

ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY

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MINUTES OF THE 44TH MEETING OF THE
ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY'S
BOARD OF DIRECTORS
LITTLE ROCK, ARKANSAS
JANUARY 18, 1991

CALL TO ORDER

The meeting was called to order at 1:40 p.m. by Mr. John Troutt, Chairman of the Board, in the conference room of the Department of Higher Education in Little Rock, Arkansas.

A quorum of Board members was present and included Mr. William Bowen, Dr. Diane Gilleland, Dr. James Hendren, Mr. Harry Truman Moore, Dr. Don Pederson and Dr. William Willingham.

The Authority's executive staff attending the meeting included Dr. John Ahlen, Mr. James T. Benham and Dr. Joe Gentry. Other staff members attending the meeting included Melissa Adams, Al Grijalva, Jacqui Klodt, Anita Millard, Chuck Myers, Stacie Nunn, Marion Staab and Cassie Tavorn.

Visitors attending the meeting included Mr. Walter May from Wright, Lindsey & Jennings Law Firm and Mr. Andrew Moreau from the Arkansas Democrat.

APPROVAL OF MINUTES

Mr. Troutt presented the minutes from the November 16, 1990 meeting for approval. Mr. Bowen moved that the minutes be approved. Dr. Hendren seconded the motion; the Board gave its unanimous approval.

INVESTMENT COMMITTEE

In the absence of the Chair of the investment committee, Mr. Harry Truman Moore presented the report for the investment committee.

Mr. Moore presented the Investment Fund Report for the quarter ending December 31, 1990.

Mr. Troutt inquired about the status of the seed capital loans. Mr. Moore reported that Micoil has been written off. ASTA is working with the Bank of Fayetteville concerning Nthrography. Mr. Moore reported that TSI-Redfield is set to be fully operational April 1st. They have already made their first loan payment. Emerging Technologies has doubled its sales over the past year. They have requested to defer their January payment till March and their request was approved.

Mr. Moore made a motion for the approval of the Investment Fund Report. Mr. Bowen seconded the motion; the Board gave its unanimous approval.

The next item brought before the Board was the General Fund Report quarter ending December, 1990. Mr. Moore stated that ASTA has spent 47% of their budget.

Mr. Moore made a motion for the approval of the General Fund Report. Dr. Hendren seconded; the Board gave its unanimous approval.

DRAFT RESOLUTION 91-11

Mr. Moore submitted for approval draft Resolution 91-11. Draft resolution 91-11 would allow for the seed capital investment in Law Office Information Systems, Inc. (LOIS).

This company has taken the court cases of the Arkansas Supreme Court and the Arkansas Court of Appeals since 1950 and transferred them to compact disk for use by attorneys. The disk can be revised as needed. Mr. Moore stated that they have received the rights to develop this system in Rhode Island and Connecticut.

LOIS has requested a \$200,000 loan from ASTA. This would help LOIS to fulfill its contract with Rhode Island and Connecticut.

Dr. Pederson stated that he had worked with LOIS when the Genesis Incubator was first formed. He was involved in evaluating its technology when first developed. Dr. Pederson's impression was that LOIS had a first rate product and that the University of Arkansas was very impressed with the idea.

Mr. Moore made a motion for the approval of draft Resolution 91-11. Dr. Pederson seconded the motion; the Board gave its unanimous approval.

Mr. Moore brought to the Board's attention the \$125,000 NIST grant that was awarded to ASTA in October of 1990. The project is called the Technology Extension Pilot Project. Mr. Moore stated that ASTA is now publicizing the

availability of these funds for small businesses in the state that may need assistance. With this grant, ASTA will be able to assist 36 businesses through 3 different technology transfer centers: the ones in Fayetteville,

UALR, and SAU-Camden. Mr. Moore commended the staff on their work with this proposal.

Mr. Moore suggested to the staff that it would be a good idea to do another press release to publicize this grant now that the funds are being made available.

Mr. Troutt stated that he attended a ground breaking ceremony for Gorden Hydraulics, a graduate of the Jonesboro Incubator. Its new plant will be located in the Jonesboro Industrial Park and will open in May.

RESEARCH COMMITTEE

In the absence of the Research Chair, Dr. Betty Overton, Dr. Don Pederson presented the research committee report.

Dr. Pederson stated that the Research Committee met on Friday, January 4, 1991 (Appendix 1, Research Committee Minutes.) and recommended for approval the following resolutions.

DRAFT RESOLUTION 91-7

Draft Resolution 91-7 provides for the funding of two proposals:

PROPOSAL NO. 91-B-15, "Nutritive and Protective Roles of Ascorbate in Insects," by Dr. Gary W. Felton of the University of Arkansas, Fayetteville, in the amount not to exceed \$25,800.00.

PROPOSAL NO. 91-B-38, "Green June Beetle Rearing, Behavior and Semiochemical Studies," by Dr. Donn T. Johnson and Dr. Ron W. Buescher of the University of Arkansas, Fayetteville, in the amount not to exceed \$30,987.00.

Dr. Pederson made a motion for the approval of Draft Resolution 91-7. Dr. Gilleland seconded the motion. Dr. Pederson stated that UAF was the institution of his affiliation. The Board gave its unanimous approval.

DRAFT RESOLUTION 91-8

Draft Resolution 91-8 provides for the funding of the following proposal:

PROPOSAL NO. 91-B-17, "Environmental Data Collection

for the GRANDE Project," by Dr. Donald C. Wold of the University of Arkansas at Little Rock, in the amount not to exceed \$4,000.00.

Dr. Pederson made a motion for the approval of Draft Resolution 91-8. Dr. Hendren seconded the motion; the Board gave its unanimous approval.

DRAFT RESOLUTION 91-9

Draft Resolution 91-9 provides for the funding of the following three proposals:

PROPOSAL NO. 91-B-26, "Coherence in Open Quantum Systems," by Dr. Julio Gea-Banacloche of the University of Arkansas, Fayetteville, in the amount not to exceed \$33,972.00.

PROPOSAL NO. 91-B-27, "Generation and Application of Squeezed Light with Frequency Tunability," by Dr. Min Xiao of the University of Arkansas, Fayetteville, in the amount not to exceed \$75,516.00.

PROPOSAL NO. 91-B-29, "Concentration Measurements of a Low Pressure Chlorinated Hydrocarbon Flame," by Dr. Carl V. Wikstrom of the University of Arkansas, Fayetteville, in the amount not to exceed \$37,439.00.

Dr. Pederson made a motion for the approval of Draft Resolution 91-9. Mr. Bowen seconded the motion. Dr. Pederson stated that UAF was the institution of his affiliation. The Board gave its unanimous approval.

DRAFT RESOLUTION 91-10

Draft Resolution 91-10 provides for the funding of the following proposal:

PROPOSAL NO. 91-B-22, "Development of a New Type of Photocatalyst," by Dr. George Blyholder of the University of Arkansas, Fayetteville, in the amount not to exceed \$55,980.00.

Dr. Pederson made a motion for the approval of Draft Resolution 91-10. Mr. Bowen seconded the motion. Dr. Pederson stated that UAF was the institution of his affiliation. The Board gave its unanimous approval.

Dr. Hendren stated that there were an outstanding set of proposals considered by the Research Committee. He stated that it was invigorating to see the amount of good quality science that was proposed to be done and that he wished they could have funded more.

Mr. Troutt stated that it was unfortunate that ASTA could not fund more proposals. Dr. Gentry stated that in the last five years, 311 proposals were submitted and a total of 90 were funded.

OLD BUSINESS

ASTA FOUNDATION

In the absence of Alice Smith, Dr. Ahlen presented a report on the ASTA Foundation. Dr. Ahlen stated that Ms. Smith's conclusion after the ad hoc committee meeting was that the ASTA Foundation should be pursued in two ways. The first being to use the Arkansas Community Foundation for the short-term and, at the same time, begin steps to establish a separate science foundation, set up as a 501(c)(3) not for profit entity with the IRS.

Mr. Moore suggested that this matter should be referred back to the ad hoc committee for consideration and indicated that the committee would have a recommendation at the next board meeting.

DRAFT RESOLUTION 91-12

Dr. Ahlen brought before the Board for approval draft Resolution 91-12. This resolution would implement the motion passed at the November 16, 1990 meeting to establish two standing committees of the Board, a research committee and an investment committee. The resolution also established an committee of the Board. Mr. Bowen made a motion for the approval of Draft Resolution 91-12. Dr. Hendren seconded the motion; the Board gave its unanimous approval.

PERFORMANCE EVALUATION OF ASTA PRESIDENT

Mr. Troutt reported that the yearly evaluation of Dr. Ahlen was completed.

PRESIDENT'S REPORT

Dr. Ahlen stated that the Governor would be making two Board appointments this month. One had been announced, Jerry Webster had been reappointed to the Board.

Dr. Ahlen reported that ASTA's audit report was taken to the joint auditing committee and there were no findings. He also stated that the audit report of the Advanced Brake and Clutch project was referred to the joint energy committee for its review.

Dr. Ahlen reported on an economic forecast conference that he attended. At this conference, a nationally recognized

economist discussed the economic forecast for the near future. Dr. Ahlen stated that the economist said there would be a two quarter recession, beginning the first quarter of this calendar year and continuing for another quarter.

The speaker discussed at length the assumptions that were made in the econometric model that was used to make this forecast. In the assumptions, technology was considered only twice. One consideration had to do with the use of computers to track inventory in business. The other consideration had to do with the Persian Gulf crisis. It was stated that after the January 15 deadline, there would be a quick resolution to the problem. He said it would be solved quickly either by diplomacy or by the military and that technology would play the determining role.

FEDERAL R&D SPENDING

The chair recognized Al Grijalva for a presentation on per capita R&D spending.

Mr. Grijalva presented statistics on federal R&D spending through doctorate granting universities. According to the statistics, the UA system averaged about a 40% increase over a ten year period from 1978 to 1988.

Mr. Grijalva stated that based on a per capita study for fiscal year 1987, Arkansas averaged \$6.50 per person in incoming federal R&D obligations.

Mr. Bowen noted that Arkansas was ahead of only West Virginia and Puerto Rico. He asked if the Virgin Islands were also included in this chart. Mr. Grijalva stated that the Virgin Islands are not included in the chart.

Mr. Bowen commented on a lecture presented in 1984 by an expert from the Department of Defense on R&D. In this lecture, it was noted that in 1981, Arkansas was 50th in per capita R&D with \$4.70 and Mr. Bowen noted that at 40 plus percent that takes ASTA to about \$6.40 for 1987.

Dr. Ahlen stated that according to a paper by Dr. Gary Chamberlin, in 1980 Arkansas received \$3.88 per capita. The figure for the bottom ten states at the same time was \$11.15 per capita. The top ten states were receiving \$22.78 per capita.

Dr. Hendren noted that Arkansas has the lowest percentage of their funds coming from the federal sources. He stated that Arkansas needs to be looking for opportunities to increase federal funding.

Dr. Ahlen suggested that because this subject is something that requires more attention, the executive committee schedule meetings during the periods between the regularly scheduled board meetings to deal with this subject and help the staff with the direction that they need to go.

Mr. Bowen moved that this motion be approved. Dr. Pederson seconded the motion; the Board gave its unanimous approval.

Dr. Ahlen shared with the Board a conversation he had with Dr. Ferris Womack concerning R&D spending. Dr. Womack is an Arkansas native who is now with the University of Michigan. Dr. Womack shared four issues with Dr. Ahlen that he felt were very important concerning the issue of R&D.

The first was to focus on specific R&D missions. Saying you want more money from the federal government is not precise enough. The research enterprise needs to have a mission with benchmarks and financial projections, very much like business plans to use in achieving whatever goals it.

Dr. Womack stated that the University of Michigan's administration spends a substantial amount of time doing the business plan for research. They currently have \$250 million a year in externally supported research from government and companies. Their business plan right now is geared towards replacing and repairing the equipment and the buildings that they wear out doing research.

The next issue was that investments in the educational system are essential if those educational systems are not competitive with other states. Arkansas needs to identify spires of excellence in research so we would know where to invest.

The last issue was that Arkansas needs to figure out how to harness the economic engines at our universities so that they serve all parts of the state regardless of where they happen to be located.

Dr. Ahlen stated that Dr. Womack suggested that ASTA needs to begin to think about the business incubator program, the centers for applied technology program, the investments that are made in research. Take all of these areas into consideration and begin developing a five year plan. After this plan is developed, then herald it to the Governor and the legislature.

Mr. Bowen moved that ASTA invite Dr. Womack to come to Arkansas for a presentation on this subject. Dr. Gilleland seconded the motion; the board gave its unanimous approval.

Dr. Hendren suggested that it would also be a good opportunity for Dr. Womack to speak at a UALR forum to present the R&D picture of the general community.

Mr. Bowen recalled an article written by Jim Wright of the Dallas Morning News on Texas' esprit de corps. Mr. Wright's article talked about a time of distress in Texas. Texas' real estate market and agri sector were experiencing a depression. Mr. Wright stated that the Texas course could be illustrated by the story of the Texan who fell off a forty story building and halfway down he was heard to say, "So far, so good." Mr. Bowen stated that this is in contrast with Arkansas' attitude, which is the best Arkansas hopes for is to stay flat. Mr. Bowen suggested that Mr. Wright be invited to speak to the Board.

Dr. Pederson stated that in an article in the Houston Chronicle, there was an article about faculty salaries in Texas. The article stated that teachers' salaries in Texas are only at the national average, and that Texas wasn't satisfied with that. This is compared with Arkansas, who seems to be satisfied with being 49th.

Dr. Gilleland suggested that if outside speakers were invited, then members of the board on higher education, presidents and chancellors and chief academic officers should be invited to attend also. Dr. Gilleland stated that nothing new had been said, but sometimes external sparks helps get the process of change started. Mr. Troutt also suggested that the boards of ADFA and AIDC be invited also.

Dr. Ahlen stated that the representative from Battelle talked about what they did in Kansas City. He stated that the Midwest Research Institute is located in Kansas City but that the institute was too close geographically and politically to the city. They really needed an outside "gunslinger" to come in and make the comments.

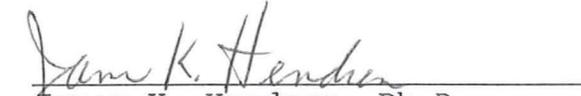
NEXT MEETING DATE

Mr. Troutt reminded the Board of the next scheduled Board meeting on February 15, 1991, but that this meeting might be cancelled.

ADJOURNMENT

With no further business to conduct, the meeting was adjourned at 2:42 p.m.

Respectfully submitted,


James K. Hendren, Ph.D.
Secretary
Board of Directors

Approved by the Board of Directors
on this 15th day of March, 1991.


James K. Hendren, Ph.D.
Secretary
Board of Directors

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