



The **READOUT**

Vol. 9 No. 1 Jan. 1986

HAPPY



NEW YEAR

Stanislaus Amateur Radio Association, Inc.
P.O. Box 4601 Modesto, Ca 95352

READOUT is the official publication of the STANISLAUS AMATEUR RADIO ASSOCIATION INC. "SARA" P. O. Box 4601 Modesto, CA. 95352. Entered as bulk mail at the U.S. Post office Modesto CA. Contributions to READOUT are always welcome and may be submitted to the editor, Bob Pinheiro, WA6ZLD at 1221 Mist Flower Ct. Modesto, CA. 95355. SARA owns and operates two F.M. repeaters. 145.39 MHz (-) located on Mt. Oso 22 miles SW of Modesto at an elevation of 3,370 feet. Our 220 MHz repeater operates of 223.68 MHz (-) and is also located on Mt. Oso at an elevation of 3,500 feet. Both repeaters are equipped with an autopatch for the use of SARA members. SARA conducts in informational net on both repeaters each Thursday evening at 730 pm with the exception of holidays.

SARA meets the third Tuesday of each month at the Stanislaus County Administration building at the 12th and H streets in downtown Modesto. Meetings begin at 730 pm. SARA is incorporated with the State of California and carries liability insurance covering all members. SARA is an affiliated club of the American Radio Relay League (ARRL) and Stanislaus County RACES. Dues are \$15.00 per annum, \$7.50 for students up to sophomore in college. Dues are pro-rated for newly joining members from the date they join. ARRL membership and QST renewals may be made through SARA with a 2.00 commission retained by SARA.

PRESIDENT

Gene Rong.....N6JRC.....239-9236

VICE PRESIDENT

John Cowman.....KB6OU.....527-7258

SECRETARY

Laverne Landeros.....KB6ECF.....578-5554

TREASURER

Lynn Windus.....KB6DXX.....523-0141

funnies by KF6QA



SO TELL ME BILL... WHAT'S IT LIKE PULLING THE PIN AFTER 20 YEARS OF AIR-TRAFFIC CONTROL?

BUDGET COPY CENTER

- XEROX COPIES
- HIGH SPEED DUPLICATING
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- BINDING

1325 J Street
Modesto, CA 95354
329-5335

1986 Officers

SARA 1986 officers were elected at the December meeting. Congratulations to President, Gene Rong, N6JRC of Manteca who moves up from Vice President last year. Vice President, John Cowman, KG6OU. Secretary, Laverne Landeros, KB6ECF and Treasurer, Lynn Windus, KB6DXX who was reelected to the office. Best wishes to the new officers as they face the new year ahead. Also, a big THANK-YOU to the outgoing officers who served the club well in 1985. NV6S Leroy; WG6P Denny; N6JRC, Gene and Lynn, KB6DXX.

DECEMBER MONEY REPORT

The Treasurers report given at the December meeting was inadvertently left out of the minutes as reported on Page 6. Here's the report from Treasurer Lynn, KB6DXX. Beginning December 1985 balance, \$946.50. Bills paid- phone \$20. 47. Stamps \$44.00. Bulk mail start program \$200 for total expenses of \$264.47. Income, \$150. Ending balance as of 12-17-85, \$832.03. Respectfull submitted by Lynn Windus, KB6DXX.

VE TEST SESSIONS

Here's a list of VE sessions coming up in Northern California and the contact information to register. The fee is \$4.25 unless otherwise indicated. Jan. 18th San Jose- contact AE6Z. Jan. 18th Santa Cruz- contact WB6MVK. Feb. 8th Sunnyvale- contact W6NLG. March 15th Pine Grove (near Jackson)- contact KE6NS. April 12th Sunnyvale - contact W6NLG. There are regular sessions held in Sunnyvale and Visalia. Contact W6NLG and WA6QFB for the dates. There is no fee charged for the Visalia tests.

RANDY, KA6WWT MARRIES

SARA member, Randy Hotchkiss, KA6WWT, was married on December 28, 1985. The bride, the former Lynn Beauchamp. Randy is presently serving in the Air Force stationed in Illinois. Congratulations!

ARRL
affiliated club

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BULK MAILING BEGINS

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With this issue of READOUT, we begin our 10th year as a club and the 9th year of the newsletter. We also begin mailing of our newsletter by bulk mail which will save the club money each year. For example, 200 copies of this issue are being bulk mailed at a cost of \$34.00. The first class rate would have been \$44.00, a savings of \$10.00 per month or \$120.00 a year. There of course, is a slight increase in the printing costs to mail 200 copies, but they are more than offset by the postage savings.

There is only one catch! We have to mail a minimum of 200 pieces of mail each month. So, that makes it very important that we keep our membership up and growing. Our membership ended 1985 with just under 180 members, and we are making up the balance of 200 by sending out copies to other clubs and prospective new members. Needless to say, it's very important that you renew your membership and pay your dues no later than this month.

Beginning with this issue, the READOUT is distributed completely by mail. They won't be handed out at the monthly meetings as in the past. Every member will receive his/her newsletter by mail approximately a week or two before the next meeting. This will afford us more timely exposure for upcoming meetings and events. Another plus is that maximum weight for bulk mail is 3 ounces compared to 1 ounce for first class mail which gives us the opportunity of put out a bigger newsletter if need be without additional postage costs. We will no longer have to fold the news letter envelope size because bulk mail does not need to pass through the post office's canceling machinery. We no longer will have to place a stamp on each newsletter because of the bulk mailing permit which does not require a stamp.

All in all, it's a very positive move, but please remember the 200 minimum limit and get your dues in right away. Also, be on the alert for new members to increase the membership. If you know of someone who might be a possible new member, please let WA6ZLD know and a complementary copy of READOUT will be sent to them.

Consequently, the deadline for articles appearing in READOUT has been moved to the 15th of the preceeding month. So, articles to appear in the February 1986 READOUT must be in the editors hands no later that the 15th of January, 1986.

This & That

>>> This has not been a good year for microcomputers—except for one company. Houston's Compaq Computer is booming! In 1983 they had a sales base of "zero". 1985 saw \$500 million plus and profits up six-fold to \$25 million.

>>> Did you know that at one time AM radio broadcasting was assigned only one frequency? In 1922 the Secretary of Commerce issued an Order assigning the 360 meter wavelength (833 kHz) to broadcasting. Later on that year, 750 kHz was added. It remained that way until 1924 when the 550-1500 kHz AM broadcast band was established. The band was later extended to 1605 and will get stretched again in 1987 to 1705 kHz making room for approximately another 1,000 stations (depending on power levels.)

>>> By 1990, one in every 11 American households will have satellite TV. Approx-

imately 1 1/2 million homes have dishes now. According to SPACE magazine, there are about 60,000 systems sold a month in this country. It appears that most home earth stations will ultimately be sold by cable companies in a "if you can't beat'em, join'em" marketing effort. Cable offers a perfect outlet for selling and leasing home satellite equipment (and decramblers) inside and outside of the their franchised areas. They have the billing and installation procedures already in place.

>>> The WA6DYF Memorial Hospital repeater has changed frequencies from 146.925 (-) to 146.355 MHz (+). The move was made primarily to get away from the QRM from the 925 machine at Pacifica.

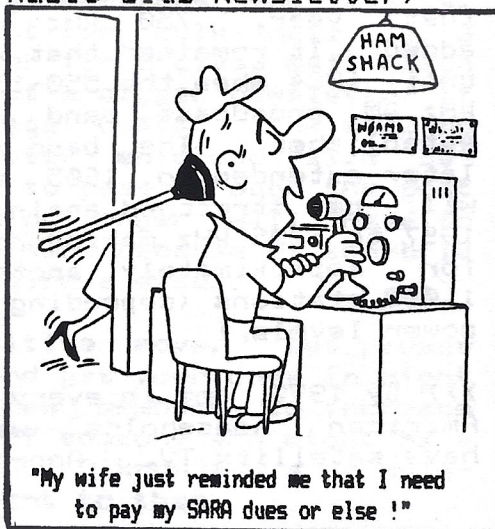
**PLEASE PAY YOUR
DUES NOW!**

STATION LOG

Minutes 12-17-85 meeting was called to order at 735 pm by President Leroy, NV6S. Minutes of previous meeting read and approved. Terry, N6KIG, reported on the November 30th fire department drill at Grayson and thanked everyone who attended. The fire department was very pleased with the efforts of all Amateurs who participated in the drill. Nomination for 1986 officers were opened. Elected to office for 1986 were Gene, N6JRC, President. John, KG6OU, V.P. Laverne, KB6ECF, Secretary and Lynn, KB6DXX was reelected as treasurer. The first ballot produced a tie vote for the office of VP between KG6OU and Denny, WG6P. A second ballot broke the tie and John was elected. NW6G reported that 21 applicants took tests on December 14 at the club sponsored VE session held in Modesto. The results; 2 new Technicians. 5 new Generals and one new Extra. KB6DYA reports he is still having trouble with the 39 machine from San Jose. He said he was going to install a reverse PL to eliminate the problem. Meeting adjourned at 810 p.m. . Respectfully submitted for the Secretary by Terry, N6KIG.

145.17 LINKS TO NEVADA

The Manteca 145.17 mHz repeater is now linked to several other systems covering Northern California and parts of Nevada. The link includes the 145.41 repeater on Fox Mt. north of Gerlach, Nevada which is linked to the 147.21 machine on Virginia Peak north of Reno. These systems are linked to a remote base on Peavine Peak near Reno which links to the Manteca machine on Fowler Peak near Copperopolis. Gerlach is about 100 miles northeast of Reno and about the same distance east of Susanville, CA. . The Manteca machine is owned by Doug, WB6MFV. (Thanks Calaveras Amateur Radio Club Newsletter)



GOLDWATER'S WIFE DIES

Margaret Peggy Goldwater, wife of Senator Barry Goldwater, K7UGA, died from complications of recent circulation problems and amputation of her left leg. She had been hospitalized since November. Mrs. Goldwater died on December 11th at the Good Samaritan Medical Center in Phoenix, Arizona with Barry at her side. She was 76 .

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Anytime you think you have influence, try ordering someone else's dog around.
(K6SJV)

AMATEUR CALL SIGNS

As of December 1, 1985 the FCC had issued the following Amateur call signs in the sixth call district.
Extra >>> WN6D <<< .
Advanced >>> KG6ZR <<< .
General-Technician >>>
N6MUM <<< . Novice >>>
KB6KRW <<<. Calls are issued in strict sequential order by the Commission.

The FCC took 24 working days, about 5 weeks, to process and mail 7,330 Amateur licenses during November 1985. Add about two more weeks for upgrade applications to filter through the new VE system making a total of 7 weeks.

PROGRAM THIS MONTH

BEAUTIFUL MULTI-PROJECTOR

COLOR/SLIDE SHOW ON ALASKA

JANUARY 21, 1986 730 PM

HOSTESS: MRS. BUNNIE RADER

SARA CLUB MEETING

PLAN TO BE THERE

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100 MILLION WATTS E. R. P.

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Did you know that you are living near a radio station that is capable of putting out 100 million watts of effective radiated power (ERP)? Well, you are! It belongs to the Voice of America relay station located at Delano, CA. just north of Bakersfield. The Delano Relay Station is a shortwave international broadcasting facility of the Voice of America (VOA), an element of the U.S. Information Agency, and is located on 800 acres 2 1/2 miles west of Delano in Kern County.

In June 1942, the Office of War Information (OWI) was established and subsequently determined that west coast shortwave radio stations were necessary to assist in the Pacific war effort, providing information and entertaining the troops. After considerable exploring for an appropriate location, representatives of the Government and CBS (who operated the station until 1963 under contract) selected Delano as the site for the station. Construction started in February, 1944. In November of that year, two 50 KW transmitters went on the air, followed by a 200 KW transmitter in 1945. At the end of WW II, OWI was abolished and VOA continued under contract to the Department of State as the international broadcasting element of the U.S. Government. Two new 100 KW transmitters were installed in 1950/51 and the VOA became part of the United States Information Agency (USIA) in 1953.

In 1965, the VOA started an extensive modernization program which more than doubled Delano's output power by 1967. Three new 250 KW automated shortwave broadcast transmitters and two 50 KW independent sideband transmitters were added during this period. A new master control room incorporating modern techniques for program and transmitter control, testing and monitoring was provided. Major modification and construction of new antennas and transmission lines was started in 1974 to improve program quality overseas.

Today's facility consists of a large main building, mechanical shop, equipment shelter, pump house and complex

transmission line and antenna system. A standby receiving station is located near Pixley. The station presently has two 100 KW General Electric transmitters and three 250 KW automated Collins transmitters that are used for regular AM shortwave broadcasting. In addition, there are two 50 KW independent sideband transmitters used to relay programs to VOA relay stations overseas. Four new 250 KW Brown-Bovari Company transmitters are being installed this year. The transmitters are connected via a complex switching system to antennas consisting of nine "curtain" and six "rhombic" antennas. These antennas beam the signal into the desired target areas of Southeast Asia and Latin America. A unique curtain antenna constructed in 1977 has an ERP of 100 million Watts. Other antennas radiate from 25 to 50 million watts ERP.

The station is valued at over \$10 million dollars with an annual operating cost slightly over \$1,600,000. About half of this amount is the salary of 22 employees. The station's electric power bill is \$2,200 PER DAY which is \$1,400 per WEEK. High power tubes and vacuum capacitors used in the 250 kilowatt transmitters cost over \$6,000 and \$4,000 respectively.

Delano transmits programs to Southeast Asia and South America. These programs are beamed from the USIA studios in Washington via the Goddard Space Flight Center to the COMSAT II satellite in stationary orbit over the United States. The satellite signal is received by an on-sight earth station and programs are routed to the proper transmitters by technicians operating the large switching console in the master control room. The station transmits 914 hours weekly. VOA programs are carried in English, Chinese, Indonesian, Korean, Bengali, Vietnamese, Russian, Hindi, Khmer, Thai, Swahili, Portuguese, Burmese and Lao.

Until it's closure in 1979, the USIA operated a similar VOA station near Dixon in Solano County before it was closed down. (Thanks Splatter, Kern County Amateur Radio Club and KG6YI)

lòók

By examining the mailing label on the back page of each newsletter, you can easily determine if you have paid your dues. The year that appears in the upper right hand corner of the mailing label is the year that your membership is paid through. If it says "1985", you haven't paid your dues and this may be the last edition of the newsletter that you will get. Send your check or money order to SARA in care of the post office box.

(Example)

Joe Smith **1985**
1234 Easy St.
Modesto, CA.
95355

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NEW 1986 CALIFORNIA LAWS

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Effective on January 1, 1986 several new laws went into effect in California. Here's a run down.

1. It is now illegal for bicyclists to wear a headset that covers both ears. It is already illegal for vehicles.
2. Seat belts must be worn while operating a passenger vehicle or light truck.
3. Penalties for refusing to submit to a chemical blood-alcohol test have been increased. The penalty for anyone convicted of a subsequent drunk driving offense, including a mandatory 48-hour jail term and longer periods of license suspension.
4. The penalty for riding a bicycle while intoxicated has been increased from an infraction to a misdemeanor.
5. It is prohibited by law to operate a passenger vehicle with a modified frame height that is more than 23 inches from the ground- the so-called "high-riders." The new law, passed because of concern over stability problems of vehicles with jacked-up suspensions, also it spells out ground clearance limitations for various weights of trucks.
6. A new law requires that seat belts be worn while operating a motor vehicle on the highway.

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LASER 558 OFF THE AIR

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"Laser 558", the American financed AM pirate broadcasting station that operated off Britian's shore is no more! The questionably legal pop music station has been broadcasting from international waters unlicensed for more than a year on the 558 kHz. The United Kingdom has a 9 kHz AM broadcast band plan-hence the weird frequency.

The station, manned by young American DJ's, operated from the 440 ton "Communicator" moored off the Thames Estuary outside British territorial limits. The vessel, operated by a U.S. owned entrepreneurial radio company, sailed under a Panamanian flag. They hoped to attract advertising revenues.

It went off the air three weeks ago during a storm. It was England's most popular radio station -- much to the dismay of the British Department of Trade. The Trade Department has kept a very close watch on both Radio Laser 558 and Radio Caroline -- a rival pop music

pirate also transmitting from the North Sea. The British government has been photographing all visiting vessels, monitoring radio transmissions and building up dossiers for possible prosecution. The government earlier had passed laws prohibiting British citizens from selling supplies to such vessels in hopes of putting them out of business.

A distress call by the ship's master was answered by the Gardine Tracker, a surveillance vessel ordered by London authorities (at a cost of over \$70,000 a month) to keep a watch on the station. Conditions, described as "horrendous" aboard the vessel deteriorated sharply over the last 60 days with reported outbreaks of dysentery and scurvy. The presence of the surveillance ship had deterred delivery of needed supplies. There was little food or water on board.

On November 6th the crew said they had had enough. The ship was towed into Harwick port as fans watched and mourned. Police and imigration officials are now interviewing the ship's crew.



Editor's WA6ZLO Notes

Sometimes the word arrangement in church bulletins can be very humorous. Here's a couple of authentic announcements taken directly from various church bulletin boards. "Tuesday at 4 p.m. there will be an Ice Cream Social. All ladies giving milk please come early." "Wednesday the Ladies' Literary Society will meet. Mrs. Johnson will sing "Put Me In My Little Bed" accompanied by the Pastor." +++ Congratulations to our newly elected officers for 1986 and let's not forget the excellent job done by our 1985 officers. Once again we are fortunate to have a strong slate of officers to guide our club through the new year. +++ Chet, W6XK, was a very sick man for a few days last month when he came down with blood poisoning as a result of a spider bite. Chet didn't realize that he had been bitten until his veins turned a funny

color. +++ Sorry to report that K6SJV's wife passed away in her sleep on December 20th in Tracy. Our condolences to Oakie and the family. As of this hour, Joe, N6DXB, is in grave condition in a Stockton hospital. Joe has been in a coma for several weeks and is very weak.

The W6BXN (Turlock ARC) club's digipeater on Fremont Peak (Mt. Bullion near Mariposa) was scheduled to move from 145.01 to 145.03 MHz on December 27th. With the explosion of Packeteers, the traffic has become horrendous. Thus, the move. Burt, W6FGC, reports that he is just about ready to put a Packet Mailbox on the air from his home in Twain Harte. The box will be known at the MVRG (Mountain-Valley Radio Group) box and will carry information on SARA meetings, programs etc. Burt is not sure what frequency he is going to put it on, but tentatively it's scheduled for 145.05 MHz. +++ An excellent program has been lined up for the February 18th meeting of SARA.

Jasper, WD6DZN, will present a slide/sound show on the Memorial Hospital Medi-Flight Helicopter. Make your plans to attend.

+++Jim, WA6NSK, is about ready to put the Tuolumne Repeater Association's 220 MHz repeater on the air. 224.36 MHz will operate initially from Jim's home at Sugar Pine (4600 ft) for a testing period and then will be moved to Mt. Lewis. Plans call for a possible future link with the Sonora 147.945 machine.

Our VE examination session on December was very successful. 21 tests were administered. Applicants came from as far away as Pollack Pines and Sacramento. Congratulations to Bud, KB6JHU and Bill, KB6JHV both of whom upgraded. The VE team consisted on Leroy NV6S; Denny, WG6P; Tom, WJ60; Chuck, NW6G and myself. Also, pleased to announce that Sherry, KR6F has accepted appointment as the new SARA Educational Committee Chairperson. I'm sure she will do a fine job. Join me in thanking Chuck, NW6G for the outstanding job he did as the Educational Chairman. +++The SARA 220 machine continues to elude repair. It's been up and down for the last several weeks. The problem is the machine jumps off frequency about 10 kHz high. The oscillator circuit has been checked and rechecked and

still the problem eludes us. When we bring it down from the hill and put it back on frequency it works fine for a week or two and then starts in again. It's an intermittent problem that is giving our engineers fits. +++Before closing, one more goodie from the church bulletin. "The service will close with, Little Drops of Water". One of the men will start quietly and the rest of the congregation will join in. If you haven't paid your dues yet, please do it now. That's it! Happy New Year! Bob, WA6ZLO, 73.

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COMMODORE 64 MOST LIKED

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It appears that the Commodore 64 is the most popular computer among Amateur radio operators. In a survey conducted by QST magazine, 43% of those polled indicated that they were using the 64. The Commodore VIC 20 was next with 10.4%. The remainder in order were Radio Shack Color Computer (CoCo) 5.5%; IBM PC 5.2%; Xerox 820-1 5.2% and all others 53.6 %. The surveyed usage of computers shows that RTTY with 43.1% was the highest followed by C.W. 39% and Packet radio with 30.8%.

THE AMERICAN RADIO RELAY LEAGUE, INC.

SECTION MANAGER

SAN JOAQUIN VALLEY

Charles P. McConnell W6DPD

WORLD RADIO for January 1986 has the following headline, "Lobby may kill patches." The article refers to legislation in Congress (House Bill HR 3378 and Senate Bill S-1667) that proposes to limit the ability of the general public to monitor telephone and other forms of communication transmitted by radio. That could include Amateurs listening to other Amateurs' VHF autopatch and HF phone patch calls. The article points out that this legislation may be the result of the role that Amateurs played in the defeat of California Senate Bill SB 1431. This legislation was aimed to protect the cellular telephone industry in California. All Amateurs should read the *WORLD RADIO* article and then contact Congressman and Senators about the legislation.

On November 20 the FCC released a Report and Order in PR Docket 85-51, amending the Amateur rules to prohibit Amateurs who have had their operator licenses suspended and station licenses revoked from participating in Amateur Radio communications as third parties. This does not change the present rules provisions regarding third party participation, it simply says that Amateurs who have been disqualified can't circumvent enforcement sanctions by taking part in Amateur communications as third parties. Amateurs must not allow the disqualified persons to operate their stations as third parties.

There are appointments as an Assistant Technical Coordinator (ATC) available to ARRL members who desire them. The ATC works in the area of radio frequency interference problems. This appointee would get information to help Amateurs in solutions to these kinds of problems. If your club has a TVI chairman, you might consider having this person seek the ATC appointment as a means to help in the solution of RFI problems. Contact the Section Manager for more information. His address is on page 8 of any *QST*.

Your Invitation

Several complimentary issues of READOUT were mailed this month. If you are not a member of SARA and received a copy of READOUT, we hope you enjoy it and will accept this invitation to join SARA. You will enjoy meeting new friends and the many activities of the club each year. Your membership brings with it the club's monthly newsletter, READOUT and use of the autopatch facilities.

Please use the handy membership application below to apply for membership. If you would like more information on SARA please write to the Club at post office box 4601 Modesto, CA. 95352.

Join In: **DUES** Pay

January	\$15.00
February	\$13.75
March	\$12.50
April	\$11.25
May	\$10.00
June	\$ 8.75
July	\$ 7.50
August	\$ 6.25
September	\$ 5.00
October	\$ 3.75
November	\$ 2.50
December	\$ 1.25

Membership

MEMBERSHIP APPLICATION

Name	_____	Date	_____
Address	_____	Call	_____
City	_____	MEMBER OF ARRL?	_____
Zip	_____	Home Phone	_____
Bus. Address	_____	Bus. Phone	_____
Occupation	_____	Date of Birth	_____
Class of License	_____	Year First Licensed	_____
FOR OFFICIAL USE ONLY:		Membership year (19)	Entered Roster ()
Treasurer ()	_____	Welcome/Autopatch letter sent: ()	Entered Mail List ()

CALENDAR

January 21, 1986.....SARA Monthly meeting..... 730 p.m.
 Program: Slide show on Alaska
 February 18, 1986.....SARA Monthly meeting..... 730 p.m.
 Program on Medi-Flight helicopter
 March 18, 1986.....SARA Monthly meeting..... 730 p.m.
 April 22, 1986.....SARA Monthly meeting..... 730 p.m.
 May 20, 1986.....SARA Monthly meeting..... 730 p.m.
 June 17, 1986.....SARA Monthly meeting..... 730 p.m.
 July 15, 1986.....SARA Monthly meeting..... 730 p.m.
 August 19, 1986.....SARA Monthly meeting..... 730 p.m.
 Sept. 16, 1986.....SARA Monthly meeting..... 730 p.m.
 October 21, 1986.....SARA Monthly meeting..... 730 p.m.
 November 18, 1986.....SARA Monthly meeting..... 730 p.m.
 December 16, 1986.....SARA Monthly meeting..... 730 p.m.

 * " " " S P E C I A L " " " *
 * SLIDE/SOUND SHOW ON MEDI- *
 * FLIGHT EMERGENCY HELICOPTER *
 * >>>>>> NEXT MONTH <<<<<< *



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