FINAL PROGRAM FOR SOS/AAPT, COPA and APPA MEETING
AT DUBLIN HIGH SCHOOL
MARCH 6, 1993

8:45am
- 2:30 Commercial Exhibits, Room A212
  Coffee and Donuts in morning

8:30 REGISTRATION OPENS

TOURS OF METATEC DISCOVERY SYSTEMS AT 9:00, 10:00 AND 11:00
Get tickets at Registration desk - Limit 20 each hour
Meet at Registration Desk 10 minutes before hour to go

9:00 A. WORKSHOP I, Room A202
Cinema Classics
Judy Doyle

10:30 A. WORKSHOP II, Room A206
Graphing Calculators
Linda Antinone

B. PRESENTATION, Room A208
Research at Ashland Chemical Company
Ed Witt

12:00 Box Lunch, Pick up in Room A216
Executive Committee Meeting, Room A219

12:30 Tours of Dublin High School

1:00 How I do it session!, Room A208

Invited Speaker, Room A208
Alan Van Heuvelan, Ohio State University
"EDUCATION - It's a verb."

2:30 SOS/AAPT Business Meeting - Bill Ploughe, Room A208
Election of Officers
Door Prize Drawing

COPA Business Meeting - Frauke Palmer, Room A203

APPA Business Meeting - Don Koontz, Room A202

2:45?
- 4:00 A. Discussion Session on AP Physics, Room A202
Don Koontz

B. Current Trends in Research in Physics Education, Room A208
Alan Van Heuvelen

C. Ohio Science Model and National Standards, Room A206
Stan Santilli

The Woodrow Wilson Foundation Follow-Up Group will Meet in Room A214

EXECUTIVE COMMITTEE MEETING AGENDA
March 6,1993

1) INTRODUCTIONS

2) SECRETARY'S REPORT — Jim Sullivan

3) TREASURER'S REPORT — Bob Teese

4) DIALOG EDITOR'S REPORT — Mike Grote

5) REPORT OF HOST — Carol Damian

6) REPORT OF SECTION REP — Jim Poth

7) SOS/AAPT FUTURE MEETINGS
   - Fall 1993 — Bill Kuhlman
   - Spring 1994 — Bob Cunningham
   - Fall 1994
   - Beyond?

8) OLD BUSINESS
   - Membership Committee
   - High School Physics Exam — Dwight Portman
   - Other

9) NEW BUSINESS
   - AAPT Summer Meeting - Boise, Idaho - August 7-12, 1993
   - AAPT Winter Meeting - San Diego - January, 1994
   - Other Meetings and Events
   - Nominating Committee
   - Other

10) AJOURN

SOS/AAPT
Statement of Revenues and Expenses

	1987 through Nov 13	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93 to 3/5/93
Revenues:							
Contributions	$0.00	$0.00	$165.10	$0.00	$0.00	$0.00	$0.00
Dues (regular membership)	$590.00	$470.00	$565.00	$395.00	$502.00	$385.00	$90.00
Dues (student membership)	$2.00	$4.00	$2.00	$0.00	$2.00	$0.00	$0.00
Dues (retiring membership)	$7.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Physics Prize income	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
State Science Day income	$100.50	$167.50	$0.00	$170.50	$62.00	$38.50	$0.00
Workshop registration	—	—	$300.00	$250.00	$0.00	$500.00	$0.00
Advertizing income	$0.00	$0.00	$0.00	$0.00	$0.00	$204.00	$0.00
Conference registration	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Misc. conference income	$86.00	$100.00	$88.00	$114.00	$0.00	$301.00	$0.00
Conference meals income	$87.50	$31.50	$0.00	$43.07	$0.00	$0.00	$0.00
	—	$131.25	$54.25	$0.00	$0.00	$0.00	$0.00
Total Revenues:	**$873.00**	**$904.25**	**$1,174.35**	**$972.57**	**$566.00**	**$1,428.50**	**$90.00**
Expenses:							
Misc. supplies	$25.76	$37.93	$15.43	$37.09	$56.36	$81.01	$101.84
Conference expense	$131.50	$127.50	$263.20	$169.57	$0.00	$204.00	$0.00
Physics Prize expenses	$154.68	$0.00	$0.00	$73.82	$0.00	$60.58	$0.00
Postage	$192.57	$93.36	$412.41	$118.69	$203.38	$219.46	$27.84
Printing	$275.00	$395.00	$245.00	$70.00	$165.00	$184.49	$58.49
Building fund	—	$50.00	$0.00	$0.00	$0.00	$0.00	$0.00
State Science Day Prizes	—	$100.00	$350.00	$350.00	$350.00	$320.00	$0.00
Total Expenses:	**$779.51**	**$803.79**	**$1,286.04**	**$819.17**	**$774.74**	**$1,069.54**	**$188.17**
Net Income:	**$93.49**	**$100.46**	**($111.69)**	**$153.40**	**($208.74)**	**$358.96**	**($98.17)**
Cash balance:	**$1,008.39**	**$1,108.85**	**$997.16**	**$1,150.56**	**$941.82**	**$1,300.78**	**$1,202.61**

3/5/93

Summary of attendance & receipts for SOS/AAPT 1992 Fall Meeting

	Number	Received	Buffet	Regist.	Membership
Reg. Members	29	$508.45	$98.45	$290.00	$120.00
Students	4	$8.00			$8.00
Retired	1	$5.00			$5.00
SCC faculty	12	$57.90	$17.90		$40.00
Non-members	4	$56.95	$8.95	$48.00	
Guests	8				
	==	=======	=======	=======	=======
Meeting Totals	58	$636.30	$125.30	$338.00	$173.00
Non-attending membership renewal	1	$5.00			$5.00
		=======	=======	=======	=======
Grand Totals		$641.30	$125.30	$338.00	$178.00

Minutes of the Executive Committee
of the
Southern Ohio Section
American Association of Physics Teachers

Dublin High School
Dublin, Ohio
Saturday March 6, 1993

The Executive Committee of the Southern Ohio Section of the American Association of Physics Teachers (SOS/AAPT) met in room A219 of Dublin High School.

The meeting was called to order at 12:22 pm by President W. Ploughe.

The minutes of the last executive committee meeting (October 17, 1992) were approved as distributed. Secretary James Sullivan requested a copy of the original SOS/AAPT Constitution and By-Laws from anyone who has one.

Treasurer R. Teese reported that as of the last meeting there were only forty members with the current dues paid. The mailing list needs updating. Treasurer Teese distributed a treasurer's report.

Dialog Editor M. Grote Distributed copies of the SOS/AAPT pamphlet which he recently created. Copies will also be distributed at the business meeting.

F. Thomas, the host for the Fall, 1992 meeting, gave a final report on that meeting.

W. Ploughe reported on the preliminary data for this meeting.

Section Representative J. Poth reported on the activities of the national AAPT. There will be a 10M$ fund raising campaign for the AAPT and the APS - the AAPT share is 3M$. The AAPT data base is being updated. This is year two (of 3) of the three-meeting model and this will be reevaluated at the Washington meeting in the Spring, 1993. Future AAPT meetings: Summer 1994 - University of Nebraska or Notre Dame University (secretary's note: Notre Dame was chosen), Winter 1995 - Orlando Florida, Summer 1995 - Gonzaga University Spokane WA. The AAPT executive office will report on capabilities of their new system to do a section dues check off.

A discussion of future meetings followed. The Fall, 93 meeting will be in Cincinnati at St. Xavier High School - William Kuhlman is the contact person. The exact date and main speakers have not yet been announced. The spring, 94 meeting will be on March 18 and 19 at Kent State University - Tuscarawas Campus. This will be a joint meeting with the Ohio, Western Pennsylvania, and Appalachian Sections and will be affiliated with the Liquid Crystal Institute and the NASA Lewis Center. Robert Cunningham is the contact person.

The meeting adjourned at 1:04 pm.

Respectfully Submitted,
James F. Sullivan,
Secretary

Minutes of the Business Meeting
of the
Southern Ohio Section
American Association of Physics Teachers

Dublin High School
Dublin, Ohio
Saturday March 6, 1993

The meeting of Southern Ohio Section of the American Association of Physics Teachers (SOS/AAPT) was called to order by President W. Ploughe at 2:48 PM on Saturday March 6, 1993 in Room 208 of Dublin High School.

Section Representative J. Poth urged all SOS/AAPT members to attend national meetings. He is attempting to get a national dues check off system for AAPT section dues. There is a possibility of using a national exam in high school physics prize contests - possibly as soon as the spring of 1994.

W. Ploughe announced future SOS/AAPT meetings:
Fall 1993: St. Xavier High School, Cincinnati, date to be announced, contact person is William Kuhlman. Spring 1994: March 18-19, Kent State - Tuscarawas Campus, contact person is Robert Cunningham.

Elections were held and those elected were:

President-elect: W. Gene Stoppenhagen (Ohio U.-LAncaster)
VP for Universities: William Dollhopf (Wittenberg U.)
Secretary: James Sullivan (U. of Cincinnati)
Treasurer: Robert Teese (Muskingum)

James Sullivan urged all members to assist in the judging of the Ohio State Science Fair.

Door prizes were distributed to those in attendance

The meeting adjourned after the door prizes were distributed.

Respectfully Submitted,
James F. Sullivan,
SOS/AAPT Secretary

SOUTHERN OHIO SECTION
AMERICAN ASSOCIATION OF PHYSICS TEACHERS
OFFICERS
March 6, 1993

PRESIDENT

Emmett Riordan
Independence High School

Columbus, OH

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SOUTHERN OHIO SECTION
AMERICAN ASSOCIATION OF PHYSICS TEACHERS
HOME ADDRESSES & PHONE NUMBERS OF OFFICERS
March 6, 1993

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American Association of Physics Teachers

5112 Berwyn Road
College Park, MD 20740-4100
(301)345-4200 • FAX (301)345-1857

Bernard V. Khoury, Executive Officer

1993 APS/AAPT Spring Meeting
April • Washington, DC

1993 AAPT Summer Meeting
August • Boise State Univ.

1994 AAPT Winter Meeting
January • San Diego, CA

April 7, 1993

James F. Sullivan
OMI College of Applied Science
2220 Victory Pkwy
Cincinnati, OH 45206

Dear James:

It's time once again for the *Announcer*. The copy deadline is quickly approaching, so get your copy in by **April 19**. The July issue will serve as the program issue for the AAPT Summer Meeting in Boise, Idaho. If you have missed past issues, this would be a good opportunity to make sure your section information (section news and section calendar) is seen and read by all.

Please submit all copy to *Nicole Wagschal, Announcer, AAPT Executive Office, 5112 Berwyn Rd., College Park, MD 20740-4100*. Thank you in advance for your contributions. AAPT values the input of its sections as they are an integral part of the Association.

I look forward to hearing from you soon!

Sincerely,

Nicole Wagschal

Nicole Wagschal
Publications Specialist

American Association of Physics Teachers

5112 Berwyn Road
College Park, MD 20740-4100
(301)345-4200 • FAX (301)345-1857

Bernard V. Khoury, Executive Officer

1993 APS/AAPT Spring Meeting
April • Washington, DC

1993 AAPT Summer Meeting
August • Boise State Univ.

1994 AAPT Winter Meeting
January • San Diego, CA

June 8, 1993

Dear Section Representative or Section Secretary!

It may be hard to believe but it is already time to start thinking about the September issue of the *Announcer*. **The copy deadline is June 21.**

The September issue carries the 1992 AAPT Audit Report and the full listing of the Section Officers' Directory. The Directory is already being compiled in the AAPT Executive Office. All Section Representatives were encouraged to respond with submissions for the 1993 Directory by June 10.

The September issue is important in that it is the first *Announcer* to greet you at the beginning of the school year. Help make this year's September *Announcer* a success by submitting your Section News and perhaps photos highlighting your recent meetings.

Plan ahead. Send your copy submissions by June 21 to: *Announcer*, 5112 Berwyn Rd., College Park, MD 20740, FAX 301-345-1857. *Copy submitted at the 1993 Summer Meeting in Boise, Idaho, will be printed in the December* Announcer.

Sincerely,

Donna

Donna Willis
Director of Publications

SOS/AAPT

SOUTHERN OHIO SECTION/AMERICAN ASSOCIATION OF PHYSICS TEACHERS

FALL MEETING

SATURDAY OCTOBER 9, 1993

SCHEDULE

8:00 - 1:00	REGISTRATION [Cafeteria]
9:00 - 10:00	CONTRIBUTED PAPERS [Rooms 108 & 110]
10:10 - 11:00	G. Aubrecht (OSU) Models of Reality [Room 111/113]
11:05 - 12:00	D. Zoller (UC) A New Phase of Electrodynamics [Room 111/113]
12:00 - 1:00	LUNCH [Cafeteria]
1:00 - 1:30	B. Clemens (Sycamore) Microcomputer Implementation in First Semester Physics [Room 111/113]
1:30 - 2:30	R. Reifenberger (Purdue) Wide-Ranging Applications of Scanning Probe Microscopy [Room 111/113]
2:30 - 3:30	SOS/AAPT MEETING (Door Prizes) [Room 111/113]

WELCOME TO ST. XAVIER

CONTRIBUTED PAPER SESSION

9:00 a.m.

ROOM 108

Automated Franck-Hertz Experiment. Dave Gaskell, Earlham College. The Franck-Hertz Experiment involves the quantization of energy levels of electrons in mercury vapor. An Apple II computer was used to control a stepper motor that varied the voltage applied to the Franck-Hertz apparatus. An analog to digital converter card let the Apple read the relevant data. The data was then stored to disk for later analysis. This set-up allowed prolonged runs that otherwise would be very time consuming if done manually. The results of the data were of very good quality.

ROOM 110

Sounds Around the Home. R. Esquivel-Sirvent and F.B. Stumpf, Ohio University. A-weighted sound level measurements are presented for several appliances found in the home. These include and electric drill, upright sweeper, force-air furnace, clothes washer, clothes dryer, and refrigerator. The sound level meter used was a Realistic Meter from Radio Shack. Similar measurements might be the basis of an experiment in a high-school or beginning college level lab.

9:15 a.m.

ROOM 108

Laser Diffraction Pattern Intensity Detection. Andy White, Earlham College. Scanning a diffraction pattern with a light sensitive diode produces and array of voltages corresponding to the changing light intensities. It is possible to store this data in a file for further analyses. Scanning the diffraction pattern with the photo diode can be automated by using a stepping motor. This provides a smooth scan of the diffraction pattern which is necessary for proper representation of the light intensity vs horizontal change in position. Data acquisition and scanning can be executed simultaneously by interfacing a voltage meter and stepping motor with a regular PC type computer. We found that a program written in Quick Basic® was useful in performing both operations. This design would be a useful teaching aid for students trying to understand the diffraction properties of light.

ROOM 110

Radiometry for Astronomy: Calculating the Brightness of a Planet. Howard E. Evans II. Ball Systems Engineering Division. With some simplifying assumptions (co-planar circular orbits, uniform planetary albedo and Lambertian reflectivity), This talk shows how manipulation of the basic radiometry relations (exitance, intensity, radiance, and irradiance) and elementary calculus (straightforward integrals and vector dot products) are used to calculate the visual magnitudes of the planets. The results agree with expected phenomenology: brightness depends on an interplay between the sunlit fraction of a planet's surface that is visible and its distance from the observer.

CONTRIBUTED PAPER SESSION

9:30 a.m.

ROOM 108

Computer-assisted Assessment in an Inquiry-based Physics Course.
Kathleen Miller Koenig, James Poth, and Beverly A.P. Taylor, Miami University.
A study has been carried out on the use of computers for assessing student understanding in the Physics by Inquiry course at Miami University. This one semester course is offered as an elective for undergraduate pre-service teachers and as a summer institute for in-service teachers. We investigated the effects of the use of the computer on student learning, attitudes, and motivation. The operation of the course and the results of the study will be presented and discussed.

ROOM 110

But Where Does It Land?. Christopher R. Hazard, Joseph A. Sicking, Terrence P. Toepker, Xavier University. Many textbooks present a loop-the-loop problem and ask how high the object must be started in order to complete the loop without leaving the track. This paper investigates the motion of a frictionless block, sphere, and cylinder, each of which is started at 2R. The angle where the object leaves the track and also where it lands is calculated. The problem all started from a single question: "But where does it land?".

9:45 a.m.

ROOM 108

Using Science Fiction Cinema to Stimulate Interest in Physics. Michael Grote, Ohio Wesleyan University. Most students enjoy watching films. Many science fiction films raise some interesting questions which can engage students. The presenter will show several excerpts from readily available video tapes of SF films, present sample questions, and discuss how these can be used with small groups of students to make physics relevant and interesting to the general population of our schools.

ROOM 110

10:10 a.m. ROOM 111/113

Models of Reality†

Gordon J. Aubrecht, II
Department of Physics
Ohio State University
1465 Mt. Vernon Avenue
Marion, Ohio 43302-5695

In 1990, I began work on a revision of the introductory physics course for students of science and engineering with the support from FIPSE, a project that is currently concluding. The current University Physics course, as IUPP groups have noted over the years, includes little knowledge gained from physics education research about how students learn, little from among contemporary physics topics, and does not generally use the microcomputer effectively. These 3 "*C*"s, existing *C*ognitive studies in physics pedagogy, more *C*ontemporary physics content, and use of [micro]*C*omputers in teaching, have been incorporated as an integral part of the project.
That effort has produced a book for the course and many spreadsheets to support the students in their learning. The book has the focus on particles as a major story line, and emphasizes student ability to describe physical situations both qualitatively and numerically through multitudinous examples. Contemporary physics is spread throughout the book, and focused as groups of chapters on condensed matter physics, and particle physics and astrophysics at the conclusion of the book.

† Work supported in part by the U.S. Department of Education under FIPSE grant #P116B01237.

11:05 a.m. ROOM 111/113

A NEW PHASE of ELECTRODYNAMICS

David Zoller
Department of Mathematics, Physics,
and Computing Technology
University of Cincinnati
2200 Victory Parkway
Cincinnati, OH 45206

The infinite electromagnetic self energy of a charged point particle implies that electrodynamics is not well defined. Knot theory suggests a novel way of making the theory well defined which differs from the standard approach. The new method gives rise to a new term in the equation of motion involving fourth derivatives of position. The quantum theory of this generalization of electrodynamics has two phases much like a piece of iron has a magnetic phase at low temperatures and a non-magnetic phase at high temperatures. One phase is essentially identical to ordinary electrodynamics and the other is a new phase of electrodynamics where a point particle, in absence of external forces, moves in helical rather than straight line motion. Although this new phase is not evident in nature, it is conceivable that very strong electromagnetic fields could trigger it. We comment on some speculations that an experiment in Germany involving heavy ion collisions has generated a new phase of electrodynamics.

1:00 p.m. ROOM 111/113

MICROCOMPUTER IMPLEMENTATION in FIRST SEMESTER PHYSICS

Bernadette Clemens
Sycamore High School
7400 Cornell Road
Cincinnati, OH 45242-3099

Fundamental concepts of mechanics are difficult to learn. Microcomputer based tools can significantly change the design of the classroom to provide students with directed opportunities for active learning and knowledge construction in cooperative learning groups. The three tools involved are a sonic ranger for laboratory measurements of position, velocity and acceleration, spreadsheets with associated graphs, and selected simulations of physical events. This paper is based on ideas developed during the P.C.E.P. (Physics Courseware Evaluation Project) program at North Carolina State University during the summer, 1993.

1:30 p.m. ROOM 111/113

WIDE-RANGING APPLICATIONS of SCANNING PROBE MICROSCOPY*

Ronald G. Reifenberger
Department of Physics
Purdue University
West Lafayette, IN 47907

The success of the scanning probe technique for studying the surface topography of a wide variety of materials has opened up new areas in virtually every field of science. Following a brief overview of the physical principles underlying the Scanning Tunneling Microscope(STM) and the Atomic Force Microscope(AFM) , a number of examples will be given that demonstrate the wide scope and utility of the scanning probe technique. Examples will be drawn from research on the properties of nanometer-size metallic clusters, high temperature superconductors, electromigration phenomena in integrated circuits and nanolithography. The pivotal role played by STM and AFM in enhancing cross-disciplinary research at universities will be emphasized.

*Work performed at Purdue in collaboration with R.P. Andres, T. Miller, M. Paniccia, and D. Schaefer.

SOS/AAPT
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Dues (retired membership)	$7.00	$0.00	$0.00	$0.00	$0.00	$0.00	$5.00
Contributing membership	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Physics Prize income	$100.50	$167.50	$0.00	$170.50	$62.00	$38.50	$30.00
State Science Day income	—	—	$300.00	$250.00	$0.00	$500.00	$0.00
Workshop registration	$0.00	$0.00	$0.00	$0.00	$0.00	$204.00	$0.00
Interest income	—	—	—	—	—	—	$7.82
Conference registration	$86.00	$100.00	$88.00	$114.00	$0.00	$291.00	$171.00
Misc. conference income	$87.50	$31.50	$0.00	$43.07	$0.00	$0.00	$0.00
Conference meals income	—	$131.25	$54.25	$0.00	$0.00	$0.00	$306.00
Total Revenues:	$873.00	$904.25	$1,174.35	$972.57	$566.00	$1,388.50	$1,057.82
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Building fund	—	$50.00	$0.00	$0.00	$0.00	$0.00	$0.00
State Science Day Prizes	—	$100.00	$350.00	$350.00	$350.00	$320.00	$350.00
Total Expenses:	$779.51	$803.79	$1,286.04	$819.17	$774.74	$1,044.55	$1,441.07
Net Income:	$93.49	$100.46	($111.69)	$153.40	($208.74)	$343.95	($383.25)
Cash balance:	$1,008.39	$1,108.85	$997.16	$1,150.56	$941.82	$1,285.77	$902.52

10/8/93

SOUTHERN OHIO SECTION
AMERICAN ASSOCIATION OF PHYSICS TEACHERS
HOME ADDRESSES & PHONE NUMBERS OF OFFICERS
October 18, 1993

PRESIDENT

Emmett Riordan
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SOUTHERN OHIO SECTION
AMERICAN ASSOCIATION OF PHYSICS TEACHERS
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October 18, 1993

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American Association of Physics Teachers

One Physics Ellipse
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Bernard V. Khoury, Executive Officer

December 6, 1993

Dear Section Secretary and Section Representative:

The copy deadline for the March *Announcer* is January 7, 1994.

As you bring your semester to a close--don't forget about the *Announcer* copy deadline. Before you head out for Winter Break, mail your Section News or Section Calendar items to me or hand your copy to an AAPT representative at the Winter Meeting.

Be sure to alert us to any changes in Section Representatives. The March *Announcer* will carry a list of Section Representatives as part of the AAPT Organizational Directory. This is the time to update your Section Representative's mailing information and/or phone numbers.

Sincerely,

Donna Willis

Donna Willis
Director of Publications

Minutes of the Executive Committee
of the
Southern Ohio Section
American Association of Physics Teachers

St. Xavier High School
Cincinnati, Ohio
Saturday October 9, 1993

The Executive Committee of the Southern Ohio Section of the American Association of Physics Teachers (SOS/AAPT) met in the northeast corner of the dining room at ST. Xavier High School. The meeting was called to order by W. Ploughe at 12:20 pm. Those present were G. Aubrecht, R. Cunningham, W. Dollhopf, W. Ploughe, D. Portman, J. Poth, G. Stoppenhagen, J. Sullivan, R. Teese, and F. Thomas.

R. Cunningham is the organizer of the spring, 1994 meeting on the Tuscarawas Campus of Kent State University in New Philadelphia, Ohio. The two-day meeting will be on Friday March 18th and Saturday March 19th. This will be a joint meeting with the Ohio, Western Pennsylvania, and Appalachian sections of the AAPT. Many speakers are committed and possible workshops include Particles and Interactions (G. Aubrecht) and the STAR Astronomy workshop (Bluffton College).

The minutes of the previous executive committee meeting were distributed and approved. Secretary J. Sullivan announced that he now has a copy of the original SOS/AAPT Constitution and By-Laws and will attempt to construct the current versions for per

Treasurer R. Teese distributed the treasurer's report (enclosed, dated 10/8/93). This report was accepted. There are over 100 paid-up members. The section will pay $50.00 for one half of a booth at the Science Education Council of Ohio (SECO) Convention in Columbus, Ohio on February 10th and 11th, 1994.

W. Ploughe announced that the Executive Committee will meet on Saturday January 22, 1994 at Wittenberg University (January 29th is the back up date).

Section Representative J. Poth reported that there is a new computer system in operation at the national AAPT headquarters. The dues check off is being worked on. The legal relationships between the national AAPT and the AAPT sections are not established - we should start establishing the section as a 501(c)(3) organization (J. Sullivan agreed to look into this). The new American Center for Physics is scheduled to open soon. The Executive Committee assisted J. Poth in filling out a questionnaire which he is required to send to the national AAPT.

The meeting adjourned at 1:10 pm.

Respectfully Submitted,
James F. Sullivan,
Secretary

Minutes of the Business Meeting
of the
Southern Ohio Section
American Association of Physics Teachers

St. Xavier High School
Cincinnati, Ohio
Saturday October 9, 1993

The meeting of Southern Ohio Section of the American Association of Physics Teachers (SOS/AAPT) was called to order by W. Ploughe at 2:33 PM on Saturday October 9, 1993 in Room 111/113 of St. Xavier High School.

W. Ploughe asked for nominations for future SOS/AAPT officers. If you, or anyone you know, is interested in being an officer of the SOS/AAPT please contact any current SOS/AAPT officer.

Section Representative J. Poth reported that the Center for Physics will open soon in the Washington, DC area. Another hot topic is whether or not to continue the three meeting per year model. Future national AAPT meetings: January 94 - San Diego CA, April 18-22, '94 - Washington DC, August 8-13, 94 - Notre Dame University.

Secretary J. Sullivan distributed the minutes of the last meeting. They were approved as distributed. J. Sullivan also announced a workshop at his college on amateur radio.

W. Ploughe asked for volunteers for our booth at the Science Education Council of Ohio (SECO) Convention. This will be on February 10 and 11, 1994 at the Ohio Center in Columbus, OH.

All in attendance thanked W. Kuhlman for this excellent meeting.

Door prizes were distributed to those in attendance

The meeting adjourned after the door prizes were distributed.

Respectfully Submitted,
James F. Sullivan,
SOS/AAPT Secretary

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AMERICAN ASSOCIATION OF PHYSICS TEACHERS
HOME ADDRESSES & PHONE NUMBERS OF OFFICERS
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CONSTITUTION
SOUTHERN OHIO SECTION, AMERICAN ASSOCIATION OF PHYSICS TEACHERS

December, 1993

Article I

The name of this organization shall be the Southern Ohio Section of the American Association of Physics Teachers.

Article II

The Southern Ohio Area is that portion of the state of Ohio south of the present location of US route 30, with the exceptions of the following counties: Athens, Belmont, Gallia, Jefferson, Lawrence, Meigs, Monroe and Washington.

Article III

The objectives of the organization shall be:

1. To facilitate the dissemination of information concerning physics and physics instruction to interested persons and groups in the Southern Ohio Area.
2. To improve the teaching of physics at all levels.
3. To increase the general appreciation of the role of physics in our culture.

Article IV

1. Regular membership shall be open to all members of the AAPT, to all persons engaged in the teaching of physics, and to other persons who will, in the judgment of the Executive Council, promote the goals of the section.
2. Junior membership shall be open to those students who satisfy the requirements for junior membership in the AAPT.
3. Sustaining membership shall be open to corporations and institutions which wish to further the work of the section and whose admission is recognized as promoting the objectives of the section.
4. Applications for membership shall be sent to the Treasurer. Questions of eligibility shall be determined by the Executive Council of the Section.
5. Only regular members shall be eligible to vote.
6. Only regular members residing or employed within the Southern Ohio Area shall be eligible to vote for Section Representative.

Article V

1. Officers of the Section shall be as follows:
   a. President
   b. President-elect
   c. Secretary
   d. Treasurer
   e. Vice-President for Colleges and Universities
   f. Vice-President for Two-Year Colleges
   g. Vice-President for Secondary Schools
   h. Section Representative to serve on the AAPT Council
2. Officers shall be elected at the annual meeting of the Section and shall serve until the next annual meeting or until their successors have been elected, except that the Vice-presidents (for Colleges and Universities, for Two-Year Colleges, and for Secondary Schools) shall each serve for terms of three years, so arranged that one of these shall be elected each year. The Section Representative shall also serve for a term of three years.
3. Vacancies created by death, resignation, or extended absence may be filled by appointment by the Executive Council. Persons so appointed shall serve until the next annual meeting, but may be eligible for election to a full term. However, a person appointed to a vacancy in the position of President-elect shall succeed to the presidency only upon election to that position.
4. The position of Section Representative may be held by a person who simultaneously holds another office within the Section. The Section Representative shall be a member in good standing of the American Association of Physics Teachers.
5. The position of Vice-President for Colleges and Universities shall normally be filled by a person whose principal affiliation is with a four year college or university. The position of Vice-President for Two-Year Colleges shall normally be held by a person whose principal affiliation is with a two-year college. The position of Vice-President for Secondary Schools shall normally be filled by a person whose principal affiliation is with a secondary school.

Article VI

The Executive Council shall comprise the elected officers, the editor of "The Dialog", and the immediate past president of the Section. The Executive Council shall have the power to govern the Section, subject to direction by the membership at the annual meeting or as may be determined by mail ballots at the discretion of the Executive Council at other times. Important matters shall require the affirmative vote of a majority of the members of the Executive Council.

Article VII

Special interest groups may be established within the Section, provided their purposes do not conflict with the objectives of the Section.

1. To establish a Special Interest Group a petition, signed by at least five (5) members of the Section, is first presented to the President. This petition must, at a minimum, state the name and purpose of the proposed Special Interest Group. The Special Interest Group shall be established upon favorable majority vote of those Executive Council members present at an Executive Council meeting.
2. The leaders of the Special Interest Group shall periodically report on the group's activities to the President.
3. A Special Interest Group may be disbanded by the Executive Council by a vote of 2/3 of those Executive Council members present at an Executive Council meeting.

Article VIII

1. This constitution may be amended by a two-thirds majority of those present and voting at the annual meeting, or by a two-thirds majority of those returning valid mail ballots.
2. Amendments may be initiated by
   a. the Executive Council
   b. Petition from at least one-tenth of the regular members of the Section
3. Any proposed amendment shall be submitted in writing to the Secretary at least thirty days prior to the annual meeting at which it is to be put to a vote and shall be distributed by the Secretary to the membership at least fourteen days prior to that meeting. At the discretion of the Executive Council, amendments may be submitted to the membership by mail ballot, provided that at least 21 days shall be allowed for return of the ballots and reasonable effort shall be made to advertise, at the time of or before the distribution of ballots, the reasons for the proposed amendment and the reasons for known or probable opposition to the amendment.

December, 1993

BY-LAWS OF THE SOUTHERN OHIO SECTION OF THE AAPT

Article I. Dues

1. The annual dues shall be $5.00 for regular members. There shall be no annual dues for retired regular members. The rate for lifetime regular membership shall be 20 times the annual dues for regular members.
2. The annual dues shall be $2.00 for junior members.
3. The annual dues for sustaining members shall be determined by the Executive Council.
4. The fiscal year shall begin on January 1 and shall end on December 31. Dues for a given fiscal year are payable on or before the date of the annual meeting.

Article II. Meetings

1. The annual meeting shall be held in the spring at a time and place decided upon by the Executive Council.
2. Other special meetings may be called and arranged for by the Executive Council.
3. Notice of the time and place of the annual and special meetings shall be sent to all members, including junior members, by the Secretary.

Article III. Amendment of By-Laws

These By-Laws may be amended by action of the Executive Council with the approval of two-thirds of the membership present and voting at an annual meeting, or in the manner prescribed for amendments to the Constitution of the Section.