Official Program

FOURTEENTH ANNUAL

PACIFIC DIVISION CONVENTION A. R. R. L.

Auspices of

S. C. C. A. R. A.

Hotel Sainte Claire San Jose, California

September Second, Third, Fourth 1933

CONVENTION COMMITTEES



General Chairman	Eugene R. Booker, W6YAF
Vice Chairman	Harry Engwicht, W6HC
Financial	Gordon Howes, W6CEO
Reception	Frank E. Breene, W6FQY
Registration	Charles Apra, W6DSE
Housing, Entertainment	George H. Call, W6BHY
Prizes and Code Contests	E. J. Amarantes, W6FBW
Ladies' Chairman	Mae Amarantes, W6DHV
Ladies' Reception	Sylvia Apra, W6FMT
Publicity	Dick Barrett, W6CFK
Program	
Station Technicians—Terry Hansen, W6KG	5; Ronald Gordon, W6AAZ; Don Bellis.

Station Technicians—Terry Hansen, W6KG; Ronald Gordon, W6AAZ; Don Bellis, W6DBK; Fred Gillmeister, Steven Hedrick.

OFFICERS OF SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION

President	Harry Engwicht
Vice President	
Secretary	Mae Amarantes
Treasurer	Gordon Howes
Supervising Operator	Jack Anderson

OFFICERS OF SANTA CLARA VALLEY SECTION

S. G. Culver, W6AN	Pacific Division Director
Bruce Stone, W6AMM	Section Communication Manager
E. J. Amarantes, W6FBW	Route Manager
Chas. J. Camp, W6BMW	Route Manager

The Santa Clara County Amateur Radio Association



During the Winter of 1921, a group of amateur radio operators residing in San Jose mer and formed an organization known as the San Jose Radio Club. The purpose of the organization was to promote the interests of amateur radio in San Jose. During the years that immediately followed, the club enjoyed an ever increasing membership, and it was not long before it became desirable to accept amateurs from the immediate vicinity of San Jose as members. In 1925 the name was accordingly changed to the present one. The Santa Clara County Amateur Radio Association. Under the new impetus the membership increased to about 150 members and in 1926 the 7th Annual Pacific Division Convention of the American Radio Relay League was given under the auspices of the Association. The year 1926 was an important one in the history of the Association for other reasons than its venture into a convention. During the early part of the year the plan of operating an amateur station from the summit of Mount Hamilton, 4209 feet above the sea level, was carried to a successful conclusion when all continents but Africa and Europe were worked. A more important work was done, however, when messages from the Lick Observatory astronomers were transmitted and answers were received from the Lick Observatory station near Santiago, Chile.

For twelve years without interruption the club has met and worked with one idea above all others—to champion the cause of amateur radio and to fight for the rights of that group of men who as amateur radio operators serve the "public interest, convenience and necessity" better than any other group or organization existing in the world today. The work has not been easy and the membership has been from time to time labelled as "back seat drivers" and radicals. Nevertheless, the work has gone on and though the gains have been small efforts will not cease until the goal has been reached.

In two cases men have been selected from the club's membership to become Directors of the Pacific Division. The first WAC certificate was granted to a member of the organization and, indeed, the WAC club itself was conceived at one of the meetings. As time has gone on members have gone to the far corners of the earth, China, The Phillippines, India, Australia, Central Africa and Europe. These men are still active in carrying on for amateur radio and the club is proud to have started them on their way.

Long has the organization labored to make the amateur understand that it is a right and not a privilege that he has in carrying on communication. The amateur must protect himself, for there is no one that will do this task — and it is a task — for him. The "Open Forum" at this convention has been provided for the serious minded men who are willing to put their shoulders to the wheel. This is not the place to let your emotions carry you off. Only by hard headed, logical reasoning can we plan the means to gain back that which we have lost, and protect as inviolate that which we have.

The SCCARA is happy to have you as its guests and hopes that you will spend a profitable three days for amateur radio.

H. E.

PROGRAM

SATURDAY, SEPTEMBER 2, 1933

- 9:00 A.M.—Registration and "hamfest." Lobby of Hotel Sainte Claire.
- 10:00 A.M.—R. I. Examinations. Convention Rooms on Second Floor.
- 10:45 A.M.—Assemble in Gold Room on Second Floor.
- 11:00 A.M.—Convention called to order and officially opened by S. G. Culver, W6AN, Pacific Division Director.
 - Greetings by George B. Campbell, President of the San Jose Chamber of Commerce; Bernard H. Linden, Radio Supervisor; Harry Engwicht, W6HC, President of S.C.C.A.R.A.
 - Announcements by Mae Amarantes, W6DHV, Ladies' Chairman, and Eugene R. Booker, W6YAE, General Chairman.
- 1:00 P.M.—Sending and Receiving Contests. Convention Rooms on Second Floor. Elbert J. Amarantes, W6FBW, in charge.
 - Meeting of Phone Men. Gold Room. Charles W. Holdiman, W6AGJ, Chairman.
- 3:00 P.M.—Technical Meeting. Gold Room. Harry Engwicht, W6HC, Chairman. Speakers:

Milton A. Ausman. Subject: "Audio Amplifiers."

Earl R. Meissner. Subject: "The Velocity Microphone."

7:30 P.M.—Stunts and Smoker. Gold Room. George H. Call, W6BHY, in charge.

SUNDAY, SEPTEMBER 3, 1933

- 8:00 A.M.—SCM, RM, ORS Traffic Breakfast. Gold Room. Frank J. Quament, W6NX, Chairman.
- 9:30 A.M.—Ladies' Breakfast. Patio of Hotel Sainte Claire. Mae Amarantes, W6DHV, in charge.
- 10:00 A.M.—Technical Meeting. Gold Room. Harry Engwicht, W6HC, Chairman. Speakers:

Franck C. Jones. Subject: "Amateur Ultra-Short Wave Practice."

Norris Hawkins. Subject: "Some Notes on Electron-Coupled

Oscillators."

PROGRAM

- 1:00 P.M.—OPEN FORUM. Gold Room. Director Culver, W6AN, Chairman.
 "The Time and Place for Constructive Action."
- 2:00 P.M.—Ladies' Bridge and Whist Party. Patio of Hotel Sainte Claire.

 Mae Amarantes, W6DHV, in charge.
- 7:30 P.M.—OPEN FORUM continued, if incomplete.

Speakers:

F. E. Terman. Subject: "Directional Antennae and Radio Frequency Transmission Lines." Ralph M. Heintz. Subject: Open.

MONDAY, SEPTEMBER 4, 1933

8:30 A.M.—USNR Meeting. Gold Room. Frank J. Quement, W6NX, Chairman.

Speakers:

Lieutenant E. L. Fryberger, USN. Lieutenant H. K. Huppert, USNR. Movies by Lieutenant Fryberger.

9:45 A.M.—Technical Meeting. Gold Room. Harry Engwicht, Chairman.

Speakers:

Arthur Halloran and A. H. Brolly. Subject: "Television."

D. B. McGown. Subject: "The Newer Types of Tubes and Their Application to Amateur Practice."

- 1:00 P.M.—Assemble on Walk west of Hotel Sainte Claire for Convention Photograph.
- 1:15 P.M.—Take cars and busses for trip to Naval Air Base, Sunnyvale, and Ryan High Voltage Laboratory, Stanford University.
- 7:30 P.M.—Banquet and Awarding of Prizes, Cafe Esplendido of Hotel Sainte Claire.

 See Page 6 for Banquet Program.

BANQUET

MENU

Chilled Fruit Cocktail

4

Cream of Fresh Tomatoes

•

Grilled Club Steak Mushroom Sauce

Parmentier Potatoes

Corn Saute with Peppers

•

Heart of Lettuce

•

Bavarian Cream Pudding

Coffee



Music—Joe Jennings, W6EI, and his orchestra.
Welcome Address—Eugene R. Booker, W6YAF, General Chairman.
Address—S. G. Culver, W6AN, Director Pacific Division, Toastmaster.
Talks:

Bernard H. Linden, Supervisor Sixth District.

H. W. Dickow, Editor of "Radio."

Lieutenant E. L. Fryberger, USN.

Section Communication Managers.

Others to be announced later.

Awarding of Prizes—E. J. Amarantes, W6FBW, and Geo. H. Call, W6BHY. Selection of City for 1934 Convention—Under Supervision of Director Culver. Closing Remarks.

CONTESTS

A Valuable Prize Will Be Awarded the Winner of Each

First "ham" to register from outside of Santa Clara County.

The "ham" registered from the greatest distance (arriving during past three months).

The SCM selling the most convention tickets.

Receiving Contest (Open).

Receiving contest for amateurs (barred to those who have had commercial experience or have held commercial tickets).

Sending Contest (Open).

Best Stunt.

QLF Contest.

Tallest "ham."

Shortest "ham."

Oldest "ham."

Youngest "ham."

Best "mike" voice (Fone "hams" only).

Best 3/4 Meter Transmitter and Receiver (Fone given preference over CW).

PRIZES

The following manufacturers, distributors, and dealers have co-operated with the Convention Committee by furnishing the prizes to be used, the majority being door prizes. We heartly endorse their products and urge that you reciprocate by patronizing them when ordering those miscellaneous parts you need from time to time. We arge upon those receiving prizes that they write the prize donor, acknowledging, receipt of prize. Only by co-operation on the part of the amateur will the advertising value of such prize donations as follow be impressed on the donor.

AMATEUR RADIO SUPPLY CO., 390 11th St., Oakland, Calif.

ELECTRIC SUPPLY CO., 328 13th St., Oakland, Calif. G. M. C. RADIO CO., 921 Harrison St., Oakland, Calif. HODGES & GLOMB, Hammarlund Distributors, San Francisco

HAMMARLUND MFG. CO, 424 W. 33rd St., New York, N. Y.

"THE OFFICIAL CONVENTION RECEIVER"

MCMURDO SILVER, INC., 136 W. Austin Ave., Chicago, Ill.— 1 Type 3A Ham Super with Dust Cover and one unit inductor.

NATIONAL RADIO TUBE CO., 3420 18th St., San Francisco, Calif.— One 204A Tube

- ONE COMET PRO

OFFENBACH ELECTRIC CO., 1452 Market St., San Francisco, Calif.— 1 Silver Marshall Bearcat SW Receiver complete with power pack. coils, and tubes

RADIO MFG. ENGINEERS, 147 Cooper Ave., Peoria, Ill.— One E7S Condenser Microphone with amplifying head, stand and connecting cord

PRIZES — (Continued)

- AMATEUR SERVICE SALES, 2000 Market St., Chicago, III.— One Type A Transmitting Choke— One Type B Transmitting Choke
- ARRL HEADQUARTERS— 3 pads message blanks, One QST Binder, 2 Hints& Kinks
- AMERICAN SALES CO., 44 W. 18th St., New York. N. Y.— 4 Dubilier 4 MFD Condensers, 1 Stromberg Carlson Power Transformer
- BANKS INTER-AIR PRODUCTS, Woodside, N. Y.—
 1 Taurex, 1 Masterdial, 1 Test Kit
- BLILEY PIEZO-ELECTRIC CO., Erie, Pa.— 1 Order for Crystal, 1 Crystal Holder
- BURGESS BATTERY CO., New York, N. Y.— 2 Super B Batteries
- BURSTEIN APPLEBEE CO., 1012 McGee St., Kansas City, Mo.— One 204A Socket
- ALLEN D. CARDWELL MFG. CORP., 83 Prospect St., Brooklyn, N. Y.— One T199 Transmitting Condenser
- I. S. COHENS SONS CO., 1106 Market St., San Francisco, Calif.— One 750 Volt Power Transformer, 2 Concourse 8MFD 400V Condensers, 1 Jefferson Microphone Transformer, 1 Fleron Lead-in Insulator
- CORNELL-DUBILIER, Long Island City, N. Y.— One Pyranol Transmitting Condenser
- CORNING GLASS WORKS, Corning, N. Y.— 2 Pyrex Strain Insulators, 1 Lead-in Insulator
- DELTA MFG. CO., Cambridge, Mass.— 1 Power Transformer, 1 Swinging Choke
- DUOVAC RADIO TUBE CO., 360 Furman Ave., New York, N. Y .-- One 242 50 Watter
- ELECTRAD, INC., 175 Varick St., New York, N. Y.— Two TG100 Trans. Leaks
- M. M. FLERON & SON, INC., 113 Broad St., Trenton,
 N. J.— 20 Stand-off Insulators
- GENERAL RADIO COMPANY, Cambridge, Mass.— One 639A Transmitting Variable Condenser
- GIRARD HOPKINS MFG. CO.- 1437 23rd Ave., E. Oakland, Calif.— One 1MFD 2000V Condenser
- HAMMARLUND MFG. CO., New York, N. Y.— One TC 225X Condenser, One Ch500 Choke, and One CH8 RF Choke
- HINDS & EDGARTON, 19 S. Wells St., Chicago, Ill.-1 Order for 200 QSLs

- ALBERT HOEFLICH, 626 16th Ave., San Francisco, Calif.— One 40 Meter Crystal, One SS Crystal
- HYGRADE SYLVANIA CORP., Clifton, N. J.— One 211 50 Watter
- INTERNATIONAL RESISTANCE CO., 2006 Chestnut St., Philadelphia, Pa.— 1 Resistor Kit, 1 Resistor Indicator
- M. C. JAMES, W6DQI, Long Beach, Calif— Two 866 Tubes
- J. M. P. MFG. CO., 3118 N. 34th St., Milwaukee, Wis.— 1 Submariner SW Adapter
- E. F. JOHNSON & CO., Waseca, Minn.— 25 Transposition Blocks No. 31, 15 Strain Insulators No. 32, Two No. 71, No. 72 Plugs & Jacks
- KENYON TRANSFORMER CO., 122 Cypress Ave., New York, N. Y.— One 866 Fil Trans
- LEEDS, 45 Vesey St., New York, N. Y.— Two 50 Watt Sockets
- LITTLEFUSE LABS, 1784 Wilson Ave., Chicago, III.— Little Fuses
- R. H. LYNCH, 970 Camulos St., Los Angeles, Calif.— One 16 ga. Aluminum Meter Can
- LYNCH MANUFACTURING COMPANY, 51 Vesey St., New York, N. Y.— 1 SW Antenna Kit
- P. R. MALLORY & COMPANY, 3029 E. Washington St., Indianapolis, Ind.— 6 SW Switches
- MCGRAW HILL BOOK CO., 330 W. 42nd St., New York, N. Y.— 1 "Radio Operating and Questions", by Nilson and Hornung
- MODERN RADIO LABS., 151 Liberty St., San Francisco, Cal.— 1 Set Type A SW Coils, 1 Set Type B SW Coils
- MORRILL & MORRILL, 30 Church St., New York, N Y.— One I MFD 2000V Condenser
- NATIONAL CO., Malden, Mass.— 2 Type SE 100 Variable Condensers
- OHIO CARBON CO., 12508 Berea Rd., Cleveland O.— Two 1 Watt Resistor Kits
- OHMITE MFG. CO., 363 N. Albany Ave., Chicago, Ill.— One 10M Resistor, One 50 Ohm Rheostat
- PACENT ENG. CORP., 79 Madison Ave., New York, N. Y.— 1 Radioformer Kit

PRIZES — (Continued)

- PHILCO RADIO & TELEVISION CORP., 218 Fremont St. San Francisco, Calif.— Two 866 Tubes
- PLATTEVILLE RADIO LAB., Platteville, Wis.— 1 Crystal
- PRECISION PIEZO SERVICE, Asia St., Baton Rouge, La.— 1 Crystal
- PREMIER CRYSTAL LABS., 53 Park Row, New York. N. Y.— 1 Crystal Holder
- RADIO AMATEUR CALL BOOK INC., 608 S. Dearborn St., Chicago, Ill.— 5 Fall Call Books
- RADIO CORPORATION OF AMERICA, Russ Bldg., San Francisco, Cal.— 2 Type 10 Tubes
- RAYTHEON PRODUCTION CORP., 555 Howard St.. San Francisco, Cal., Miscellaneous Transmitting and Receiving Tubes
- RADIO ENG. LABS., 100 Wilbur Ave., Long Island, N. Y.— One 181D Variable Condenser, Two 242 Coil Forms
- RADIO-TELEVISION SUPPLY CO., 1000 S. Broadway, Los Angeles, Cal.— 2 Igrad 1 MFD 2500 Volt Filter Condensers, 100 Amateur Log Books
- R-9, Los Angeles, Cal 1 Year Subscription, Three 6 Months Subscriptions
- SAN FRANCISCO RADIO EXCHANGE, 1284 Market St., San Francisco, Cal.— 1 Speed Key
- SANGAMO ELECTRIC CO., Springfield, Ill.— Two .002 5000V Condensers
- E. M. SARGENT, 721 McKinley Ave., Oakland, Cal.— 2 Sargent Band Spreaders
- SHALLCROSS MFG. CO., Collingdale, Pa.— 1 order for Resistors
- SHURE BROS CO., 337 W. Madison St., Chicago, Ill.— 1 5N Microphone
- W. W. SMITH, W6BCX, 215 West Cook St., Santa Maria, Cal.— One 80 or 160 Meter Crystal, One 20 or 40 Meter Crystal, 1 S. S. Filter Crystal
- SOUND ENG. CORP., 412 Leavitt St., Chicago, Ill.--1 Microphone

- C. C. SMOOT CO., Representing The Triad Co., 871 Folsom St., San Francisco, Cal.— 10 Type 30 Special Tubes
- CHAS. E. SPITZ, Box 1804, Phoenix, Ariz.— 1 Order for 200 QSLs, 1 Order for 100 QSLs, 1 order for 100 Radiogram Cards
- SYNTHANE CORPORATION, Oaks, Pa.— One \$5 Order for engraved bakelite
- WILLIAM THREM, W 8FN, 4021 Davis Ave., Cheviot, O.— 1 X-cut Crystal and 1 Y-cut Crystal,3670 Kc and 7254 Kc, resp.
- TRIMM RADIO MFG. CO., 1528 Armitage Ave, Chicago, Ill.— 1 Lightweight Fones
- TRIPLETT ELEC. INSTRUMENT CO., 60 College Ave., Bluffton, O.— Two 0-300 AC Readrite voitmeters, One 0-1 DC Mlliammeter
- UNCLE DAVE'S RADIO SHACK, 356 Broadway, Albany, N. Y.— Six 25000 ohm 100 Watt Bleeder Resistors. 12 Standoff Insulators. One 220 SM Transformer. One 225 SM Transformer. 1 Mignon Masterformer. 1 Samson Power Transformer. 1 Arco 3665 KC Crystal. 1 Crystal Holder. 1 Loftin White Speech Amplifier. 2 Hytron 866 Tubes. 2 Hytron 210 Tubes 1 Special 25 Watt Oscillator
- UNITED RADIO MFG. CO., 191 Greenwich St., New York, N. Y.— Midget Panel
- UNIVERSAL MICHROPHONE CO., Inglewood Cal.—
 1 Microphone
- DON WALLACE, Long Beach, Cal.—1 Wallace Manual WARD LEONARD ELEC. CO., 41 South St, Mt. Vernon, N. Y.— 1 Midget Time Delay Relay, 1 Midget Keying Relay, 1 Primary Fil. Control, 1 Vitrohm Resistor
- WESTON ELEC. INSTRUMENT CO., Newark N. J.--One 0-300 Milliammeter
- RALPH HEINTZ, Palo Alto, Cal., \$25 for best ¾ meter outfit
 - W6YAF, Chairman, 35 turns 2½" Diam. ¼" Copper Tubing

TECHNICAL NOTES

BIBLIOGRAPHY ON TELEVISION

A Resistance-Coupled Amplifier for Television

Electronics — August, 1932 — Page 265

Bibliography on Television

Electronics — August, 1932 — Page 265

Series Modulation for Television Transmitters

Electronics — August, 1932 — Page 263

Modulation Frequencies in Visual Transmission

Proc. I. R. E. - January, 1933. - Page 51

Cathode Rays in Television

Radio Engineering — April, 1931 — Page 29

Standards of Performance for Commercial Television Receivers Radio Engineering — August, 1931

The Design of a Complete Television System

Radio Engineering — August, 1931 — Page 36

Journal, Television Society - London

December, 1931 — Page 71

Television Progress From an Engineering Viewpoint

Radio Engineering — March, 1932 — Page 11

Resistance Capacitance Coupled Amplifiers in Television

Proc. I. R. E. — April, 1932 — Page 732

Applications of the Cathode Ray Oscillograph

Proc. I. R. E. — December, 1932

Thyratron Linear Line Axis for Cathode Oscillograph

Electronics — June, 1932 — Page 198

Dinsdale — "Television" — Jno. Wiley Pub. Co.

Ghirardi — "Radio Physics Course" — Radio Tech Pub. Co.

TECHNICAL NOTES — AUTOGRAPHS