

K7LED

RELAY

AN
ARRL
AFFILIATED
CLUB

NEAR SEATTLE, WASHINGTON

VOLUME 14

JUNE 1986

NUMBER 6

CLUB OFFICERS

President	Jimmy Sutton	WA7LNO	Trustee No. 1	Vic Zumbrunnen	WB7TBR
Vice President	Rick Beatty	WB7DTI	Trustee No. 2	Pat Shinnors	W7UIH
Secretary	Jim Christiansen	K7ND	Trustee No. 3	Wayne Moddison	K6DOW
Treasurer	Jack Burrell	KB7ZS	Trustee No. 4	Hal Goodell	N7NW
Activity Mgr	Mike Dinkelman	WB7UJ	Trustee No. 5	Chuck Stroehner	WA7EBH

RADIO OFFICER: KEN RAU, K7YR

The K7LED RELAY is the Official Publication of the MIKE and KEY AMATEUR RADIO CLUB, 5430 Lake Alice Rd SE, Fall City, WA. 98024. The Club meets the third Saturday of each month at 10am in "The Good Neighbor Center", 305 S 43rd St. Renton, WA. All "Hams" invited. The MIKE and KEY net meets each Sunday morning at 10am on 3930 kHz with Novice and CW check-in on 3730 kHz, VHF on 146.58 MHz, K7LED/R 52.37-53.37 MHz - 224.12/R MHz.

K7LED RELAY EDITOR
13517 117th Ave NE
Kirkland, WA. 98034



REPEATER FREQUENCY

52.37-53.37

222.52 - 224.12

BOARD MEETING

11 JUN 12
K7YR QTH

CLUB MEETS:

UGN CENTER
RENTON 10:00
JUN 12 21

ACTIVITY EVENING

FIELD
DAY
27-28-29
JUN 12

PETE WEBBERS K7W7B
20904 NE 77TH ST
REDMOND
WA 98053

First Class

Here are the names, addresses and phone numbers of the Club Officials. See front of Relay for position.

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3516 SW 343rd.
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Phone 392-5303

KEN RAD, K7YR
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Fall City, Wa. 98024
Phone 222-7711

EDITOR
RAY E LESLIE, WA7EKH
Phone 821-4188

ANSWERS: 1-D. 2-C. 3-D. 4-D. 5-E.

NEWSPAPERS ++ NEWSPAPERS ++ NEWSPAPERS

A little change in the amount that I took to the recycle place. It is understandable as there were not very many membs to the last meeting. I collected quite a few papers from the neighbors and got a bunch from WA7ELI.

I won't be there for the next, at least two, meetings so, look for VIC, WB7TBR's van and fill it up.

I have added May's money to make \$29.40.

	M	A	M	J	J	A	S	O
\$	9.90	9.50	10.00					

Lets see if we can get a lot more this year as compared to last year. Ray, WA7EKH

PS: No one claimed the shoe, so it may have been thrown out. Sorry!!!

GENERAL MEETING MAY 17, 1986

1000 meeting to order by WA7LNQ with pledge of allegiance.

Question: Current ham project & what hamfests are you planning to attend.

Activity: Field Day tape by W7JWJ.

Pres: Banners found.

VP: Today's visitor; KA7QHG, Frank

Sec: Mailed 14 flyers to new area hams.

Treas: Financial statement bal \$5648.14

Rad Off: Work continuing on 6M repeater.

Public Service: May 17 Ballard parade, WA7EBH

May 31-June 1 Special Olympics, K6DOW - check Relay for other events.

WA7EKH: W7ZLW will do Relay for 2 months - send articles to Vern.

Training: Novice class ready to go, starts Sept 25 - N7NW

W7VIH: Picnic site OK - date needs to be set

N7NW: Field day - meeting after June General meeting, need transportation for club trailer.

WB7DTI 220 net - swap/shop started 2 items. need alternate net control.

Motion: Donate \$50.00 to Westlink - WA7EBH, 2nd N7BT - passed - quorum present.

N7NW: 220 repeater working fine since Oct 85

Pres: Decision on Radio Officer position on hold awaiting job description.

NEW BUSINESS:

Motion: Table budget vote until next meeting WA7HQG, 2nd WB7TBR, passed

75M Net: Change Sun morning net into a public service information vehicle.

2M: Repeater pair may be coming available - June 22 is next WWARA meeting.

Motion: Letter to WWARA requesting 2M repeater freq and stating purpose and future plans for freq. K7YR, 2nd WA7HQG -passed.

WA7EKH: QSL cards - send orders to Ray

Meeting adjourned at 1156.

220 NET - - - - -

Summer us coming and I know all of you probably have plans for your vacation. Once Terri and I get moved into our new home and settled we are planning to take a vacation too!!! This means I may be away from the net on some Mondays throughout the summer.

I'd like to invite you to run the net for me while I'm gone.

If you'r interested please contact me on the K7LED repeater or at home at 775-9196 any evening. - Thanks, 73 - Rick WB7DTI

ANOTHER LETTER FROM MIKE, WA7UVJ, IN SWITZERLAND - - -

May 20, 1986

To the Mike and Key

Well, after two months, I've found the Zurich Radio Club, Station call HB9Z. They have a real nice setup with HF, RTTY, UHF/VHF, and satellite capability. They have a room at the local community recreation center, in a 15' x 20' area. They have a lounge, kitchen sink, and station area. Real nice! It can't hold all 100 members of the club, but only a few drift in and out at a time. Outside, they have a 10 meter tower (I-beam) with 3 element yagi's for 20/15/10, dipole for the lower bands, and VHF/UHF antennas including satellite. They meet every Tuesday evening and the primary interest looks like contesting. The walls are covered with certificates and awards. Didn't realized there were so many awards available.

My operations continue. I've worked more Soviet stations than I care to remember. The east coast of the U.S. isn't too hard to reach when conditions are good but the west coast eludes me. I don't think my power levels and antenna are up to it. The local Field Day here is June 7, 8. I don't think I'll be making our FD. My departure date here looks to be July 4th at the earliest. This leaves Tent Site #1 open if anybody wants it. I'm sure Hal will delegate it to any deserving souls that want it. My wife has the reservation.

I haven't heard anything from Southcenter, guess I'll have to ramrod that when I get back. Hope they still have an open slot.

I appreciate Pati doing all this work for me as Activity Manager. I sure miss all the chatter from the 220 repeater.

Well, guess that's all for now. Have fun on Field Day. Wish I were there. Next year for sure.

73 WA7UVJ/HB9

SUMMARY OF ARRL LETTER

MAY 9, 1986

NOVICE PRIVILEGES - -

Due to the loss of almost 10,000 Novices over the last three years, the FCC has issued a NPRM to "enhance" Novice privileges.

If this goes through, (and it look promising) the 10 meter Novice band would be expanded to 28.1-28.5 with CW and Digital communications between 28.1-28.3MHz and SSB and CW on 28.3-28.5 at the present power limit.

The 1 1/4 meter band (220-225 MHz) would be added with 25 watt limit. 1246-1246 MHz would also be added. Novices would be able to operate through repeaters on the 220 and 1240 MHz band.

There would be some change in the testing phase as compared to what is now in effect.

FCC REPEATER COORDINATION - -

Looks like the FCC has left the repeater coordination more or less to the Amateur fraternity rather than make a bunch of rules that probably could not be enforced. So it is up to the Amateurs to make things work.

NUCLEAR ACCIDENT - - -

The lack of information via official channels on the Chernobyl nuclear disaster has once again brought Amateur Radio into the media spotlight. An East Coast Amateur who happens to speak Russian and had been in contact with some Russian Amateurs provided the information. A number of television interviews with ARRL HQ staff concerning Amateur Radio have resulted.

- - - -

Northern California decided to stay on the 2 meter, 15 kHz band plan.

- - - -

New York State is trying to enact Legislation that would limit towers to 50 feet or the tree line which ever is lower.

- - - -

State of New Mexico has repealed a State Law that would place amateur call sign license plates in the "vanity" class. This leaves the plates at \$3.00 instead of raising to \$15.00. (Washington State Amateur plates are not in the "vanity" class and the price is the same as regular plates).

ARTIST ALERT - - -

If you are an artist and want to compete for the design of the International Humanitarian Award plaque or medallion you must have your entry into ARRL lby June 16, 1986.

THREE ARO FINED BY FCC - - -

N3DFD, KA2YIN and N3DXP were caught operating in the wrong frequency band (26.165-26.770) .They are subject to a fine of \$1,000.00

- - - -

Donald Santangelo, KA2RLW, was awarded the MAXIM MEMORIAL AWARD for 1985.

- - - -

Motorola wants to use radio to communicate between computers and desk-top terminals using 100 milliwats. This would give them a range of about 500 feet on frequencies near 75 MHz. And save a lot of money when it came to relocating terminals within an office complex.

MAY 23, 1986 - - - -

H.R. 3378 - - - -

This bill is now known as "The Electronics Communications Act of 1986". The Subcommittee that has studied this bill for so long has now approved the bill unanimously.

There are all kinds of rules, fines, jail sentences and other good things included in this bill now. It is supported by various organizations. It also looks like this bill will not effect "ham" operations as it stands now unless it get changed along the way.

30 Day retest - - - -

FCC has stuck to its previous decision and denied the ARRL request to keep the 30 day retest waiting period.

AMSAT - - -

AMSAT declared a temporary spacecraft emergency on AO-10 May 18 when an onboard computer failure locked Mode B on. So, do use the transponder until further notice. It should be fixed soon.

FCC Enforcement - - -

Some hot air balloonists were using 221.0 and 221.15 in the Douglas, Arizona area and the FCC caught them. This was two different groups and they were both fined \$750.00.

NOTES !!!!

Vacation time is again upon us, so for the next 60 days or so, please send your RELAY inputs to Vern Nelson. His address is correct on the Club roster.

The Club HF net was discussed at the May Board meeting and further discussed at the May Club meeting. There weren't very many members at the May meeting, however, it was decided to keep on trying to keep the HF net active and provide some exposure for the M & K Club. If you can why don't you check into Club HF net?????????

We had a visitor at the meeting. Welcome to FRANK KRIEGER, KA7QHG. Come back and see us next club meetin.

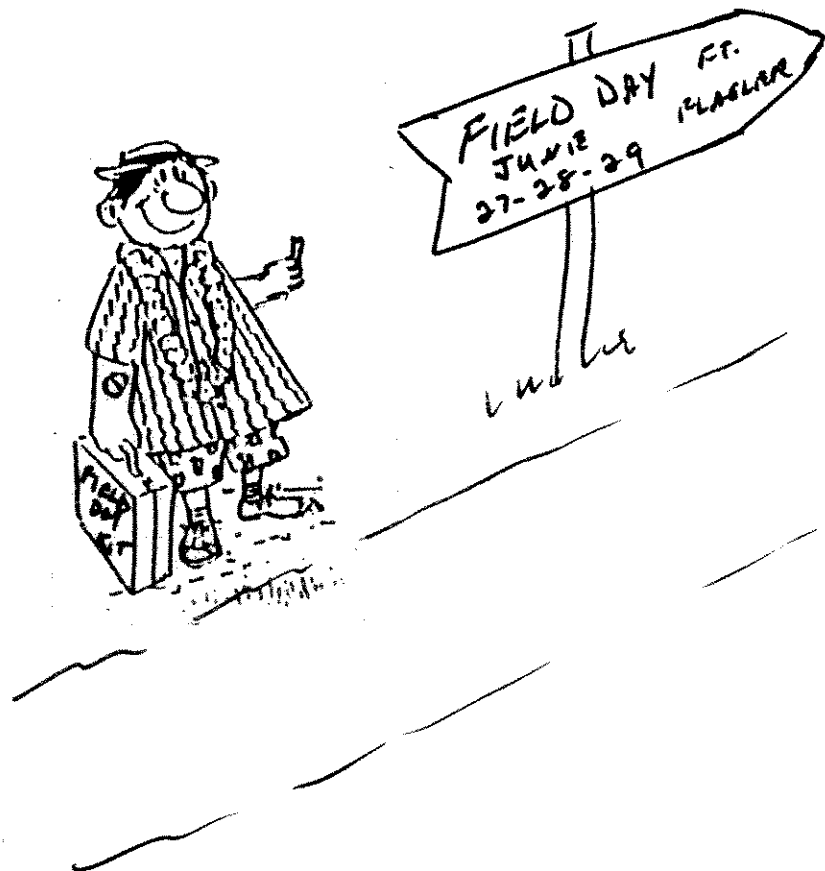
My appologies to all, I forgot to publish the budget in the May RELAY, matter of fact I don't think anyone reminded me to do that. It is in this issue so come to the June meeting and vote on the budget.

The QSL card thing has the go-ahead from the board and I somewhat presented what I had to the members that attended the May meeting. I made up the art work some time ago and have modified it a slight amount so as to be able to make cards for the membership with their call letters, address, etc. The basic info will be preprinted on "X" amount of card stock then the call and other information will be overprinted. Looks like the first, which will include the Club and about 12 members, will be for at least 6000 cards or even more. There is a data information in this Relay. If you are interested in QSL cards please fill it in and get it to your Editor within the next 75 days. Fill out what you can and I will get to each and every one before I make up the art work. (WA7EKH)
PS: I don't know the cost as yet but will find out and let you know before printing.

Those of you who have Amateur Radio installed in your vehicle or even in your home, do you have insurance ??, if not why not??. Take a look at the equipment you have and then sit down and figure out what it would cost to replace it if it were stolen or destroyed. Insurance is very reasonable through ARRL as compared to the local Insurance Company downtown. ARRL insurance is \$1.00 per \$100.00 of replacement value. i.e., if you have \$5000.00 of radio equipment and/or computers the cost of insurance is \$50.00 plus \$5.00 for Administration Charge per year. It bears looking into.

Just talked to Len, W7MCU, this evening, (24 May) and he says that he has now contacted 132 stations for the Club DCDX award. He picked up a bunch of Russian stations the other evening. Good work Len, keep it going.

We now have a Post Office Box in Kirkland, Wa. for the Club. It was getting a little out of hand on the addresses that we have spread around, so it was time we bunched them up in one. The Address is Mike & Key Amateur Radio Club, P.O. Box 2121, Kirkland, Wa. 98083-2121. The mail will be picked up at least once a week or oftener if I get down there. While I am on vacation someone else will pick it up.



CANADIAN HAMS INVITE YOU TO VE7EXPO AT EXPO 86

By J.F. (HoP) HoPwood VE7AHB

Canadian Radio Amateurs extend a most warm invitation to our American neighbours and friends to visit Amateur Radio Station VE7EXPO at EXPO 86. There are no boundaries in ham radio and no boundary between our two great countries when we want to have an eyeball.

So come on up and help us celebrate the 1986 World Exposition at Vancouver B.C. Be sure to bring the XYL (or OM) and kids. There's lots for them to do and see at Pavilions from countries around the world featuring "Transportation and Communications". And oh yes! Bring along your "handheld" so that we can QSO on your way in and around the EXPO area and talk to the gang in VE7 land!

Amateur radio station VE7EXPO is located on the main floor of the Canada Pavilion at the Burrard Inlet EXPO 86 site. The station operates from 160 meters to 1.2 GHz using CW, SSB, FM, RTTY, Packet Radio, Satellite Plus Slow and Fast Scan TV. The station is on-the-air daily through October 13th from 17:00 to 05:00 UTC (10 AM to 10PM PDT).

VE7EXPO monitors repeater VE7RPT at 146.94/34, 224.300/222.700 and 443.525/448.525 MHz. The station operators will be happy to assist you in any way possible to make your visit enjoyable and memorable. Bring along a copy of your FCC license for verification and then sit down at one of the five consoles and operate on your favorite mode as our special guest. ICOM has presented a great array of their latest equipment for the use of VE7EXPO.

We offer an "open auto-patch" on repeater VE7FVR at 147.06/66 MHz. Wait for the controller beep, then touch-tone:

UP: 7 digit Phone no. (no access code)
DOWN: #

Be sure to ask for our special VE7EXPO "INFORMATION GUIDE FOR VISITING AMATEURS" at border crossing Tourist Centers, Vancouver International Airport and other tourist bureaus in the Vancouver area. Ask for a copy when you visit VE7EXPO.

Each logged QSO (HF) with VE7EXPO will be QSL'd via national QSL Bureaus. Make a special request for a VHF/UHF QSL card. Direct mail QSL cards can be obtained by sending a S.A.S.E. (or I.R.C.) to:

VE7EXPO QSL Manager
P.O. Box 80555
BURNABY B.C.
CANADA V5H 3X9

For HF frequencies used by VE7EXPO;
listen on K7NEWS/R 144.73/145.33
Sundays 7:45 PM PDT. ASK if
you want the freqs!! OBS N7IL

So come on up and join us in our international EXPO 86 celebration as we host the world. You are our closest neighbour and best friend. We would love to share it with you!

COMMUNITY AMATEUR RADIO PUBLIC SERVICE

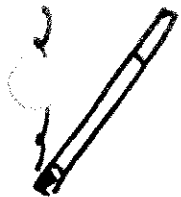
DATE	CONTACT	PHONE #	LOCATION	EVENT
Jun 28-29	+++++	FIELD DAY	Merristone Island, Ft Flagler	+++FIELD DAY+++
Jul 4	KA7CNT	825-5321	Enumclaw	10K Run & Parade
Jul 12-13	WA7UEW	587-6731	Kirkland	Moss Bay Regatta
Jul 12	WA7EBH	392-5303	Kent	Kent Cornucopia Days
Jul 20	K6DOW	271-53414	Seattle	Seafair Tri-Athalon
Jul 27 - Aug 3	WA7EBH	392-5303	King County	Seafair District Parades & Torchlight Parade
Aug 17	K6DOW	271-5314	Bellevue	Bellevue Tri-Athalon
Aug 23	KE7I	271-6125	Enumclaw	Equestrian Event
Aug 23-24	K7ZBF	454-7243	Puget Sound	Seafair Salmon Derby
Sep 6-8	W7AKA	226-4115	Seattle-Victoria	Olympic Bike Trek (ALAW)
Sep 13	KE7I	271-6125	North Bend	Equestrian Event
Sep 13-15	W7AKA	226-4115	Seattle-Victoria	Tri-Island Bike Trek (ALAW)
Sep 20-22	W7AKA	226-4115	Seattle-Victoria	Tri-Island Bike Trek (ALAW)
Sep 27-29	W7AKA	226-4115	Seattle-Victoria	Tri-Island Bike Trek (ALAW)
Nov 1-2	K6DOW	271-5314	Shelton Area	Tour-De-Forest (Sports Car)
Nov 30	K6DOW	271-5314	Seattle	Seattle Marathon
Dec 6	---	---	Seattle Area	Boat Rides for the Handicaped
Dec 6	KA7CNT	825-5321	Enumclaw	Christmas Parade
Dec 17-24	K7QMI	547-0404	King County	"Santa Talks" (Hospitals)

Contact K6DOW or W7JIE to add or change this calendar of events.

MORE QUESTIONS FOR THE AVERAGE HAM.

1. Zener voltage is the voltage necessary to cause: A. Oscillation. B. Avalanche. C. Feedback. D. Amplification. E. Overload.
 2. A doping chemical which is responsible for making "holes" in a crystal lattice is: A. A dielectric. B. A donor. C. An acceptor. D. A piezoelectric. E. A diode.
 3. How many degrees are in one cycle of a wave? A. 45 degrees. B. 90 degrees. C. 180 degrees. D. 360 degrees. E. 450 degrees.
 4. Which one of the following statements IS NOT true? A. Frequency is measured in hertz. B. Phase is measured in degrees. C. Impedance is measured in ohms. D. Apparent power is measured in watts. E. Electromotive force is measured in volts.
 5. A Colpitts circuit is an oscillator circuit which always uses: A. A piezoelectric crystal. B. A diode. C. A transistor. D. Inductive feedback. E. Capacitive feedback.
- ANSWERS somewhere in the bulletin.

THANK YOU FOR NOT
SMOKING DURING CLUB MEETINGS



MIKE AND KEY AMATEUR RADIO CLUB
1986 BUDGET

PAGE 1 OF 3

EXPENSE CATEGORY	1985 BUDGETED	1985 ACTUAL	1986 BUDGETED	
FIELD DAY				
GAS	100.00	0.00	100.00	
CAMPING	250.00	156.00	240.00	
TRAILER FEES	40.00	0.00	50.00	
TOW VEHICLE	0.00	0.00	50.00	
PARTY	175.00	152.59	0.00	
SANI CAN	75.00	65.00	75.00	
MISC.	50.00	0.00	50.00	
TOTAL	690.00	373.59	565.00	
PICNIC				
FOOD & DRINKS		27.64		
MISC (SITE, BANQ PER)				
TOTAL	200.00	27.64	125.00	
CHRISTMAS PARTY				
HALL RENT	50.00	50.00	100.00	<1>
FOOD	50.00	37.00	75.00	
PRIZES/DECORATIONS	75.00	13.40	100.00	
TOTAL	175.00	100.40	275.00	
BANQUET				
DINNER	0.00	12.50	50.00	<2>
AWARDS	150.00	117.51	150.00	
PRIZES	400.00	400.00	400.00	
ENTERTAINMENT	0.00	36.27	0.00	
TOTAL	550.00	566.28	600.00	
RELAY				
POSTAGE	325.00	218.65	325.00	
PRINTING	320.00	375.15	325.00	
MISC SUPPLIES	50.00	19.50	50.00	
TOTAL	695.00	613.30	700.00	
UGN DONATION	100.00	200.00	100.00	<3>
FLEAMARKET	1000.00	3135.85	3500.00	<4>

< SEE END FOR SUMMARY OF NOTES AND RECOMMENDATIONS >

CONTINUED ON PAGE 2

MIKE AND KEY AMATEUR RADIO CLUB
1986 BUDGET

PAGE 2 OF 3

EXPENSE CATEGORY	1985 BUDGETED	1985 ACTUAL	1986 BUDGETED
TRAINING	200.00	0.00	500.00
REPEATER			
FUND	1500.00	1500.00	550.00
SITE RENTAL	300.00	215.00	360.00
TOTAL	1800.00	1715.00	910.00
MISCELLANEOUS			
SEC/TREAS POSTAGE	40.00	39.16	50.00
STATE FEE	5.00	5.00	5.00
BANK SERV CHARGE	110.00	53.02	60.00
TRAILER LICENSE	25.00	23.50	25.00
INSURANCE	120.00	237.00	250.00
WVARA MEMBERSHIP	10.00	10.00	10.00
MISC. PRINTING	0.00	0.00	50.00
PUBLIC RELATIONS	0.00	0.00	200.00
GUEST SPEAKERS	0.00	36.54	50.00
P.O. BOX	0.00	24.00	25.00
MISC. DUES & SUB.	0.00	109.00	100.00
TOTAL	310.00	537.22	825.00

EXPENSE CATEGORY	1985 BUDGETED	1985 ACTUAL	1986 BUDGETED
SUMMARY EXPENSES			
FIELD DAY	690.00	373.59	565.00
PICNIC	200.00	27.64	125.00
CHRISTMAS PARTY	175.00	100.40	275.00
BANQUET	550.00	566.28	600.00
RELAY	695.00	613.30	700.00
UGN DONATION	100.00	200.00	100.00
FLEAMARKET	1000.00	3135.85	3500.00
TRAINING	200.00	0.00	500.00
REPEATER	1800.00	1715.00	910.00
MISCELLANEOUS	310.00	537.22	825.00
TOTAL EXPENSES	5720.00	7269.28	8100.00

< SEE END FOR NOTES AND RECOMMENDATIONS >

CONTINUED ON PAGE 3

MIKE AND KEY AMATEUR RADIO CLUB
1986 BUDGET

PAGE 3 OF 3

INCOME CATEGORY	1985 BUDGETED	1985 ACTUAL	1986 BUDGETED
DUES	520.00	545.00	600.00
TRAINING			400.00
FLEA MARKET	2800.00	6761.55	6000.00 <8>
INTEREST	120.00	115.96	150.00
MISCELLANEOUS	0.00	12.00	0.00
TOTAL INCOME	3440.00	7434.51	7150.00

BUDGET SUMMARY	1985 BUDGETED	1985 ACTUAL	1986 BUDGETED
TOTAL INCOME	3440.00	7434.51	7150.00
TOTAL EXPENSES	5720.00	7269.28	8100.00
EXPECTED INC/DEC	<2280.00>	165.23	<950.00>

NOTES:<1> HIGHER RENT BECAUSE FOREST RIDGE HALL MAY NOT BE AVAILABLE.

<2> FOR DINNER GUESTS.

<3> ACTUAL FOR 1985 INCLUDES 1984 DONATION WHICH WAS NOT PAID.

<4> 1985 ACTUAL AND 1986 BUDGETED SHOW TOTAL EXPENSES WHEREAS 1985 BUDGETED WAS ONLY SEED MONEY.

<5> TRAILER FEE IS ESTIMATED AS IT HASN'T BEEN PAID YET.

<6> NEW BUDGETED ITEM TO COVER ANTICIPATED PR COSTS.

<7> INCLUDES WORLD RADIO SUB. AND KCARS DONATION, ETC.

<8> 1985 ACTUAL AND 1986 BUDGETED SHOW GROSS INCOME WHEREAS 1985 BUDGETED SHOWED NET INCOME.

SUBMITTED BY : JACK BURRELL, KB7ZS
JIMMY SUTTON, WA7LNG
VIC ZUMBRUNNEN, WB7TBR
HAL GOODELL, N7NW
WAYNE MODDISON, K6DOW
PAT SHINNERS, W7VIH
CHUCK STROEHER, WA7EBH