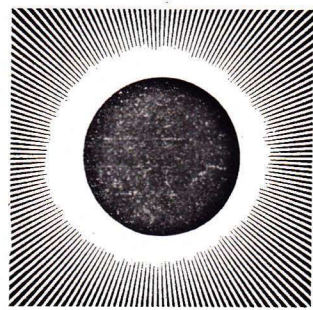


TX-SES NEWS



A PUBLICATION OF THE TEXAS SOLAR ENERGY SOCIETY

DEC/JAN-1979-80

VOL. 3-04

A CHAPTER OF THE AMERICAN SECTION OF ISES

1007 SO. CONGRESS, SUITE 359 AUSTIN, TEXAS 78704

"Solar Energy's Time Has Come"

—William P. Hobby
Lieutenant Governor of Texas



Photos by Ave Bonar

*"The lending industry . . . should . . . accelerate lending
for solar installations."* —William Sinkin, Chairman of the Board
Texas Bank, San Antonio

- * Windfall Profits
- * New Tax Break
- * Books: *The Sun Betrayed* & *Solar Cat Book*

Historic Statewide Conference
Solar Realities '79

Board of Directors

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Gary Vliet, Vice Chairperson
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Board Members: Ken Anderson / Bill Burgesser / Doug Elliot /
Ron Freeman / Anna Fay Friedlander / Peter Jenkins /
Sidney Parker / George Way

Executive Director—Russel E. Smith

THANKS

Texas Solar Realities 79 could not have been as successful as it was without the help of a whole battalion of people the local coordinators; the local solar groups; and many others all over the state.

To list every one would require an additional issue of the newsletter. And then I'd probably forget someone's name, feel guilty and have to spend money on group therapy --or something stronger.

You all know who you are, and so do Russel and I.

Mucho thanks --with the warning that we hope to be coming back this year with other programs needing your assistance.

Daryl

this issue:

David Bentley—Publications Committee
Chairman

Daryl Janes—Editor

Photos by Ave Bonar

Zilla Witherspoon—Graphic Design

Steve Anderson Bill Garfield
Gary Ashford Mike Plaster
Ave Bonar Russel Smith
Warren Cole Joan Wolff

SUSTAINING MEMBERS

*George Smith, Inc.
Austin, Texas

*Centennial Homes, Inc.
Dallas, Texas

*Energy Exploration Group
Del Rio, Texas

SUN ANGLES

Fort Worth has the first solar heated Girl Scout Center in the U.S., according to the DALLAS-FORT WORTH SOLAR ENERGY ASSOCIATION newsletter. The DFW's visited the headquarters for the Circle T Girl Scout Council, and inspected the 800 sq. ft. of collectors intended to provide 70% of the total DHW and space heating requirements for the 10,000 sq. ft. building.

A solar public info service, SUNLINE, has been tentatively agreed upon by the DFW's and the Energy Extension Service in Arlington. Inquiries of local solar interest would be referred to the association...

Sun tea has been shown to be cost effective. The NORTHEAST TEXAS SOLAR ENERGY ASSOCIATION turned a \$580.28 profit selling the gentle beverage at the Edom Craft Fair this past fall. The NETSEA's also report that the Carrier corporation's air conditioning plant in Tyler has installed a solar powered heating and cooling system --built by Carrier, of course. Heating and cooling bills in the coil shop are expected to be cut by 15-20%. The unit was pre-assembled at Carrier's Syracuse, N.Y. plant, a process the corporation thinks could make solar installation more economical...

The EL PASO SOLAR ENERGY ASSOCIATION reports a 20 kilowatt photovoltaic generating facility

was to begin construction in Oct. at the E.P. electric utility's Newman generating plant. Jim Brown, head of the electric company's energy resource development program, was featured speaker at the associations Nov. meeting. He discussed a project, still in the R&D stage, called Repowering, described as a "new concept for conversion" of existing fossil fuel generators to solar. A heliostat tower would generate steam to power the generators. DOE awarded a \$493,000 grant "to study the technical design and economic evaluation to repower 100% of Unit One" at the Newman station...

The HOUSTON SOLAR ENERGY SOCIETY held the First Annual Sun Banquet at the U. of H. The Dec. 10, Monday night event was well attended in spite of clashing with the televised Houston Oilers/Pittsburgh Steeler game. (which the Oilers won in the Astrodome. Nevermind what happened in Pittsburgh. Or for that matter, Dallas.) Guest speaker at the banquet was solar pioneer John Yellot, who, just three days before, had taken some 200 banqueteers at the Texas Solar Realities 79 statewide conference in Austin on an enjoyable, audio-visual stroll through some solar history.

The AUSTIN SOLAR ENERGY ASSOCIATION has been born again. (That's what Jimmy Connors keeps

saying, "What, Bjorn again?") Driven by the relentless, 3rd gear imagination of Gary Ashford, the group has four scenarios for achieving solvency, and at least three proposed programs: information retrieval; computation services; and study of the County Energy Plan --a soft energy oriented project encouraging decentralized energy planning in the nation's 3,000 counties. The plan is from the Institute for Ecological Studies, in Fairfax, Va...

TX-SES Exec-Direc., Russel Smith, and board member Anna Faye Friedlander were finally, and much deservedly, honored for their contributions to solar in general, and TX-SES in particular. Award were presented at the society's business meeting/luncheon the weekend of the Solar Realities conference. Russel worked so hard keeping Anna Faye's award a secret, that his own snuck up on him...

...John Kinzel, sec/treas of the American Section, ISES, was guest speaker at that TX-SES luncheon. He stressed the need for AM/ISES and its chapters to be of mutual assistance to each other. And he put his muscles where his mouth was by helping with the set up at the Realities 79 conf. ...Also at the luncheon, the Houston SES and the Coastal Bend SES (Corpus) were officially welcomed as affiliate members of TX-SES...

TX-SES CASE STUDY NUMBER 5

System Type: Solar Toilet/Space Heating

Location: Langtry, Tx 78871

Climatic Data: Sunshine about 70% of time

Latitude: 30th

Owner: Paul H. Robinson

Building Type: Family

System Sized For: Paul H. Robinson - Family

System Designed By: Paul H Robinson

System Installed By: Paul H Robinson

Building Design By: Paul H Robinson

Solar System Manufacturer: Homemade

System Description: This solar toilet requires no water for flushing, reducing water requirements pollution and the larger sewer lines. Only warm air of around 100 F. is needed. Little or no solar heat is needed during the hot summer months. No back-up heating has been used for this toilet, but where it might be needed, any kind of heat could be used, such as a very small gas flame. However, a few days without heat, has been no problem. The collector surface in this photo also supplies virtually all space heating needs. Storage is located under floors (covered stock tank).

Auxiliary/Back-up System: Holding Tank (not used) for toilet. Wood stove for space heating.

System Cost: \$90.00 for materials

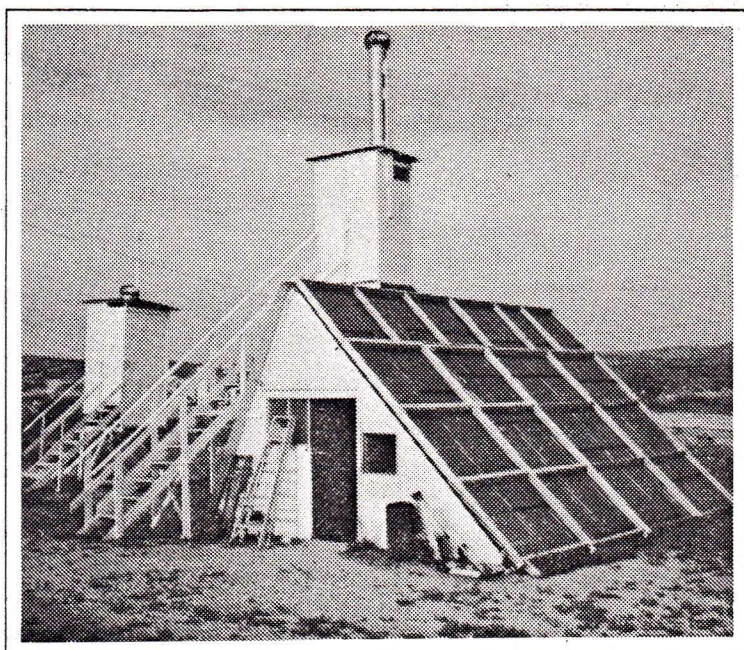
Funding Source: Private

Monitoring Equipment: Thermometer and overflow holding tank that has never been needed.

Performance Data Available?: Not at this time

Installation Available for Prearranged Tour?: In about one year

Best Person/Persons for Operating Experience Detail: Anyone can operate after a few instructions



TX-SES CASE STUDY NUMBER 6

System Type: Solar space heating with
non-integrated solar DHW
Location: Del Rio, Tx

Climatic Data: 1500 heating degree days

Latitude: 29 degrees 22 min. N

Owner: Occupant

Building Type: Single family residence,
1468 Sq. Ft.

System Sized For: Space heating-50% plus unverified contribution due to continuously
variable storage system. DHW-70%

System Designed By: Dan Burr, High Technology Associates, Del Rio

System Installed By: Dan Burr, High Technology Associates, Del Rio

Building Design By: Unknown

Solar System Manufacturer: Collectors-Solarmaster Corp., all other major components
fabricated on-site by installers.

System Description: Automatic drain back system using water as HTF. System uses
150 sq. ft. of single glazed collectors and a split cell
storage design. Minimum storage is 150 gallons variable up
to 313 gallons depending on insolation values. Design strategy
emphasizes simplicity, availability of components, ease of
maintenance and the use of alternate building materials i.e.,
all plumbing was done with CPVC. Solar DHW system installed
in 1977, space heating system was operational in Dec. 1979.

Auxiliary/Back-up System: Natural gas up-flow

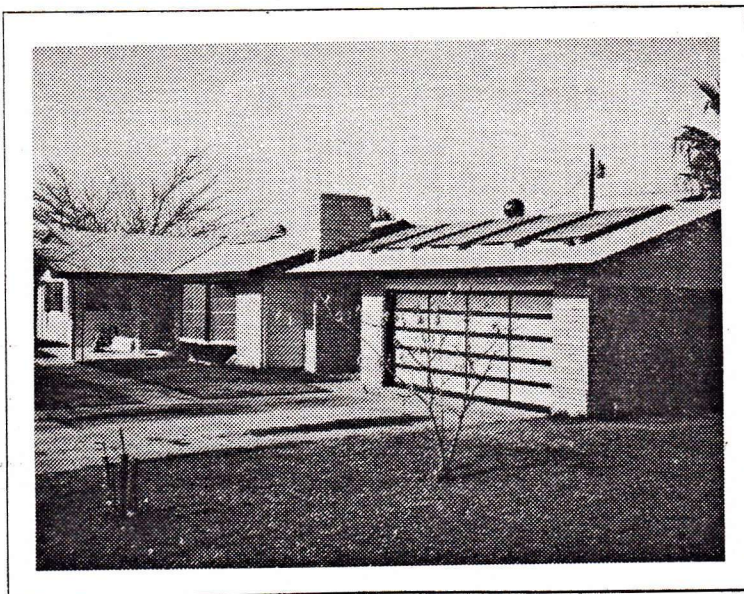
System Cost: \$3000.00 plus instrumentation for heating system, \$750.00 for DHW.

Funding Source: Heating system-Dept. of Energy and owner. DHW-owner.

Monitoring Equipment: Total radiation pyranometer, strip chart recorder and multi-
station remote sensing thermometer. Control system consists
of an aquastat, differential controller & single stage thermostat.
Performance Data Available?: After 1979-1980 heating season.

Installation Available for Prearranged Tour?: Yes

Best Person/Persons for Operating Experience Detail: Dan Burr
High Technology Associates
P. O. Box 1756
Del Rio, Tx 78840
(512) 775-6575



Windfall Profits

In Washington, D.C., the Windfall Profits bill could be completed and sent to Congress for final approval as early as the end of January, 1980. Congressmen Bill Archer of Houston, Jake Pickle of Austin and Senator Lloyd Bentsen have been serving on the joint committee considering the House & Senate versions. The House of Representatives made no provisions for revenue expenditures, instead leaving it to the Senate to formulate proposals. The Senate is advocating the following measures:

- A credit, up to \$2,000, would be available to a builder who constructs a new residence which meets the passive solar energy requirements.
- An income tax credit increase to 50% on the first \$10,000 spent on renewable energy systems through December, 1999.
- Equipment which uses solar or wind energy to generate electricity or to heat or cool a structure qualifies for a 20% non-refundable business energy credit through December 31, 1990. Solar equipment to provide process heat is also eligible now. Effective December 31, 1979.
- Boilers and burners or fuel converters using non-wood biomass are provided an energy investment credit of 20% effective through 1990. The present biomass from wood credit of 10% is extended through 1990. Equipment for converting biomass into an alcohol fuel is provided a 20% credit from October 1, 1980 through September 30, 1984.
- Property eligible for the energy credit is also eligible for the regular investment credit.
- Public utility property which is solar, wind, geothermal, ocean thermal, small scale hydroelectric, biomass or cogeneration property will now qualify for an energy credit.
- The current 4¢ a gallon federal excise tax exemption for gasoline is extended to Year 2000.

New Tax Break

When the sun rose on the 80's the axe fell on another solar tax. As of January 1, 1980, local assessors are "prohibited from considering in...assessment of property value the value of any solar energy device installed or constructed on the assessed property." And that includes passive, wind and bio-mass.

This Ad Valorem Solar Exemption was passed, in 1979, by the 66th Legislature in response to the 1978 voter approval of a constitutional amendment exempting solar and wind devices from all Texas taxation.

Texas Renewable Energy, Texas Tax Free, published by the Comptroller's office, contains a well illustrated "non-exhaustive list of solar and wind energy devices" --including greenhouses, Trombe walls, various collectors, roof ponds, rock bins, crop driers, and wind plants.

The booklet is available from the Tax Publications section, Comptroller of Public Accounts, LBJ Office Building, Austin, Texas 78774. Or call toll free 1-800-252-5555.

Solar Subdivisions

Solar Subdivision

The City of Port Arthur recently amended its subdivision Ordinance to require solar orientation for Energy conservation.

The ordinance provides for solar access; requires that "at least" 80% of the buildings in the subdivision be 'solar oriented'; and softens several code barriers.

The Planning Dept. was aided by a developer "sold on the idea" of solar subdivisions; and by the Gulf States Utility Company's support for the amendments.

Since the ordinance was amended "the preliminary plots for three new subdivisions meeting or exceeding the ordinance requirements have been approved". City planners estimate energy savings in the 10 to 17% range.

(Reprints available from TX-SES office w/self addressed stamped envelope. 28¢ postage.)

From the Horse's ...

Claiming that he knows of "no experts worthy of that name" who view solar and geothermal energy as an answer in the near future, Gov. Bill Clements went on to say to an audience of the Texas Association of Broadcasters that Texans are going to have to forget about the "glamorous, sexy exotics".

"These exotics can have no impact on our energy requirements by 2000."

The founder of SEDCO also said, "I think the media has done Texas a great disservice" in its coverage of the Mexican Oil spill.

TENRAC Appointment

Dr. Charles E. Mauk has been appointed Coordinator of Solar and Energy Conservation Programs, for the Texas Energy & Natural Resources Advisory Council (TENRAC) effective November 1, 1979. Mauk is a native of Houston with B.S., M.S., PH.D. in Chemical Engineering from the University of Houston. He spent 13 years with a consulting research and engineering company, the last 5 years of which were on environmental projects. Just before joining TENRAC, he was a staff engineer in the Energy Laboratory of the University of Houston, where he worked on chemical storage of solar energy for central receiver power, chemical storage of solar energy for heating and cooling of buildings, parabolic concentrators, and chemical heat pumps.

COLE SOLAR SYSTEMS

Warren Cole

**PRESIDENT
PROFESSIONAL ENGINEER**

(512) 444-2565

**COLE SOLAR SYSTEMS, INC.
440A E. ST. ELMO RD.
AUSTIN, TEXAS 78745**

**MANUFACTURERS OF
SOLAR HEATING EQUIPMENT**

Director's Report

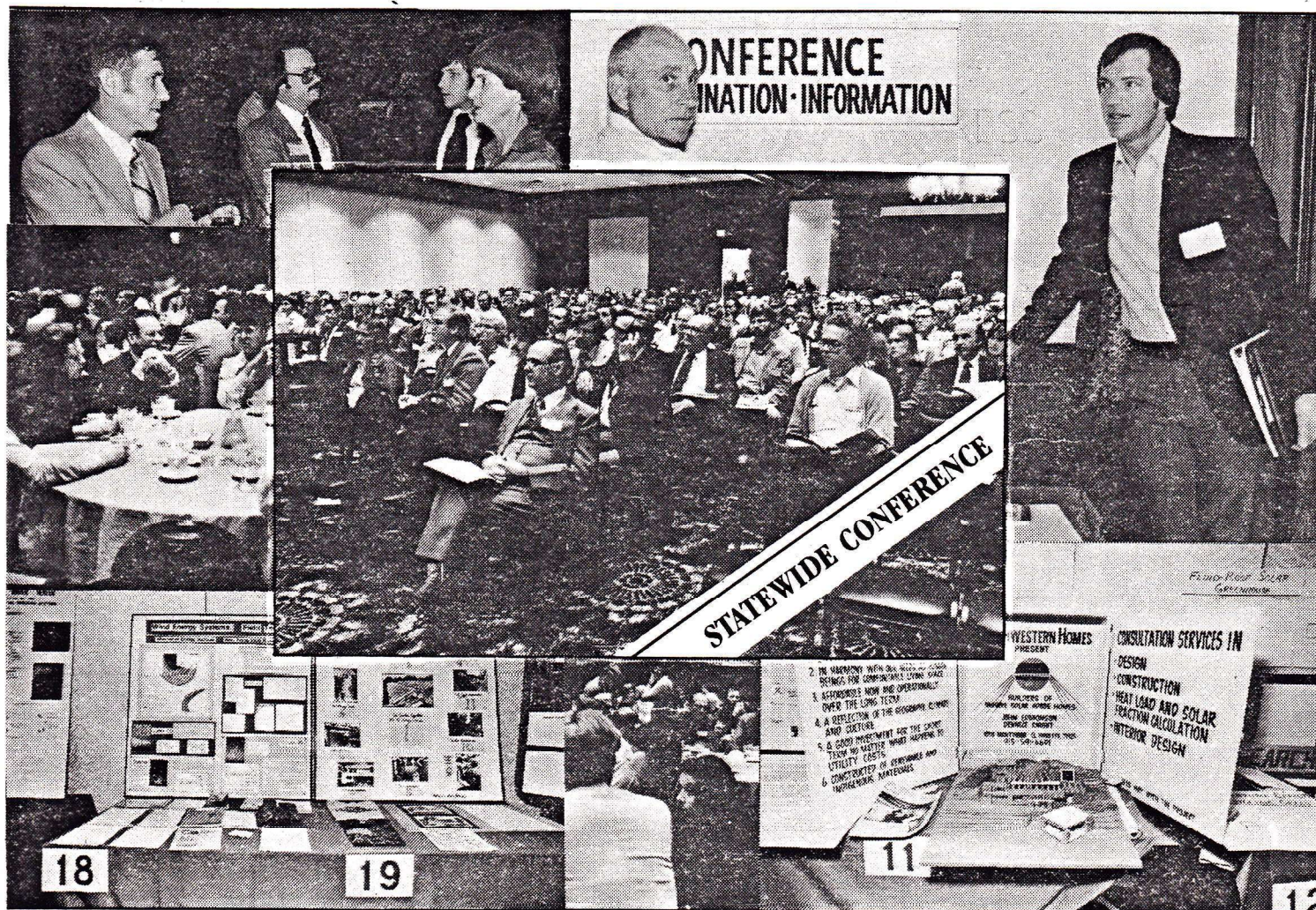
...Russel E. Smith

With over 33% of the Societies Full Members responding to a mail ballot, six Board of Director seats have been filled for 1980. Coming out on top in the January 2, count were: Gary Ashford (Architect, Alan Y. Taniguchi Associates, Austin) Rick Brand (Houston Solar Energy Society), Bill Burgesser (Architect, Solar Design Consultants, Inc., Dallas), Dr. Ernst Kiesling (Chrmn., Dept. of Civil Engrng., Texas Tech Univ., Lubbock), Dennece Knight (Builder, Edmonson & Knight, Inc., dba Earthworks, El Paso), and Dr. Gary Vliet (Assoc. Chrmn., Mechanical Engineering Dept, UT at Austin). They will join six continuing members on the Board: Ken Anderson, Warren Cole, Anna Fay Friedlander, Dr. Al Hildebrandt, Dr. Peter Jenkins, and George Way. The new Board will hold its first meeting of 1980 on Jan. 19, in Dallas, where officers will be elected.

Two officers of the American Section of ISES Board were elected on Jan. 11 in Killeen where its first meeting of the year was hosted by John Kincl and the AS-ISES headquarters staff. The Sec./Treas. position was split with Keith Haggard (SERI) being elected Secretary and John Kincl retaining the Treasurer position. A number of items were dealt with during the tight five hour session, including the hiring of Lee Salmon (AS-ISES Chapters Co-ordinator) as Executive Director; starting the procedure to establish Student Chapters; reports on progress being made on the 1980 Annual Meeting in Phoenix and the 5th Passive Conference at Amherst. It was also noted that the TX-SES will be the host for the 1982 Meeting. Appointment of the host city site selection committee is proceeding by both Boards.

The AS-ISES Board also dealt with the 1980 Budget, and heard a request for assistance in seeking a source of funding for a TX-SES proposal to produce "Solar Public Service Announcements" for both radio and t.v. air-play. The proposal is receiving favorable attention from the new Executive Director.

As part of the never ending search for means to support TX-SES educational efforts, proposals will be submitted by Jan. 25, to the Texas Energy and Natural Resources Advisory Council, for an Attached Solar Greenhouse Team Training Program and a Solar Town Hall Meeting series for 1980. The Society will also be bidding to perform a statewide or possibly regional conference in Texas for the Southern Solar Energy Center sometime in the Spring. The Board has approved the continuation of the Solar Realities Workshops as a strictly Society supported program. This office is beginning to negotiate package deals with non-profits, agencies, utilities, etc. interested in such training sessions. 1980 promises to be one more intense year.



TEXAS SOLAR REALITIES '79

The sun dawned on Texas in 1979. Or on some Texans, anyway. Several reasons, but costs mostly, have been causing many people to look to the sun as a possible source of energy.

Again.

Caught in a free-fire zone --between those that say solar is 20 years away, and not worth much then; and those that say it can do everything, and then some-- people could be excused for having less than a clear vision of the sun, and its uses.

Realities 79 was one attempt to cut through some of that.

The 22 workshops in nine cities were expanded to 31 to accommodate (sometimes just barely) the interest in the how-to, what's-it-gonna-cost seminars.

As a result of the program, understanding and enthusiasm for the "reality" of various systems and designs, clearly increased among those professions and crafts most active in the energy market place. In the next year or so we should see some economic evidence of the workshops' success -even in times of flash-flood inflation.

The Dec. 6-8 Solar Realities 79 statewide conference at the Austin Marriott was the finale to the workshop series. But as the most comprehensive renewable energy presentation in the history of the state, it was a beginning as well as an end.

More than 500 people from all over Texas (and some from elsewhere) attended the concentrated presentation of general sessions, films, exhibits, and 26 case studies covering virtually every type of solar application -plus wind and biomass; and legislative and financial matters.

This evidence of a markedly increased volumn (and variety) of renewable energy development and use in Texas --together with a billowing voter interest-- should make it more difficult for public officials to denigrate solar. (In fact, many state agencies, and some counties and municipalities were represented at the conference -as registrants and presenters.)

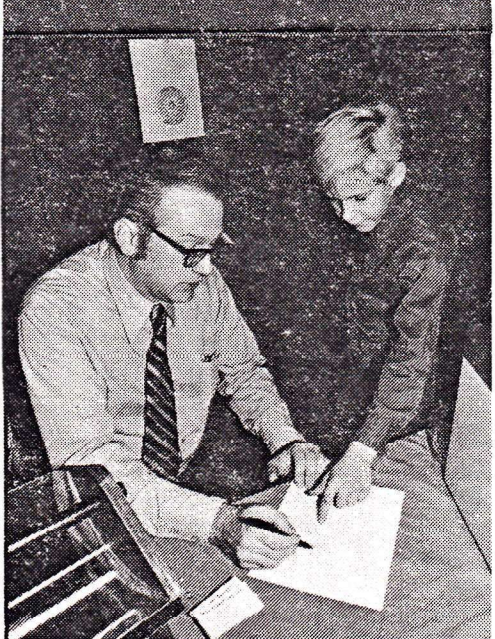
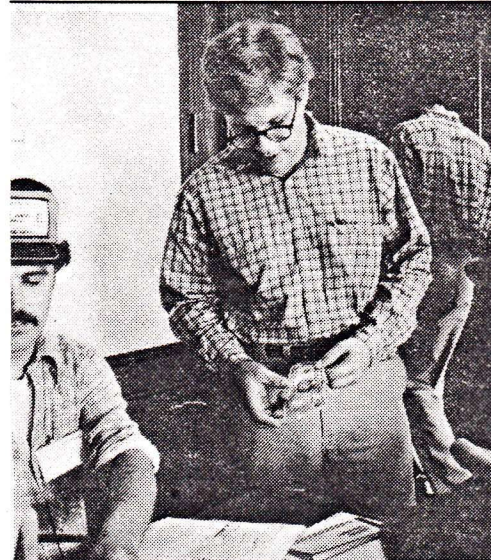
Hopefully, this all suggests that the energy security (and therefore economic security) of our lives is beginning to take precedence over narrow political bias.

Daryl

CONFERENCE PAPERS

The Texas Solar Realities 79 statewide conference resource handbook --containing the names and addresses of sponsors and presenters; summaries of presentations; legislative update; TX-SES/TENRAC survey of solar loan attitudes of the banking community; and follow-up resource listings-- is available for \$5.00 + 50¢ postage from :

TX-SES
1007 So. Congress
359
Austin 78704



8

COMMUNITY APPLICATIONS

ARKWORKS

In Denton County, north of Dallas, a non-profit organization, ARKWORK, is providing information experimental models, and practical demonstrations of energy and lifestyle self-sufficiency that are ecologically and economically appropriate.

This is partially done through the Free University of Denton, a citizen organized school offering classes in A.T., low-cost home made solar, and energy efficient construction.

The area is also witnessing the development of two cooperative, self-sufficient communities. One, Whitehawk Community, was founded by Bob and Ruth Foote near Sanger, Texas, and currently has about 35 families participating.

Six miles south of Denton, the other community, Rainbow, was only recently begun by Dale Branum.

For more information, or a copy of Arkwork Review, contact Dale Branum, Denton County Arkwork Inc., Box 13615, NTSU Station, Denton, Texas 76203.

ACT NEWSLETTER

The fifth issue of ACT (Appropriate Community Technology) will be available in late January and will have numerous articles, activities, legislative notes, book-reviews and information on appropriate technology in Texas. TX-SES members who do not receive ACT presently, and would like a sample copy, contact Joanie Wolff, 4009 Av. D, Austin 78751. Subscriptions are \$6 a year. (Six issues)

HARD & SOFT

The issues related to hard vs. soft technologies will be debated by Hazel Henderson, author of Creating Alternative Futures, and Samuel Florman, who wrote Existential Pleasures of Engineering, Feb. 15, 10:00 AM, at Texas A & M.

CYCLE 2 - REGION VI DOE A.T. SMALL GRANTS

Grants of up to \$10,000 for Project Design; up to \$50,000 for Project Development; and up to \$50,000 for Project Demonstration.

Individuals, small businesses, state and local agencies, local non-profit organizations, institutions, and Indian Tribes are eligible.

Approximately one million dollars is expected to be available. In Cycle 1, 52 grants, from \$700 to \$49,000, were awarded for a total of \$673,000.

Appropriate Technology Prog.
U.S. DOE/6CE
P.O. Box 35228
2626 W. Mockingbird Lane
Dallas, 75235

DEADLINE: April 2, 1980

NCAT GRANTS

LOW COST SOLAR WATER HEATERS

Five grants of \$12,000 each available to demonstrate the feasibility of community built solar water heating systems using three performance tested designs selected by the National Center for Appropriate Technology.

RFP #33-Solar water Heater
Available July 25, 1980
Deadline Aug. 29, 1980

SAWDUST LOG FABRICATION

Fourteen grants at \$3,000 each available for practical demonstration of an inexpensive sawdust log fabricator developed by NCAT engineer, Toby Benson.

RFP #33-2 - Community Demonstration of Sawdust Log Fabrication.

Available July 25, 1980
Deadline Aug. 29, 1980

WRITE: RFP Request #
NCAT Grants Office
P.O. Box 3838
Butte, Mont. 59701

Only incorporated non-profit organizations, Public Agencies, and Indian Tribes are eligible.

The SUN BETRAYED

A Report on the Corporate Seizure of U.S. Energy Development BY RAY REECE

Paperbound \$5.50; clothbound \$12.50.
Add 5% sales tax and 60 cents postage.

Community Resources Development Associates
516 Terrace Drive Austin, TX 78704
Phone: (512) 447-9274 • 478-8910

10% DISCOUNT
WITH THIS AD!

THE SUN BETRAYED

by Ray Reece
234 pps.
South End Press
Boston, Mass., 02123

TX-SES member Ray Reece has written "a report on the corporate seizure of U.S. solar energy development", entitled The Sun Betrayed.

The 200 plus page book presents evidence indicating a pattern of discrimination against small firms, individuals, and low cost renewable energy applications.

Reece says that of over 700 HUD Third Cycle funding applicants, four companies received 49% of the total budget.

He quotes a Senator's aide as calling the D.C. energy game "the new technological porkbarrel... it's carte blanche"; and accuses the utilities of "collusion with the federal government."

A December, 1977 Congressional study is cited that reveals "21 instances where (former DOE boss James) Schlesinger either ordered or approved substantial alterations in data" forwarded to the Carter administration for use in energy strategy.

An instructor with the Honeywell Transportable Solar Laboratory is quoted as saying, "I represent the government more than I do Honeywell." And then provided a short course in grantsmanship, "...go big. They like to fund big projects."

From a November 1978 Small Business Subcommittee report on The Future of Small Business in America: "for the period between 1953 and 1973...small firms produced about four times as many innovations per R&D dollar as medium sized firms, and about twenty-four times as many as the largest firms."

Nearly every page blossoms with similar information as the author's extensive study presents incident after incident of disastrous energy decisions.

Research for the book was partially funded by a grant from the Fund for Investigative Journalism. Exerpts have appeared in the Texas Observer.

A free-lance writer with a background in energy and environmental research, Ray Reece is also Chairman of Austin's Renewable Energy Resources Commission, a city council appointed citizen's advisory board.



SECONDARY SCHOOL CURRICULUM

A cooperative effort of science educators and scientists has resulted in a comprehensive Solar Energy Curriculum for Grades 7-12. The curriculum was developed by the New York State Education Department and the Atmospheric Science Research Center at the State University of New York at Albany with support from the D.O.E.

Solar Envelope

GOLDEN CO - The Department of Energy's (DOE) Solar Energy Research Institute (SERI) has awarded the City of Los Angeles and the University of Southern California (USC) School of Architecture, a contract to study the development of a "solar envelope" zoning concept. The results are expected to provide a method to insure access to the sun for newly constructed residential and commercial buildings in dense urban areas. The study will focus on two areas in Los Angeles where high-rise buildings already have an impact on smaller buildings.

OEM Products, Inc. announced the development of a thermal storage system using the heat of fusion/solidification of sodium sulfate decahydrate and an immiscible fluid capable of at once being a heat transfer fluid, a stirring agent and a sealant.

A major benefit of the Heat Battery(TM) is its ability to store large quantities of heat in a relatively small space. Larger, multiple tank batteries can be set up for commercial or industrial applications.

Recharge of the battery is accomplished with solar panels, waste heat or a boiler capable of supplying temperatures of about 100 F.

Blue-line prints of a typical heat pump/Heat Battery system are available from Solarmatic, OEM Products, Inc., 2701 Adamo Dr., Tampa, Florida 33605.

\$55 million saving

More than six million Americans took advantage of the new energy conservation tax credit laws and saved themselves \$55 million on their 1978 taxes. The returns show that virtually all claims were from taxpayers with adjusted gross incomes of \$15-\$51, 000 per year.

Alabama

A display of six commercially available solar water heaters has been erected in the Alabama Solar Energy Center's Test Facility for the purpose of developing public awareness of commercialized technology and acquiring factual performance and operational data.

The display incorporates into a typical residential roof structure, two each of the three types of freeze protection systems (oil, anti-freeze, and drain-back) being marketed in northern Alabama.

Solar Utilities

The California Energy Commission has awarded six more cities fund to develop marketing, legal and financial plans for municipal solar utilities.

Los Angeles currently has a similar program funded by the federal government, and Santa Clara has had a solar Utility since 1976.

Non-profit, special purpose Municipal Solar Utilities are designed to provide low-cost financing for solar systems. The CEC plan allows local government the opportunity to tailor solar programs to the specific needs of the community.

Solar Tar

The Texas Department of Highways constructed the state's first solar heated asphalt storage tank in Lubbock last year. A second is being built in San Antonio. Both have a 12,000 gallon capacity.

The systems consist of an asphalt tank, solar collectors, auxiliary heater, heat exchanger inside the tank, pump to circulate ethylene glycol and a safety device to permit expansion of the ethylene glycol.

The Division has said that the projects are "economically justifiable." Copies of the reports may be obtained from D-10 Research, Transportation Planning Division, Texas Department of Highways.

Refugio

From an editorial Jan. 2, in the County Press, Refugio:

"This is the time for the town council to seriously consider a change to solar heat at the municipal swimming pool. The high cost of heating with gas/electricity is largely responsible for running the cost of operating the pool into the 'red' each year. With the knowledge that solar heating would in the long run be far less expensive than any other known-available form of heating, we urge the council to take steps immediately to economize in this way."



PASSIVE SOLAR ARCHITECTURE

L. M. Holder III

Architect of over 20 Texas solar buildings.
Member: American Institute of Architects
Texas Society of Architects
Texas Solar Energy Society

Commercial / Residential / Site Planning

Drop-in visitors welcome at solar designed offices at:
4202 Spicewood Springs Rd., / Austin, Tx. 78759 / (512)345-8817

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To place an ad, send your check and copy ready ad, 2" x 3 1/2", horizontal or vertical, by the 10th day of the 3rd, 6th, 9th, or 12th months.

WHERE TO LOOK

Bulletin 110, Oct. '75, Publication on Solar Access., "Fact Sheets" on Insulation (FS 103), Heat Transfer Fluids... (FS 108), Thermal Storage (FS 115) and many more. National Solar Heating & Coding Information Center, P O Box 1607, Rockville, MD. 20850, 800/523-2929.

Low-Cost Performance Evaluation of Passive Solar Buildings" (SERI/RR-63-223) Licensing Arrangements and the Development of the Solar Energy Industry (SERI/TP-62-260), A Survey of State Approaches to Solar Energy Incentives (SERI/TR-62-265). SERI Document Distribution Service, 1617 Cole Boulevard, Golden, Colorado 80401.

Texas Conserve - A free home energy payback analysis is offered by the Texas Energy & Natural Resources Advisory Council. Interested parties fill out a questionnaire and it is analyzed by a computer to calculate potential savings or payback from specific energy conservation actions. Texas Conserve, P O Box 4965, Austin, Tx 78765.

Solar Utilization News, send for free copy, plus Lending Library Info. (cost item), SUN, Box 3100, Estes Park, Colorado 80517.

Solar Water Heater Design Competition, Carol Cook, Solar Grants, Office of Energy Program, Capitol Tower - Room 505, 1700 W. Washington, Phoenix, Az. 85007, 1-800-352-5499.

A Nine - Title series on American's Alternate Energy Sources, (film strips, movies, study guides) Un. of Colorado, Educational Media Center, Stadium Building, Boulder, Colorado 80309, 303/492-7341

Installation Guidelines (for solar hot water systems) stock # 023-000-00520-4.

Solar Energy Legal Bibliography - Final Report, March '75, stock # 061-000-00302-9, Superintendent of Documents, Government Printing Office, Washington, D.C., 20402.

County Energy Plan Guidebook, (cost item), Institute for Ecological Policies, 9208 Christopher Street, Fairfax, Virginia 22031.

Satellite study

A new study assessing the proposed Solar Powered Satellites project's role and potential problems is now available through the Citizens Energy Project, 1110 6th St., NW, Washington, DC, 20001. The five part series addresses a wide spectrum of issues, including controversial microwave effects and international political and economic considerations.

Free Fuel Biblio

A free bibliography is now available listing 30 books and periodicals that address the use of renewable resources in alcohol fuel production. Compiled by Scott Sklar and James Kersteter, the publication also lists organizations and individuals currently working with alcohol production.

Natl. Center for A.T.
P.O. Box 3838
Butte, Mont. 59701
Attn: Alcohol Bibliography

Gassed up in S.A.

More than 900 people attended the convention sponsored by the National Gasohol Commission in San Antonio. Speakers included representatives from Guatemala, Switzerland, Australia, Brazil, the National Gasohol Commission, National Alcohol Fuels Commission, DOE, AAA, and the Bureau of Alcohol, Tobacco and Firearms.

Natl. Gasohol Comm., Inc.
Myron Reaman, Administrator
#5, 521 S. 14th St.
Lincoln, Nebr. 68508

Douglas Durante
Natl. Alcohol Fuels Comm.

#3000, 2000 M St. NW
Washington, D.C. 20036

QUOTABLES:

"Any challenge can be met when the Electric industry sees itself as a national force. Those who are calling for a national energy program should get one--our way, not theirs."

-Robert E. Kerby
Chairman,
Westinghouse Corp.

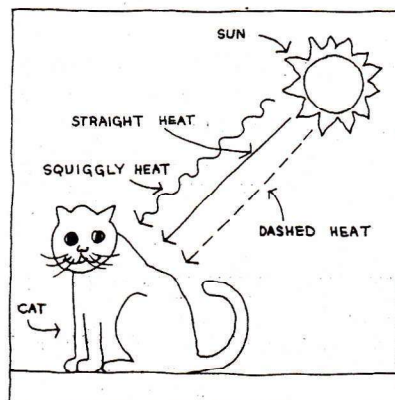
(From a November 12, 1979 address to the Atomic Industrial Forum.)

THE SOLAR CAT BOOK

by Jim Augustyn
illustrations: Hildy Paige Burns
96 pp.
Ten Speed Press
P.O. Box 7123
Berkeley, California 94707

Starting with the E.B. White observation that "a cat sunning himself in the doorway of a barn knows all about solar energy. Why can't man learn?", and finishing with a glossary that defines inflation as "an imaginary condition in which people's energy and work becomes worth less as time goes by", this book observes history (past and present) through a fur-ball of fantasy and common sense.

With a sense of humor somewhere between Johnathan Swift and Mel Blanc, the author gently (and not so gently) bruises the ego of traditional energy attitudes, while holding the jargon of solarism up to pure (purr?) sunlight for some less than flattering documentation of its utilization and application. For lovers of solar and/or cats.



Cat absorbing straight, squiggly and dashed heat from the sun while appearing to be just standing around.

writing editing research

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SUNDIAL

- Feb. OKLAHOMA CITY: A National Issues forum (10 weeks). Energy and the Way We Live. Sponsored by the American Assn. of Community and Jr. Colleges. Contact: Patrick Cross, Regional Coordinator, So. Oklahoma City Junior College, Oklahoma City, OK, 405/682-7562
- Mar. 4-6 CHICAGO: 1980 Corrosion Show. Contact Karl Heinrich, Nat'l Assn. of Corrosion Engineers, P O Box 986, Katy, Tx. 77450, 713/492-0535.
- Mar. 17-18 ALBUQUERQUE, N.M.: Solar Central Receiver Testing Facility Operations Workshop. Sponsored by Sandia Lab., Livermore, Cal. 94550, 414/422-2975.
- Mar. 24-26 WASHINGTON, D.C.: Energy Technology Conference & Exposition. Contact: Energy Technology Conference, Government Institutes, Inc., P O Box 5918, Wash., D.C., 20014.
- Apr. 9-11 BOULDER, COLO.: Wind Energy Conference. Contact: SERI, 1536 Cole Blvd., Golden, Colo. 80401 303/231-1343
- Apr. 14-15 STILLWATER, OKLA.: Heat Pipe Technology Conference. Contact: Dr. Parker, School of Mech. & Aerospace Engineering, 218 Engineering North, Oklahoma State Univ. Stillwater, Okla., 74074, 405/624-5828.
- June 2-6 PHOENIX, ARIZONA: The Solar Jubilee. AS/ISES Annual Meeting. Hosted by the Ariz., S.E.A. & The Ariz. Solar Energy Commission. Contact: Jan Schnorr, P.O. Box 15700, NAU, Flagstaff, Ariz., 86011
- Aug. 3-8 BOULDER, COLO.: 3rd International Conference on Photo-Chemical Conversion and Storage of Solar Energy. Contact: SERI, 1536 Cole Blvd., Golden, Colo. 80401 303/231-1343
- Feb. 14 SAN FRANCISCO: 2nd Solar Reflective Materials Workshop. Contact: SERI, 1536 Cole Blvd., Golden Col. 80401 303/231-1343
- Feb. 15-16 AUSTIN: Passive Solar Energy Conservation Workshop. Division of Continuing Education, University of Texas School of Architecture, Main Bldg. 2500 Austin Tx 78712 Contact: Lynn Cooksey 512/471-3123.

ANNOUNCEMENTS

THE TECHNOLOGY DEVELOPMENT SECTION OF THE TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL (TENRAC) IS NOW SOLICITING PROPOSALS FOR THE FOLLOWING GRANTS:

ALCOHOL DEMONSTRATION PLANT - SPI # 80-B-1

Construct and demonstrate a small-scale (1000 gallon per day or less) commercial alcohol distillery to provide functional information for use by the general public.

CELLULOSE FEEDSTOCK AVAILABILITY - SPI # 80-B-2

Survey practical sources of biomass to determine availability and geographic distribution for cellulose conversion into alcohol.

TX-SES members are entitled to a \$5 discount on AS/ISES membership.



AUSTIN SOLAR ENERGY ASSOCIATION

MEETING: TUE., JAN. 29,
7:00 PM
TX-SES office

Dr. Gene Clark from Trinity Univ. will be a guest.

TEXAS WIND RESOURCES - SPI NUMBER 80-W-1

Collect, analyze and prepare wind velocity data for use in establishing statewide data on a regional basis for wind energy utilization.

Contact Robert V. Avant, Jr., Texas Energy and Natural Resources Advisory Council, 411 West 13th St. Austin, 78701

RESIDENTIAL CODES WORKBOOK

Comments and suggestions are now being solicited by SSEC for the recently compiled draft of a Residential Codes Workbook. It is primarily intended to assist builders with potential problems, and to update them on forth-coming mandatory energy conservation standards.

Contact: Kalevi M. Turkia, Southern Solar Energy Center
61 Perimeter Park
Atlanta, GA 30341
404/458-8765

JOB/JOB/JOB

SOLAR ENGINEERING SPECIALIST 1, (Assistant Solar Officer) for Western Sun - AZ
Arizona Solar Energy Commission
(602) 255-3682
SALARY: \$19,162 - \$26,040



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Yes ☐ No ☐

Local Chapter Member? ☐ Chapter Name _____
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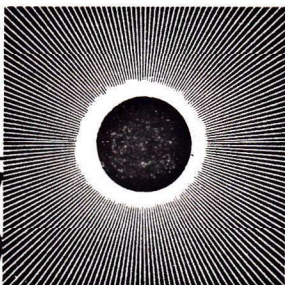
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