of any funds raised
or to be raised by taxation, and said Warrants shall never evidence or become a charge or claim against the State of Colorado, the Warrant holders' sole right and remedy for payment being confined to the sources herein specified.

8. The provisions of this Resolution are severable, and if it should ever be determined by a court of competent jurisdiction that any part hereof is invalid or unenforceable, such determination shall not affect or impair the remaining provisions hereof.

9. That after said Warrants or any of them shall have been issued, this Resolution shall not be changed, amended or revoked until said Warrants and the interest thereon shall be fully paid, satisfied and discharged in the manner herein provided, except on the written consent of the owners of 75% of the Warrants then outstanding.

10. That the Secretary of the Board be authorized to deliver to the purchaser of the Warrants certified copies of this Resolution and of the minutes showing its adoption, together with such other certificates or documents as may be required, and to take such steps as may be necessary or advisable fully to carry out the purpose and intent of this Resolution.

ADOPTED AND APPROVED as of this 12th day of June, 1981.

(S E A L)  
President

ATTEST:

Secretary
STATE OF COLORADO  
COUNTY OF JEFFERSON  

I, James C. Wilson, the duly qualified and acting Secretary of the Board of Trustees of Colorado School of Mines, do hereby certify that the attached copy of the minutes of a regular meeting of said Board, held on the 12th day of June, 1981, is a true and correct copy of the original minutes of said meeting on file and of record, and I do further certify that the copy of the Resolution appearing in such minutes is a true and correct copy of the original Resolution adopted at said meeting, which minutes and Resolution are on file and of record in my office.

WITNESS my hand and the seal of the Board of Trustees of Colorado School of Mines, this ___ day of ________, 1981.

(S E A L)  
Secretary
STATE OF COLORADO  
COUNTY OF JEFFERSON  

GENERAL INCUMBENCY CERTIFICATE  

I, the undersigned Secretary of the Board of Trustees of Colorado School of Mines, do hereby certify:  

1. That this Certificate is for the benefit of the holders of Anticipation Warrants designated "Colorado School of Mines Dormitory and Student Center Revenue Anticipation Warrants" dated June 1, 1981, in the denomination of $5,000 each, numbered 1 to 900, inclusive, in the aggregate amount of $4,500,000, issued by said Board.  

2. That the following persons constituted the Board of Trustees on the 12th day of June, 1981, the date upon which the Resolution authorizing the issuance of said Revenue Anticipation Warrants was adopted, viz:  

<table>
<thead>
<tr>
<th>Name</th>
<th>Term Ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. K. Coors</td>
<td>March 23, 1985</td>
</tr>
<tr>
<td>Fred R. Schwartzberg</td>
<td>March 23, 1983</td>
</tr>
<tr>
<td>James C. Wilson</td>
<td>March 23, 1983</td>
</tr>
<tr>
<td>Monte Pascoe</td>
<td>March 23, 1985</td>
</tr>
<tr>
<td>Don K. Henderson</td>
<td>March 23, 1987</td>
</tr>
<tr>
<td>J. N. Warren</td>
<td>March 23, 1987</td>
</tr>
</tbody>
</table>

Student Representative:  

That the following is a list of the present officers of the Board:  

President: W. K. Coors  
Vice President: Fred R. Schwartzberg  
Secretary: James C. Wilson  
Assistant Secretary: Monte Pascoe  
Assistant Treasurer: Don K. Henderson  

EXECUTED this ___ day of June, 1981.  

(S E A L)  

Secretary
STATE OF COLORADO
COUNTY OF JEFFERSON

) ss.

SIGNATURE IDENTIFICATION AND NON-LITIGATION CERTIFICATE

WE HEREBY CERTIFY that we did officially sign, either by facsimile or manual signature, the Colorado School of Mines Dormitory and Student Center Revenue Anticipation Warrants dated June 1, 1981, in the principal amount of $4,500,000, maturing on June 1, 1984, bearing interest at the rate of 10% per annum, evidenced by coupons attached thereto, said Warrants being numbered 1 to 900, inclusive, of the denomination of $5,000 each.

WE DO FURTHER CERTIFY that:

1. At the time we signed said Warrants, either manually or by facsimile signature, and at the time of executing this Certificate, we were the duly chosen, qualified and acting officers indicated therein and authorized to execute the same.

2. No litigation of any nature is now pending or threatened restraining or enjoining the issuance and delivery of said Warrants, or in any manner questioning the proceedings or authority by which same is made, or affecting said Warrants.

3. Neither the corporate existence of the Board of Trustees of Colorado School of Mines nor the title of present officers to their respective offices is being contested and that no authority or proceedings for the issuance of said Warrants have been repealed, revoked or rescinded.

4. We are acquainted with the official seal of said Board, and that the facsimile of said official seal is affixed to each of said Warrants, and that a correct impression of the same also appears upon this Certificate.

5. The facsimile signature of the President and the manual signature of the Secretary appearing on said Warrants, and the facsimile signature of the Secretary of said Board appearing
upon the coupons attached to said Warrants are hereby adopted by each such officer respectively as his own signature.

EXECUTED and delivered this ___ day of June, 1981.

Signature

Official Title

President, Board of Trustees
Colorado School of Mines

Secretary, Board of Trustees
Colorado School of Mines

(SEAL)

Signatures above and upon each of the above-described Warrants guaranteed as those of the officers respectively designated above.

By __________________________ of
Boettcher & Co.,
Denver, Colorado
STATE OF COLORADO
COUNTY OF JEFFERSON

TREASURER'S RECEIPT

I, the undersigned, DO HEREBY CERTIFY that I am the duly qualified and acting Treasurer of the Colorado School of Mines, acting for and on behalf of the Board of Trustees of Colorado School of Mines, in Golden, Colorado; that as such officer I further certify that $4,500,000 of Colorado School of Mines Dormitory and Student Center Revenue Anticipation Warrants dated June 1, 1981, being Warrants numbered 1 to 900, inclusive, in the denomination of $5,000 each, have been delivered to the purchaser, and that said Warrants have been paid for in full by said purchaser, in accordance with the terms of sale, as follows:

- Purchase price of Warrants ------------ $4,500,000.00
- Accrued interest from June 1, 1981 ------------------ $ __________
- Less Discount -------------------------- $ __________
- Net Amount Received ------------------ $ __________

I DO FURTHER CERTIFY that the interest coupons maturing December 1, 1981, and all subsequent coupons, were attached to said Warrants at the time of delivery, and that when the 1979 Warrants dated July 1, 1979 numbered 1 to 905 in the denomination of $5,000 each are paid, I will cause the same to be cancelled and destroyed.

IN WITNESS WHEREOF, I have hereunto set my official hand and the seal of the Board, this ___ day of June, 1981.

(S E A L) Treasurer
STATE OF COLORADO

COUNTY OF JEFFERSON

CERTIFICATE AS TO ARBITRAGE

I, W. G. Scott, Treasurer of Colorado School of Mines, Golden, Colorado (the "College"), HEREBY CERTIFY with respect to the College's Dormitory and Student Center Revenue Anticipation Warrants in the principal amount of $4,500,000, dated June 1, 1981 (the "Warrants"), being issued this day, that on the basis of the facts, estimates and circumstances in existence on the date hereof, I do not expect that the proceeds of the Warrants will be used in a manner that would cause such Warrants to be arbitrage bonds within the meaning of Section 103(c) of the Internal Revenue Code of 1954 (the "Code"), as amended, and Treasury Regulations, Section 1.103-13, 1.103-14 and 1.103-15.

This Certificate is executed for the purpose of establishing the reasonable expectations of the College as to future events regarding the College's Warrants. The College has not been notified of any listing or proposed listing of the Issuer by the Internal Revenue Service as an issuer that may not certify its Warrants.

To the best of the undersigned's knowledge, information and belief, the expectations contained in this Certificate are reasonable.

The College has covenanted in its Certified Record of Proceedings dated June 12, 1981, not to use the proceeds of the Warrants so as to cause them to be arbitrage bonds under Section 103(c) of the Internal Revenue Code and regulations in effect thereunder.

The $4,500,000 received by the College from the sale of the Warrants is expected to be needed and fully expended on or prior to July 1, 1981 to pay and redeem $4,525,000 Colorado School of Mines Dormitory and Student Center Revenue Anticipation Warrants, dated July 1, 1979, due July 1, 1981.
To the best of my knowledge and belief, there are no other facts, estimates and circumstances which would materially change the expectations herein expressed.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of June, 1981.

Treasurer,
Colorado School of Mines
Golden, Colorado
Golden, Colorado
July 18, 1981

The Board of Trustees met in regular session on July 18, 1981 at 1:30 p.m. in the Gold Room at Keystone Lodge, Keystone, Colorado.


Absent: Messrs. Henderson and Pascoe.

Trustees Designate present: Miss Craig and Mr. Wood.

Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott and Welles, Dean Golden, Dean Nyikos, and other staff members, visitors, and a representative of the press.

Oaths of office were administered to Trustee Craig and Trustee Wood and properly executed by each.

Previous Minutes. President McBride called to the attention of the Board the failure of the June minutes to record the election of Mr. Scott as Treasurer of the Board. It was moved and seconded that the minutes be amended to reflect that action and approved as amended. Motion carried.

Faculty Appointments. Dr. Mueller reviewed the new faculty appointments, resignation and leaves of absence, as follows:

New Appointments:

Annette L. Bunge  
Assistant Professor of Chemical and Petroleum-Refining Engineering  
$22,000 for the 1981-82 academic year

Ramona M. Graves  
Assistant Professor of Petroleum Engineering  
$20,000 for the 1981-82 academic year

Robert D. Hamilton  
Assistant Professor of Geology  
$20,040 for the 1981-82 academic year

Robert C. Hansen  
Associate Professor of Basic Engineering  
$27,500 for the 1981-82 academic year

Mary Ellen Kemp  
Librarian  
$1,750 per month for the period June 22 to August 31, 1981

Charles A. Natalie  
Assistant Professor of Metallurgical Engineering  
$24,000 for the 1981-82 academic year

July 18, 1981
Laurence M. Nicoletis  
Postdoctoral Fellow in Geophysics  
April 1, 1981--May 15, 1981, $1,500 per month; May 16, 1981--August 15, 1981, $750 per month; September 1, 1981--May 15, 1982, $1,500 per month

John D. Wright  
Instructor in Petroleum Engineering  
$30,000 for the 1981-82 academic year

Resignation:

Barbara B. MacDonald  
Librarian  
Resignation effective June 12, 1981

Leaves of Absence:

Don L. Williamson  
Associate Professor of Physics  
1981-82 academic year at one-half pay

Oded Rudawsky  
Professor or Mineral Economics  
1981-82 academic year at one-half pay

Robert S. Fisk  
Assistant Professor of Mathematics  
1981-82 academic year at no pay

Douglas W. Hilchie  
Associate Professor of Petroleum Engineering  
1981-82 academic year at no pay

Financial Reports. Mr. Scott presented the report Budget Status 1980-81, reviewing the tentative year-end figures. He also presented the monthly investment report.

Admissions. Dean Nyikos presented the Admissions Report and noted that we expect an entering class of 625 new students.

Steam Line. Mr. Scott reviewed the report compiled by Adolf Coors Company Utilities Engineering. He reviewed the nature of the project, the proposed cost of construction and the proposed costs of steam over the ten year period ending 1991. Scott added that the report had been received on the prior Wednesday, and the cost analysis section had been reformulated by CSM as of that date. Communication from Boettcher & Company subsequent to that time indicates the cost of debt service is likely to be $230,087 per year, based on a 12 percent interest rate and $1.3 million debt. Scott stated the Coors unit-charges for steam had been presented as not-to-exceed-prices on a yearly basis and would be the subject of continued negotiation. He also noted that the construction included a 20 percent contingency which was believed to be generous. A somewhat lower net cost of construction is to be anticipated. Discussion followed, at the end of which it was moved that the officers of the Board and the administrative officers of the School be authorized to continue negotiations with Adolf Coors Company Utilities Engineering within the general parameters included in the proposal and that those officers be authorized to sign on behalf of the Board such documents for construction, steam supply and financing as are required to be executed prior to the next regular meeting of the Board. Seconded. Carried with Mr. Coors abstaining.

July 18, 1981
Prospector Village Maintenance. President McBride indicated that the administration has looked into the maintenance of Prospector Village, following the discussion with tenants at the last meeting, to determine that such maintenance had been and would continue to be prudently accomplished. Mr. Scott was asked to comment, and he referred the Board to his memorandum to President McBride, dated July 16. He reported that the meetings with the tenants had produced meaningful communication and would form the basis of a continuing dialogue. Dean Nyikos reported on the provisions for financial aid which had been explained to the tenants and indicated his belief that communications were improved.

The Board asked for a follow-up report, preferably in October, as to the utilization of the financial aid by the tenants and the status of the maintenance activities.

Administrative Salary Schedule. President McBride introduced salary recommendations for the twelve-month faculty, commenting that the recommendations had been discussed with each of the Vice Presidents of the respective areas.

He further noted that embodied in the recommendation was his request that the Office of Dean of Students be designated as the Office of the Vice President for Student Affairs and Dean of Students and that the incumbent, Dean Nyikos, fill the office and be known by that title.

It was moved and seconded that the salaries recommended for the contract year beginning September 1, 1981 and the organizational change be adopted.

Harold R. Cheuvront
Registrar
$29,000

Brodie D. Farghular
Public Information Officer
21,500

Carl A. Fawcett
Director of Housing, Student Center, and Green Center
30,900

Daniel R. Prelund
Controller
30,800

John O. Golden
Dean of Graduate Studies and Research and Professor of Chemical and Petroleum Engineering
53,200

Robert J. Hensley
Admissions Counselor
19,900

William A. Ingels
Administrative Services Officer
32,700

Carl Kallansrud
Director of Research Administration
28,135

Andrew M. Lopez
Affirmative Action/Contract Review Officer
23,300

Warren J. Mason
Director of Financial Aid
27,000

July 18, 1981
<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guy T. McBride, Jr.</td>
<td>President</td>
<td>$70,000</td>
</tr>
<tr>
<td>Virginia A. McGinnis</td>
<td>Assistant Museum Curator</td>
<td>16,700</td>
</tr>
<tr>
<td>Michael B. McGrath</td>
<td>Director of Computing Center and Associate Professor of Basic Engineering</td>
<td>38,650</td>
</tr>
<tr>
<td>Charles S. Morris</td>
<td>Director of Public Relations</td>
<td>29,500</td>
</tr>
<tr>
<td>William M. Mueller</td>
<td>Vice President for Academic Affairs and Dean of the Faculty and Professor of Metallurgical Engineering</td>
<td>62,700</td>
</tr>
<tr>
<td>Michael S. Mykos</td>
<td>Vice President for Student Affairs and Dean of Students</td>
<td>40,000</td>
</tr>
<tr>
<td>Judith O'Brien</td>
<td>Personnel Officer</td>
<td>26,400</td>
</tr>
<tr>
<td>Jon W. Raese</td>
<td>Director of Publications</td>
<td>26,000</td>
</tr>
<tr>
<td>Anne R. Reynolds</td>
<td>Assistant Director of Housing and Head Resident of Twin Towers Hall</td>
<td>8,500</td>
</tr>
<tr>
<td>Martin D. Robbins</td>
<td>Director, Colorado Energy Research Institute</td>
<td>56,100</td>
</tr>
<tr>
<td>W. Gordon Scott</td>
<td>Vice President for Business Affairs</td>
<td>55,000</td>
</tr>
<tr>
<td>Warren A. Spaulding</td>
<td>Director of Cooperative Education and Placement</td>
<td>22,500</td>
</tr>
<tr>
<td>Carolyn Steele</td>
<td>Departmental Assistant</td>
<td>24,000</td>
</tr>
<tr>
<td>Richard Sudermann</td>
<td>Director of Plant Facilities</td>
<td>37,900</td>
</tr>
<tr>
<td>Paul T. Treece</td>
<td>Assistant Director for Systems and Operations and Assistant Professor of Mathematics</td>
<td>33,390</td>
</tr>
<tr>
<td>Frank Waterous</td>
<td>Admissions Counselor</td>
<td>18,600</td>
</tr>
<tr>
<td>Joseph C. Weber</td>
<td>Assistant Dean for Research Development and Associate Professor of Mineral Economics</td>
<td>32,340</td>
</tr>
</tbody>
</table>

July 18, 1981
Requests to CSFM for Various Funds 1981-82. President McBride asked the Board to authorize requests to CSFM for the Faculty Improvement Fund, in the amount of $40,000, and the President's Discretionary Fund, in the amount of $50,000, at the Foundation's next regular meeting. Discussion followed during which Dr. Mueller indicated the Faculty Improvement Fund provided support for professional activities, mainly faculty travel, and recruiting of new faculty. Dr. McBride reviewed the use of the past year's Discretionary Fund and indicated the probable use of the requested funds. Mr. Scott reported his confirming with Mr. Paterson, Foundation Treasurer, that a fund balance remained in the Faculty Improvement Fund which would be exhausted following the funding of this request and that unrestricted funds would be used in the case of the President's requests, as it has in the past. It was moved and seconded that the requests be authorized. Motion carried.

Trustee Schwartzberg inquired as to whether the CSFM Board was satisfied with the CSM Board's method of approving requests and the general level of communications between the two organizations. Discussion followed among the trustees who sit in both Boards and staff members representing both Boards, which indicated a consensus that the answer to both questions was affirmative.

Transcript Fee. Mr. Scott reported that Vice President Nyikos had requested a change in the transcript fee for this August 15, 1981 which would increase from $1.00 to $2.00 the amount charged per transcript, such charge being comparable to that of other institutions in our area. Dean Nyikos further requested that the Registrar's Office be authorized an additional .75 FTE for fiscal 1982, which would be used to employ clerical support for the preparation of transcripts, microfilming of student's records and other assigned duties. This request had been reviewed by the President, subject to rejustification on an annual basis and the approval of the Board of Trustees. Mr. Scott indicated that the additional revenue from the increased charge would support the cost of the addition.

It was moved and seconded that a change in transcript fee from $1.00 to $2.00 be approved and that the 1982 budget be modified to indicate the increased revenue and the increased expense of the additional staff. Carried.

Budget and Legislative Strategies (White Paper). President McBride introduced the discussion on the white paper by indicating the necessity for determining our near term actions with regard to the legislature and the next funding cycle, and our longer term actions related to continuation of the Mines Policy. Mr. Robbins was asked to review the document. He emphasized the preliminary nature of the draft and then moved through the sections of the paper, highlighting three issues related to the next legislative session:

1. Should CSM make a concerted effort to win a substantial adjustment in the general fund base?

2. Should CSM employ experienced full time representatives at the legislature?

July 18, 1981
3. Should there be extensive development of the CSM story, with efforts made to make presentations to the CCHE, the legislative Education Committees and the Joint Budget Committee, as well as special efforts to secure additional coverage by the media.

Extended discussion followed, during which the perceived limits of state resources, the need for the maintenance of strong and successful Mines identity, and various forms of desirable relationships between CSM and the state central government were discussed. At the end of the discussion, the Board indicated its consensus in making an effort:

1. to secure an adjustment in the base;
2. to have the administration secure and make firm arrangements for legislative consultants in advance of the next regular meeting of the Board;
3. to continue discussions as to the CSM relationship with the state central government.

A revision of the white paper will be prepared for September and used as a basis for discussion of longer term concerns raised in the draft document.

Budget Parameters, 1982-83. Mr. Scott presented a draft of the Five Year Plan for CSM, revised July 17, 1981. As a background for the discussion, he called the Board's attention to the plan, as consistent with previous guidelines, to reach a standard engineering school budget in three increments. The draft reflected the costs of such change and the impact of stated inflation rates. (See attached.)

Mr. Scott then presented to the Board a recommended budget for 1982-83 (copy attached), which supported the level of expenditures projected in the 1982-83 column on the five year plan. He reviewed the major items and described the increments included in each. Discussion followed.

The Board reflected its concern with the high tuition rates required to support the proposed level of expenditure. President McBride stated that he shared these same concerns and asked Mr. Scott to introduce a revised set of 1982-83 parameters. (See attached.) Mr. Scott then reviewed parameters which would call for an $18.5 million budget, and he discussed the major elements therein. Discussion followed, at the conclusion of which the parameters for 1982-83 budget as revised were adopted, with the following modifications:

1. Headcount enrollment will be limited to 3,000.
2. Every effort will be made to maintain a student body comprised of 72 percent resident students and 28 percent nonresident students.
3. Faculty compensation will be included at percent.
4. Every attempt will be made to keep resident tuition at $2,000 per year, or less.

The question was raised as to whether to include the adjusted general fund base in the request document. Discussion followed, at the end of which the Board indicated its preference to use the adjusted base and to make explicit to the legislature the additional tuition required should the adjustment not be made.

July 18, 1981
It was moved and seconded that the parameters as amended be adopted. Carried.

Executive Session. The regular meeting was adjourned at 5:45 p.m., and the Board went into Executive Session.

[Signature]

Secretary

July 18, 1981
# Five Year Plan

**Colorado School of Mines**

July 17, 1981

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<td>26.9</td>
<td>29.3</td>
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**Notes:**
1. Standard Engineering School Funding is achieved in 1984-85.
PARAMETERS - 5 YEAR PLAN

1. Inflation Rate. No change.
   1981-82 - 12%  1984-85 - 7%
   1982-83 - 10%  1985-86 - 7%
   1983-84 - 7%  1986-87 - 7%

2. Faculty FTE.
   The 1981-82 Student/Faculty ratio is 15.7/1. This excludes the coaching faculty (200.3 - 5.1).
   The APCUP formula generates a ratio of 14.9/1 at 100 percent of formula. It is the goal to reach
   the full formula of 14.9/1 by 1983-84. The ratio for 1982-83 will be 15.3/1. One-half FTE is added
   in 1982-83 for research release time and an additional .5 FTE is added in 1983-84.

3. Faculty Compensation.
   The goal is to move CSM engineering faculty to third place on the national list of sixteen
   mineral engineering schools by 1984-85.
   1982-83 = +14%  1985-86 = +7.0%
   1983-84 = +12%  1986-87 = +7.0%
   1984-85 = +10.5%

4. Resident Instruction Support, Staff.
   The current Faculty/Staff ratio is 2.15/1. It is the goal to reach a ratio of 1.5/1 by 1984-85.
   1981-82 = 2.15/1  1983-84 = 1.70/1
   1982-83 = 1.90/1  1984-85 = 1.50/1

5. Museum.
   Current staffing is 1.6 FTE. A level of 2.0 FTE is recommended by 1984-85.
   1982-83 = 1.8 FTE  1983-84 = 1.9 FTE

6. Administration.
   The full APCUP formula will be reached by 1984-85.
   1982-83 = 43.9 FTE  1984-85 = 53.2 FTE
   1983-84 = 48.5 FTE

7. Student Services.
   The APCUP formula generates 21.5 staff FTE. Placement and Co-Op staffing plans will require an
   increase of 1.0 FTE in 1982-83 and 0.6 FTE in 1983-84.

   The 1981-82 staffing plan for Data Processing is 20.9 FTE. With the expanded usage of the
   computer for instruction and administration, it will be necessary to increase the staff level to
   23.0 FTE by 1984-85.
   1982-83 = 21.6 FTE  1983-84 = 22.3 FTE

9. Library.
   The 1981-82 staffing level is 20.1 FTE. It is expected to reach the full APCUP formula of
   22.8 FTE by 1984-85.
   1982-83 = 21.0 FTE  1983-84 = 21.9 FTE

    The current staffing level is 91.1 FTE.

11. Staff Compensation Increases.
    Percentage increases for classified and hourly staff are projected to be at the same rate
    as the estimated increases of the Consumer Price Index (CPI).
12. Teaching Assistant Compensation Increases.

Increases are based on the projected tuition rates. For planning purposes, the 1982-83 rate will increase thirty percent, in 1983-84 it will increase twenty percent, and thereafter 15 percent.


The 1981-82 budget is $902,152. Even though CSM will realize a considerable savings with the steam line, utility costs will continue to rise due to rate increases for electricity and water and increased usage.

14. Operating Expense and Travel.

It is recommended that from 1982-83 through 1984-85 the percentage increase equal the projected inflation rate plus five percent. Thereafter, the increase will equal to the projected CPI. Expansion of Sponsored Research activity will require a corresponding increase in operating and travel costs in the academic departments. $80,000 per year is added to be phased in over two years.

15. Learning Materials.

The current budget is inadequate at $228,000. It is planned to double this budget in three years.

1982-83 = $303,000
1984-85 = $456,000
1983-84 = $379,000


A base of $300,000 beginning in 1982-83 is recommended with inflationary increases thereafter. In addition, $150,000 of equipment match (relating to Sponsored Research) will be phased in over a two year period.


For the period 1982-83 through 1984-85 the annual payment on our existing equipment will be $268,400. Beginning in 1982-83, $320,000 will be budgeted annually. Annual inflationary increases will also be applied to this figure. Excess funds will be held in reserve for future replacement of the central processor. Computer accessories (disk and tape drives, printers, etc.) will be replaced using Capital Outlay funds.

18. Fabrication.

Space modification, remodeling, and rehabilitation will be phased in over a three year period. By 1984-85 the level will be $200,000.

1982-83 = $70,000
1983-84 = $140,000


A $100,000 reserve will be established in 1982-83. It is recommended that a similar amount be set aside on an annual basis.
1. Assumed Inflation Rate
   Add 10%

2. Faculty FTE
   No addition
   Estimated student/faculty ratio, 15.7/1

3. Faculty Compensation
   Add 14%

4. Resident Instruction Staff Support
   Add 2 FTE
   Faculty/staff ratio 2.1/1

5. Museum
   No addition

6. Administration
   No addition

7. Student Services
   Add 1 FTE, to meet Co-op and Placement requirements

8. Data Processing
   Decrease .7 FTE

9. Library
   No addition

10. Physical Plant
    Current staffing

11. Classified Staff Compensation
    Estimated increase, 10%

12. Utilities
    Rate increase, 35%

13. Operating Expense and Travel
    Continuing programs, add 10%
    Expansion of Sponsored Research support, $40,000

14. Learning Materials
    Add $45,000

15. Capital Outlay
    $150,000 for continuing programs
    $75,000 for equipment match research support

16. Computer Payments
    Continued obligation same level

17. Contingency
    No addition

18. Fabrication
    No addition
## RECOMMENDED BUDGET FOR FISCAL YEAR 1982-83

**COLORADO SCHOOL OF MINES**

**EDUCATION AND GENERAL**

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<tr>
<th>INCOME</th>
<th>1981-82 BUDGET</th>
<th>1982-83 RECOMMENDED REQUEST</th>
<th>FOOTNOTES</th>
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| TOTAL EXPENSE                        | $15,903,000    | $18,498,714                 |           |

### FOOTNOTES

1. Resident FTE = 2,289; Nonresident FTE = 851 and Total FTE = 3,140. General Fund support per Resident student FTE is 107 percent of 1981-82 amount ($3,688).

2. Resident/Nonresident tuition is $2,156 and $5,892, respectively. Other Cash includes an increase of $200,000 from Sponsored Research overhead income.
REVISIONS TO THE ADMINISTRATIVE SALARY SCHEDULE
APPROVED AT THE MEETING OF JULY 18, 1981

Adjustment

Dr. Michael B. McGrath

Increase from $38,650 for twelve months to $40,000. Adjustment made to recognize increased responsibilities incurred in assuming control of ADP operations.

New Appointment

Dr. Janice C. Hepworth

Appointment as Director of Special Programs (includes Continuing Education and Energy and Minerals Field Institute at a salary of $36,000.)
The Board of Trustees met in regular session on September 11, 1981 at 9:00 a.m.


Mr. Coors presided.

Also attending the meeting were President McBride, Vice Presidents Mueller Scott and Welles, Dean Golden, Dean Nyikos, and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on July 18, 1981 were approved as distributed.

President McBride announced that Mr. Wilson has appointed Russell Wood to be the Trustee representative to the Board of the Colorado School of Mines Research Institute and has requested that Fred Schwartzberg continue to serve on the Advisory Board of the Colorado Commission on Higher Education. It was further reported that Mr. Wilson intends to appoint a Trustee representative to the Board of the Colorado School of Mines Foundation in the near future.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

- Michael J. Devereux
  Instructor in Physics
  $17,600 for the 1981-82 academic year

- Hugo A. Perchau
  Visiting Professor of Environmental Sciences and Engineering Ecology
  32,000 for the 1981-82 academic year

- Gary W. Grefsrud
  Adjunct Professor of Mathematics
  13,500 for the 1981-82 academic year for half-time effort

- Abdelwahid Ibrahim
  Visiting Associate Professor of Geophysics
  30,000 for the 1981-82 academic year

- John L. Lufkin
  Associate Professor of Geology and Geology Department Head
  27,000 for the 1981-82 academic year

- Joseph A. Marcello
  Visiting Assistant Professor of Chemistry and Geochemistry
  19,000 for the 1981-82 academic year

- Sally Oslund
  Assistant Professor of Mathematics
  Assistant Director of the Computing Center
  35,000 for the period September 1, 1981-August 31, 1982

September 11, 1981
Mark A. Passler  
Assistant Professor of Physics  
$19,600 for the 1981-82 academic year

Wayne Richmond  
Adjunct Assistant Professor of Humanities & Social Sciences and Director of Chorus  
4,000 for the 1981-82 academic year

William D. Schulz  
Associate Research Professor of Chemistry and Geochemistry  
3,000 for the 1981-82 academic year

Thomas M. Zamis  
Visiting Assistant Professor of Chemistry and Geochemistry  
18,500 for the 1981-82 academic year

Reappointments:

James F. Ely  
Adjunct Associate Professor of Chemical & Petroleum-Refining Engineering  
Appointment is for the 1981-82 academic year with no stipend

Roger P. Hansen  
Adjunct Associate Professor of Environmental Sciences and Engineering Ecology  
$ 3,000 for the fall semester of the 1981-82 academic year

Gary Pippin  
Adjunct Assistant Professor of Chemistry and Geochemistry  
2,000 for the fall semester of the 1981-82 academic year

Thomas D. Riley  
Visiting Assistant Professor of Humanities & Social Sciences  
9,350 for the fall semester of the 1981-82 academic year

Reuben J. Ross  
Adjunct Professor of Geology  
12,600 for the 1981-82 academic year (half-time effort)

Steven A. Russell  
Part-time instructor in Mathematics  
9,000 for the 1981-82 academic year

Linden E. Snyder  
Adjunct Assistant Professor of Basic Engineering  
3,450 for the 1981-82 academic year

Richard C. Walker  
Adjunct Assistant Professor of Mathematics  
4,500 for the 1981-82 academic year

Larry E. Wells  
Adjunct Assistant Professor of Petroleum Engineering  
2,250 for the fall semester of the 1981-82 academic year

Thomas R. Young  
Adjunct Professor of Mining Engineering  
2,050 for the 1981-82 academic year

September 11, 1981
Additional Assignment:

Beatrice Willard
Head of Department of Environmental Sciences & Engineering Ecology

§ 2,000 department head increment

Leave of Absence:

James M. Lockhart
Assistant Professor of Physics

Spring semester of 1981-82 and fall semester of 1982-83. No pay.

Temporary Appointment:

Leslie W. LeRoy
Adjunct Professor of Geology

2,030 for the period November 1-21, 1981

Resignation:

W. Richard Moore
Assistant Professor of Geology

Resignation effective July 15, 1981

Introductions. The following persons were introduced: Dr. Kathryn Jens, Director of Student Development, Mr. William T. Hill, Director of Student Activities, Mr. Eric Wiedehilt, Student Body President, Miss Kathy Knierien, Student Body Vice President, Mrs. Pam Held, Director of External Affairs for the Colorado Commission on Higher Education, and Ms. Joanne Carr, Director of Corporate Relations, Colorado School of Mines Foundation.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the two months ending August 31, 1981; Colorado School of Mines Current Funds - Summary by Fund for the two months ending August 31, 1981; and CSM Time Deposits and Investment Report, August 31, 1981.

Admissions and Enrollment. Mr. Young reviewed the current Admissions Report, referred the Board to the special additional report on committed students not coming for fall 1981, and responded to questions asked by the Board.

Dr. Cheuvront reviewed the enrollment statistics for fall 1981.

1982-1983 Request Budget Guidelines. The Board was reminded that during its discussion of the 1982-83 guidelines at its July meeting it had suggested that the administration’s minimum acceptable budget there presented in the amount of $18,498,714 be revised to show at least some quality improvement even at a hoped for resident tuition level not to exceed $2,000. It was understood at that time that this revision would necessarily include a greater than 7% increase in state tax funds.

Mr. Scott presented a recommended revised budget in the total amount of $19,362,289 indicating both that it fulfilled the quality increase suggestion made by the Board in July and that it called for a resident tuition of $2,020. It also called for a technical adjustment in the 1981-82 General Fund base of $361,800 and for an increase of 15.5% beyond the adjusted base in the state tax dollar capitation number.

The Board approved the recommended revised budget as the basis for further informal negotiations with state officials and for submittal in due course as these negotiations indicate.

September 11, 1981
1982-1983 Capital Construction Projects. Mr. Scott presented Summary of 1982-1983 Capital Construction Projects, CSM Priority. Mr. Coors made inquiry concerning item 17, Campus Modifications for Access to the Handicapped. Dean Nyikos explained that we do have handicapped students on the campus; that there have not been any access problems; and that the situation is being monitored. President McBride explained that items 1 through 7 are primarily safety matters.

It was moved, seconded and passed to approve the projects as prioritized.

Steam Line. Mr. Scott reported that although two proposals are under consideration, we will not be able to have the steam line in place for the current heating season; it will likely be put into service in the fall of 1982. It was pointed out that the 1982-83 budget is based on having the steam line. Board action was not requested.

1981-1982 Faculty Salaries. President McBride stated that schedules have been prepared showing the names and amounts and that copies of the schedules have been made available to the Board. He commented that this matter should have been approved at the July Board meeting.

Upon motion made, seconded, and passed the Board approved the schedules as presented (schedules are attached).

President McBride reported further that at the July meeting the Board approved administrative salaries for Dr. Michael B. McGrath and Dr. Janice C. Hepworth and stated that he is asking the Board for approval of salary adjustments for Drs. McGrath and Hepworth.

Upon motion made, seconded, and passed the Board approved the adjustments.

Revised Affirmative Action Plan. President McBride introduced Mrs. Nancy Connick of the Attorney General's Office, who said that our first requirement is to revise our Affirmative Action Plan and to submit it to the Department of Labor no later than the Monday following the October Board meeting. She stated that, in her opinion, the current draft needs substantial revision.

Mr. Andy Lopez, Affirmative Action Officer, reviewed the current draft and said that the figures reflected in the draft have been taken from the 1970 census. He stated that the OFCCP has suggested that these figures may not be acceptable. Mrs. Connick stated that there are several publications now available which contain data which may be acceptable to the OFCCP.

Discussion followed, during which it was determined that in view of the fact that this is a matter that is a pending proceeding, it is proper to defer it to the executive session.

September 11, 1981
Security Resolution. Dr. Golden explained that when the composition of the Board changes the Security Resolution must be updated. It was pointed out that the School has just had a security review with favorable results.

Upon motion made, seconded and passed the Security Resolution was approved.

SECURITY RESOLUTION

Be it resolved by the Board of Trustees of the Colorado School of Mines that those persons occupying the following positions at the Colorado School of Mines shall be known as Managerial Group as described in the Industrial Security Manual for Safeguarding Classified Information.

Guy T. McBride, Jr. President
William M. Mueller Vice President for Academic Affairs
W. Gordon Scott Vice President for Business Affairs
John O. Golden Dean of Graduate Studies and Research

That the President and the other members of the Managerial Group currently hold, have been processed, or will be processed for a personal security clearance for access to classified information to the level of the facility clearance granted to this institution as provided for in the aforementioned Industrial Security Manual.

That the said Managerial Group is hereby delegated all of the Board’s duties and responsibilities pertaining to the protection of classified information under classified contracts of the Department of Defense of User Agencies of its Industrial Security Program awarded to the Colorado School of Mines.

That the following named officers and members of the Board of Trustees and Colorado School of Mines administrative officers shall not require, shall not have, and can be effectively excluded from, access to all positions that would enable them to affect adversely the policies and practices of the University in the performance of classified contracts for the Department of Defense or user Agencies of its Industrial Security Program, awarded to the Colorado School of Mines, and need not be processed for personnel security clearance.

Officers - CSM Trustees

James C. Wilson President
Fred R. Schwartzberg Vice President
Don K. Henderson Secretary

CSM Trustees

W. K. Coors - Adolph Coors Company, Golden, Colorado 80401

Monte Pascoe - Dept. of Natural Resources, Rm. 718, 1313 Sherman St.
Denver, Colorado 80218

Jasper N. Warren - Goldrus Drilling Co., 900 PCNB Bldg., Houston,
TX 77002

Russell L. Wood - Louisiana Land Exploration Company, Suite 660
West Point Bldg., 3900 S. Wadsworth Blvd.,
Lakewood, Colorado 80235

September 11, 1981
*Sandra Craig - Student, Colorado School of Mines

CSM Administrative Officers

John G. Welles - Vice President for Industrial Planning and Development
Michael S. Nyikos - Vice President of Student Affairs and Dean of Students

*Student Trustee

CCHIE Liaison. President McBride stated that after reviewing the School's relations with CCHIE, he has appointed Mrs. Carolyn Steele to represent the administration at the CCHIE meetings.

Foundation Support for Graduate Program. Dr. Golden reviewed the request to the CSM Foundation for Graduate School support. He said that the Graduate School is facing the loss of significant federal support and that this support would sustain the current effort.

Upon motion made, seconded and passed the request was approved.

Executive Session. The regular meeting was adjourned at 11:15 a.m., and the Board went into Executive Session.

Secretary

September 11, 1981
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Salary</th>
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</thead>
<tbody>
<tr>
<td>John F. Abel</td>
<td>Professor of Mining Engineering</td>
<td>$34,390</td>
</tr>
<tr>
<td>Charles S. Aldrich</td>
<td>Assistant Professor of Petroleum Engineering</td>
<td>20,000</td>
</tr>
<tr>
<td>R. Bruce Allison</td>
<td>Professor and Head of Department of Physical Education (A.D.) (10 month contract)</td>
<td>40,000</td>
</tr>
<tr>
<td>William R. Astle</td>
<td>Associate Professor of Mathematics</td>
<td>29,600</td>
</tr>
<tr>
<td>Henry A. Babcock</td>
<td>Professor of Basic Engineering</td>
<td>39,530</td>
</tr>
<tr>
<td>Charles R. Baer</td>
<td>Assistant Professor of Mathematics</td>
<td>22,570</td>
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<tr>
<td>Robert M. Baldwin</td>
<td>Associate Professor of Chemical and Petroleum-Refining Engineering</td>
<td>25,080</td>
</tr>
<tr>
<td>Frederick B. Bart</td>
<td>Assistant Professor of Humanities and Social Sciences</td>
<td>19,430</td>
</tr>
<tr>
<td>Daniel M. Bass</td>
<td>Kerr-McGee Corporation Professor of Petroleum Engineering</td>
<td>43,130</td>
</tr>
<tr>
<td>Ramon E. Bisque</td>
<td>Adjunct Professor of Chemistry and Geochemistry (60% basis)</td>
<td>22,250</td>
</tr>
<tr>
<td>Ardel J. Boes</td>
<td>Professor of Mathematics</td>
<td>33,230</td>
</tr>
<tr>
<td>Emmy Booy</td>
<td>Assistant Professor of Geology</td>
<td>25,000</td>
</tr>
<tr>
<td>Joan N. Brooks</td>
<td>Assistant Professor of Basic Engineering</td>
<td>23,110</td>
</tr>
<tr>
<td>Austin R. Brown, Jr</td>
<td>Professor of Mathematics</td>
<td>35,670</td>
</tr>
<tr>
<td>Diane Brown</td>
<td>Boettcher Librarian (12 month contract)</td>
<td>17,860</td>
</tr>
<tr>
<td>James T. Brown</td>
<td>Professor of Physics</td>
<td>30,160</td>
</tr>
<tr>
<td>W. Rex Bull</td>
<td>Professor of Metallurgical Engineering (One-third academic load at one-third this salary)</td>
<td>33,790</td>
</tr>
<tr>
<td>Jerrold J. Burnett</td>
<td>Professor of Physics</td>
<td>30,440</td>
</tr>
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</table>

July 31, 1981
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicholas P. Callas</td>
<td>Associate Professor of Mathematics</td>
<td>$26,740</td>
</tr>
<tr>
<td>Betty Jo Cannon</td>
<td>Assistant Professor of Humanities and Social Sciences</td>
<td>$20,600</td>
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<tr>
<td>Debra Carnell</td>
<td>Assistant Professor of Basic Engineering</td>
<td>$20,180</td>
</tr>
<tr>
<td>Edward F. Cecil</td>
<td>Associate Professor of Physics</td>
<td>$23,710</td>
</tr>
<tr>
<td>Jin S. Chung</td>
<td>Professor of Basic Engineering</td>
<td>$33,000</td>
</tr>
<tr>
<td>W. John Cieslewicz</td>
<td>Associate Professor of Humanities and Social Sciences and Associate Professor of Mineral Economics</td>
<td>$22,610</td>
</tr>
<tr>
<td>L. Graham Closs</td>
<td>Assistant Professor of Geology</td>
<td>$23,910</td>
</tr>
<tr>
<td>William D. Copeland</td>
<td>Professor of Metallurgical Engineering and Head of the Department</td>
<td>$41,890</td>
</tr>
<tr>
<td>John A. Cordes</td>
<td>Associate Professor of Mineral Economics</td>
<td>$25,060</td>
</tr>
<tr>
<td>Scott W. Cowley</td>
<td>Assistant Professor of Chemistry</td>
<td>$20,150</td>
</tr>
<tr>
<td>Richard S. Culver</td>
<td>Professor of Basic Engineering</td>
<td>$29,690</td>
</tr>
<tr>
<td>Stephen R. Daniel</td>
<td>Associate Professor of Chemistry</td>
<td>$28,890</td>
</tr>
<tr>
<td>James Darden</td>
<td>Associate Professor of Physical Education and Athletics</td>
<td>$29,170</td>
</tr>
<tr>
<td>Thomas L. Davis</td>
<td>Assistant Professor of Geophysics</td>
<td>$24,990</td>
</tr>
<tr>
<td>Richard H. DeVoto</td>
<td>Professor of Geology</td>
<td>$30,970</td>
</tr>
<tr>
<td>Dean W. Dickerhoof</td>
<td>Professor of Chemistry</td>
<td>$28,940</td>
</tr>
<tr>
<td>Donald I. Dickinson</td>
<td>Associate Professor of English</td>
<td>$27,460</td>
</tr>
<tr>
<td>Philip F. Dickson</td>
<td>Professor of Chemical and Petroleum-Refining Engineering and Head of Department</td>
<td>$42,480</td>
</tr>
<tr>
<td>John Patrick Dyer</td>
<td>Assistant Professor of Physical Education and Athletic Trainer</td>
<td>$22,260</td>
</tr>
</tbody>
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July 31, 1981
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karl R. Newman</td>
<td>Professor of Geology</td>
<td>$29,860</td>
</tr>
<tr>
<td>Kathleen H. Ochs</td>
<td>Assistant Professor of Humanities and Social Sciences</td>
<td>19,540</td>
</tr>
<tr>
<td>David L. Olson</td>
<td>Professor of Metallurgical Engineering</td>
<td>34,230</td>
</tr>
<tr>
<td>Michael J. Pavelich</td>
<td>Associate Professor of Chemistry</td>
<td>24,550</td>
</tr>
<tr>
<td>Robert W. Pearson</td>
<td>Assistant Professor of Physical Education &amp; Athletics</td>
<td>22,260</td>
</tr>
<tr>
<td>Anton G. Pegis</td>
<td>Professor of Humanities and Social Sciences</td>
<td>35,590</td>
</tr>
<tr>
<td>Harry C. Peterson</td>
<td>Professor of Basic Engineering</td>
<td>33,440</td>
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<tr>
<td>Alfred Petrick, Jr.</td>
<td>Coulter Professor of Mineral Economics</td>
<td>38,930</td>
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<tr>
<td>Thomas Philipose</td>
<td>Associate Professor of Humanities and Social Sciences</td>
<td>24,630</td>
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<tr>
<td>Hartley K. Phinney, Jr.</td>
<td>Director of the Library (12 month contract)</td>
<td>42,250</td>
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<tr>
<td>George R. Pickett</td>
<td>Professor of Geophysics</td>
<td>37,920</td>
</tr>
<tr>
<td>Robert T. Reeder</td>
<td>Associate Professor of Mining Engineering</td>
<td>33,200</td>
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<tr>
<td>Samuel B. Romberger</td>
<td>Associate Professor of Geology</td>
<td>30,070</td>
</tr>
<tr>
<td>Philip R. Romig</td>
<td>Associate Professor of Geophysics</td>
<td>29,510</td>
</tr>
<tr>
<td>Oded Rudawsky</td>
<td>Professor of Mineral Economics (Academic leave for the 1981-82 academic year at one-half this salary)</td>
<td>29,000</td>
</tr>
<tr>
<td>Arthur Y. Sakakura</td>
<td>Associate Professor of Physics</td>
<td>30,110</td>
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<tr>
<td>Dave Ray Schmitz</td>
<td>Assistant Professor of Mathematics</td>
<td>20,040</td>
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<tr>
<td>William A. Schneider</td>
<td>Professor of Geophysics</td>
<td>42,900</td>
</tr>
<tr>
<td>Franklin D. Schowengerdt</td>
<td>Professor of Physics</td>
<td>31,690</td>
</tr>
<tr>
<td>John M. Shannon</td>
<td>Assistant Professor of Geology and Director of the Geology Museum</td>
<td>23,860</td>
</tr>
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</table>

July 31, 1981
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Craig Simmons</td>
<td>Assistant Professor of Chemistry and Geochemistry</td>
<td>$20,070</td>
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<tr>
<td>Catherine A. Skokan</td>
<td>Adjunct Assistant Professor of Geophysics</td>
<td>10,550</td>
</tr>
<tr>
<td>Maynard Slaughter</td>
<td>Professor of Chemistry</td>
<td>30,865</td>
</tr>
<tr>
<td>E. Dendy Sloan, Jr.</td>
<td>Associate Professor of Chemical and Petroleum-Refining Engineering</td>
<td>26,080</td>
</tr>
<tr>
<td>James C. Smart</td>
<td>Adjunct Associate Professor of Chemistry</td>
<td>no salary</td>
</tr>
<tr>
<td>Margaret Smart</td>
<td>Librarian (12 month contract)</td>
<td>25,790</td>
</tr>
<tr>
<td>Joseph D. Sneed</td>
<td>Atlantic Richfield Foundation Professor in Humanities</td>
<td>39,950</td>
</tr>
<tr>
<td>David J. Spottonswood</td>
<td>Associate Professor of Metallurgical Engineering</td>
<td>32,210</td>
</tr>
<tr>
<td>Richard E. Stapp, Jr.</td>
<td>Associate Professor of Physical Education and Athletics</td>
<td>26,940</td>
</tr>
<tr>
<td>Franklin J. Stermole</td>
<td>Professor of Chemical and Petroleum-Refining Engineering (Assigned to the Department of Mineral Economics)</td>
<td>36,700</td>
</tr>
<tr>
<td>Charles H. Stoyer</td>
<td>Assistant Professor of Geophysics</td>
<td>25,460</td>
</tr>
<tr>
<td>Harold D. Taylor</td>
<td>Assistant Professor of Mathematics</td>
<td>20,610</td>
</tr>
<tr>
<td>Robert J. Taylor</td>
<td>Associate Professor of Basic Engineering</td>
<td>27,760</td>
</tr>
<tr>
<td>John U. Trefny</td>
<td>Associate Professor of Physics</td>
<td>24,860</td>
</tr>
<tr>
<td>Robert H. Trent</td>
<td>Instructor in Mining Engineering, 80% basis</td>
<td>26,070</td>
</tr>
<tr>
<td>A. Keith Turner</td>
<td>Associate Professor of Geology</td>
<td>28,260</td>
</tr>
<tr>
<td>Robert Underwood</td>
<td>Assistant Professor of Mathematics</td>
<td>23,790</td>
</tr>
<tr>
<td>David M. Updegraff</td>
<td>Professor of Geochemistry</td>
<td>30,870</td>
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<tr>
<td>Samuel E. Vandiver</td>
<td>Professor of Humanities and Social Sciences</td>
<td>31,660</td>
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July 31, 1981
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Beth Vanderpoorten</td>
<td>Librarian (12 month contract)</td>
<td>$23,930</td>
</tr>
<tr>
<td>Craig W. Van Kirk</td>
<td>Associate Professor of Petroleum Engineering and Head of Department</td>
<td>$32,590</td>
</tr>
<tr>
<td>Kent J. Voorhees</td>
<td>Assistant Professor of Chemistry</td>
<td>$24,330</td>
</tr>
<tr>
<td>Fun-Den Wang</td>
<td>Director of Earth Mechanics Institute and Professor of Mining Engineering</td>
<td>$38,020</td>
</tr>
<tr>
<td>John E. Warme</td>
<td>Professor of Geology</td>
<td>$36,880</td>
</tr>
<tr>
<td>Robert J. Weimer</td>
<td>Getty Professor (Professor of Geology)</td>
<td>$46,360</td>
</tr>
<tr>
<td>James E. White</td>
<td>Professor of Geophysics</td>
<td>$43,170</td>
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<tr>
<td>Ronald Wiedenhoeft</td>
<td>Associate Professor of Humanities and Social Sciences</td>
<td>$29,320</td>
</tr>
<tr>
<td>Thomas R. Wildeman</td>
<td>Professor of Chemistry</td>
<td>$31,310</td>
</tr>
<tr>
<td>Karen B. Wiley</td>
<td>Assistant Professor of Humanities and Social Sciences</td>
<td>$19,110</td>
</tr>
<tr>
<td>Beatrice Willard</td>
<td>Professor of Environmental Sciences and Engineering</td>
<td>$34,330</td>
</tr>
<tr>
<td>John T. Williams</td>
<td>Professor of Chemistry</td>
<td>$39,320</td>
</tr>
<tr>
<td>Don L. Williamson</td>
<td>Associate Professor of Physics</td>
<td>$25,280</td>
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<tr>
<td>Robert D. Witters</td>
<td>Professor of Chemistry</td>
<td>$30,130</td>
</tr>
<tr>
<td>Robert E. D. Woolsey</td>
<td>Professor of Mineral Economics</td>
<td>$42,000</td>
</tr>
<tr>
<td>Baki Yarar</td>
<td>Associate Professor of Metallurgical Engineering</td>
<td>$27,520</td>
</tr>
<tr>
<td>Frank R. Yeatts</td>
<td>Associate Professor of Physics</td>
<td>$27,950</td>
</tr>
<tr>
<td>Victor Yesavage</td>
<td>Associate Professor of Chemical &amp; Petroleum-Refining Engineering</td>
<td>$29,890</td>
</tr>
<tr>
<td>Terence K. Young</td>
<td>Assistant Professor of Geophysics</td>
<td>$25,210</td>
</tr>
</tbody>
</table>

July 31, 1981
The Board of Trustees met in regular session on October 9, 1981 at 9:25 a.m.


Mr. Wilson presided.

Miss Craig introduced fellow student Eric Greenwood.

Mr. Coors presented a silver Certificate of Appreciation to student Trustee Emeritus June Leaver. The Certificate reads:

In recognition of her 
loyal and meritorious service as 
a member of the Board of Trustees, 
this certificate is presented to 
JUNE LEAVER 
by the Board of Trustees upon the 
occasion of 
expiration of the term 
June thirtieth. One thousand nine hundred and eighty-one.

Mr. Wilson announced that Mr. Henderson has agreed to represent the Trustees on the CSM Foundation Board. He will join Mr. Wilson and Mr. Pascoe on the Trustee Gifts Review Committee and on the corresponding committee of the Foundation Board.

Previous Minutes. President McBride stated that page 4 of the September 1981 minutes should reflect the salaries for Drs. McGrath and Hegworth and that this correction will be made. The salaries have been approved by the Board. Otherwise, the minutes of the meeting held on September 11, 1981 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

James N. Brooke  
Adjunct Associate Professor of Mining Engineering  
$2,000 for the fall semester of the 1981-82 academic year

James Crafton  
Adjunct Associate Professor of Petroleum Engineering  
$7,000 for the fall semester of the 1981-82 academic year

Russell C. Dohrmann  
Adjunct Associate Professor of Basic Engineering  
$1,400 for the fall semester of the 1981-82 academic year

Russell F. Beckman  
Adjunct Professor of Chemical and Petroleum-Refining Engineering  
$10,000 for the 1981-82 academic year

Robert E. Jeffrey  
Band Director  
$4,000 for the 1981-82 academic year
Carlton W. Staples  
Adjunct Professor of  
Basic Engineering  
$4,000 for the 1981-82 academic year

Marilyn Stark  
Librarian  
$13,900 for the 1981-82 academic year

Robert S. Thompson  
Adjunct Assistant Professor of  
Petroleum Engineering  
$5,000 for the fall semester of  
the 1981-82 academic year

Reappointments:

Jerald E. Jones  
Adjunct Assistant Professor of  
Metallurgical Engineering  
$9,855 for the fall semester of  
the 1981-82 academic year

Robert D. Knecht  
Adjunct Associate Professor of Chemical  
and Petroleum-Refining Engineering  
$4,400 for the 1981-82 academic year

William E. Marlatt  
Adjunct Professor of Environmental  
Science and Engineering Ecology  
$4,000 for the fall semester of  
the 1981-82 academic year

Change in Appointment:

Jerome G. Morse  
Adjunct Professor of Physics  
$2,250 for the spring semester of  
the 1981-82 academic year


Resignations from Colorado School of Mines Faculty, Academic Year 1980-81.
Dr. Mueller distributed a summary report on this subject and reviewed the reasons for the resignations, stating that the primary reasons are low salaries, desires for career or relocation changes, lack of support personnel, and heavy teaching loads. He said that the administration is working with industry in seeking supplements to faculty salaries in areas where this is most critical.

Monthly Financial. Mr. Scott made available the monthly reports as follows: Current Funds Comparison with Budget for the three months ending September 30, 1981; Current Funds - Summary by Fund for the three months ending September 30, 1981; and Time Deposits and Investment Report as of September 30, 1981. He said that the School is operating within its financial plan.

Admissions-Registrar's Report. Mr. Young reported on admissions and enrollment for the coming year. He said that Mines has been concerned with student math preparation and has, together with the University of Colorado and Colorado State University, provided a booklet entitled "High School Mathematics for Engineering Students," which is being widely distributed to high schools in an attempt to explain the expectations of these schools.

Dean Nyikos stated that he would have information available for the next Board meeting concerning the survey of economic status of students. He said that there is no evidence that we are blocking admission of qualified students because of the higher tuition.

Affirmative Action Plan/WEAL. President McBride stated that the proposed Affirmative Action Plan has been revised by Affirmative Action Officer, Mr. Lopez, with the assistance of Dr. Mueller and Campus groups. Mrs. Nancy Connick of the Attorney General's office has monitored these efforts and has conducted negotiations with OFCCP. He said that

October 9, 1981
the administration is now in a position to recommend to the Board that the revised Affirmative Action Plan, dated September 24, 1981, be accepted with minor changes in numbers and style as required by counsel. The final document will not be different in substance from the present draft.

Mrs. Connick said that she feels that there has been a substantial effort on the part of the School to revise the Affirmative Action Plan. The commitment of the School has consistently been that by October 16, 1981, the Affirmative Action Plan will be submitted. She said that she feels the document presented to the Board, with minor revisions, will be acceptable to OFCCP and she recommends its approval and submission.

It was moved, seconded and passed to accept the draft, with the revisions that have to be made.

President McBride cautioned that anyone who uses the draft document do so carefully until corrections are made and it is submitted on October 16.

WEAL Complaint. Mrs. Connick discussed the OFCCP review of the Colorado School of Mines. She said that its investigation spanned four days and included all charges made in the WEAL complaint. It found no discrimination in the hiring, promotion or termination policies of the School but questioned the comparison between two female professional salaries and those of male counterparts of the investigators' choice. Mrs. Connick stated that she hopes to have something to report at the next Board meeting concerning the continuing investigation. She said that the people from OFCCP who conducted the investigation commended the School on its cooperation.

Mr. Wilson expressed the Board's appreciation for Mrs. Connick's assistance in these matters.

CERI Report. Mr. Robbins, Director of CERI, reported on the activities of the Institute and reviewed its responsibilities. He said that one of its major efforts is directed toward public utilities. It investigates areas such as energy conservation, plant capacities, rate change effects, demand forecasting and data collection. He stated that the Institute is also involved in researching the electricity requirements for oil shale development and the environmental effects of coal gasification and wood burning. Mr. Robbins referred to the various publications distributed by CERI.

Resources Communication Center. Dr. Golden discussed the video - status report distributed to the Board and reviewed the history of the Resources Communication Center. Dr. Joe Weber responded to questions asked by Board members. Dr. Golden said that the objective of the program is to use video facilities to supplement the instructional program. He reviewed the video activities of the past year.

Senior Management Institute. Mr. Welles discussed the document entitled "Potentials for the Senior Management Institute," and said that a search is being conducted for a Director of the Senior Management Institute. He discussed what he feels will be the benefits to the School and said that he believes the Institute will provide a valuable service to the energy and mineral industries. Mr. Pascoe expressed the hope that we will use the existing faculty as much as possible. Mr. Welles stated that he hopes to have a slate of candidates for the directorship within a couple of months and that he will keep the Board advised.

Awarding of Mines Medal at December Degree Convocation. President McBride suggested that in order to relieve a crowded condition which exists at the May Commencement and to add significance to the December Degree Convocation, the Board might wish to consider awarding the Mines Medal at the December Degree Convocation.

The Board responded affirmatively to the suggestion.

October 9, 1981
Prospector Village Report. Roger Rutson, a student tenant of Prospector Village, was asked to give a progress report on the maintenance of Prospector Village. He said that, although there is some work to be done, he is optimistic about completion of certain projects, and that there is improved communication among all involved parties. He thanked the Board for its help in this endeavor.

Stockmar Dinner Reminder. Mr. Welles presented the preliminary program for the Stockmar dinner and said that the invitations for the dinner should be in the mail by the end of next week.

President McBride distributed to the Board members a sample letter proposed to be signed by each member of the Board and to be handed to Mr. Stockmar along with the usual silver certificate of service and appreciation.

The Board approved the letter and the proposed program.

Announcements. Miss Craig reminded the Board of the dedication of a tree in honor of Dr. Fogarty today at 12:15 p.m.

President McBride said that Professor Emeritus Walter H. Dunke has died and that services will be held at noon on Monday following.

The meeting was adjourned at 11:30 a.m.

October 9, 1981
Golden, Colorado  
November 13, 1981

The Board of Trustees met in regular session on November 13, 1981 at 9:00 a.m.


Mr. Wilson presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, Welles, Nyikos and Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on October 9, 1981 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Thomas R. Brogan  
Adjunct Professor of Chemical and Petroleum-Refining Engineering  
$2,500 for the fall semester of the 1981-82 academic year

Paul Pasaching  
Assistant Director of the Computing Center for Administrative Applications  
$38,000 for the calendar year

James R. Herring  
Adjunct Assistant Professor of Chemistry and Geochemistry  
$700 for the fall semester of the 1981-82 academic year

Reappointments:

Thomas B. Reed  
Adjunct Associate Professor of Basic Engineering  
$2,000 for the fall semester of the 1981-82 academic year

Warren A. Spaulding  
Associate Professor of Military Science  
No additional pay

Change in Appointment:

Ramona M. Graves  
Instructor in Petroleum Engineering  
$20,000 for the 1981-82 academic year

This is a change in appointment from Assistant Professor to allow Mrs. Graves to complete requirements for the Ph.D.

Levent Ozdemir  
Director of the Earth Mechanics and Excavation Engineering Institute  
$40,000 for the calendar year

Dr. Ozdemir has been Acting Director of EMI since August 1, 1981.
Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget For the four months ending October 31, 1981; Colorado School of Mines Current Funds - Summary by Fund For the Four Months Ending October 31, 1981; and Colorado School of Mines Time Deposits and Investment Report. He said that a supplemental appropriation request in the amount of $81,000 for 24 additional Colorado FTE on an annual basis had been submitted on November 6, 1981.

Mr. Scott told the Board that there is some question whether or not the School will be continued to be audited on an annual basis. The School has no internal auditor. President McBride said that Mr. Scott will report at some subsequent meeting on the School's accounting control function.

The Board agreed that we do need an annual audit since we do not have an internal audit.

Admissions. Dean Nyikos reviewed "A Report on Student Financial Assistance with Projections for Future Funding." He said that his office will continue to update this report.

Dean Nyikos stated that the family income data is being prepared and may be available for presentation to the Board at the December meeting.

Mr. Henderson discussed the matter of industry providing summer jobs for students, indicating that industry and the School should cooperate vigorously to make such jobs available both because of students' financial need and in view of the great value of the work experience. Mr. Wilson asked for a further discussion of this subject in a month or two. Dean Nyikos told the Board that he and Mr. Spaulding of Cooperative Education will be glad to provide further information at a subsequent meeting of the Board.

Mr. Young told the Board that based on information compiled, he is planning on a very productive year. He said that the annual student-parent day was a success.

Report for Academic Leave by Dr. Phillip E. Romig. Dr. Romig outlined his accomplishments, the benefits that he received and the benefits accruing to the Colorado School of Mines as a result of his academic leave during the academic year 1980-81. He described the degree to which the original objectives were accomplished and summarized some "fringe benefits" that developed during the year. He said that he feels the long-range benefits will be for the School, and he believes it is in the best interest of the School to encourage academic leaves. He said that the motivation to request academic leave is to be able to keep in touch with industry and to learn new technology.

Mr. Henderson stated that he would like to see the School be able to do this for more faculty members.

Dr. Romig thanked the Board for having granted his request for academic leave, and Mr. Wilson thanked Dr. Romig on behalf of the Board for his presentation.

Request for Faculty Improvement Funds. Dr. Mueller reviewed the recommendation that the Board endorse a request to the CSM Foundation Board of Directors for faculty improvement funds for the 1982-83 year in the following amounts:

<table>
<thead>
<tr>
<th>Professional activities</th>
<th>$ 25,000</th>
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<tbody>
<tr>
<td>Recruiting-Miscellaneous</td>
<td>15,000</td>
</tr>
<tr>
<td>Research</td>
<td>90,000</td>
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<tr>
<td>$130,000</td>
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</table>

Discussion followed, during which it was moved, seconded and passed to approve the recommendation.

November 13, 1981
Conferral of Emeritus Status at May 8, 1982 Commencement. Dr. Mueller reviewed emeritus recommendations for Dr. Ralph C. Holmer and Dr. Henry A. Babcock.

On the recommendation of the administration and in view of his fulfilling the requirements of ten years of valuable service of which at least five years were served as full Professor, Professor Holmer was designated Emeritus Professor of Geophysics upon his retirement effective May 8, 1982.

On the recommendation of the administration and in view of his fulfilling the requirements of ten years of valuable service of which at least five were served as full Professor, Professor Babcock was designated Emeritus Professor of Basic Engineering upon his retirement effective May 8, 1982.

May 8, 1982 Commencement Speaker. President McBride said that he and Mr. Coors had extended an invitation to Mr. C. William Verity, Jr., Chairman of Amoco Inc., to be the Commencement speaker in May 1982 and that Mr. Verity has accepted. President McBride recommended that Mr. Verity be the Commencement speaker in May 1982.

It was moved, seconded and passed to have Mr. Verity as the May Commencement speaker.

President McBride stated that the Board has generally felt that it is desirable to confer an honorary degree on the speaker.

It was moved, seconded and passed to award Mr. Verity the honorary degree Doctor of Engineering at the May Commencement.

WEAL Complaint. President McBride reported that CSM has reached an agreement with the OFCCP both as to the Affirmative Action document which the Board approved at its last meeting and with regard to specific matters which arose in connection with the WEAL complaint. The investigatory team called the School's attention to alleged unfavorable salary comparisons of two female faculty members. President McBride concluded that there was merit in the question and said that the administration, acting on its own, had increased the salaries of the female faculty members by approximately five percent each. He said that this action appears to have entirely satisfied the federal investigators.

It was further reported that the Attorney General's office has negotiated a Conciliation Agreement between the OFCCP and the Colorado School of Mines and has provided a letter dated November 10 recommending that the agreement be executed as it has satisfied all requirements in protecting CSM against future incorrect interpretations of federal regulations. He said that he has signed the agreement and that he expects it to be signed by the federal officials.

Mr. Wilson asked that the minutes reflect that President McBride had reported on the Conciliation Agreement and that the Board received the report.

Mr. Schwartzberg asked that it be reported in the Oredigger or in the Grizzly. President McBride said that this will be done after the agreement is signed by the government.

Legislative Matters. President McBride reported that he and Mr. Pascoe attended the JBC meeting on Wednesday, November 11. It is presumably the only hearing that CSM or any other school will get. This Board will have the opportunity to present its case to the JBC at a December 10 luncheon with the JBC, which has now been scheduled. The hearing on Wednesday was not particularly closely directed to matters of concern to Mines.

Mr. Pascoe indicated it to be his view that the JBC did not discuss the larger questions and nothing pertaining to Mines.

November 13, 1981
Mr. Welles stated that the overall strategy is to have the universities support the seven percent budget submission. It is the general feeling among the schools that the Memorandum of Understanding based on the original Mines Plan is likely to achieve good results and that the legislators like it. More time is needed on the part of the universities to determine whether or not it is really working. He said that the legislators are stressing that the schools have flexibility. The JBC is concerned about the high cost per student at CSM and general fund support per resident student. He feels that the JBC does not understand why an engineering education is more expensive than another type of education. Dr. Mueller said that he is attempting to get figures together on the true cost of an engineering education.

President McBride reminded the Board members that there will probably be an 11:00 a.m. Board briefing to be followed by luncheon with the JBC on December 10 at the Brown Palace Hotel.

Mr. Wilson asked Mr. Welles for an up-to-date report on CSM’s relationship with the legislative consultants. Mr. Welles said that the consultants have been very cooperative and have been able to determine how CSM is perceived by the legislators. Mr. Welles is very pleased with the relationship thus far. It appears that the legislators are proud of the School, the students and the Board. However, they complain about the amount of money that CSM has received, the high cost of education at Mines and the fact that the students can make more money when they graduate than most other Colorado public institution graduates and thus should pay more for their education.

Alumni Association Move to Chauvenet Hall. President McBride reported to the Board that Mr. David Crawford, Executive Director of the Alumni Association, with the concurrence of his Board, and Dr. Golden, with President McBride’s approval, have prepared an agreement for the Alumni Association’s move into Chauvenet Hall on a “tenant beware” basis, the Alumni Association having undertaken to pay for its space. President McBride told the Board that he intends to approve the request of the Alumni Association for the move in accordance with the memorandum of agreement, which was distributed to the Board. The Colorado School of Mines may not spend any budget dollars on the maintenance of either Chauvenet or Stratton Halls.

Mr. Henderson asked that the minutes reflect his concern about the safety of Chauvenet Hall. Mr. Scott responded that there is no safety problem in Chauvenet Fall.

President McBride said that, depending on the renovation schedule, he hopes that the move can be completed by the first of the year.

Deed on Sale of Remainder of Wild Horse Park. Mr. Scott said that the Board had authorized the sale on January 9, 1981, at $75.00 per acre, on the condition that the mineral rights are reserved. He stated that the closing is now set for December 16, 1981, and the deed has been prepared by the Attorney General’s office. President McBride recommended approval.

It was moved, seconded and passed to authorize the Board President and the Board Secretary to execute the deed reserving the mineral rights.

November 13, 1981
December Meeting Date. In order to conserve Trustee time and travel expense, the Board changed the December meeting date from the previously announced December 11, 1981 to December 10, 1981.

Executive Session. The regular meeting was adjourned at 11:15 a.m., and the Board went into Executive Session.

[Signature]
Secretary

November 13, 1981
Golden, Colorado
December 10, 1981

The Board of Trustees met in regular session on December 10, 1981 at 8:30 a.m.


Miss Craig presided.

Also attending the meeting were President McBride, Vice Presidents Mueller, Scott, Welles, Nyikos and Dean Golden and other staff members, visitors, and a representative of the press.

Previous Minutes. The minutes of the meeting held on November 13, 1981 were approved as distributed.

Faculty Appointments. Dr. Mueller reviewed the new appointments to the faculty as follows:

Reappointment:

John C. Horne
Adjunct Professor of Geology
No salary for the 1981-82 academic year

Change in Appointment:

Carl N. Kallansrud
Director of Research Administration

Mr. Kallansrud has requested a change in appointment from full time to half time effective January 1, 1982.

Leave:

Robert H. Trent
Instructor in Mining Engineering
Leave without pay for the spring semester of 1981-82

Salary Adjustments:

Joan R. Hundhausen
Associate Professor of Mathematics
Additional $1,000 for the 1981-82 academic year

Karen B. Wiley
Assistant Professor of Humanities
and Social Sciences
Additional $570 for the 1981-82 academic year

Monthly Financial. Mr. Scott made available the monthly reports as follows: Colorado School of Mines Current Funds Comparison with Budget for the five months ending November 30, 1981; Colorado School of Mines Current Funds - Summary by Fund for the five months ending November 30, 1981; and Colorado School of Mines Time Deposits and Investment Report, dated November 30, 1981. Mr. Scott answered questions concerning the budget.
Admissions. Mr. Young told the Board that there is a substantial increase in the number of students applying for admission to CSM. Mr. Henderson said that the standards utilized for admission are a concern of a number of alumni groups, e.g. that neither resident nor nonresident applicants be disadvantaged in the competition for places.

Dean Nyikos discussed the Family Income Data Study and said that the three components of this report are a survey of students this semester conducted at random during registration by the Registrar, a compilation of historical data by Mr. Young from information gathered over a ten-year period through the American College Testing Service for the Admissions Office, and historical data supplied by Mr. Mason of students who have applied for financial aid at CSM. He said that it has been concluded that family income levels do not reflect significant change as a factor in student profiles for the time period considering the effect of inflation on income in general; that access has not been denied and family income does not seem to be a factor; and that other variables make up the elements of why a student is attracted to CSM and those elements are evidently not related solely or even significantly to financial standing. Mr. Young said that the reason for a student's applying is more dependent on motivation than on financial considerations.

Mr. Young stated that the ratio of applications for admission to CSM is 67% resident students to 33% nonresident students. The criteria used for selection are the same whether the person is a resident or nonresident. President McBride said that this is a major issue which needs to be discussed with the Joint Budget Committee. Due to lack of funds, CSM may be in the position of denying access to qualified resident students. Mr. Schwartzberg expressed the opinion that we should tell the Legislature that we may have to deny access to qualified resident students in the future.

Candidates for Degrees. Dr. Mueller reviewed the lists of candidates for degrees as recommended by the regular and graduate faculties.

Upon motion made, seconded, and unanimously passed, the following were approved for degrees on the dates specified, subject to the completion of all academic requirements and continued compliance with school requirements and regulations.

**BACHELOR OF SCIENCE (MINING ENGINEERING) - DECEMBER**

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Brinkmann, Monika H.</td>
<td>Mueller, Mark S.</td>
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<tr>
<td>Cook, Michael Tillman</td>
<td>Nyikos, Christopher Michael</td>
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<td>Cornette, Daniel Johnston</td>
<td>Peppers, Paul Ray</td>
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<td>Finch, Mark Paul</td>
<td>Porterfield, Donald Gene</td>
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<td>George, David Franklin</td>
<td>Randlin, David Leonard</td>
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<td>Gilfillan, George Bedell</td>
<td>Ryan, Kevin John</td>
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<td>Gill, Charles George</td>
<td>Shenck, Daniel Leslie</td>
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<td>Gill, Mark Charles</td>
<td>Shirley, Charles Thomas</td>
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<td>James, Richard Vernon</td>
<td>Simmons, Brian George</td>
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<td>Jones, James Scott</td>
<td>Varley, Floyd D.</td>
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<td>Knapton, Mitchell Wayne</td>
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<td>Koehler, John Robert</td>
<td>Zipfel, Bruce Charles</td>
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<td>Maloney, Daniel Riney</td>
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**BACHELOR OF SCIENCE (METALLURGICAL ENGINEERING) - DECEMBER**

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Barsch, Thomas Frederick</td>
<td>Main, David Heber</td>
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<tr>
<td>Dahlberg, Per Steiner</td>
<td>Smith, Michael Scott</td>
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<td>Jones, Steven Scott</td>
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**BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - DECEMBER**

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Agba, Leonard</td>
<td>Baird, Robert Wilson III</td>
</tr>
<tr>
<td>Ashen, Mary Cecile</td>
<td>Balogh, Suzanne Ulmann</td>
</tr>
</tbody>
</table>

December 10, 1981
BACHELOR OF SCIENCE (GEOLOGICAL ENGINEERING) - DECEMBER (continued)

Coffield, Dana Quentin                  Murillo, Mercedes A.
Craig, John R.                          Patterson, David Brian
Ekren, Sally J.                         Pearce, James Foster
Greenwood, Eric John                    Stenberg, Eric Clayton
Groover, Dean Alan                      Templeton, Katherine Ann
Johnson, Kenneth Lloyd                  Thyer, Terry L.
Krupp-Hutson, Dawn Michelle             Waller, Kevin Salls
Law, Linda Sue                          Wilson, Steven Charles
Mays, Rachael Hall                      Yearsley, Elliot Nye

BACHELOR OF SCIENCE (PETROLEUM ENGINEERING) - DECEMBER

Crutchfield, David Robert               McManus, Michael Leroy
Curtis, Todd Michael                    Mitchell, Bruce Gordon
Flournoy, Charles Miller                Peters, David Charles
Hadsell, Eric Frank                     Romero, Veronica Lou
Haman, Clinton Lee                      Ronk, Jeffrey Howard
Hathaway, David Charles                 Shearan, Thomas Anthony Jr.
Hickey, John Patrick                    Sides, Michael Allen
Jacobs, Michael Ray                     Smith, Kevin Lee
Jo, John Yonghan                        Sorrentino, Laura Ann
Joseph, Claude Harvey                   Voelker, Joseph James
Lamons, Lance H.                        Wagner, Charles Robert
McGinn, Patrick Mark                    Worosello, Wesley

BACHELOR OF SCIENCE (CHEMICAL & PETROLEUM-REFINING ENGINEERING) - DECEMBER

Carter, Randal Lee                      LaRocca, Therese Ann
Clark, Page Lee                         Logsdon, Boyce Walter
Edwards, Melanie Dee                    Mock, Jon Marvin
Erickson, Dale Douglas                  Moore, Christopher Fraser
Giese, Kenneth Arthur Jr.               Motes, Kathy Lynn
Hill, David Arthur                      Pearce, William Richard
Jacobs, Mary Jo                         Poos, Henry William Jr.
Johnson, Stephen Carl                   Radtke, Sandra Lou
Keller, Alfred Emil                     Sandarasi, Janal Allyn
Kramer, Karen Ann                       Van Dersarl, Dena Godard
Lankford, Kurt Edwin                    Walberg, Randall Lewis

BACHELOR OF SCIENCE (GEOPHYSICAL ENGINEERING) - DECEMBER

Agena, Warren Fred                      Hayden, Vicki Loraine
Anderson, William Emil                  Ketchum, Karen Sue
Brainerd, Gregory Stuart                Marrone, Frank Joseph
Brooks, Thomas Alan                     Mathewson, John Corey
Burgus, Mark Lee                        McGuire, Michael Herbert
Cataldo, Brad R.                        Perrelli, Susan Maireadhn
Parkash, Vladimir                       Saunders, George William
Go, Michael Alan                        Sixta, Joanna Elizabeth
Smith, Mark Alan                        Whitmer, Donald M.
Smith, Richard Patrick                  Winter, Mark Thomas
Spangler, Carl Martin                   Yale, Robinn Rae

GEOPHYSICAL ENGINEER - DECEMBER

Spangler, Carl Martin

December 10, 1981
BACHELOR OF SCIENCE (MINERAL ENGINEERING CHEMISTRY) - DECEMBER
Keller, Alfred Emil

BACHELOR OF SCIENCE (MINERAL ENGINEERING MATHEMATICS) - DECEMBER
Goodrich, Jeffrey Leland
Kramer, Karen Ann
Wall, Thomas Wayne

BACHELOR OF SCIENCE (MINERAL ENGINEERING PHYSICS) - DECEMBER
Dombrowski, Duane Charles
Milner, Thomas E.
Pompea, Daniel John
Powell, Rick Charles
Scull, Lonnie Lowell
Walker, Christopher Morgan
Wendelin, Timothy John

BACHELOR OF SCIENCE (MINERAL ENGINEERING) - DECEMBER
Barringer, Roger Anthony
Evans, Frank Jon
McLennon, Stephen
Merkel, Ernest Charles W.
Mitchell, John Clifford III
Perkins, Stephan Gregory
Vander Ark, Thomas J.

MASTER OF SCIENCE (MINING ENGINEERING) - DECEMBER
Moreno-Martinez, Mario Rito
Selcuk, Sakir

MASTER OF ENGINEERING (METALLURGICAL ENGINEER) - DECEMBER
Harris, Michael J.

MASTER OF SCIENCE (METALLURGICAL ENGINEERING) - DECEMBER
Campbell, Glenn Martin
Cusick, Michael John
Elmer, John W.
Gelb, Mark Douglas
Horzekwa, David A.
Lanning, Bruce Roy
Ojebuoboh, Folorunsho Kayode
Parks, Jeanne Marie
Plante, Paul Joseph

MASTER OF ENGINEERING (GEOLOGICAL ENGINEER) - DECEMBER
Lyman, Tracy J.

MASTER OF SCIENCE (GEOLOGY) - DECEMBER
Berg, Charles Raymond
Fahley, Michael P.
Gee, William R.
Herald, Christopher E.
Rath, Bruce A.
Steel-Mallory, Brenda A.
Tuppan, Eric John
Walker, Valerie A.

MASTER OF SCIENCE (GEOLOGICAL ENGINEERING) - DECEMBER
Palen, Ann Catherine

MASTER OF ENGINEERING (PETROLEUM ENGINEER) - DECEMBER
Garrett, Bruce Thomas
Viana, Rodolfo Tenorio

December 10, 1981
MASTER OF SCIENCE (CHEMICAL & PETROLEUM-REFINING ENGINEERING) - DECEMBER

Amer, Mohamed M.                      Herman, Deborah Robisin
Dickey, J. Hugh                        Hiesen, Vicki Gene
Giussani-Calabrese, Alberto Pedro      Skaff, Salim M.
Hardy, Bryant Joseph

MASTER OF SCIENCE (GEOPHYSICAL ENGINEERING) - DECEMBER

Chislow, Donald

MASTER OF SCIENCE (GEOPHYSICS) - DECEMBER

Bellatti, John Tomlin                  Deza, Jean-Francois
Cooke, Dennis A.                       Iroe, Hindartono D.

MASTER OF SCIENCE (CHEMISTRY) - DECEMBER

Heneman, Cpt. Frederick C.

MASTER OF SCIENCE (GEOCHEMISTRY) - DECEMBER

Dawson, Helen Eleanor                 Parker, Rebecca Ellen
DeLuca, Stephan J.                    Tucker, Robert E.
Horvath, Joseph G.

MASTER OF SCIENCE (MATHEMATICS) - DECEMBER

Kuhn, Michael Lee

MASTER OF SCIENCE (PHYSICS) - DECEMBER

Galasso, Linda Anne                    Takezaki, Shojiro
Martens, John T.                       Virreira P., Jorge Victor
Peters, Douglas Scott                  Whitham, Barth Edward

MASTER OF SCIENCE (MINERAL ECONOMICS) - DECEMBER

Gruppi, Maria Jose                    Takezaki, Shojiro
Haukaas, Stein                        Virreira P., Jorge Victor
Inciarte, Ricardo A.                  Whitham, Barth Edward

DOCTOR OF PHILOSOPHY (MINING ENGINEERING) - DECEMBER

Maleki, Hamid

DOCTOR OF PHILOSOPHY (METALLURGICAL ENGINEERING) - DECEMBER

Indacochea B., Jorge Ernesto

DOCTOR OF PHILOSOPHY (GEOLOGY) - DECEMBER

Johnson, Stephen Alan
McAlpin, James Patrick

DOCTOR OF PHILOSOPHY (PETROLEUM ENGINEERING) - DECEMBER

de Pour, Mervyn Austin

December 10, 1981
DOCTOR OF PHILOSOPHY (CHEMICAL & PETROLEUM-REFINING ENGINEERING) - DECEMBER
Al Saleh, Muhammad Abdallah

DOCTOR OF PHILOSOPHY (GEOPHYSICS) - DECEMBER
Mamah, Luke Ikechukwu

DOCTOR OF PHILOSOPHY (GEOCHEMISTRY) - DECEMBER
Crock, James Gerard
Hsi, Ching-Ruo Daniel

DOCTOR OF PHILOSOPHY (MINERAL ECONOMICS) - DECEMBER
San Miguel, Elias J. Herrero

Academic Leave Recommendations. Dr. Mueller reminded the Board that "The Administration, in considering applications for faculty leaves, will give preference to candidates who have at least five years of service and who have a program of research or study already in progress." (Faculty Handbook, p.2-15). He said that the basis for the decision is how it will aid the person's professional advancement and how it will help the School. He noted further that the administration has four requests for academic leave and recommended that three only be favorably considered by the Board due to financial restrictions. He recommended that the following persons be granted academic leave:

Dr. George H. Kennedy, Professor of Chemistry and Head of Department, for the 1982-83 academic year at one-half salary.

Dr. Alfred Petrick, Jr., Coulter Professor of Mineral Economics, for the fall semester of the 1982-83 academic year at three-fourths salary.

Dr. James H. Gary, Professor of Chemical and Petroleum-Refining Engineering, for the fall semester of the 1982-83 academic year at three-fourths salary.

Mr. Schwartzberg expressed his concern at the small number of persons who are granted academic leave. Mr. Henderson suggested that one solution may be to request funds for this purpose from industry.

It was moved, seconded and passed to grant the requested academic leaves.

Future Graduate Profile Report. Dr. Richard Culver reviewed the background of the Future Graduate Profile—what it is, what has been done, the status of the proposed revised curriculum (PRC) and the EPICS program.

Dr. Culver answered questions concerning the technical breadth requirement and the question of science v. engineering degree. President McBride noted that there is no specific proposal for a science degree.

Dr. Culver discussed the EPICS program and said that by restructuring the instruction in technical writing, graphics, computer science and military science, it is anticipated that the students will have a far better introduction to problem solving, lifelong learning and professional behavior and will, at the same time, improve their competence in graphics, computer utilization, and technical communication. He said that a learning center is being developed on the campus which will be available to all students.

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In response to Mr. Wilson's question concerning a firm schedule for implementation, Dr. Culver said that he believes the Board needs to address the issue of science-engineering program before the PRC can be implemented. If science degrees are instituted there could be two different technical breadth requirements.

Dr. Culver agreed to prepare a detailed written report and submit it to the Board members.

The meeting was adjourned at 10:45 a.m. and the Board went into executive session.

[Signature]
Secretary

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