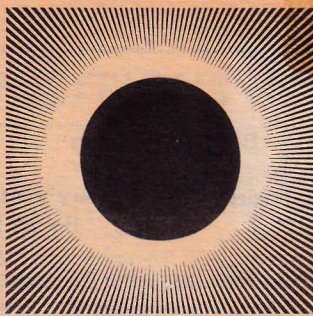


TX-SES



NEWS

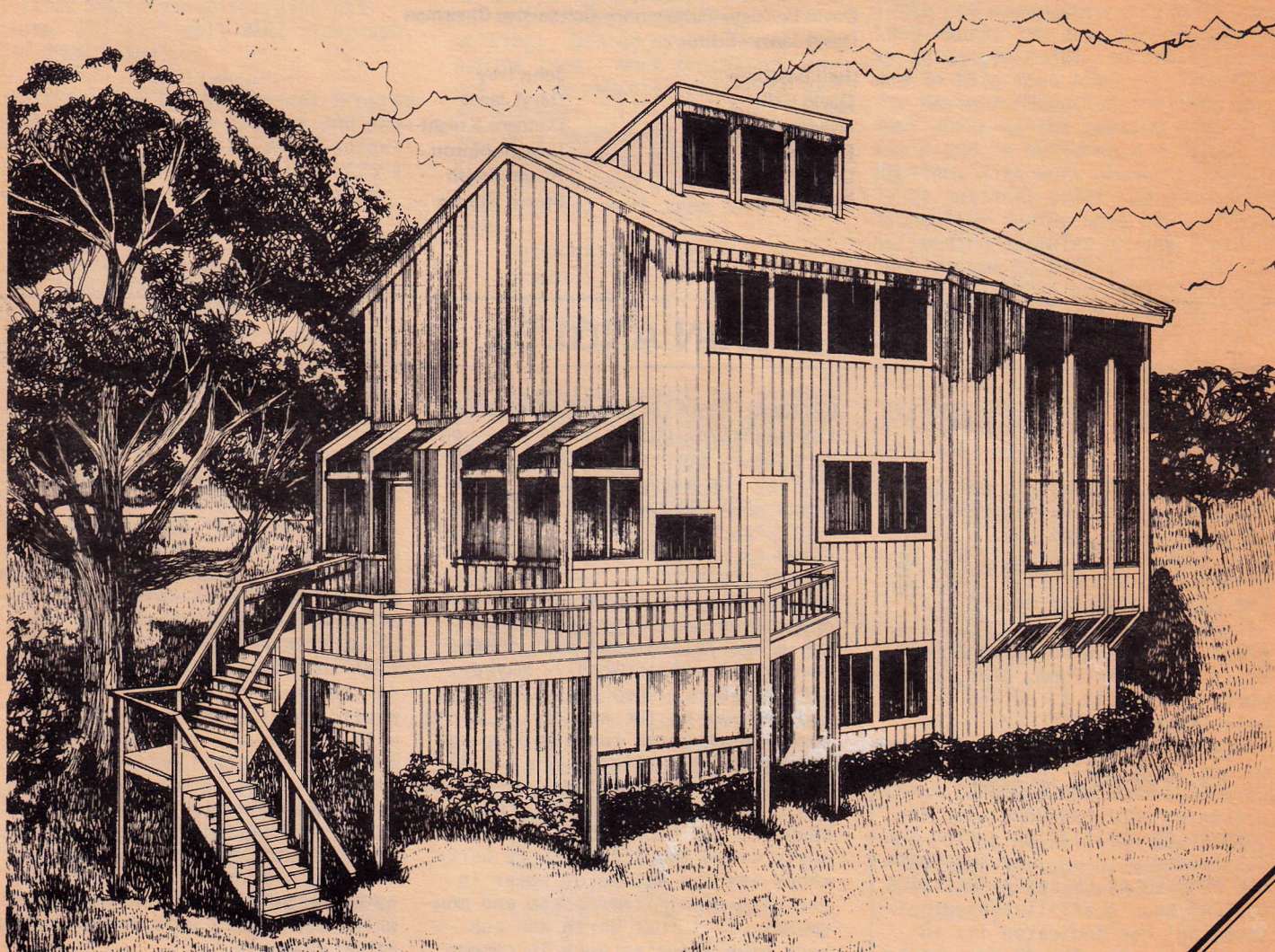
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A CHAPTER OF THE AMERICAN SECTION OF ISES

1007 SO. CONGRESS, SUITE 359 AUSTIN, TEXAS 78704



J.M. Holder III architect

- Sun City Success—EPSEA & City Agree
- Best Little Workshop Series in Texas
- Case Study Nos. 3 & 4

TX-SES BOARD
ELECTIONS

Board of Directors

Alvin F. Hildebrandt, Chairperson
Warren Cole, Secretary

Gary Vliet, Vice Chairperson
Robert Bennett, Treasurer

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

Contributors to this issue:

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Daryl Janes—Editor

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Lina Robinson
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Steven Stepan

SUN ANGLES



Northeast Texas is not Baja, Oklahoma or an Arkansas annex (though just a pine cone's toss away from foreign lands), and to prove it, the NORTHEAST TEXAS SOLAR ENERGY ASSOCIATION (NETSEA) has affiliated with TX-SES. The great event occurred at the Edom Craft Fair --in Edom, near Tyler-- where a slightly tired and very well-traveled RUSSEL SMITH (he staggered in from the western tour of the Texas Solar Realities '79 workshops in Lubbock and El Paso) presented JUDI BASEHORE with the CHARTER OF AFFILIATION at the Sun Tea Booth. . . . and the COASTAL BEND SOLAR ENERGY ASSOCIATION (CBSEA) hasn't affiliated yet either, but has indicated its intent to do so. The CBers announced their intent at a press conference Aug. 8 in Corpus, after the first day of the SOLAR REALITIES 79 workshops, sponsored by the TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL (TENRAC), formerly known as the GOVERNOR'S OFFICE OF ENERGY RESOURCES (GOER), increasingly called-- by those in and out of the government --the State Energy Office . . . the CBers also got praise from the

NATIONAL ASSOCIATION OF FARM WORKERS ORGANIZATIONS which held a conference in Corpus on RENEWABLE RESOURCES and SELF RELIANCE. In both cases GARY WEED, GORDON ZAHN, and C.B. chairman ED HANSON were recognized as essential to the success of the projects . . . In Austin, JOE HOLT, after months of selfless dedication, is ready to take a break and let someone with spare energy (the magic word)-- maybe GARY ASHFORD --keep the candle lit and the wax on the saucer . . . and sometimes the cup runneth over and sometimes it spilleth. In San Antonio, where it sometimes does both, the efforts of LYNN JUDGE, DAVID NAWROCKI and STEVE HUCK have obviously aided the REALITIES 79 workshops and the future of solar in the city of military posts and monuments . . . Fort Worth and Lubbock have about as much in common as TCU and TECH, WBAP and the Cotton Club, Delbert McClinton and Buddy Holly, wind and cow chips-- till the sun shineth . . . MERVE CROSTON in Ft. Worth and Dr. C.E. TESKE in Lubbock (with a lot of help from other TX-SES members ERNST KIESLING and C.B. WRIGHT) are attempting to establish chapters in their areas . . . According to Project Director DR. JOHN D. REICHERT, the dedication ceremony

for the CROSBYTON PROJECT is scheduled for November 29, 1979. . . . Nothing formal yet, but the HOUSTON SOLAR ENERGY SOCIETY will be working more closely with HOUSTON LIGHTING AND POWER for the purpose of dispensing info on solar things. Additionally, RICK BRANDT, chairman of the HSES public information committee, said that as soon as the group's tax-exempt status is official that every single TV station in the Bayou City will be doing public service ads on solar. HSES will also have 3 to 4-minute segments of CBS local news on the state of solar in Houston. Brandt said they will run as long as it takes to cover all topics, using on-site filming, interviews, whatever it takes. And, of course, they have the solar index on Channel 13, which eventually will be carried on other channels.

The TX-SES office has just been moved. A more convenient and better lighted (natural) space came open across the parking lot. Correspondence should now be addressed to Suite 359, rather than Suite 348. All else remains the same.

The Best Little Workshop Series in Texas

The contract the Texas Solar Energy Society signed with the Governor's Office of Energy Resources (now the Texas Energy and Natural Resources Advisory Council--TENRAC) is the largest undertaking the Society has yet embarked upon.

The contract calls for TX-SES to develop and present 22 workshops in nine Texas cities--nine passive, nine active, and four Lender/Financial.

The early days of the contract were a little terrifying. Would the workshops be as effective as possible? Would attendance be high enough to at least avoid embarrassment?

As with most rhetorical questions, the answers are obvious.

To date, registration has been three times as great as the most optimistic expectations. Because of this, TENRAC has authorized TX-SES to increase the number of workshops in several cities.

Even more important are the written evaluations of those who have attended. Eighty-four percent said the workshops were effective or quite effective. Seventy-three percent said they planned to make use of what was learned at the workshops within the first year. And fewer than four percent said they felt solar was less effective than before.

Because of their quality, the workbooks used in the Passive and Active sessions have attracted at-

tention in solar circles nationally. And several people have expressed the opinion that the workshops are among the best of this type ever developed.

The reasons for the responses are several and varied. The development teams did an excellent job on the materials; the mailing list of 40,000 blanketed the state; the brochure is enticing and concise; the \$25 per workshop is almost a giveaway at today's prices; and the sponsorship of the Governor's Office is certainly helpful.

But perhaps the most compelling factors are the current state of the economy and the relation of energy costs to it. As these costs continue to escalate, solar applications begin to look more and more attractive. Many of the people attending these workshops have expressed a desire to have a working knowledge of solar as we enter what some of them anticipate to be "the solar decade."

Additionally, the targeted professions--architects, engineers, builders, contractors, realtors, and public and utility officials--are responding to the need to answer the questions their customers are increasingly asking about solar.

While there has been a stampede to the Passive and Active sessions, the turnout for the first Lender/Financial workshop, in El Paso, was very light. And registration for the Lender sessions in Houston and San Antonio are running far behind the Passive and Active.

The materials and presentations themselves are very interesting and informative, and virtually every lending institution in Texas was contacted. The reasons for the light response must, therefore, be elsewhere.

One reason that has emerged as perhaps one of the most important is that representatives of lending institutions don't necessarily see any problem with lending for solar. If the person seeking the loan for a solar application has sufficient equity, and the contractor is judged to be dependable, the loan will probably be made. If not, it won't.

In fact, almost as many bankers have enrolled in the Passive and Active as in the lender sessions. Which leads to a second possibility--that lending officers may have a greater need for an understanding of solar basics, than for financial information. Some modifications are being made in the materials to reflect these developments and some other professions, especially realtors, may be targeted for the lender sessions.

It is exciting to anticipate what the ripple effect of the attendance at these workshops of more than 2000 people directly involved in the market will have in the state of Texas. That prospect, and the prestige the success of the workshop series has brought to TX-SES is reason to believe the 1980's will be very good growth years.

TEXAS SOLAR REALITIES '79 STATEWIDE CONFERENCE

SPONSORED BY

THE TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL
ORGANIZED AND PRESENTED BY THE TEXAS SOLAR ENERGY SOCIETY

December 6,7,8

Marriott Hotel
Austin, Texas

While program details are still being finalized, the conference is intended to be a culmination of highly successful Solar Realities '79 workshop series and will feature up-dates on technology, summaries and studies of various projects, information on educational and training programs in Texas, guidelines for the solar tax exemption effective January 1, 1980, exhibits, and guest speakers.

Formal announcement will be mailed by the end of October to nearly 40,000 architects, engineers, builders, contractors, public and utility officials, and solar enthusiasts.

Sun City Success

The historic Southwest Border States Solar Conference held July 6-8 in El Paso (where "the sun has failed to shine only 23 days in the last 14 years") was, with nearly 200 people in attendance, successful far beyond the expectations of the participants. Coordinated by Dennece Knight of the host El Paso Solar Energy Association, the conference brought together, for the first time, the Arizona and New Mexico Solar Energy Associations with the Texas Solar Energy Society in an effort to "establish a sense of regional consciousness."

Don Osborn of Arizona said he expected the conference would "probably be a bust," but decided to "give it a shot anyway" and was "pleasantly" surprised.

TX-SES Executive Director Russel Smith explained there had been two recent solar conferences in El Paso that were less than successful, in spite of being highly publicized by the sponsors --the City of El Paso and the electric utility, respectively. Smith said the efforts of citizens groups, with much less publicity, reversed the image of failure and "put solar in a positive light in the eyes of the media" in El Paso. He also said the conference apparently "paved the way" for the spectacular success of the Solar Realities '79 workshops held September 18-20 (see related story this issue.)

A major portion of the conference, Passive/Hybrid and/or Domestic Hot Water Case Studies, included, among others, presentations by TX-SES member Dr. Ernst Kiesling of Lubbock on the passive spec home from a builder/developer point of view; TX-SES board member George Way explained how a home built in 1976 in Nacogoches has a total energy operating cost of \$223 a year; and Jeffrey Cook and Helen Kessler from Arizona talked about desert tract homes.

Larry Shirley of the Washington, D.C.-based Center for Renewable Resources, emphasized activity on the state and local levels, rather than the federal.

Other speakers included Richard T. Montoya, Executive Director of the Texas Governor's Office of Regional Development on

the Southwest Border Regional Commission Solar Demonstration Program; Mike Plaster, administrative assistant to Representative Bill Keese, sponsor of the Omnibus Solar bill; and Ray Reece, from the Austin Renewable Energy Resources Commission.

Russel Smith said the aim of the conference was to "encourage such regional meetings . . . of a broad cross-section of people committed to the advancement of renewable resources technology," and he felt it had been successful.

An added, unintended benefit of the conference may be the recent agreement between the El Paso Solar Energy Association and the City of El Paso's Department of Housing Rehabilitation to retrofit four low and moderate income single-family homes with solar heating equipment.

EPSEA & City Agree

On September 18 El Paso Mayor Tom Westfall and the city council voted unanimously to accept the recommendations of the Community Development Steering Committee and allow the Department of Housing Rehabilitation to engage in a joint project with the El Paso Solar Energy Association. The project is designed to retrofit four low and moderate income single family homes with solar heating equipment.

The applications to be considered are: a thermal wall, a greenhouse, a passive domestic water heater, and an active domestic water heater.

EPSEA is offering technical assistance, selection criteria, participation in the screening process, complete solar designs, workshops for installations and operations, ample labor to assemble each installation, and construction supervision.

At no more than \$1500 per home, the total cost of materials should not exceed \$6000.

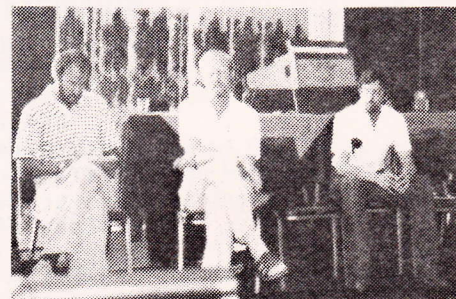
TENRAC

The question of who and how many people will fill the vacancy created when Bob King left the TEAC

for the TVA, given the new structure of the TENRAC, has been partially answered. Bob Avant has been hired as Coordinator of Biomass and Wind Programs under the Technology Development Section (headed by Dr. Roy Ray) of the Energy Analysis and Development Division (formerly the TEAC, headed by Dr. Milton Holloway) of the Texas Energy and Natural Resources Advisory Council (headed by Mr. Ed Vetter). Mr. Avant is a native of Pflugerville, with a solid farm background. He has his M.S. in Agricultural Engineering from Texas A&M where he also worked for a time in environmental and energy related staff positions. Most recently, preceeding his hiring by TENRAC, Bob was serving as the only State Engineer at the State Agriculture Department. The position of Coordinator of Coal and Lignite Programs, and of Solar Programs are yet to be filled. (See "Positions Open" section for details.)

The Conservation Division (formerly the Governor's Office of Energy Resources) is currently headed by Mr. Tom Wright (David Marks resigned at the end of September). Two key individuals with responsibilities relating to solar and other renewable resources within this division are Mr. Pete Baldwin, Program Coordinator, Industrial (in charge of A.T. Small Grants Program) and Mr. John Carlson, Program Coordinator, Commercial and Solar.

The whole operation, "lock-stock and barrel," has just vacated 7703 N. Lamar and reestablished itself as the Texas Energy and Natural Resources Advisory Council at 411 W. 13th, Austin, TX 78701. The old phone numbers (475-5407, GOER and 475-5588, TEAC) will still put you in touch with essentially the same people.



From Left: David Miller, Exec. Dir.—NMSEA; Lee Salmon, Chapter Coordinator—American Section ISES; Russel Smith, Exec. Dir.—TX-SES.

September Summit

Sometimes it isn't enough to talk to each other by phone or through newsletters. It's a little cold.

So every now and then we need to get together, within breathing distance. And that ain't easy in the only state that once was a republic.

The latest gathering was the first weekend in September. And even though it meant sacrificing labor day festivities, most areas of the state were represented. It was held in Austin, so maybe it wasn't a total sacrifice.

One of the primary purposes of the get-together was to update local coordinators and groups on the Solar Realities '79 workshop series. But one of the most productive results was the exchange of ideas and programs among the various groups.

The Houston Solar Energy Society's public information activities are inspiring the various groups.

Dallas-Ft. Worth SES's documentation program and relationship with other segments of the community (League of Women Voters, for example), and the Northeast Texas SES's organizing efforts among a more dispersed population were discussed.

John Edmonson, from the El Paso SES, outlined efforts to increase cooperation between the solar group and the City of El Paso.

And everyone talked about the need to avoid letting differences within the solar community-- activist/commercial, passive/active, AT/high tech --become disruptive to the overall effort to advance solar.

Jim Robertson, with the Texas Solar Action Coalition, outlined that group's contract with the Center for Renewable Resources to document community-oriented solar programs and build a statewide network of activists.

There were reminders from TX-SES executive director Russel Smith of future events-- including the Solar Realities Statewide Conference, board elections, the growth

of local groups throughout the state, and approaches to TX-SES from both the Gulf States Utilities and CIBA-GEIGY for cooperative efforts.

Saturday night a number of people gathered to enjoy some dis-

tinctively Austin entertainment.

The most significant benefit of the conference, though, was the recognition on everyone's part that a great deal more is going on around the state than any one of us realizes.

From Top To Bottom: Daryl Janes, Russel Smith, Elizabeth Churchill, David Bentley, Warren Cole, Merve Croston, Ken Anderson, Jill Smith, Damon Hooten, Kevin Conlin, John Edmonson, Judi Basehore, Jeff Basehore.



TX-SES Board Elections

In accordance with the Bylaws of the Texas Solar Energy Society, Board of Directors nominations and election will occur during the final quarter of this year. Six positions come open for election each year with elected members serving two-year terms. No member may serve more than two consecutive terms. At least six board members must be American Section of ISES members at the time of the election. One AS-ISES opening must be filled first. Individuals whose current terms are up are: Bob Bennett, Bill Burgess, Doug Elliott, Ron Freeman, Sid Parker, and Gary Vliet. All are eligible for nomination for a second term. Following is the schedule of election procedures:

- *Nominations accepted from full members through the mail through December 5
- *Nominations made from the floor at annual Society business meeting (TX-SES luncheon, 12:00 noon, Saturday, Dec. 8, 1979, Austin Marriott)
- *Ballots mailed to full members for marking Dec. 15
- *Ballots counted, election determined Dec. 31. (Top six vote getters will fill positions effective Jan. 1, 1980)
- *Board officers to be elected at first board meeting of 1980

As noted above, the 1979 Annual Meeting will be held in conjunction with the Solar Realities '79 Statewide Conference in Austin. Special notices of the luncheon will be sent to TX-SES members in advance of the conference. Anyone with a subject they wish to have included on the agenda should contact Warren Cole, Secretary, Cole Solar Systems, Inc., 440-A East St. Elmo Rd., Austin, TX 78745, 512/444-2565.

Board members with one year remaining on their terms are: Ken Anderson, Warren Cole, Anna Fay Friedlander, Al Hildebrandt, Pete Jenkins, and George Way.

TX-SES CASE STUDY NUMBER 3

System Type: Domestic hot water and space heating

Location: Beto Unit - NW of Palestine, TX

Climatic Data:

Latitude:

Owner: Texas Dept. of Corrections

Building Type: Multi-family residence

System Sized For: 100% DHW and 80% space heating

System Designed By: Tex. Dept. of Corrections

System Installed By: Tex. Dept. of Corrections

Building Design By: Tex. Dept. of Corrections

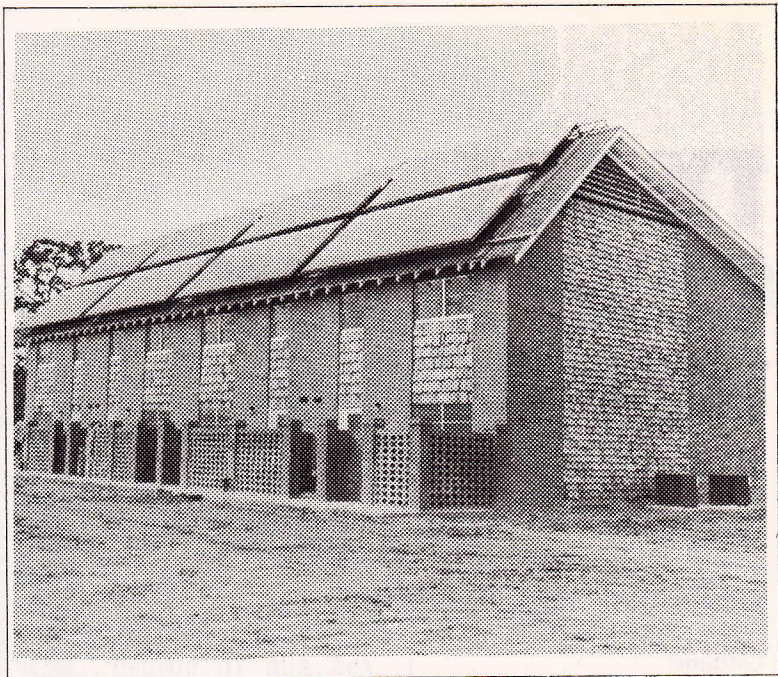
Solar System Manufacturer: Texas Dept. of Corrections

System Description: Liquid Type - Water/Ethylene Glycol

1088 ft² of collectors with 1492-gallon storage tank.

Collectors are single-glazed and use Olin Brass copper collector panel with Nextel black paint.

Panels were designed by the Tex. Dept. of Corrections and tested by Texas A&M University.



Twenty five (25) systems like this; Twelve (12) now completed or under construction.

Auxiliary/Back-up System: Natural gas-fired water heater (102,000 BTU input).

System Cost: \$15/Ft² of collector area

Funding Source: Texas Department of Corrections

Monitoring Equipment: None

Performance Data Available?: Yes

Installation Available for Prearranged Tour?: Yes

Best Person/Persons for Operating Experience Detail: Ronald E. Howell, P.E.
Chief Engineer
Texas Department of Corrections
P.O. Box 99 N/C
Huntsville, TX 77340

TX-SES CASE STUDY NUMBER 4

System Type: 2 Solarvak Collectors

Location: Edom, Texas

Climatic Data: Htg. Degree Days 1980
Clg. Degree Days 2578 60% sun in winter.
Latitude: 75% sun in summer.
32° 2 min. Avg. win. tem. 48°F
Owner: Avg. sum. tem. 84°F

Fred Hershback

Building Type:

Residential Home

System Sized For:

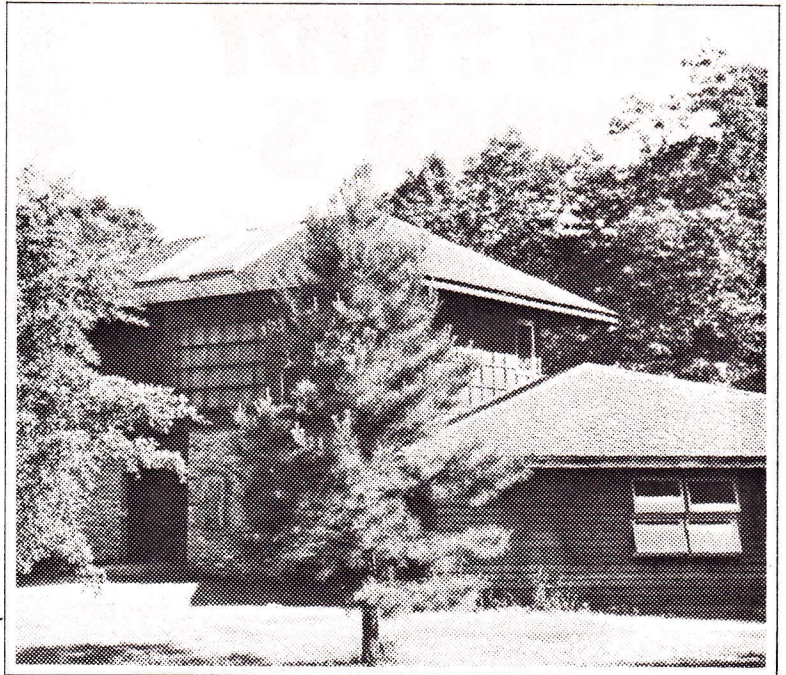
System Designed By: Robert Faulkner

System Installed By: Owner

Building Design By: Owner

Solar System Manufacturer: Solar Systems, Inc., Tyler, TX

System Description: 83-gallon storage tank for domestic hot water only, with provisions to add space heating later on. Recycle pump for freeze protection. Installed in 1976



Auxiliary/Back-up System: Electric water heater

System Cost: Approx. \$2000

Funding Source: Owner

Monitoring Equipment: Temperature Gauges

Performance Data Available?: No

Installation Available for Prearranged Tour?: Yes

Best Person/Persons for Operating Experience Detail: Fred Hershback

Solar in Libraries

As a result of the program, "Wake Up to the Sun, Learn About Solar Energy at Your Library," which was initiated by D.O.E. through the Southern Solar Energy Center and the Southeastern Library Assoc. this past May, five major libraries (Austin, Dallas, El Paso, Houston, and San Antonio) now have sizeable solar energy collections valued at over \$1000. These collections can be accessed through the state's interlibrary loan system. The several hundred libraries in the Texas State Library System have all received a solar information packet containing basic solar information, brochures, bibliographies, as well as a complete listing of the items to be found in the regional library collections. Local solar people are encouraged to spread the word about the availability of this information and to visit their libraries to check it out for themselves.

BIOMASS BRIEF

The Texas Energy Advisory Council (now part of TENRAC) hosted a 1979 Texas Biomass Research Workshop in Austin on August 16-17. Several of Texas' top biomass specialists as well as experts from Kansas and Oklahoma made presentations on the latest in alcohol production, anaerobic digestion for methane production, direct combustion, petroculture, and gasification/pyrolyses. The outcome of the workshops was a set of recommendations on policy for the state and suggested courses of action for municipalities, co-ops, and farmers. For follow-up information, contact:

Bob Avant
Coordinator: Biomass and
Wind Programs
Technology Dev. Section
Texas Energy & Natural
Resources Advisory Council
411 W. 13th
Austin, TX 78701
512/475-5588

NATIONAL

Boulder Bash

The 1979 Conference for a Solar America was held in Boulder, Colo. Aug. 16-17. The thrust of the convention was political organization, with networks being

set up to coordinate action when legislation affecting the solar movement is pending. The conference was hosted by the Center for Renewable Resources along with the Solar Lobby. Keynoted speakers were Valerie Pope, Sam Brown, Denis Hayes, David Morris and Amory Lovings. Numerous workshops and clinics were held with subject matter ranging from women's involvement in Solar/AT to problems with utility investments in Solar Technology.

Perhaps the most important aspect of the convention was the evidence of a growing grass roots movement involving an impressive array of individuals all over the country.

Reprinted from ACT

SERI Data Bank

SERI's Solar Energy Data Bank is currently documenting existing computer models for solar applications. If you are a developer of such a model, SERI would like to hear from you. Write: Solar Energy Research Institute, 1536 Cole Blvd., Golden, CO 80401, Attn: Solar Energy Data Bank.

Solar Curriculum

A secondary school solar energy curriculum has been developed by the New York State Education Department and The Atmospheric Science Research Center at the State University of New York at Albany. Components of the curriculum are available from the U.S. Government Printing Office, Washington, D.C. 20402. Further information on the curriculum is available from Debra Langford, Office of Conservation and Solar Applications, Dept. of Energy, 20 Mass. Ave., NW, Washington, D.C. 20585.

Solar Cell Coops

The Southern California Solar Energy Association is contributing to the reduction in the cost of photovoltaic energy production and increasing membership in the society at the same time. Members are offered solar cells that normally sell from \$3-\$5 for \$1, the price reduction being made possible by volume purchases. Perhaps solar cell co-ops could be formed to achieve similar savings elsewhere.

Wisps of Wind

A film produced by D.O.E. and SERI, "Wind: An Energy Alternative" is currently on tour to 35 state fairs to increase public awareness in the application of wind energy. The 13-minute film documents the role of wind power throughout American history.

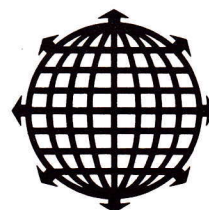
Passive Retrofit

D.O.E. is preparing a passive solar retrofit computer model for state governments to use in determining whether to undertake programs to encourage installation of passive solar energy systems in existing buildings. The model, to be completed next summer, would use information on local building structures and types to determine which passive solar systems would be suitable for retrofitting and how much fuel could be saved.

The completed model will only contain enough information to furnish the retrofit data on a statewide basis, but cities that have information on their own buildings would be able to insert that information into the model and determine whether a passive retrofit program would be a worthwhile investment.

D.O.E.'s Los Alamos Scientific Laboratory, which is developing the program for the Conservation and Solar Division, now is gathering detailed information on several passive systems including: direct gain systems-- direct heating of room air by sunlight; storage walls-- thick masonry walls that absorb the sun's heat; greenhouses-- glass enclosures built over the wall of a house to trap heat; and convective heaters-- enclosures that allow heated air to flow into other room areas, with a cool air return.

The sources said a D.O.E. contractor has prepared a draft handbook for the program describing the passive solar systems available along with methods of estimating costs of installing the systems.



COMMUNITY APPLICATIONS

A.T. GRANT AWARDS

Governor Bill Clements presented awards to recipients of the D.O.E. Small-Scale Appropriate Technology Grant Program at the State Capitol October 16. Approximately \$200,000 was awarded to 18 grant recipients out of 776 applications submitted in Texas.

The purpose of the Appropriate Technology Program is to encourage individuals, small businesses, non-profit organizations, and local/state agencies to become involved in energy research and development. The program is geared toward small-scale, energy efficient projects which use local materials, labor, and ingenuity, as well as maximize the use of renewable energy resources.

Texas is one of five states participating in this regional program; Arkansas, Louisiana, New Mexico, and Oklahoma are the other states included in the region. The Texas Energy and Natural Resources Advisory Council coordinated this program for the state of Texas. The 18 recipients from Texas are:

Allen D. Boehm
San Jacinto College
8060 Spencer Hwy.
Pasadena, TX 77505
Project: Wind-powered heat pump

Harvey Westerholm
City of Lufkin
P.O. Drawer 190
Lufkin, TX 75901
Project: Lufkin Worm Ranch (bioconversion of city waste water sludge's chemical energy)

Julio T. Perez
City of Carrizo Springs
308 Pena St.
Carrizo Springs, TX 78834
Project: Integrated Caliche Passive Solar Energy for Girl Scout Troop in Carrizo Springs

Daniel S. Burr
High Technology Associates
P.O. Box 1756
Del Rio, TX 78840
Project: Continuously Variable Collector-Storage Ratio

Jesus T. Salazar, Pres.
Laredo-Webb County Community Action Agency
P.O. Box 2125
Laredo, TX 78041
Project: Solar-Energy of Laredo Demonstration Project

James R. Campbell
2803 South Surrey
Carrollton, TX 75006
Project: Evaporative Precooler Retrofit for Air Cooled Condensers

Temple Dickson
Rolling Plains Technical Foundation
301 E. 3rd St.
Sweetwater, TX 79556
Project: Demonstration of Use of Solar Energy at Avenger Village near Sweetwater (also to train students in solar energy mechanics in this housing project)

Dr. James D. Briggs
Tierra Linda Ranch
Star Route, Box 574-637
Kerrville, TX 78028
Project: Combination Thermal Window Shutter, Shade Awning & Solar Reflector

Ed Brock
Rt. 3, Box 220 AB
Roanoke, TX 76262
Project: 22-Foot Diameter Horizontal Axis Windgenerator

E.L. Fulton
Tarleton State University
P.O. Box T-119
Stephenville, TX 76402
Project: Demonstration of Biogas as an Energy Source for Farm Operation

Dr. L. Dale Webb
1108 Langford
College Station, TX 77840
Project: Embedded Metal Vault (to develop a marketable system of building construction which would combine earth-embedded technology with metal buildings to produce significant savings in energy consumption)

Dr. A. Eugene Blackwell, Mayor
City of Wilmer
P.O. Box 248
Wilmer, TX 75172
Project: Heating and Cooling of Municipal Buildings with Waste Heat from Ground Water

Dennis Werner Feller
RFD 2
Fredericksburg, TX 78624
Project: Livestock Water Pumping Using Solar Energy

E.L. Moody
Marlin Chamber of Commerce
245 Coleman Street
Marlin, TX 76661
Project: Geothermally-Heated Chamber of Commerce Offices

Dr. Joseph Bousquet
1013 North Wall St.
Belton, TX 76515
Project: The Morama Bean: Propagation in Texas (drought-resistant African bean to alleviate costly irrigation in appropriate areas of Texas)

William S. Austin, A.I.A.
1817 SESCO
Arlington, TX 76013
Project: Monitoring of Thermal Mass Performance in a Residence

Howard Scoggins
1706 Karen Ave.
Austin, TX 78757
Project: Portalab Project Development

Laura S. Duncan
4828 Canyonbend Circle
Austin, TX 78735
Project: Design of One-Way Heat Shield

Feds Seek Complaints

The Department of Energy is seeking written comments to identify any Federal regulations you feel might interfere, or already are interfering, with the development and widespread use of renewable energy resources, such as solar power. Specific comments are invited concerning (1) which regulations prevent or impede the introduction into the market place of solar devices or technologies, (2) which regulations impede competition between solar firms, (3) what provisions should be added, deleted or subtracted to stimulate market acceptance and increased private interest in solar concerns.

Comments should be submitted to "Regulatory Reform - Re-

newable Energy Resources", Ms. Carol Snipes, Rm. 2221-C, Dept. of Energy, 20 Massachusetts Ave., NW, Washington, DC 20585. Comments need to be received by October 29, 1979. For further information contact Mr. John Schuler, 202/376-9630.

Do It Yourself

* Bread Box Water Heater Plans prepared by Steve Baer; published by Zomeworks Corp., Box 712, Albuquerque, NM 87103; A one-page blueprint which explains the principal, design and construction of a very low-cost, simple water heater which combines tank and collector.

* Building A Solar Water Heater prepared by Arnie Valdez and Akira Kawanabe; published by San Luis Valley Solar Energy Assoc., Box 1284, Alamosa, CO 81101; This well-illustrated booklet contains instructions for building a do-it-yourself solar hot water heating system based on the conventional flat plate collector.

* Solar Food Dehydrator Blueprints published by Domestic Technology Inst., Box 2043, Evergreen, CO 80439.

* Solar Food Dehydrator Cookbook published by San Luis Valley Solar Energy Assoc., Box 1284, Alamosa, CO 81101.

* Solar Reliant Greenhouse Blueprints prepared and published by Domestic Technology Institute, Box 2043, Evergreen, CO 80439; Five pages of blueprints describe the construction of free-standing, solar-heated greenhouses which can be built for approximately \$1,000 in materials.

* Solar Water Heater Plans prepared by Steve Baer; published by Zomeworks Corp., Box 712, Albuquerque, NM 87103; Two sheets of blueprints include discussion and design of a simple water-heating, flat-plate collector.

* A Survey Of Solar Agricultural Driers prepared and published by Brace Research Inst., MacDonald College of McGill Univ., Ste. Anne de Bellevue, Quebec, Canada H0A 1C0; Survey describes common types of solar driers which have been built around the world. Over 25 case examples with plans, materials and construction, performance data,

economics and comments on operation.

* Building A Vertical Forced Air Solar Collector published by San Luis Valley Solar Energy Assoc., Box 1284, Alamosa, CO 81101; This small booklet describes the construction of a low-cost air heater which has been widely duplicated in the northern Great Plains and Rocky Mountain states.

* How To Design And Build A Solar Swimming Pool Heater prepared by Francis de Winter; published by Copper Development Assoc., 405 Lexington Ave., New York, NY 10017; Information on the design, construction and economics of copper, flat-plate, water heating collectors.

* How To Build A Solar Crop Drier published by New Mexico Solar Energy Assoc., Box 2004, Santa Fe, NM 87501.

* Solar Energized Food Dehydrator Plan published by Solar Survival, Box 119, Harrisville, NH 03450.

SUNDIAL

Oct 17-18 HOUSTON
Oct 24-25 SAN ANTONIO
Nov 7-8 DALLAS
Nov 14-15 FT. WORTH: Texas Solar Realities '79. The final four stops in the statewide workshop series sponsored by the Texas Energy and Natural Resources Advisory Council. For information contact: TENRAC, c/o Texas Solar Energy Society, 1007 South Congress, Suite 359, Austin, TX 78704. Phone Daryl Janes 512/443-2528.

Oct 19-20 ARLINGTON: An introductory short course on Solar Heating and Cooling, sponsored by the Construction Research Center, UTA, Arlington, TX 76019. 817/273-3701.

Oct 28-31 WASHINGTON, D.C.: Fifth Annual Membership Meeting. Contact: SEIA, 1001 Conn. Ave., NW, Suite 800, Wash., D.C. 20036. 202/293-2981.

Oct 29-31 ATLANTA: 2nd World Energy Engineering Congress. Contact: Association of Energy Engineers, 464 Armour Circle, N.E., Atlanta, GA 30324. 404/892-1784.

Oct 29-31 WASHINGTON, D.C.: 4th Biennial Conference & Workshop on Wind Energy Conversion Systems. Contact: Richard Kottlo, JBF Scientific, 1925 N. Lynn St., Suite 308, Arlington, VA 22209. 703/524-4232.

Nov 6-
Dec 18

IRVING: "Solar Energy For Your Home," an eight-week course for the general public. Contact North Lake College, Irving, TX 214/659-5200.

Nov 8-10

AUSTIN: Texas Solar Action Coalition State Conference. Contact: Jim Robertson 512/478-3381 or 472-3329.

Dec 6-8

AUSTIN: "Solar System Performance in Texas," Texas Solar Realities 79 Statewide Conference. Sponsored by the Texas Energy & Natural Resources Advisory Council. Contact: Russel Smith, TX-SES, 1007 S. Congress, Austin, TX 78704, 512/443-2528.

WHERE TO LOOK

Low Temperature Thermal Energy Storage: A State-of-the-Art Survey. Frank Baylin. The National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Road, Springfield, VA 22161. Report # SERI/PR-S4-164.

Down to Business: An Analysis of Small-Scale Enterprises and Appropriate Technology and Biological Management of Passive Solar Greenhouses. Available from NCAT--Information, P.O. Box 3838, Butte, Montana 59701.

Energy Future: Report of the Energy Project at the Harvard Business School. Random House, P.O. Box 253, Cambridge, MA 02138.

The Politics of Energy, Barry Commoner. Knopf Press, in paperback.

The National Center for Appropriate Technology is taking proposals for its Grants Program year 3. Requests for proposals should be addressed to the NCAT Grants Office, Butte, Montana 59701.

The study, "The Role of Government and the Development of Solar Energy" by Michael Yokell addresses the question of whether the Federal government should subsidize solar energy, gives a brief review of the current subsidy program, presents the options for subsidizing solar energy, and discusses the proper balance among these options. Free from National Technical Information Service, 5285 Port Royal Rd, Springfield, VA 22161.

Reaching Up, Reaching Out: A Guide to Organizing Local Solar Events. Published by the Market Development Branch, Technology Commercialization Division, SERI, 1536 Cole Blvd., Golden, CO 80401.

Pamphlet on Gasohol, free from Domestic Technology Institute, P.O. Box 2043, Evergree, CO 80439.

New First Passive Solar Home Awards presents the state-of-the-art designs that won the competition sponsored by HUD. Contact: National Solar Heating & Cooling Information Center, P.O. Box 1607, Rockville, MD 20850.

Plain Talk About Buying or Building an Energy Efficient Home. Free

pamphlet from: Texas Energy Extension Service, Office of the Director, Texas A&M Univ., College Station, TX 77843.

Buying Solar by U.S. Office of Consumer Information Center, Pueblo, CO 81009.

Citizens National Solar Program: State Reports on Barriers and Strategies to Renewable Energy Development. Contains reports from each state on the potential of renewable resources, the barriers, and strategies for overcoming those barriers. Write: Center for Renewable Resources, 1001 Conn. Ave., NW, Washington, DC 20036.

Direct Testimony of Jeanne Schil-laci, Economic Research Division, PUC of Texas, Docket # 2676. Re: Application of Houston Lighting & Power Co. for a Rate Increase, Sept., 1979. Also: Similar Testimony for Gulf States Utilities. Both address the issue of utility rates in relation to customer use of solar systems. Write: Public Utilities Commission of Tex. Economic Research Division 7800 Shoal Creek Blvd. Austin, TX 78757

"Putting Environmental Protection and Paychecks Together." A publication which includes a section on opportunities for small business & employment in solar energy. Write: Bay Area Colloquium, LWVBA, 477-15th Street, Oakland, CA 94612.

Citizens' Energy Project is investigating the possibility of launching a National Passive Solar Foundation. For information, write: Citizens' Energy Project 1110 Sixth St., NW Washington, DC 20001

The American Association of Community and Junior Colleges will be sponsoring public forums on energy topics in 300-400 communities across the U.S. during Feb, March, and April of 1980.

Also, a course on energy topics to be carried by over 500 U.S. newspapers running concurrent with the forums will be done. In addition, a National Public Radio series will be tied to the Calendar of Issues. Contact: Patrick Cross, Regional Coordinator, Energy and The Way We Live, South Oklahoma Junior College, 7777 South May St., Oklahoma City, OK 73159.

Ideas on alternative State and local policies can be obtained from The Energy Project, Michael Freeberg, Coordinator, 1901 Que St. NW, Washington, D.C. 20009.

Citizens Energy Directory, 2nd edition, June '79, contains 620 names of the most active individuals and groups in the U.S. Listed by state and cross-indexed by areas of expertise. Write: Citizens Energy Project, 1110 Sixth St. NW, #300, Washington, D.C. 20001.

An annotated bibliography and resource list on "Biological Management of Passive Solar Greenhouses" can be obtained from National Center for Appropriate Technology, P.O. Box 3838, Butte, Montana 59701, 406/494-4572.

EI&I Associates is compiling an Alternate Energy Investment Directory which will be designed to assist under-capitalized energy-related firms by making their financial needs known. It will be directed to a clientele that is in a position to help, like investment companies, financial lending institutions, etc. Companies or individuals desiring to be listed should request the AEI Directory Data Form from: EI&I Associates, P.O. Box 37, Newbury Park, CA 91320.

D.O.E. has a 2nd draft of a Model Document for Code Officials on Solar Heating and Cooling of Buildings. Write: CABO, 2233 Wisconsin Ave., NW, Suite 560, Washington, DC 20007. In addition, three public sessions to hear public response on the Model Document will be held: Dec. 3 in Washington, DC; Dec. 5 in Denver, Colorado; and Dec. 7 in San Diego, California. They will be coordinated by Trinity University of San Antonio. Contact: Trinity University Continuing Education, 715 Stadium Dr., San Antonio, TX 78284, 512/736-8311.

Solar Access Law by Gail Boyer Hayes. A 320-page book from the Ballinger Publishing Co., Cambridge, MA 02138.

Catalogue of literature and brochures concerning energy available from Environmental Action Reprint Service, Box 545, LaVeta, CO 81055, 303/321-1645. EARS is a non-profit

organization working for national energy and environmental policies.

From: Solar Energy Research Inst. Solar Thermal TID Project, Communication Branch, 1536 Cole Blvd., Golden, CO 80401 the following:

Proceedings: Solar Thermal Power User Review Panel Meeting, March 1 and 2, 1979. Findings of the User Review Panel charged with analyzing information needs of four target audiences and recommending products to fill information gaps.

Poster: U.S. Mean Daily Solar Radiation, Annual. Map in brilliant color on black background illustrates radiation dispersion patterns (21"x17" wall map, viewgraph, or 35mm slide).

Poster: The D.O.E. Thermal Program. Two-color map with symbols and legend depicts D.O.E.-assisted solar thermal programs in the U.S. (23"x17" wall map, viewgraph, or 35mm slide)

Kit containing: two Mean Daily Solar Radiation wall posters plus one viewgraph and one slide; two solar thermal program posters plus one viewgraph and one slide; descriptive brochure.

Newsletter: In Review, a SERI monthly update. Capsule reports of SERI-administered work in progress, including information on upcoming meetings and publications.

The California office of Western SUN, the federally funded regional solar energy center, has recently published a handbook to advise local governments on the role they can play in stimulating conservation and solar energy use.

"Capturing the Sun, Opportunities for Local Governments" outlines measures already in place around the state, including the mandatory solar water-heating ordinance in San Diego County, the Davis conservation ordinance and sample sunrights proposals.

The book is being sent to more than 1000 county supervisors, mayors and city council members in California in an effort to focus statewide attention on the variety of models for local government action on solar energy. Copies are available for \$2.50 from Larry Levin, Western SUN, 921-10th St., Sacramento, CA 95814.

POSITIONS OPEN

Executive Director, New Mexico Solar Energy Association. Strong background in solar technology and administration of a technical organization. Salary \$13-16,000. Send resume and references to:

NMSEA
P.O. Box 2004
Santa Fe, NM 87501

Deadline: November 1, 1979

Appropriate Technology Organizer.

The Greenhills Center offers hospitality to anybody who wishes to become Dallas, Metroplex, or northeast Texas regional organizer for appropriate technology networking. Office space, local telephone free. Work processor, xerox, micro-computer resources by arrangement. If you would like to set up a meaningful program, we will host you as long as it does not cost us cash outgoing. Get your grants, work from here. Welcome.

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Route 1, Box 861
Cedar Hill, TX 75104
214/296-1955 (ask for
Dr. Stanford or Nadine Simon)

The Greenhills Center for Studies at the Interface Between Town and Country is an independent training and research field station near Dallas, Texas, doing exciting things in solar energy production and conservation by biological pathways: coppicing, novel treatments for refuse and sewage (and their by-products), roofcover vines for passive home-cooling, biogas, minimum-irrigation horticulture....Stationed on 1,000 acres of woodland and pasture as a refuge habitat. Looking for dedicated people at every level: trained scientists and administrators, farmers and skilled and unskilled artisans. Contact:

Dr. Stanford
Greenhills Center
Rt. 1, Box 861
Cedar Hill, TX 75104

Texas Energy and Natural Resources Advisory Council. Perform supervisory engineering work involving planning, coordinating, and directing energy research, development, and demonstration activity. Preferred qualifications: Masters or Ph.D. in engineering; Experience with energy technologies and State

or Federal government. Salary--\$23,592. Contact:

Dr. Roy Ray
TENRAC
411 W. 13th St.
Austin, TX 78701
512/475-5588

Position available for architect with top design ability. Involves passive solar architecture, earth materials, and some low-cost community applications. Previous experience with any of these helpful but not a prerequisite, whereas well-established architectural ability is crucial and fabrication and/or construction knowledge and experience extremely useful. Long hours, low pay, but an opportunity to assume major responsibilities and to help make history. The Center for Maximum Potential Building Systems works at the cutting edge of the field and is building a national reputation, with work presented regularly at national solar and appropriate technology conferences and published as leading examples in the field. Send resume to CMPBS, 8604 F.M. 969, Austin, TX 78724 or call Pliny or Daria Fisk at 512/928-4786 or 926-4418.

POSITIONS SOUGHT

Organizer/Administrator. Ten years experience community organizing. Particular interests in solar and renewable energy source and technologies.

Stephen A. Schneider
123 Tarpon Street
Galveston, TX 77550
713/762-6190

Solar—Patriots

The Texas Solar Action Coalition is sponsoring what may be the first ever SOLAR FLAG CONTEST.

All flags must be submitted in full scale, in actual materials, colors, etc. Recommended size is 6' x 4'. Deadline is 9 p.m. Thursday, Nov. 8 at the Union Hall at St. Edwards University in Austin.

For further details contact: The Flag Committee, TSAC, Box 12055, Austin, TX 78711, 512/478-3881 or 422-3329.

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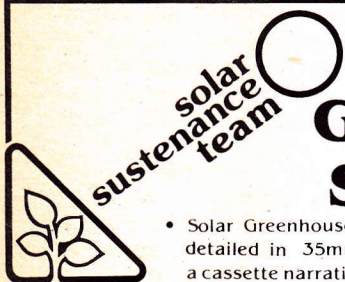
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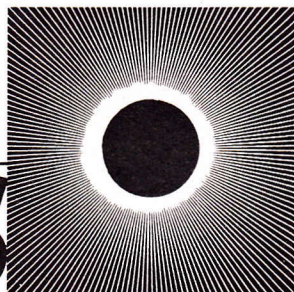
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