

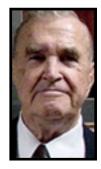
Health Physics Society ◆ **South Texas Chapter** ◆ Radiation Safety Specialists

STC Member Krohmer to Receive National HPS Award!

Susan Jablonski

t noon on Tuesday, June 12, 2001, at the HPS Awards Luncheon in Cleveland, Ohio, South Texas Chapter of the Health Physics Society (STC-HPS) member Jack S. Krohmer, Ph.D., will be awarded the Health Physics Society's Fellow Award. The HPS Fellow Award was established to honor members of the Society who have made a significant administrative, educational, and/or scientific contribution to the profession of health physics. Previous STC members who have been awarded the HPS Fellow Award include Hugh (Bill) Bryant, Milton (Milt) McLain, John W. Poston, and John E. Simek.

For those good people attending the HPS Annual Meeting in Cleveland this year, please help the STC honor this significant recognition of Dr. Krohmer's career by attending the HPS Awards Luncheon on Tuesday, June 12, 2001.



Susan M. Jablonski, President South Texas Chapter of Health Physics Society, Inc.

decorated World War II veteran, Dr. Jack Krohmer received advanced degrees in Biophysics and Medical Science from the University of Texas (1961). He was employed throughout his career in the military, academia, medical facilities, and consulting firms. He served the American Board of Radiology as examiner (1961-93), chair of the Physics Committee (1967-93), and as Trustee (1981-93). He was the first non-MD Trustee of any medical specialty board. Dr. Krohmer was a founding member and President (1975) of the American Association of Physicists in Medicine. He received that organization's highest honor, the Coolidge Award in 1985. He has received Gold Medals from the Radiological Society of North America (1992) and the

American College of Radiology (1994). It is particularly noteworthy that Dr. Krohmer is one of only seven non-MDs who have received these last two Gold Medals since their inception in the early 1920's. Three of the last seven Gold Medal awardees were Nobel Laureates Sir Godfrey Hounsfield, for the development of Computed Tomography (CT), Rosalyn Yalow, Ph.D., for the development of Radioimmunoassay used for the detection and evaluation of diabetes, and Marie Curie, Ph.D., for the discovery of radium. Dr. Krohmer also has an endowed chair at the University of Texas' Southwestern Medical School in Dallas, the "Dr. Jack Krohmer Professorship in Radiation Physics."

Dr. Krohmer has also served on four committees of the National Council on Radiation Protection, chairing the last, Medical X-Ray Protection up to 50 million Volts. During his years as an examiner for the American Board of Radiology, Dr. Krohmer served as an oral examiner for more than 1300 radiologists and radiation oncologists and over 750 physicists. He was also a board member and oral examiner for the American Board of Health Physics from 1974 to 1978.

Dr. Krohmer was appointed to the Texas Radiation Advisory Board (TRAB) in 1986 as the Certified Health Physicist member by Texas Governor Mark White. Governors Bill Clements and Ann Richards reappointed him to the TRAB in 1988 and in 1994, respectively. Elected as the chairman of the TRAB in February 1990, Dr. Krohmer served in that

capacity until June 2000. Dr. Krohmer's "no nonsense" approach to sometimescontroversial radiation issues helped to shape sound policy in Texas based on sound science.

During his illustrious career. Dr. Krohmer influences countless lives and decisions related to radiation safety and protection. In recognition of his substantial contributions to their respective specialties, Dr. Krohmer holds Fellow status with many affiliated professional societies including the American College of Radiology, American Association of Physicists in Medicine, Cleveland Radiological Society, and American Academy of Health Physics. Predating all affiliations, Dr. Krohmer was, and remains to this day, a member of the Health Physics Society **(1959).** ◆

THE BILLET

President

Susan M. Jablonski TNRCC

Austin (512) 239-6731 sjablons@tnrcc.state.tx.us

President-Elect

Bob Emery University of Texas at Houston (713) 790-2761 Houston bemery@admin4.hsc.uth.tmc.edu

Past President

Ian S. Hamilton Texas A&M University

(979) 845-8101 College Station ian@trinity.tamu.edu

Secretary

Pete Myers

TDH Bureau of Radiation Control (512) 834-6688 Austin pete.myers@tdh.state.tx.us

Treasurer

Michael A. Charlton UTHSC at San Antonio San Antonio (210) 567-2955 charlton@uthscsa.edu

Treasurer-Elect

Ken V. Krieger Earchtech

San Antonio (210) 271-0925 ken_krieger@earthtech.com

Executive Council

James A. Lewis (Jim) UTSA

San Antonio (210) 458-5807

jlewis@utsa.edu

Christopher W. (Chris) Maxwell Ludlum Measurements, Inc. (800) 622-0828 Sweetwater cmaxwell@camalott.com

Jim Sharp

Sharp Radiation Safety Services (281) 316-0052 jsharp713@aol.com

Editor

John P. Hageman Southwest Research Institute (210) 522-2633 San Antonio jhageman@swri.org

Managing Editor

Alana Woods Southwest Research Institute San Antonio (210) 522-3760 awoods@swri.org

Technical Editor

David Norman NORM-Rad Services Graham (940) 549-6578 David.Norman@norm-rad.com

Graphic Designer

Jean Fox Southwest Research Institute (210) 522-2839 San Antonio jfox@swri.org

The Billet is sponsored by the South Texas Chapter Affiliate Members and is printed as a courtesy by Southwest Research Institute in San Antonio, Texas.

STC-HPS Workshop Goes International

Kenneth Krieger & Linda Morris

ast summer at the Annual HPS Meeting in Denver, the South Texas Chapter (STC) put on an evening workshop entitled, "How to Host a Science Teachers' Workshop (STW)." The standing-room-only crowd that evening was the first indication that the program was timely and a topic of great interest. One of the attendees

was a long way from the sunny 90s in Texas-try 40s, raining, and a wind chill of about 25°F.

There was great interest in the Canadian How-To Science Teachers' Workshop. Approximately 35 people signed up in advance for the workshop, which was held in a 7:00 p.m. to 10:00 p.m. timeslot during the CRPA annual meeting.



Ian Hamilton. Linda Morris and Ken Krieger represented the STC and HPS during their mission to Nova Scotia.

that evening was Pauline Jones, an active member of the Canadian Radiation Protection Association (CRPA). She was so impressed with the workshop that she asked the STC to make the same presentation at the next meeting of the CRPA in Halifax, Nova Scotia. So, the STC planned to pack up its bag of tricks and head to the great, white north.

The adventure started even before three Texans got on the Canada-bound airplane. The airlines phoned prior to departure to inform that flights to Canada were either changed or canceled. With storms brewing and other delays, successful arrival at the host Halifax hotel finally occurred around midnight. The weather Around 50 people actually attended the STC Workshop, including the past and present presidents of the CRPA and Ray Johnson, HPS Past-President.

STC Past-President Ian Hamilton started the workshop with a Texan introduction, tips for starting an STW program, and some hands-on exercises for teachers to take back to their classrooms. Ian and current STC Student Assistance Chair Linda Morris followed up with the financial aspect of putting on an STW and how to evaluate and improve the program over time. STC Treasurer-Elect Ken Krieger rounded out the workshop with a review of all the material that the teachers are given

at STC workshops and the materials provided on CDs to attendees. The STC educational CD included the presentation slides from that evening, all the presentation modules for a day-long STW, electronic copies of the lesson plans and handouts for an STW, and a sample agenda for an STW. After the presentation, there was much discussion, and excitement about working with science educators to provide factual, useful information on radiation issues. There was even talk of the STC coming back to the annual meeting of the CRPA and doing it all again next year. Pauline Jones has reported since this workshop that her colleagues from the province of Saskatchewan have already formed a committee and have started the process of developing STWs in Canada.

Special thanks to all the people who helped make this great outreach to Canada possible. Funding to assist with travel expenses was graciously provided from the HPS general budget and the HPS Public Education budget under the persistent support of HPS Board Member, Carmine Plott. The Texas A&M University Nuclear Engineering Department also helped fund travel expenses for this trip. Special thanks to all the STC members, especially David Fogle and Susan Jablonski, who provided their services in developing the STC Science Teachers' Workshop Program and putting together the presentation information for these how-to workshops. •

What's in a Name: STC Mentoring Program

Kenneth Krieger

he mentoring program introduced to the STC several meetings ago was a successful pilot program that we would like to take to HPS national. After a few meetings and discussion on this program, we need your help to fully institute this pilot. Please contact Ken Krieger at ken_krieger@earthtech.com with any suggestions for naming this program and any comments on the pilot. So far, the names suggested are the "welcoming program," or to stay with the spirit of an ongoing relationship, the "mentoring program."

Some details of the pilot program have been purposed for the full implementation of this outreach effort. Due to the size of the STC, the program will be implemented once a year during the STC Winter Meeting & Affiliates Fair. This meeting is usually a joint meeting with the student branches of HPS at Texas A&M University and Texas State Technical College and marks the annual HPS President-Elect visit. The Winter Meeting will give the students and the first-time meeting attendees a chance to meet STC members from varying backgrounds, meet affiliate vendors and other representatives. and visit with the HPS President-Elect. So be ready for the yet-to-be named program to resurface toward the end of the year.

Since this was a pilot program, an effort is in the works to take this to HPS national and other chapters throughout the U.S. This program could be successfully carried out at both meetings of national HPS—mid-year and annual. The potential number of first time attendees and students is greater for HPS-wide events. Even if the same student would attend two, or even three HPS meetings, they could be paired with different "seasoned" health physicists each time, greatly expanding their HPS experience and networking pool.

The implementation of this type of pilot program on the national level could help to retain student members and new members for years to come. ◆

Neff Student Award Presentations at Annual Meeting

Linda Morris

Exas A&M University was a fitting location for the 2001 South Texas Chapter
Annual Meeting and Student Presentations. Seventeen students ranging from
associate degree students to doctoral students presented papers at the TAMU
Memorial Student Center on Saturday, May 5th. The highlight of the meeting was the

presentation of the Richard D. Neff Memorial Student Awards for outstanding scientific paper presentation. STC judges Jim Lewis, Ken Krieger, and Roy Craft had the difficult duty of determining the winners at the graduate and undergraduate levels. After much deliberation, the following students were honored with \$50 checks:

Rob Buchheit and Michael Pope (Texas A&M undergraduate students) were recognized for their presentation entitled, "Neutron Activation Analysis of an Unknown Mineral Sample."



Texas A&M graduate students Matt Arno (left) and David Hearnsberger (not shown) tied for the Richard Neff Award for Best Graduate Paper. Susan Jablonski, STC President presented Matt with his check.

David Hearnsberger

shared graduate presentation honors with *Matt Arno*. David's paper was entitled, "Fission Neutron/Gamma Irradiation of Bacillus thuringiensis at the Texas A&M University Nuclear Science Center Reactor." Matt's presentation was "Neutron Dose Analysis of a Pulsed Power Facility." Both are Texas A&M University students.

The awards were made in the name of deceased Texas A&M University professor Richard D. Neff. Dr. Neff served as major professor for many practicing Aggie HPs and is fondly remembered for his contributions to health physics education. ◆



Michael Pope (left), and Rob Buchheit (center), undergraduate students at Texas A&M University, received the Richard D. Neff award for the Best Undergraduate Paper. The title of their joint presentation was "Neutron Activation Analysis of Unknown Mineral Sample."

Minutes of the Executive Council Meeting of the **South Texas Chapter of Health Physics Society, Inc.** Memorial Student Center, Texas A&M University, College Station, Texas May 4, 2001

Persons in attendance:

Executive Council Members in Attendance: Ian Hamilton, President; Susan Jablonski, President-Elect; David Fogle, Past-President; Mike Charlton, Treasurer; Jim Lewis, Executive Council Member, John Salsman, Executive Council Member; Chris Maxwell, Executive Council Member.

Executive Council Members not in Attendance: Pete Myers, Secretary (David Fogle was proxy).

Chapter Members and Guests in Attendance: Janet McCrary, Chairperson, Nominating Committee; Linda Morris, Chairperson, Student Assistance Committee; Bob Wilson, Chairperson, Legislative Committee; Alta and Roy Craft, Stacy and Ken Krieger.

Call to Order—Ian Hamilton. A quorum was established, and the meeting of the Executive Council (EC) of the South Texas Chapter of Health Physics Society, Inc. (STC) was called to order at 6:11 p.m. by President Hamilton.

Approval of Minutes of EC Meeting on January 19, 2001—Ian

Hamilton. President Hamilton asked the EC if there were any changes to be made to the minutes of the meeting held January 19, 2001. No changes to the minutes were recommended. A motion to accept the minutes as written was made by Ms. Jablonski; the motion was seconded by Mr. Fogle. There being no discussion, President Hamilton called for a vote on the motion, and the motion was passed unanimously.

Approval of the Agenda—Ian Hamilton. A motion was made by Ms. Jablonski to accept the agenda as amended. The motion was seconded by Mr. Salsman. There being no discussion, President Hamilton called for a vote on the motion, and the motion was passed unanimously:

- Mr. Fogle will provide the Secretary's report, the Public Relation Committee's report, and the Admission Committee's report.
- Ms. Jablonski will provide the Publications Committee report.
- The item under old business on the mentoring program will be deleted.
- Incoming President Jablonski's Chairpersons for 2001–2002 will be read into the minutes under new business.
- A report from the Science Teacher Workshop Committee will be provided by Mr. Fogle after the Student Assistance Committee report.
- Mr. Charlton will discuss the new \$20,000 interest-bearing, money market account under new business.

A motion was made by Ms. Jablonski to adjourn at 8:30 p.m. or whenever the business of the EC for the evening is completed. The motion was seconded by Mr. Maxwell and passed by unanimous voice vote of the EC.

President's Report—Ian Hamilton:

STW Workshops

Nova Scotia, Canada (May 14, 2001)—HPS approved funding for STC's participation in the joint venture between HPS and STC based on the proposal that Past-President Fogle wrote. STC will send three people.

HPS will put up the first \$2000 to send three STC persons to conduct the Workshop. Mr. Fogle and Ms. Jablonski could not participate, so the persons selected were President Hamilton, Ms. Morris, and Mr. Krieger. TAMU is covering the cost of President Hamilton's trip to Canada. The only expense to STC will be cost of providing the CDs that contain all presentations and manuals.

Cleveland, OH (June 11, 2001)—STC will host another workshop on STWs. The presentations have been updated for the Canadian Workshop. Several good ideas provided by Dr. Frank Iddings have been integrated into the presentation in an effort to continually try to improve the product. Will need the same kind of volunteers as assisted in Denver. If interested, please contact Ms. Jablonski.

An entire session dedicated to public outreach (June 13, 2001)—During the public outreach session, President Hamilton will present the STW modules developed by the HPS Ad Hoc STW Committee. Those modules drew significantly from STC STW modules.

\$500 Donation—Have a request from the student branch of the American Nuclear Society at TAMU for a \$500 donation. The student branch hosted the largest student conference in the history of the ANS, and it was quite successful including a great job fair with more than 20 companies in attendance. More than 400 students and 200 professionals in the nuclear and radiation health sciences attended from around the United States. President Hamilton indicated that he had several things to pass to Ms. Morris (TSTC) because there were several companies that had an immediate need for TSTC-type graduates. ANS donated \$35,000. TU Electric donated money to rent the country club for a student mixer (no nonstudents allowed). All money not spent on transportation (e.g., buses to NASA for tours), hotels for speakers, and conference rooms (more than 50 percent) went to pay for HP and Nuclear Engineering students from around the US to present/attend. HPS did not donate.

Ms. Jablonski made a motion that we donate \$500 towards the student chapters for their student conference contingent upon receiving an official request and a packet on the conference so that we can write it up in *The Billet* and submit an article for the *HPS Newsletter*. The motion was seconded by Mr. Salsman. There being no further discussion, President Hamilton called for a vote on the motion, and the motion was passed unanimously.

CAST 2001

Austin (Later this year)—President Hamilton asked if we wanted to do the same thing for the American Association of Physics Teachers. (smaller than CAST). Need to make certain an advertisement of our presentation is prominently positioned within the program and that it accurately describes the content and benefit of attending.

CDV-700s-Mike Rutherford, TDH/BRC, Chief, former-RADEF, has at least 2000 CDV-700s in really good condition that he is offering to donate. Need to decide how many we'd like to take and find a place to store them. Will come in the individual CDV cartons with dosimeters and instructions (entire set). Previously received 800 through ANS (Chris Meyer & John Salsman) and have good facilities and student

labor to clean them up. Need to consider receipt of 2000 100 nCi U-238 (or Pb-210) nonexempt check sources. Mr. Fogle will check with Chief, BRC, to see how the Agency should proceed with the donation of these instruments and then what the future might hold for a not-for-profit entity giving these away to teachers. Need to check into licensing/chain of custody. Have used 300 in a year, but if we don't take them now, they won't be available later. A&M is storing some now, and Chris Maxwell will investigate availability at ADIT.

HPS Award Nominations—HPS will not tell us if our nominees have been selected until the candidates have been notified. Selections probably have been made, but not all selectees have been notified and/or have accepted the awards, so HPS does not want to make premature announcements.

2003 *Mid-Year Topical Symposium*—Decision has been made to hold the 2003 Mid-Year Topical Symposium in San Antonio at the Hyatt on the Riverwalk (\$138 plus tax per night), January 19–22, 2003, with overflow and government rooms at La Quinta.

Five-Week Basic HP Course—Recognizing the critical importance of maintaining a staff technically capable of providing expert service to Bureau of Radiation Control (BRC) customers, the Texas Radiation Advisory Board influenced Texas A&M University to offer a custom-designed, cost-effective, five-week Basic Health Physics course to persons assigned to BRC. This course is considered a basic qualification course by the U.S. Nuclear Regulatory Commission and is normally provided by the Oak Ridge Institute for Science and Education but at a price that has become too expensive to include in the BRC budget. Six highly motivated BRC central office junior staff members committed to attending the course. The course has two sessions—the first is a three-week session running from May 21, 2001, to June 8, 2001, and the second is a two-week session running from June 18, 2001, to June 29, 2001.

Keynote Address—Irradiated papaya is being served in conjunction with Dr. McClellan's presentation on food irradiation. Last night, in recognition of the theme of tomorrow's meeting, Doug Johnson prepared and ate an irradiated steak that had been stored unrefrigerated/unfrozen in an air-tight, sealed foil package for 13 years. He reported that the steak was fork-tender.

Treasurer's Report—Mike Charlton

Funds:

- Operating fund has \$26,621.
- Scholarship fund has total assets of \$59,845.
- New interest-bearing \$20,000 money market fund out of old operating fund that wasn't earning any interest.

The Treasurer requested that the STC Committee Chairperson submit a budget or estimated annual schedule of how many workshops will be conducted in the year and how much cost will be incurred. Then submit the budget to the President so that we can plan for the expenses. Have to understand estimates will be soft because we get money from other sources (HPS/A&M). Would like a list of where, how many, cost.

 A motion was made by Mr. Fogle to accept the report; the motion was seconded by Mr. Salsman. The motion was passed unanimously.

$\it Reimbursements:$

- \$28.90 to Ms. Jablonski for postage for STW mailings and letters.
- \$197 and \$203.50 for trophies, awards, plaques [Hermann Memorial Hospital Auxillary and the science fair].
- \$97.70 to Ms. Myers for postage for mailing membership renewals and ballots.
- \$18.32 to Mr. Fogle for supplies to support the Sweetwater STW.

- \$38.32 to Mr. Fogle for mailing STW letters of attendance/appreciation.
- \$59.94 to Mr. Fogle for CDs to support the Canadian Workshop.
- \$120.14 to Ms. Jablonski for a President's Plaque.
- \$587.50 to Mr. Sharp for reproduction of STC directory.

Motion made by Ms. Jablonski to pay bills from the operating fund made and seconded by Mr. Salsman. The motion was passed unanimously. Mr. Charlton reminded everyone that he has tax exempt forms that should be used by anyone making purchases for which reimbursement from STC is expected.

Secretary's Report—David Fogle (for Pete Myers)

Election Results:

President-Elect: Bob EmeryBoard Director: Jim SharpTreasurer-Elect: Ken Krieger

Standing Committee Reports.

Admissions—David Fogle (for Jim Sharp)

- Final membership for 2000–2001: 279
- Present membership for 2001–2002: 258

A motion was made by Susan Jablonski to accept 28 new members. The motion was seconded by Mr. Lewis. There being no discussion, President Hamilton called for a vote, and Ms. Jablonski's motion passed unanimously.

Program—Susan Jablonski

Reviewed agenda and discussed details of the meeting.

Next meeting will be in Cleveland being planned by President-Elect Emery June 12, 2001.

Non-ionizing radiation meeting date is still open (August 4, 11, 18; leaning toward 10–11); will be at Brooks AFB in the research park. Really need to have EC members reach out to potential attendees who do not typically attend our meetings.

Bob Emery will be developing the programs for subsequent meetings. Talked about doing a medical meeting in Galveston at Moody Gardens for the Fall STC Meeting.

Public Relations—David Fogle (for Karen Myers)

HPS Newsletter articles:

- "Houston, We Have a Problem ..." by Susan Jablonski published in February 2001.
- "Science Teacher Workshop Presented at CAST 2000" by John Salsman published in March 2000.
- "Chapter Returns to Riverwalk Venue with Successful Winter Meeting" by Susan Jablonski published in May 2001.

The Billet articles published April 2001:

- "Mentoring Pilot Program: A Success" by Ken Krieger.
- "Four STC Science Teacher Workshops Completed in One Year!" by David Fogle.
- "Chapter Returns to Riverwalk Venue with Successful Winter Meeting" by Susan Jablonski.
- "Health Physics in the High School" by David Hearnsberger.
- "Use of Risk Information in the Nuclear Materials Regulatory Process" by Pete Myers.
- "FDA's CFR 179.45 Amended to Include Irradiation of Prepackaged Foods by X-radiation and Electron Beam Energy Sources" by Pete Myers.

Web site coordination—Transferred winter meeting photos & mentor/protegé photos to Robert Ludlum for uploading to the STC web site.

Nominations—Janet McCrary

- · Pending HPS national awardees
- STC 2001–2002 elections complete.
 - President-Elect: Roy Craft & Bob Emery
 - Treasurer-Elect: Ken Krieger & Amy Orders
 - Board Director: Jim Sharp & Mary Van Baalen

Results from the National HPS nominations awards have not been announced yet and will be reported to the next EC meeting. Results from other nominations previously noted will also be announced when the information is available.

Appointed Committee Reports

Affiliate Membership—Ian Hamilton (no report) *Legislation*—Bob Wilson

Bills

- Discussed legislation on waste management Senate Bill 1541.
 Representative Gallegos' bill talks about doing away with the designation of Hudspeth County as the low-level radioactive waste disposal site. Passed through the house pending Senate Natural Resources Committee.
- House Bill 1099, BRC Clean-up Bill, passed the house.
- Senate Bill 1338, Oil and Gas NORM Bill, is innocuous.
- House Bill 319, Laser Bill, is out of committee but probably not going anywhere. Would make pointing a laser at a uniformed police officer a Class A misdemeanor.
- Representative Walker's bill is still in committee.

Compact Waste

 May require special session, and it may take 3 years for rules to be written (involves risk analysis). Requirement to follow the La Paz agreement could be interpreted as not allowing licensed user of radioactive material within 100 km of the Rio Grande River.

Publications—Ms. Jablonski (for John Hageman)

Current deadline for the next issue of *The Billet*, tentatively, is June 8, 2001.

Student Assistance—Linda Morris

Five Science Fairs—At the next meeting will propose a plan for giving:

- more than one award set to Teams (Plaques & Nuclide Chart).
- Junior and Senior awards at each Fair (hard to judge HS vs MS).
 Would be helpful to propose a budget for each year.

Education Grant Requests—May 21, 2001, is deadline for submission of education grant requests that will be awarded at the August meeting. Applications were passed out the previous two meetings, and applications are available on STC's website.

TSTC—Article in the TSTC newspaper on TSTC students participating in STC activities. Thanked President Hamilton for presentation at TSTC on nuclear terrorism. Thanked Ms. Jablonski and Mr. Fogle for attending the TSTC graduation. Never had STC representation at graduation ceremonies.

Science Teacher Workshop—David Fogle

Thanks to President Hamilton and President-Elect Jablonski for already briefing the Committee on several STW activities:

- HPS efforts providing money to participate in the Canadian program
- HPS STW workshop conducted Monday night
- CAST 2001

STW in Spring, Texas. (June 13)—One-day teacher conference with three consecutive breakouts for a total of five hours. Frank Iddings, Jim Lewis, Janet McCrary, and Stacy Krieger are preparing for 40 attendees.

Mr. Fogle gave a presentation at the University of North Texas on/about April 18, 2001, on STC's STWs to the southwest division of the American Association for Advancement of Science.

Beginning to talk about conducting an STW in Beaumont. President Hamilton reported that the Beaumont STW has fallen through due to time constraints imposed by the coordinator of that event in Beaumont.

Total of four STWs this year. Demonstrations are really getting good. Additional cost to STC has been zero (e.g., Memorial Hermann Hospital Auxillary contributed \$500, paid for box lunches). Mr. Fogle is requesting that a Chapter officer attend the next Auxillary meeting, May 9, 2001, to award the Auxilary a plaque thanking them for the past several years of supporting our educational mission.

Old Business

RSO Navigator—Ian Hamilton

Lined up server space and student programming talent. Have given some files to the student programmers to upload, but waiting for persons to volunteer to write more portions of the Navigator before asking student programmers to do any work.

Talked about getting legal opinion on possible liability we might encur if someone believes we gave them bad advice.

Mentoring Program—Ken Krieger

Will not have mentors/protegés for each meeting as the formats for some meetings do not work well for mentor/protegé activities (e.g., student research paper competition). Might want to do it once a year at the Affiliates meeting.

Texas Environmental Education Partnership Funding Board—David Fogle.

Provided presentation to the Board requesting designation as a Partner so we might be able to get money to support STC STW activities. One Board member asked to review the lesson plans. Her initial response was that everything looked great. Waiting for formal designation as a partner.

New Business

Susan Jablonski—Next meeting will be in August (4, 11, or 18), in San Antonio, with the theme being non-ionizing radiation safety. Date depends on availability of facilities at Brooks AFB. Thanked Stacy Krieger for the work she's done thus far in organizing the meeting and asked Ms. Krieger to continue working with President-Elect Emery. Mike Charlton—New \$20,000 Money Market Fund.

- Expect to earn around \$400 interest per year. Periodically, might want to put more money from the operating fund or additional donations into the money market fund so we can get its balance above \$35,000 where we would earn more interest.
- · Proposed using it for STWs.
- Should wait for the STC Financial Plan Ad Hoc Committee to make their recommendations.

New 2001–2002 Officers and Committee Chairpersons

 Election was very close, recount conducted to avoid "hanging chad" allegations. (See page 7).

Adjournment

President Hamilton adjourned the meeting at 8:00 pm. ◆

New Officers and Chairpersons

Pete Myers

Fellow STC Members and Friends:

The ballots you cast have been counted, and congratulations are in order for those you elected:

STC's Officers and Directors for 2001-2002 are:

President: Susan Jablonski Treasurer-Elect: Ken Krieger President-Elect: Jim Lewis Bob Emery Board Director: Past President: Ian Hamilton Board Director: Chris Maxwell Pete Myers Secretary: Board Director: Jim Sharp

Treasurer: Mike Charlton

President Jablonski has named the following persons to serve as STC Committee Chairpersons:

Admissions: David Fogle **Publications:** John Salsman Rob O'Donel Editor of The Billet: John Hageman Affiliates: Bob Wilson Public Relations: Karen Myers Legislation: Nominating: Janet McCrarv Teacher Workshops: Ian Hamilton Program: President-Elect Bob Emery Student Assistance: Linda Morris

Please join me in wishing them good fortune as they serve the Chapter & HPS throughout the year.

The 2001 ANS/HPS Student Conference at Texas A&M University

Submitted by Donald Todd, Student Conference Cochair

exas A&M University recently played host to a nation-wide joint American Nuclear Society (ANS) and Health Physics Society (HPS) 2001 Student Conference in College Station, Texas. The event, planned and organized by students of Texas A&M University's Department of Nuclear Engineering, was for all students and young engineers in the Nuclear and Radiation Sciences. The conference was enormously successful, with 330 students attending from across the U.S. and around the world.

This is the first time a student conference has been designed to appeal to both ANS and HPS student members. The joint effort was greatly enhanced by the presence of the Presidents of both national societies. ANS President James Lake and HPS President Paul Rowher cohosted a special panel session on the "Linear No-Threshold Hypothesis." During this session, the latest research into the topic of radiation effects, and the implications of this research were discussed. The panel members were:

- James Lake, ANS President
- Paul Rowher, HPS President
- Antone Brooks, Washington State University
- Kenneth Mossman, Arizona State University
- Les Braby, Texas A&M University

Approximately 45 health physics students attended the conference. Twenty technical papers were presented in the Health and Medical Physics Track; the best paper in the track being presented by H. Omar Wooten of Georgia Institute of Technology. His paper was entitled "Post Decontamination and Decommissioning Dose Rates at the Georgia Tech Research Reactor."

The career fair associated with the conference boasted 24 corporate participants, most of which were interested in speaking with health physics students about possible employment opportunities. With the reinvigoration of interest in nuclear energy within the United States, the utility representatives recognize the need for young health physics specialists.

The generous contribution made by the South Texas Chapter of the Health Physics Society has been used as award money for Omar and the other three session winners in the Health and Medical Physics Track. The organizing committee of the 2001 ANS/HPS Student Conference would like to thank the chapter for their contribution.

For more information about the conference, please visit the conference website at: http://ans.tamu.edu/conference/

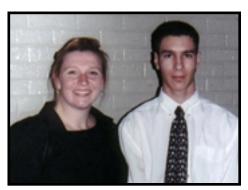
IRRADIATION OF ANIMAL FEED

DA today approved a food additive petition for an irradiation process that can be used on all animal feed and feed ingredients, including pet treats, as a means of reducing the risk of Salmonella contamination. This procedure is intended to reduce the foodborne pathogens that may be present in these feeds.

Irradiation is a process whereby products are exposed to sources of ionizing radiation that cause chemical, not nuclear, changes similar to other conventional cooking or preservation methods. It has been approved for use on a variety of human foods. Extending this process to animal feed and feed ingredients will not only increase the safety of the feed for the animals consuming it, but to people who handle animal feed and feed ingredients as well. Irradiation is a useful tool for reducing disease risk. Irradiation treatment complements, but does not replace, the need for proper food handling practices in the production, processing, and handling of animal feed and pet foods, including treats. Pet owners need to practice safe food handling practices after handling pet treats, including washing hands thoroughly in warm water and soap after any contact. The petition was filed by Sterigenics International, of Fremont, California. •

STC Presents Awards at Regional Science Fairs

Linda Morris



Susan Jablonski, STC President, and Douglas Wyatt, award winner.

■he STC-HPS increased its presence at regional science and engineering fairs in Texas from two last year, to five in 2001. The Austin Area Fair and Festival was held February 8–10, 2001, in the Austin Convention Center. STC members Susan Jablonski and David Fogle judged the fair, and awarded Douglas Wyatt the STC plaque and Chart of the Nuclides. Douglas is a student at Connally High School in Austin.

The Brazos Valley Regional Science and Engineering Fair was held at Texas A&M University on March 19–20, 2001. STC member John Salsman presented the award to Joshua Towns, a senior at Navasota High School. His project was entitled "Perishable Food Preservation Via Nuclear Irradiation: A Second-Year Study."

A few days later, the Science Engineering Fair of Houston was judged by Ken Krieger and Janet McCrary. The STC plaque went to Jacqueline Pinsky of Houston for a Senior Division project. Jacqueline's project studied cosmic radiation and its impact on the space shuttle. The Chart of the Nuclides Junior Division prize went to Michael Blunk. Michael's project was entitled "Electromagnetic Bacteria."

The Alamo Regional Science and Engineering Fair took place

March 22–24, 2001, in San Antonio. John Hageman judged this fair and awarded two student projects. Patrick Sung Cuadrado and Diego Calderon, both of John Marshall High School, won STC plaques and charts. Their project examined the effects of massive radiation doses on bacterial colonies. Both students were very familiar with

what ionizing radiation is and its risks and benefits. Patrick referred to it as a "double-edged sword" in relationship to cancer (in that radiation has both a risk to cause cancer and has a proven record to cure cancer).

The Central
Texas Science and
Engineering Fair
also was held on
March 22–24,
2001. The event,
which took place
in Baylor
University's
Ferrell Center in
Waco, resulted in
a team project

receiving the STC award.
St. Louis School students Scott
Karban and Rafael Perez
received the South Texas
Chapter award for their project
that described the effects of
magnetic fields on gender
selection in Drosophila.

Douglas Wyatt and Jacqueline Pinsky elected to join the South Texas Chapter. They both received complementary memberships.

All of our science fair judges reported that they enjoyed this experience, and several have already signed up to judge next year's fairs.

If you would like to know more about this STC health physics educational outreach program, please contact Committee Chair Linda Morris at (254) 867-2952 or Lmorris@tstc.edu. The STC thanks all of our judges. ◆



Douglas Wyatt of Austin receives the Science Fair award.

South Texas Chapter LONGEST STANDING, CONTINUOUSLY ACTIVE MEMBER

By Karen Myers, Public Relations Committee

outh Texas Chapter (STC) has selected Linda Morris, a Chapter Member since 1972, to highlight as its next longest-standing, continuously active member.

Linda was born in William Beaumont Army Medical Hospital at Fort Bliss, near El Paso, while her dad was in the Air Force and stationed at Fort Bliss. One of her father's subsequent duty assignments was at Tachikawa Air Force Base, 20 miles west of Tokyo, Japan. When asked what sparked her interest in health physics, Linda replied, "I ask myself now if my interest in health physics came by viewing, first hand, the effects of radiation on the Japanese bomb survivors."

Linda's father retired in Beaumont, Texas, where Linda's mother's family lived. Linda graduated from Beaumont High School and went on to obtain a Bachelor of Science in biology from Lamar University in Beaumont. It was at Lamar where she became aware of health physics as a profession while taking a radiochemistry course from a favorite professor, Dr. Harold Baker. "Our class went to the Nuclear Science Center (NSC) at Texas A&M University (TAMU) to perform a neutron activation experiment. There were signs posted around the NSC with cryptic references to 'health physics.' It sounded kind of interesting. I inquired and entered the TAMU health physics graduate program the

next fall. I certainly enjoyed my time at TAMU and am very proud to share the Aggie heritage with many other STC members. It was also health physics that played a role in my love life. The secretary in the Radiological Safety Office arranged a blind date with a fellow graduate in her husband's department. That blind date led to marriage to my

husband Brock several months later." Linda and Brock have been married almost 28 years.

Current STC member Dr. Robert Perry hired Linda for her first position at the University of Texas Medical Branch (UTMB) in Galveston. She was the first health physicist to work there. At the time, radiation safety was positioned under the Department of Radiology. "I credit Dr. Perry with my training in medical health physics. Also, it was during this time that I became more active in the STC although I had joined as a student." It was during this time that Linda served as STC secretary. When asked to reflect on the STC back in the early days, Linda responded with, "the South Texas Chapter during the late seventies was an enthusiastic organization. I use the term 'organization' loosely for we were not all that organized compared to



today! We sponsored an annual meeting in Houston at the old Shamrock Hilton Hotel. Yes, there was a water-skiing show in the oversized swimming pool, and no, I did not attend the infamous 'Hippy Hollow' STC meeting in Austin." A couple of other anecdotes have been provided by Linda's good friends, Ruth McBurney and Cathy Clark. Ruth recalled the following when she, Christy Shriver, and Linda worked together at the Midvear Meeting at San Antonio in 1988. When the Local Arrangements Committee was through, the three of them made Xeroxs of their faces. Ruth remembered that "the one of Linda was especially good." Those images are out there somewhere. Cathy recalled another photo of Linda's early years taken while working for Dr. Perry at UTMB. Linda, Cathy, and their secretary Donzelle were known as

Dr. Perry's girls. "Charlie's Angels" was very popular at the time, and so the three of them got dressed in long dresses for the photo that would eventually be given to Dr. Perry. Linda became Farrah (aka Jill), Cathy became Kate (aka Brie) and Donzelle became Jaclyn (aka Kelly). The title of the picture was "Perry's Angels." Dr. Perry loved the photo and probably has it to this day.

In 1978, Linda's husband Brock, who completed a medical residency at UTMB, joined a practice in El Paso. Linda was fortunate to develop a radiation safety program at the University of Texas at El Paso. She also began a medical health physics consulting practice with Dr. Perry for the El Paso region. She served as STC president-elect and president while living there. "It was not exactly South Texas, but..."

In 1984, the Morris family moved to Central Texas to be closer to their families. Linda's health physics activities included the preparation of an academic radioactive waste monograph for the Texas Low-Level Radioactive Waste Disposal Authority and joining the faculty of Texas State Technical Institute (now TSTC) in 1987. Her plan was to teach in the Nuclear Technology program for one quarter until another instructor could be hired. She has enjoyed teaching so much that she is still there thirteen years later! "Sharing my

Continued on p. 13.

Hosting the 2003 Midyear Meeting

John P. Hageman

he location and time for the Health Physics
Society's 2003 Midyear
Meeting was finally decided
on May 4, 2001. The city of choice for this meeting is San
Antonio, and the lead hotel
will be the Hyatt Regency on
the Riverwalk. The Technical
Sessions of the Midyear
Meeting will start Sunday,
January 19, 2003, and will
end Thursday, January 23.

Well, this is good news and bad news. The good news is that the South Texas Chapter of the Health Physics Society will host the 2003 Midyear Meeting of the HPS. The bad news is that the South Texas Chapter of the Health Physics Society will host the 2003 Midyear Meeting of the HPS. Why is this both good news and bad news?

GOOD NEWS

(These are listed as the "top-ten" reasons why this is good news, in some sort of nonrandom yet arbitrary order. Thanks David L.)

10. The time to worry about the impending meeting date is short—one year to worry.

(Alfred: "What, me worry? Dundee: "No worries.")

- **9.** The stimulation of hosting a Midyear HPS Meeting will make the South Texas Chapter grow stronger (if it doesn't kill you, you will be stronger).
- **8.** The STC gets to once again show the nation what a fantastic chapter it is, no brag—just fact.
- 7. Jim Lewis will help cochair the Local Arrangements Committee. With Jim Lewis as Cochair of the Local Arrangements Committee,

you will interact less than with the guy who was the Chair of the Local Arrangements Committee last time (you know that slave-driver from SwRI). Who was that person anyway?

- **6.** The cost to attend a Midyear Meeting in South Texas is much less expensive for STC members—no plane fare.
- **5.** All of the STC members have a chance to GET INVOLVED!
- **4.** The STC gets funding and funds to host a Midyear Meeting.
- **3.** We've done it before, and we know how to do it better than anyone does.
- **2.** We can show the attendees a great time with our Texas hospitality.
- **1.** The work we do is fun and fulfilling. Ask anyone who helped with hosting the previous Annual or the Midyear Meetings in San Antonio.

BAD NEWS

If you think "work" is a four-letter word, its bad news. There is no other bad news.

Negotiations with the only three hotels in San Antonio that could house the HPS Midyear Meeting were interesting. These hotels each had their own advantages and disadvantages that lead (Pb) to the final agreement to select the Hyatt as the lead (not-Pb) hotel. (When Hamlet shivered he said, "To pBE or not to pBE, that is the question.") San Antonio's newest hotel, the Adams Mark, had the meeting space and offered a very attractive convention room rate for the HPS. However, the vendor area was located in a large ballroom that was accessible only by going down an elevator to the basement level and then walking about one city block down a dog-leg hallway, under the street. The rooms for all the other meeting activities were located on the second floor of the hotel. Moving all the attendees to the vendor area for breaks, lunch, and to visit the exhibitors' booths seemed to be a formidable task. Also, the hotel only had four very small suites, and the vendors who host in-suite receptions would be out of luck.

The STC is keenly aware of the needs and desires of the vendors, and this meeting-room arrangement seemed to place an unfair burden on them. The Adams Mark is a fine hotel and can house a large number of meetings, however it did not seem to best meet the needs of the HPS, especially its affiliate vendors.

The second hotel was the Marriott. The largest of the two cojoined hotels, the lead hotel for the 1997 Annual Meeting of the HPS, could have housed all the attendees and the required meeting/ exhibitor space; however, this hotel was booked for all of early 2003. The smaller Marriott could house all the attendees, but they didn't have the needed meeting/exhibitor space. They offered to join with the San Antonio's Convention Center to host our meeting. But the rate that the hotel wanted for rooms and the huge added costs for renting the Convention Center was too high for the Society and its members.

The best deal was struck with the Hyatt Regency, which had the required meeting space and sleeping rooms/suites, all under one roof. The Hyatt is the hotel that has a large open ivy-draped center with glass elevators. The hotel looks like the Riverwalk flows through its lobby and the street side faces the Alamo. What a great location! The Hyatt first offered a bargain room rate for a meeting to be held January 8-12, 2003. This is a Wednesday through Sunday meeting format, which is different from the normal Sunday through Thursday meeting time frame.

The HPS Board of Directors asked for the normal (M-Th) meeting format and a good room rate. The Hyatt countered with a rate that was about 40 percent higher than their earlier offer, and one that was about \$30 per room per night higher than the Society's last two Midyear Meetings. This is when Sue Burk entered the picture. She skillfully negotiated just the right room rate for just the right meeting time and got all the nitty-gritty details worked out with the hotel. This negotiation took place just before the STC Meeting at Texas A&M. I couldn't attend this meeting, so Ian Hamilton was the bearer of the good news/bad news to the Chapter's members.

I look forward to the STC hosting the 2003 Midyear Meeting of the HPS, and I look forward to working with the gracious and energetic STC members. Our fun-loving and hard-working spirits make any job that the STC does a true pleasure.

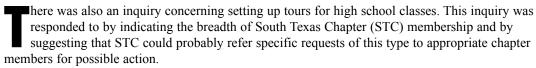
STW Program Papers Presented

Al Evans & David Fogle

Two informative presentations on South Texas Chapter Science Teacher Workshops (STW)

n March 3, 2001, at a joint meeting of the Texas Sections of the American Physical Society and the American Association of Physics Teachers held at Sam Houston State University, Huntsville, Al Evans gave a twelve-minute presentation entitled "The Health Physics Society Science Teacher Workshops." The presentation covered the motivation for and the history of the workshops, a summary of the course content, and the means for contacting the South Texas Chapter–Health Physics Society to arrange for a workshop to be held in one's community.

The two-day meeting was attended by about 50 people, split about half and half between university and secondary-school faculty members. Considerable interest was shown towards the Workshop program. Three high school science teachers asked for business cards and expressed intent to propose a workshop for their schools.



On March 26, 2001, Past-President David Fogle gave a presentation entitled "Radiation and Health: Fact-Based Education About Radiation" before the Southwestern and Mountain Divisions of the American Association for the Advancement of Science during that group's annual meeting on the campus of the University of North Texas at Denton, Texas. The half-hour presentation included an overview and the purpose of the STC's Science Teacher Workshop program, description of the two initiatives sponsored by the Health Physics Society directed at public education about radiation, examples of the products provided by national HPS and the STC, and a thorough examination of the advantages of attending a STC Science Teacher Workshop.

Much interest in the STC program was generated and all comments about the presentation and program were positive. Discussion after the presentation focused on the STC's initiative to provide fact-based education and science fair participation throughout the South Texas region. ◆

Texas Houses Differ on LLRW License Policy

This article is reprinted with permission from the National Conference of State Legislatures' April 2001 Issue of Radioactive Waste News.

ommittees within the Texas Senate and the House of Representatives have reached different conclusions about how the state should license a low-level radioactive waste (LLRW) disposal facility. Both committees agree the State needs to meet its waste management

and disposal obligation to the Texas-Maine-Vermont compact, but the houses are split on how to meet this obligation. The Senate committee recommends that only one site be developed and that the Legislature allow a private company to be licensed to operate the facility. The House committee counters that the state must hold the facility's license. Current State law mandates that the state hold title to the disposal facility. The House suggests that a

private company could manage the facility, but that the State must maintain long-term responsibility for the facility. Both committees support the assured isolation concept, with eventual conversion to permanent disposal, as one option for the facility. Meanwhile, Envirocare of Texas has decided to halt efforts to site a low-level radioactive waste disposal facility. •

National Conference Held in College Station

Local Boy Makes Good

Douglas "A" Johnson

exas A&M University will host the 48th Annual Campus Safety, Health and Environmental Management Association (CSHEMA) Conference in College Station on July 8–12. CSHEMA is a national organization of safety professionals who participate in training, presentations, and round-table discussions on issues from "sick building syndrome" to ionizing and laser safety programs.

This year, our own John White, RSO and LSO at the University of Texas in Austin, will lead a presentation on laser safety. John was careful to ensure the program reflected a proper attribution. He said, "Since my name is so simple, I request you use my middle initial on all published items, so the reference is John C. White."

So STC, remember...

The name is simple,
But the man complex.
This John's well known,
Can't call him "X".
But since complex,
How can it be?
He shall be known,
By the letter "C"! ◆

Bush Proposes Irradiated Beef in School Lunches

The following was extracted (shortened and reformatted) from an article by Marian Burros, New York Times News Service, April 5, 2001.

he Bush administration has proposed dropping testing for salmonella in ground beef for the school lunch program ordered by the Clinton administration in June 2000, instead bolstering requirements for beef packing house cleanliness and allowing schools to serve beef that has been irradiated—a procedure that kills salmonella and all other harmful bacteria.

The Clinton administration ordered salmonella tests and met fierce opposition from the meat industry, which complained that the tests were not scientific and were burdensome. The industry has since lobbied to scrap them.

Dr. Ken Clayton, acting administrator of the Agriculture Department's Agricultural Marketing Service, said the Clinton-ordered salmonella testing program does not ensure that schools get the safest possible food. In place of testing for salmonella, he

said, the agency will implement a system to weed out suppliers who do not meet cleanliness standards. With two exceptions, the standards he outlined are those that already exist for a plan to receive the Agriculture Department's seal of approval. The agency will require a second antimicrobial step at slaughterhouses, such as an acid rinse, for plants that want to sell ground beef to the school lunch program. In addition, grinders that do not meet the standards for cleanliness a certain percentage of the time will not be allowed to supply the school lunch program and other federal feeding programs.

A final decision on the Agriculture Department proposal must be in place before July, in time for the beginning of the buying season for the new school year.

Carol Tucker Foreman, director of the Food Policy Institute of the Consumer Federation of America and an Agriculture Department official in the Carter administration, said that by eliminating the salmonella testing program neither federal inspectors nor suppliers will test for a potentially deadly pathogen in meat going to millions of school-children nationwide. Foreman said that she does not object to the additions to the safety standards but that the agency must continue to check for salmonella. "They caught 5 million pounds of meat that had salmonella in it last year that they wouldn't have caught, and they won't catch it next year," she said.

Sen. Richard J. Durbin, D-Ill., a member of the Senate Appropriations Committee's agriculture subcommittee, criticized the change and threatened congressional action.

Clayton said he doesn't know how many companies would choose to irradiate their ground beef. Critics say the process is the easy way to sterilize harmful bacteria but does nothing to improve the safety standards of the meat processor.

It would be up to the schools to notify parents if they plan to serve irradiated hamburgers.

Irradiation shatters the genetic material of bacteria.

killing them. Scientists say the process leaves no residual radioactivity.

The government began allowing irradiation of beef a year ago, but relatively little has been produced, in part because of doubts about whether consumers will accept it.

Even though cooking and irradiation would destroy salmonella, mishandling even of irradiated food can cause the reintroduction of harmful bacteria. And improperly handled raw beef can cross-contaminate raw food with which it comes in contact.

Salmonella causes 1.4 million illnesses and 600 deaths a year, according to the Centers for Disease Control and Prevention.

The Agriculture Department would continue daily testing for deadly E. coli 0157H:7, except in products that had been irradiated. It would also test for generic 'E. coli,' which in itself is not harmful but indicates the presence of fecal contamination. Still, it does not necessarily signal the presence of salmonella. ◆

Date	Location	Topic
August 3, 10, & 11	Brooks Air Force Base, San Antonio, TX	Regulatory Issues of Non-Ionizing Radiation, Lasers, and Such
November 9 & 10	Moody Gardens near Galveston	TBD

Summary of 2001 Texas Legislature

Bob Wilson, Legislation Committee Chair

f all the bills introduced dealing with legislation, when the announcement of *sine die* was made to close the session, only two had passed.

There was a total of 13 bills introduced that had something to do with radiation. Ten of those concerned some aspect of radioactive waste. Neither of the bills that passed directly concerned radioactive waste.

HB 1099 passed. The bill was introduced by Representative Chisum and was the "clean-up" bill that tweaked various parts of the State's statutes that deal with the regulation of radioactive materials. Many of its provisions had been recommended by the Radiation Advisory Board in the last session in 1999, but that bill failed in the last days of the session. Some of its provisions may result in work on some rule changes in the fall:

- Requirements for increased demonstration of financial responsibility
- Collection of a 5% surcharge on normal fees to develop a "pot" of between \$350,000 and \$500,000 so that there are monies in the Radiation and Perpetual Care Fund to be used for those rare incidents when there is radioactive contamination discovered, and the State needs to step in to protect public health and safety
- Clarification of how penalties are to be credited within the State's financial system
- Authorization of certain expenditures from the Fund
- Authorization of the collection of administrative penalties
- Allows the Board to adopt rules establishing the frequency

of inspections of mammography programs.

If you would like to have a copy of the bill so you can be aware of all of its provisions, it can be accessed over the Internet from the Texas Legislature Online site www.capitol.state.tx.us, or you can contact me at (512) 495-6012 by voice or (512) 495-6093 by fax.

Senate Bill 1338 also passed. This bill allows the Railroad Commission of Texas to pass rules requiring an owner or operator of oil and gas equipment used in the exploration, production, or disposal to determine whether the equipment contains or is contaminated with oil and gas NORM. Although the statute is permissive and does not mandate that the Commission pass rules, the statute may serve as an incentive to spur operators to survey their equipment before transferring it, even in the absence of rulemaking. A copy of this bill can also be obtained through either the Texas Legislature Online Site or by contacting me.

Of those bills that did not pass, the only one not related to radioactive waste was HB 319. It was introduced to create a criminal penalty for pointing a laser at a peace officer.

Of the ten waste-related bills that failed, almost all of the "action" was connected with SB 1541. It was introduced by Senator Duncan. In Committee hearings in the Senate, Senator Bivins added amendments that expanded the bill beyond one that concerned just Texas' obligations under the Compact to allow DOE

waste to be taken to a site that would have been established in Andrews County on a tract immediately adjacent to the Compact site. It would have also authorized issuing a waste disposal license to a private entity/operator. Most of the provisions from many of the other radioactive waste bills that had been introduced found their way into language in what passed out of the Senate in this bill.

The debate on the Senate floor produced some of the most intense drama in the Session. There were calls from the gallery that led the Senators to close the gallery to the public. Four persons were arrested for creating disturbances. During the debate, there were some interesting amendments. For example, one of the amendments gave recognition to the LaPaz Agreement by prohibiting the location of the facility within 100 kilometers of the border between Texas and Mexico. Actually, the La Paz Agreement was modified further when the drainage basins of the Rivers flowing into the River, which serves as the border between Texas and Mexico, were also added to the bill as being off limits. The argument made for the inclusion of a site for DOE materials was that the site would not be fiscally sound taking just Compact waste.

The bill made it out of the Senate and through the House, although there were additional amendments to the Senate version as it went through the Environmental Regulation Committee in the House. However, when the bill

reached the Committee to be scheduled for floor action in the House, it did not have enough votes in the Committee. That meant that it died.

The question now is: what is Texas going to do about its obligations under the Low-Level Waste Compact? Stay tuned. ◆

Longest Standing Continued from p. 9.

passion for health physics through teaching has been a wonderful experience, and it has led to my present position in the STC: Student Assistance Chair. My membership in STC also provided me with the opportunity to travel to Halifax, Nova Scotia, to present a 'Science Teacher Workshop' in May. It has been my great pleasure that, even though I have lived in a number of cities in Texas, I have always been able to retain my membership in STC-HPS.'

Linda and Brock have two children (no longer kids). Jenny just completed her first year in medical school (at TAMU med school, of course), and, after a tour in the Army, Seth will return to TAMU in the spring as a college sophomore. Linda enjoys traveling, cooking, and health physics. She also enjoys serving on the Board of Directors of the Central Texas Science and Engineering Fair, the League of Women Voters Education Committee, the McLennan County Aggie Mom's Club, and she was recently named a TSTC 2001 "Woman of Courage and Wisdom" during the March National Womens' History month celebration. •

Exciting Times at Texas A&M University (TAMU)

Pete Myers

Something very, very exciting is happening at TAMU ... Dr. John Poston (STC '85) and Dr. Ian Hamilton (STC '93) have constructed and are presenting a 5-week Basic Health Physics course to 12 of the Texas Department of Health's Bureau of Radiation Control's (BRC's) technical staff.

The course is the culmination of the ideas and efforts of many, but it all started with Richard Ratliff, Chief, BRC (STC '72). In January 2000, Richard briefed the Texas Radiation Advisory Board (TRAB) on the difficulty BRC was having in providing its technical staff with an adequate amount of professional development training because of (1) the expense associated with sending staff to the Nuclear Regulatory Commission's (NRC's) courses (e.g., tuition, travel, and per diem) and (2) a travel cap imposed upon Texas Department of Health entities by the Texas Legislature. Dr. Dale Klein, Vice Chancellor, University of Texas System, and TRAB

Chairperson, identified the issue as an important one, assembled an ad hoc committee of the TRAB, and charged them with identifying ways by which training could be made

available to BRC's technical staff. Dr. Klein wrote letters to key members of the legislature and, with the ad hoc committee, went to the legislators' offices to discuss the issue with them directly.

Dr. Hamilton, Assistant Professor and Health Physics Program Director, TAMU, became aware of the issue when he was appointed as the Health Physics member of TRAB in July 2000. Because of Ian's position at TAMU, he immediately realized and suggested that some of the training could be provided by TAMU's Health Physics Program. With enthusiastic support from all, and by enrolling the critical involvement of nationally renowned Dr. John Poston, Professor of Health Physics and Nuclear Engineering at TAMU, Ian's suggestion quickly grew from conception to fruition as 12 highly motivated BRC staff members showed up for the first day of class on May 21, 2001.

The course curriculum is spread across 5 weeks, and

entails a thorough and intensive presentation of the principles of basic health physics, and is interspersed with laboratory periods and tours of state-ofthe-art facilities. Some of the basic topics in the course curriculum include:

- Nuclear and Atomic Physics
- Decay Kinetics
- Source-to-Receptor Geometries
- Radiation Interactions with Matter
- External Dosimetry
- **❖** Internal Dosimetry
- Radiation Health
- Regulations
- Reactors
- Medical Uses of Radiation
- Industrial Uses of Radiation
- ❖ Applied Health Physics
- Environmental Health Physics
- Waste Handling and Disposal

Successful completion of the course meets one of the NRC's critical criteria for qualifying NRC and Agreement State technical staff as being capable of performing their assigned tasks, and the students' understanding of basic health physics principles will allow all of BRC's customers to receive much more competent service in an ever-expanding range of uses of radiation and radiation types (e.g., positron-emission tomography).

Other persons at A&M providing important and active course support are Bob Berry, TAMU Nuclear Engineering Department Facilities' Coordinator (STC '98) and TAMU graduate research assistants Matt Arno (STC '00) and Alex Redd (STC '01).

BRC offers its most sincere gratitude to TAMU for providing this critically needed training. The training will benefit all the citizens of our great state as BRC continues its efforts to provide increasingly competent and timely service to all of its customers at a time when many senior staff are approaching retirement.

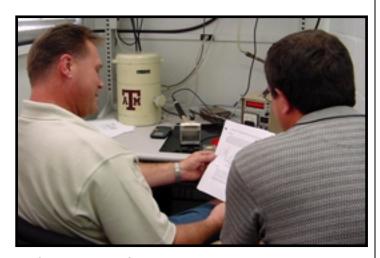


BRC students listening intently during the second week of the 5-week course.

BRC Chief Richard Ratliff (L) and TRAB Chairperson Dr. Dale Klein confer at a TRAB meeting.



Dr. Ian Hamilton (L) and Dr. John Poston Sr. pause outside a laboratory session.



Tim Schley (L) and Jerry Cogburn help one another while determining detector dead time.

Sound Science & Sound Public Policy

Submitted by Susan Jablonski, STC President

s public policy based on sound science an unattainable goal? As a health physicist or scientist, is there really a way to help channel peer-reviewed perspectives to the main stream of policy movers and shakers? There might be an answer: Find yourself "a champion" policy maker and hold on tight!



Friend of the South Texas

Chapter and Health Physics Society (HPS), Texas State Representative Warren Chisum approached the Heartland Institute and inquired if they would be interested in conveying source science about radioactive waste to their clientele. The Heartland Institute is a not-for-profit public policy research group focused on informational needs. Heartland customers are our nation's state and federal elected officials, journalists, and other interested members of business and the public. It's mission is to be the fastest, most convenient, most comprehensive, and most reliable source of public policy information for its customers. Currently, the Institute maintains a database containing more than 7,500 public policy documents for review.

With an acceptance from the Heartland Institute, articles on radiation health and radioactive waste topics were reviewed for relevant content and target audience. A group of articles authored by various members of the HPS where then submitted through Representative Chisum's office to the Institute. A message announcing the addition of this topical information went out to the thousands of subscribers to the "Hot Docs" service provided by the Institute. Special thanks to Dade Moeller, Dave LeMone, Margaret Maxey, Ted Rockwell, Michael Stabin, and Paul Frame for graciously allowing their articles to be filtered through Representative Chisum's office to the Institute's database. Very special thanks must be extended to Representative Chisum and Ms. Annette Glass for championing this effort of providing fact-based literature on this controversial and politically sensitive subject. •

Membership Application Form

To save space, the STC-HPS membership application form is not included in this issue of *The Billet*. If you are interested in applying for or renewing your membership, please refer to the application from the STC-HPS website. The URL is http://www.stc-hps.org/form2k.pdf.

Students Stand Out During STC Annual Meeting

Submitted by Karen Myers, Public Relations Chairperson

id you see South Texas Chapter (STC) Treasurer Mike Charlton proudly showing off his collection of Olympia Beer paraphernalia? Or newly elected STC President-Elect Bob Emery dressed in Holstein patterned cowboy regalia complete with chaps and a ten-gallon cowboy hat? If you did not attend the most recent STC meeting on May 5, 2001, at Texas A&M University (TAMU), you missed these amazing sights, but you also missed a great meeting.

The venue of the beautiful TAMU campus was bustling as students packed up their dorms to head home for the summer. But one last stop for some students was the Annual Meeting of the STC. The meeting got underway at 9:00 a.m. in the TAMU Memorial Student Center with a brief welcome and introduction by STC President-Elect (for the last day of her tenure) Susan Jablonski. The schedule of student presenters for the 2001 STC Annual Meeting was quite a stellar one. Seventeen students presented technical papers ranging from cosmic radiation detection to radioactive waste remediation activities.

The morning session student presenters included: Missy Reynolds and Gaby Lugo, TAMU, Occupational Uptake of Iodine-131 for Veterinary Applications; David Dodoo Amoo, The University of Texas at Austin, Dose and Risk Assessment in a Neutron Activation Analysis Facility; and Susrut Usgaonker and Laura Grady, TAMU, Radon Levels in On-Campus Student

Housing. Following the breakfast foods and coffee break, the student presentations continued with the following: Rachel Gorham, University of Texas Houston Health Science Center (UTH-HSC), Statistical Validation of a Methodology Used for Personnel Dosimetry Issuance Determinations; Matt Arno, TAMU,

Neutron Dose Analysis of a Pulsed Power Facility; and Krista Knox, Texas State Technical College (TSTC), FUDS Remediation Project at TSTC Radioactive Waste Site.

The day's luncheon featured a guest presentation by Mark McLellan, Ph.D., Director, TAMU Institute of Food Science and Engineering, who spoke to the audience about the newly acquired, joint venture, food irradiation facility coming to TAMU. Following the luncheon presentation, Dr. McLellan answered questions about the new venture and facility and provided an opportunity for all to get a glimpse of the original blueprints of the irradiation facility. The fare included sliced brisket, smoked chicken, barbecued ribs, smoked sausage, potato salad, coleslaw, fried okra, ranch-style beans, corn on the cob, jalapeño cornbread, french bread, butter, Texas pecan pie, peach cobbler, iced tea, and coffee. Following dessert, and for those still hungry enough, STC member Doug Johnson of TAMU passed out papaya



Just a few of those who received the free irradiated papayas ot the May 6, 2001, meeting in College Station, TX.

fruit treated by irradiation, compliments of the STC and Hawaii Pride.

Full from lunch, the STC returned to the meeting venue and continued to enjoy student presentations by Donald Halter (Professional Studentsorry Donny), TAMU, Metabolic Modeling of Plutonium in the Human Skeletal System; Bruce Brown, UTH-HSC, State of Washington Radiation Safety Program Outcomes as Indicated by the Results of Regulatory Compliance Inspections in 1999; and Sung-Woo Lee and Si Young Jang, TAMU, Electret Ion Chamber-Based Surface Contamination Check at the TAMU Nuclear Science Center. For those still after some sweets, the afternoon break included brownies and cookies, plus sodas and coffee. Following the break, the STC concluded the student presentations with the afternoon session: David Hearnsberger, TAMU, Fission Neutron/ Gamma Irradiation of Bacillus Thuringiensis Bacteria at the Texas A&M University

Nuclear Science Center Reactor; Rob Buchheit and Michael Pope, TAMU, Neutron Activation Analysis of an Unknown Mineral Sample; and last but not least, Eddie Horace and Tate Mueller, TAMU, Cosmic-Ray Count Variation due to Altitude.

Following the brief break, STC President Ian Hamilton called the business meeting of the STC to order and proceeded to give his "State of the Chapter" address in due form. Dr. Hamilton continued the meeting by updating the membership on current activities of the STC as reported during the previous night's Executive Council meeting. The winners of the Richard D. Neff Memorial Student Presentation Awards were then announced. (See related article on page 3.) Dr. Hamilton concluded the meeting by installing the new officers of the STC for 2001-2002: Bob Emery-President-Elect; Ken Krieger-Treasurer-Elect; and Jim Sharp, Board Director. •

Iowa Radon Lung Cancer Study

Dear Editor,

The October 12, 2000, edition of The Billet contained a copy of a July 28, 2000, letter written to the Honorable George W. Bush and signed by Dr. Dale E. Klein on behalf of the Texas Radiation Advisory Board (TRAB). In the letter, the TRAB recommended that the State of Texas challenge the EPA's proposed rules in the Safe Drinking Water Act regarding waterborne radon. As part of the justification for their position, the TRAB made misleading allegations about the Iowa Radon Lung Cancer Study.1 The Iowa Radon Lung Cancer Study was a large-scale case-control epidemiology study that found a statistically significant association between prolonged residential radon exposure and lung cancer. The study was performed in Iowa, and the participants were women throughout Iowa who lived in their current home for at least 20 years. The study was funded by the National Institute of Environmental Health Sciences.

The TRAB letter contains three erroneous allegations.

The first false allegation was that the Iowa Radon Lung Cancer Study was only able to establish statistical significance by omitting cases that died during the study period. In fact, the study did NOT omit cases that died during the study period. Analyses were performed on all cases as

well as on the subset of cases that were alive at time of interview. In addition, contrary to the statement above, the trend in risk (odds ratio) with increasing cumulative radon exposure was statistically significant for the categorical analyses for all the subjects. The trend analyses for the live subset were also statistically significant.

The second false allegation was that the study was only able to establish statistical significance by carving up the data into nonuniform intervals. In fact, the method used to divide subjects into five exposure categories was decided upon prior to analyzing any data. This included the decision to place 15% of the subjects in the highest exposure category so that there would be an adequate sample size for analysis. The cumulative radon Working Level Month (WLM) exposure categories were evenly spaced intervals.

The third false allegation was that the study was only able to establish statistical significance by poorly correcting for disparities in smoking histories between cases and controls. In fact, the study controlled for smoking at the level of the individual. Detailed individual smoking histories were obtained for all cases and controls. The cases' smoking histories do not need to match the smoking histories of the controls since the effect of smoking

can be adjusted for using standard statistical methods. Moreover, misclassification of smoking status would bias a study's findings toward no association in the majority of cases. In order to get a radon dose response relationship attributable to poor recall of smoking, the misclassification of smoking would have to correlate with radon exposure. In other words, individuals would have to independently know their radon concentrations in their home and increasingly underreport their smoking habits as the residential radon concentrations increase. Since most people in the study were unaware of the radon concentrations in their home at time of interview, that is a very unlikely scenario. Other papers supporting the methodologies used in the Iowa Study are listed below (2-8).

R. William Field Brian J. Smith College of Public Health N222 Oakdale Hall University of Iowa Iowa City, Iowa 52245 email: bill-field@uiowa.edu

Daniel J. Steck
Physics Department
St. John's University
Collegeville, MN 56321 ◆

References

- 1. Field, R.W., Steck, D.J., Smith, B.J., Brus, C.P., Neuberger, J.S., Fisher, E.F., Platz, C.E., Robinson, R.A., Woolson, R.F., and Lynch, C.F., Residential Radon Gas Exposure and Lung Cancer: The Iowa Radon Lung Cancer Study. *American Journal of Epidemiolog.* 151(11): 1091-1102, 2000.
- 2. Field, R.W., Steck, D.J., Lynch, C.F., Brus, C.P., Neuberger, J.S., Kross, B.C., Residential Radon-222 Exposure and Lung Cancer: Exposure Assessment Methodology. *Journal of Exposure Analysis and Environmental Epidemiology*. 6(2): 181-195, 1996.
- 3. Field, R.W., Smith, B.J., Brus, C.P., Lynch, C.F., Neuberger, J.S., and Steck, D.J., Retrospective Temporal and Spatial Mobility of Adult Iowa Women. *Risk Analysis: An International Journal*. 18(5): 575-584, 1998.
- 4. Fisher, E.F., Field, R.W., Smith, B.J., Lynch, C.F., Steck, D.J., and Neuberger, J.S., Spatial Variation of Residential Radon Concentrations: The Iowa Radon Lung Cancer Study. *Health Physics*. 75(5): 506-513, 1998.
- 5. Field, R.W., Lynch, C.F., Steck, D.J., and Fisher, E.F., Dosimetry Quality Assurance: The Iowa Residential Radon Lung Cancer Study. *Radiation Protection Dosimetry*. 78(4): 295-303, 1998.
- 6. Steck, D.J., Field, R.W., and Lynch, C.F., Exposure to Atmospheric Radon (222Rn) in Central North America. *Environmental Health Perspectives*. 107(2):123-127, 1999.
- 7. Field, R.W., Lynch, C.F., Steck, D.J., Smith, B.J., Brus, C.P., Neuberger, J.S., Woolson, R.F., Fisher, E.F., Platz, C.E., Robinson, R.A., Iowa Radon Lung Cancer Study. *Radiation Research*. 151:101-103, 1999.
- 8. Field, R.W., Steck, D.J., Smith, B.J., Brus, C.P., Neuberger, J.S., Fisher, E.F., and Lynch, C.F., The Iowa Radon Lung Cancer Study Phase I: Residential Radon Gas Exposure and Lung Cancer. *The Science of the Total Environment*. 272: 367-72, 2001.

South Texas Chapter of Health Physics Society, Inc. **Summer Meeting**

Understanding Non-Ionizing Radiation

Brooks Air Force Base San Antonio, Texas

Preconference tours of Brooks AFB facilities—Friday, August 10, 2001 Meeting and Technical Session—Saturday, August 11, 2001

he responsibilities of radiation safety professionals are no longer exclusively limited to the ionizing side of the electromagnetic spectrum. The prolific use of nonionizing radiation sources in the industrial, medical, and governmental sectors has resulted in the need for our profession to develop a better understanding of these radiation sources so that we can anticipate. recognize, evaluate, and

control any associated health risks. To fulfill this important training need, the August 11, a series of technical presentations will be provided, covering various

You will not want to miss this unique professional development opportunity!

STC HPS is dedicating its annual summer meeting to the topic of non-ionizing radiation. On Saturday, aspects of non-ionizing radiation safety. As a special added feature, a set of "behind the scenes" preconference tours have been scheduled for the afternoon of Friday, August 10.

An additional feature of this meeting will be a special professional enrichment session before the meeting begins for all registered attendees. The topic of this special session will be "Back to Basics Continuing Education Session: Non-Ionizing Radiation" presented by STC member, Doug Johnson.

CEUs awarded for LMP and MRT certifications*

*Based on evaluation of finalized agenda by TDH—Professional Licensure staff. STC-HPS members will be notified via e-mail of CEU amounts and affected certifications.

Preliminary Agenda

Friday, August 10

10:00 a.m. Executive Council Meeting, Brooks AFB, Building 180, Auditorium

1:00 – 4:00 p.m. Site Tour of Radiofrequency Radiation Branch, Brooks Air Force Base

Site Tour of Optical Radiation Branch, Brooks Air Force Base Site Tour of Armstrong Laboratory, Brooks Air Force Base (Meet at 1 p.m. at the entrance of Building 180 for Tours)

Please preregister for tours Attendees' names for tours need to be given to gate security prior to the date of tour

6:00 – 8:00 p.m. Reception, Ramada Emily Morgan Hotel—Downtown San Antonio,

Room TBA

Hors D'Oeuvres, Mini Burritos & Taquitos, Stuffed Jalapeno Peppers, Chicken Tenders, and Spicy Chicken Wings, Cash Bar for Beverages

Saturday, August 11

Technical Presentations

Brooks AFB, Building 180, Auditorium San Antonio, Texas

7:45 - 8:30 a.m.	Dook to Dosios	Continuing Education	Saccion: Man Ionis	ring Dadiction
1.4.) = 0)U a.III.	Dack to Dasies	COHUMUME FAUCATION	008810H. NOH-10H/	anie Kauianon

Doug Johnson, Texas A&M University

8:30 – 9:00 a.m. Registration

9:00 – 9:10 a.m. Welcome—STC President-Elect Robert Emery

9:10 – 10:00 a.m. Non-Ionizing Issues - Radiofrequency

Bruce Stuck, Brooks Air Force Base

10:00 – 10:30 a.m. Break—Coffee and Baked Pastries

10:30 – 11:20 a.m. Overview of Texas Non-Ionizing Regulations & Guidelines

Latischa Meritt, Texas Department of Health

11:30 – 1:10 p.m. Lunch with Distinguished Speaker

Bureau's Approach to Non-Ionizing Radiation Richard Ratliff, Texas Department of Health

Country Barbeque Buffet, Rudy's Bar-B-Q Brisket, Specially Blended Sausage, Ranch-Style Beans, Country-Style Potato Salad, Bread, and all the Fixings, Texas Pecan Pie, and Iced Tea

1:10 – 2:00 p.m. Industrial Hygiene Issues Associated with Lasers

Dr. James Rock, Texas A&M University American Industrial Hygiene Association

2:00 – 2:50 p.m. Non-Ionizing Radiation Instrumentation

Dave Baron, Holaday Instruments

2:50 – 3:10 p.m. Break—Canned Soda & Baked Goodies

3:10 – 4:00 p.m. Non-Ionizing Issues—EMF

Speaker To Be Announced

4:00 – 4:30 p.m. Business Meeting of the South Texas Chapter

Accommodations

Ramada Emily Morgan Hotel

705 E. Houston St. San Antonio, Texas

For Reservations: (210) 225-8486 http://www.emilymorganhotel.com /facilities.html

A block of rooms has been reserved for Friday, August 10, 2001, and Saturday, August 11, 2001, until July 27, 2001, under the name South Texas Chapter HPS. Room rates will be \$70 per night single or \$85 per night double occupancy. In order to secure these rates, you must call the reservation telephone number listed above and specify that you are with the South Texas Chapter HPS. After July 27, 2001, reservations will continue to be accepted based strictly on room availability; however, extension on the \$70 rate will be unavailable. Therefore, make your reservations early!

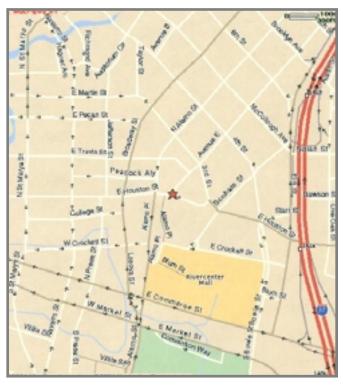
Ramada Emily Morgan Hotel Amenities

Executive Rooms and Suites *Available* ◆ *Courtyard Pool*, Whirlpool, Separate His & Her Sauna's ◆ Exercise Room ◆ Premium cable TV including HBO, CNN, and Nintendo ◆ In-room coffee makers, hair dryers, irons and ironing boards ◆ All rooms with voice mail and modem *capabilities* ◆ *Complimentary* hors d'oeuvres in Oasis Bar from $5:00 \ p.m. - 7:00 \ p.m.$ *Monday – Friday* ◆ *Yellow Rose* Café serves breakfast & lunch with a captivating view of the Alamo.

The Ramada Emily Morgan Hotel is steps from the historic Alamo, the Riverwalk, Rivercenter Mall, and a short stroll to the newly constructed Alamodome.

Maps & Directions





Map to Brooks Air Force Base

Map to Ramada Emily Morgan Hotel

Directions to Brooks AFB

From Houston take I-10 West to I-37 South *From Austin* take I-35 South; near downtown merge into I-37 South

From I-37 South, exit SE Military Drive and turn right, Brooks Air Force Base entrance is the first left past Goliad Rd. At the entrance, identify yourself and inform the guard you are with the South Texas Chapter HPS and one going to building 180. All persons driving vehicles into Brooks AFB should have

a valid driver's license and proof of insurance. Proceed to the Auditorium.

Directions to Hotel

From Houston take I-10 West to I-37 North, and exit E. Commerce.

From Austin take I-35 South, near downtown merge into I-37 South, and exit E. Commerce.

On E. Commerce Street going west (one-way street), after the Rivercenter Mall parking garage, turn right on Alamo Plaza, then left on E. Houston.

Parking at the Ramada is \$9 per day with unlimited in's and out's or \$5 one-time parking.



San Antonio Map

Registration

Please submit a registration form for each member or guest attending the meeting and mail to the address below.

Pre-Registration Form

2001 Summer Meeting, August 10 & 11, 2001 ◆ Brooks Air Force Base, San Antonio, Texas STC Registration Deadline—August 1, 2001 ◆ Hotel Registration Deadline—July 27, 2001

Attendee's Name			
Attendee's Address			
City	State	Zip	
PLEASE NOTE: It is imperative that you send civilian access to the Brooks AFB.	in a Pre-Registration Form to ensure	e attendance at this meeting due to limited	
All non-military personnel wishing to attend the T should arrive at the gate between 8:00 a.m. and 9:			
□ STC Member (technical session, site tours, reception, and lunch) - \$ 45 □ STC Member (technical session and site tours ONLY) - \$ 30* □ Non-STC Member (technical session, site tours, reception, and lunch) - \$ 55** □ Non-STC Member (technical session and site tours ONLY) - \$ 40*, ** □ Non-STC Member (lunch ONLY) - \$ 15		☐ I would like to be a Meeting Mentor ☐ I would like to have a Meeting Mentor (A Meeting Mentor assists a new attendee in meeting others and answering questions.)	
 □ Will attend technical session on Saturday, A □ Will attend site tours of Brooks AFB on Frie Social Security # 	day, August 10, 2001		
(Must include this information) ☐ Will attend reception on Friday, August 10,		☐ Need a receipt for this meeting☐ Need CEU certificate	
Mail registration form(s) with your check (mad	le payable to the STC-HPS) to arrive	e before August 1, 2001, to:	
Michael Charlton, Treasurer South Texas Chapter - HPS 8811 Warley Heights San Antonio, TX 78254 Phone (210) 567-2955 Fax (210) 567-2965			

Pre-registration will close on AUGUST 1, 2001. If you will not be able to attend the meeting, please call and cancel your reservation **PRIOR TO AUGUST 1, 2001.** Any reservation not canceled by August 1, 2001, will be regarded as a confirmed reservation and monies will be due for the meeting expenses. Refunds will be honored only for cancellations made before August 1, 2001. Registration fees collected after August 1, 2001, or at the door, if space is available, will be \$10 extra.

^{*}This price DOES NOT include lunch. If contemplating on-site purchase, meeting space and lunch cannot be guaranteed on the day of the meeting.

^{*}Non-members may select the option of applying for South Texas Chapter–Health Physics Society membership at the meeting and enjoy privileges of membership at future Chapter events.





Health Physics Society South Texas Chapter

P.O. Drawer 28510 San Antonio, TX 78228-0510 ATTN: John Hageman

SOUTH TEXAS CHAPTER-HEALTH PHYSICS SOCIETY—2001 AFFILIATE MEMBERSHIP ROSTER

he affiliate membership of the South Texas Chapter (STC) is listed below. Our affiliates help support our Chapter's functions, and we should support them. They contribute substantially to the STC, and each should be thanked by our considering their products or services first. Also, tell them we sent you.

ADCO Services

Len Warbiany 17650 Duvan Drive Tinley Park, IL 60477 E: len@adcoservices.com T: 800.282.2326 F: 708.429.9759

ADIT/ELJEN Technology

Chris Maxwell
Post Office Box 870
300 Crane Street
Sweetwater, TX 79556
WEB: www.aditpmt.com
E: cmaxwell@camalott.com
T: 800.399.4557

APTEC-NRC Inc.

Bill Richardson Post Office Box H 125 Titas Avenue Warrington, PA 18976 E: general@aptec-nrcinc.com T: 215.343.5900 F: 215.343.3087

Bionomics, Inc.

John McCormick
Post Office Box 817
1391 James Ferry Road
Kingston, TX 37763
E: j_mccormick_bionomics@email.msn.com
T: 865.376.0053
F: 865.376.4709

Canberra Industries

Steve Vittatoe Route 2 Box 154F3 Gladewater, TX 75647 WEB: www.canberra.com E: svittaoe@canberra.com T: 903.297.2987 F: 903.235.1347

Inovision Radiation Measurements

Todd Jokerst
355 East Vista Ridge Mall Drive, #3423
Lewisville, TX 75067
WEB: www.inovision.com
OR www.surveymeters.com
E: tjokerst@inovision.com
T: 214.507.0226
F: 972.459.2194

ISO-TEX Diagnostics, Inc.

Tom Maloney Post Office Box 909 Friendswood, TX 77546 E: isotex@aol.com T: 281.482.1231

Isotope Products Laboratories

John Paul Pasquerelli 1800 N. Keystone Street Burbank, CA 91504 WEB: www.isotopeproducts.com T: 661.309.1049

Ludium Measurements. Inc.

Dwane Stevens
Post Office Box 810
501 Oak Street
Sweetwater, TX 79556
WEB: www.ludlums.com
E: rludlum@ludlums.com
T: 800.622.0828
F: 915.235.4672

Microtec Services Inc.

Quintin Stokely 110 Charles Street Pasadena, TX 77506 E: qas.msi@evi.net T: 713.475.2274

NELCO

Paul Holsinger 4600 Homestead Road Houston, TX 77028 WEB: www.nelco.com T: 713.675.3266

Owens Scientific, Inc.

Jack Owens/Betty Hail Private Mail Box 147 13318 Westheimer, Suite 200 Houston, TX 77077-3500 E: owenssci@flash.nto T: 713.784.8443 F: 281.933.0522

Perkin Elmer Instruments

Eric Daggett
801 South Illinois Avenue
0ak Ridge, TN 37830
WEB: www.perkinelmer.com
E: eric_daggett@perkinelmer.com
T: 865.483.2251
F: 865.483.0396

Perma-Fix Environmental Services

Ben Warren 1940 N.W. 67th Place Gainesville, FL 32653-1692 WEB: www perma-fix.com E: wor.365.6066 F: 352.373.0040

Phoenix Scientific Sales

Bill Tucker
Post Office Box 2074
Roswell, GA 30077
E: phoenixsales@mindspring.com
T: 770.642.8529
F: 770.642.0466

Protechnics Environmental Services, Inc.

Larry Stephenson 1160 Dairy Ashford, Suite 444 Houston, TX 77079 T: 281.496.3734

PULCIR, Inc.

Joe Eddlemon Scott Eddlemon 9209 Oak Ridge Parkway Oak Ridge, TX 37830-3500 WEB: www.pulcir.com T: 865.927.6358

Radiation Technology

Jack Hendrick Post Office Box 27637 Austin, TX 78755 T: 512.346.7608

SAINT-GOBAIN Crystals & Detectors

Terrence Moore
343 Knollwood Lane
Woodstock, GA 30188
WEB: www.bicron.com
E: terrence.c.moore@saint-gobain.com
T: 770.926.1660
F: 770.926.5541

Dave Stadelman 3650 Aldergrove Spring, TX 77388 WEB: www.bicron.com E: david.p.stadelman@bicron.sgcna.com T: 281.355.1033

Southwest Research Institute

John Hageman Honorary Affiliate 6220 Culebra Road San Antonio, TX 78238-5166 WEB: www.swri.org E: jhageman@swri.org T: 201 522 2633

Suntrac Services

F: 281 288 757

Rob O'Donel 1818 East Main Street League City, TX 77573 WEB: www.suntrac.com E: rob@suntrac.com T: 281.338.2133 F: 281.338.2136

Teledyne Brown Engineering

Dave Henry 300 Sparkman Drive Cummings Research Park Post Office Box 070007 Huntsville, AL 35805 E: dave.henry@tbe.com T: 256.726.1922 F: 256.726.3585

Texas State Technical College

Linda Morris Honorary Affiliate 3801 Campus Drive Waco, TX 76705 E: Imorris@tstc.edu T: 254.867.2952

The Delphi Groupe, Inc.

Ron Gauny 2211 South Interstate Highway 35, Suite 400 Austin, TX 78741 WEB: www.delphigroupe.com T: 512.462.1181

Thermo Eberline Instruments

Denny Cannon
Post Office Box 621059
Littleton, CO 80162
E: dennycannon@cs.com
T: 303.948.5001
F: 303.978.0518

Scott Lamb Post Office Box 2108 Santa Fe, NM 87504-2108 T: 505.471.3232

WEB: eberlineinst.com

Thermo MeasureTech

Ralph S. Heyer (Formerly TN Technologies, Inc.) Post Office Box 800 Round Rock, TX 78680 E: rheyer@thermoMT.com T: 512.388.9287 F: 512.388.9333

W. H. Henken Industries, Inc.

William Scott Henken 415 Lillard Street Arlington, TX 76012 WEB: www.henkenind.com T: 817.261.5566

Waste Control Specialists

Post Office Box 1937 1710 West Broadway Andrews, TX 77501-9714 WEB: www.wcstexas.com T: 505.394.4300 T: 505.394.3427

William B. Johnson

Dick Landfried
Post Office Box 472
200 A.E.I. Drive
Roncerverte, WV 24970
WEB: www.johnsonnuclear.com
E: johnnuc@access.mountain.net
T: 304.645.6568
F: 304.645.7182