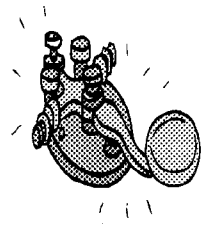




Long Path



◆ Volume 18 Issue 04

SEMDXA NEWSLETTER

May 2001

Meeting Minutes

The monthly **SEMDXA** meeting was held on April 13, 2001. No minutes were available from the previous meeting (March, 2001). The Treasurers report indicated a beginning balance as of March 1 of \$283.00. Total deposits (membership dues) were \$579.00. Ending balance as of March 31 was \$862.00. Total membership at the meeting was 13.

President **K8NA** opened the meeting at 8:10 PM. Due to limited attendance no new business was proposed. **K8NA** noted that the low turn out for this meeting was due to the Christian holy day of Good Friday. He further noted that maybe -in the future- no meetings should be held at these times. President **K8NA** stated that **SEMDXA** must be recognized as an **ARRL** affiliated club before a **DXCC** checker could be appointed from our ranks.

The program included a video depicting the **FO0AA** DX-pedition of last year. The meeting was adjourned at 9:30 PM.

N8CQA

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## Membership Notes

Our active membership roster stands at 63 amateurs. Newest members include **K8GL**, **K8MV**, **WD8S**, **N8KR**, **N8SNM**, **N8MR**, **WD8PLQ**, **K8TRF**, and **N8EA**. Total all-time membership stands at 214 which includes 13 silent keys.

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DXCC Yearbook

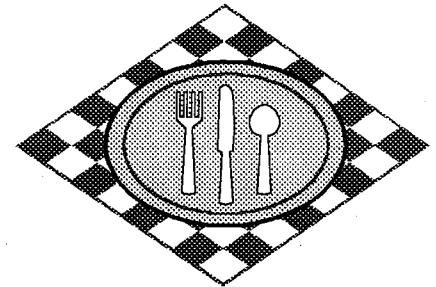
The annual **DXCC** Yearbook for the year 2000 was recently published and distributed to active **DXCC** members. Bob Eshleman, **W4DR (W4QCW)** was announced as the winner of the Clinton DeSoto Challenge Cup (no totals were noted!) A new method of validating broken DX-pedition QSOs was proposed by Martti Laine, **OH2BH**. A review of the DX year 2000 was authored by Carl Smith, **N4AA** which highlighted many of the outstanding DX-peditions including the **A52A** event and **OH2BR**'s marathon as **VP6BR**. The annual list of most needed countries was also included with **P5** at the top of the list followed by **BS7H**, **E4**, **FO0/A**, **FO0/M**, **H40**, **BV9P**, **VU4**, **7O** and **A5**. Also published was the least needed which -surprisingly- placed the United States 16th from the bottom! Italy finished at the bottom. **SEMDXA** Honor Roll members noted in the Mixed category are noted below. The totals do not include new **DXCC** entities **TX** (Chesterfield Islands) and **4W** (East Timor).

N8GZ	380	K8ZR	348
W8PHZ	377	K8JP	345
W8KPL	373	W8LU	345
K8EJ	362	K8NA	342
W8GF	362	W8KZM	338
K8AJK	357	KR8V	335
K8RWL	353	K8BTH	334
NE8Z	352	N8JV	331
K8LJG	349	K8MSU	330

May SEMDXA Meeting

The May 11 **SEMDXA** meeting will again take place at the Royal Oak Elks Club located in Royal Oak at 2401 East 4th Street (corner of 4th and the I75 Freeway Service drive). Dinner will be available at 6:00 PM together with a cash bar serving your favorite libation. Most members come early to enjoy the company of fellow members. Those thinking of dinner should contact **SEMDXA** Treasurer **N8CQA** because reservations are required. You may contact Buck at (**N8CQA@TIR.COM**) or via telephone at (248) 435 2448. Our program for the May meeting is outlined on the rear panel of the **Long Path**. See you there!

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## SEMDXA CLUB OFFICERS

*President:* Ted Pauck, **K8NA**

*Vice-President:* Hank Kohl, **K8DD**

*Treasurer:* Buck Switzer, **N8CQA**

*Secretary:* Stan Arnett, **AC8W**

*Director:* Open

*Awards Chairman:* Gary Rutledge, **KR8V**

*QSL Manager:* Open

*Program Chair:* Gary Rutledge, **KR8V**

*LP Publisher:* Gerry Fasse, **W8GF**

## RF SAFETY

Effective September, 2000 every US amateur radio operator is responsible for following the FCC's RF exposure guidelines.

The regulations actually went into effect January 1998 for new stations or any station renewing or modifying its license (i.e. sending a Form 610 to the FCC) But as of September, all amateur stations are required to follow the rules.

How much power any particular amateur station is allowed to transmit is based on the principle of "Maximum Permissible Exposure" or MPE. In turn, the MPE for a particular situation will vary with frequency, power and "exposure environment". There are two types of exposure environments:

*"Controlled"*, where the people exposed to the RFD field know that it is there and could (presumably) take steps to limit their exposure. For amateur stations in homes, for example, the operator's home and land would be considered a controlled exposure environment.

*"Uncontrolled"*, where the people exposed to the RF field do not know that it is there. As the signal passes over other properties (neighbor's houses and yards, public streets, etc.), these areas become uncontrolled exposure environments.

Obviously, the rules for uncontrolled environments are more stringent. In particular, the average power output (MPE is based on average, not peak power) is measured over a 30-minute period for uncontrolled environments, but over a 6-minute period for controlled environments. Average power also varies with different emission types: SSB or CW has a lower average power than FM, frequency-shift keyed digital modes, or unmodulated carriers.

Ok, what does all of this mean to the average ham. Well, before we start panicking with visions of field strength meters and endless reams of government paperwork, let's take a closer look at the rules. First of all, FCC has totally exempted certain types of amateur stations from evaluation (they still must comply with MPE-based power limits, though). They are:

\*Amateur stations with transmitter power less than 50 Watts PEP at the transmitter terminal.

\*Mobile or portable stations (HT's) using push to talk control.

\*Repeaters not mounted on buildings, if the lowest point of the antenna is higher than 10 meters off the ground and power is 500 Watts ERP or less.

\*Repeaters that are mounted on buildings, if the power is 500 Watts ERP or less.

Stations operating at or below the power levels listed in the enclosed table. The permitted power varies by frequency. (Note that the maximum power permitted is at the lowest in the 30-300 mHz range - these wavelengths approach the height of a human body).

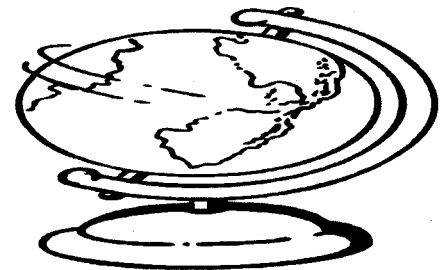
If the station runs more power than permitted by the above conditions, it will need to be evaluated. "But I don't have a field strength meter!" Guess what, one is not needed! (They can be tricky to use for this purpose anyway). According to the ARRL antenna modeling software (NEC, MINNINEC, etc.) or even power-density/field strength tables (often available from antenna textbooks or antenna manufacturers) can be used. However it is measured, the field strength or power density within a particular area must not exceed the MPE for that particular frequency/average power

combination and type of environment ("controlled" or "uncontrolled").

Ok, so the station is in compliance. So, how do we tell the FCC? It's right there on the Form 610B.. the amateur certifies that the station complies with the new RF safety requirements (Any measurements or calculations should be retained, in case the FCC might have reason to question the station installation).

For more details, please read Ed Hare's (W1RFI) article in the January 1998 issue of QST. (This article is also available at <http://www.arrl.org/news/rfsafety/eval/index.html>. In fact, <http://www.arrl.org/news/rfsafety> has many other resources on RF safety).

*This item borrowed from the SD Carrier with thanks to George Goldstone W8AP.*



| AMATEUR BAND          | MAXIMUM PEP WATTS |
|-----------------------|-------------------|
| 160. 80, 40 METERS    | 500               |
| 30 METERS             | 425               |
| 20 METERS             | 225               |
| 17 METERS             | 125               |
| 15 METERS             | 100               |
| 12 METERS             | 75                |
| 10, 6, 2, 1.25 METERS | 50                |
| 70 CM                 | 70                |
| 33 CM                 | 150               |
| 23 CM                 | 200               |
| 13 CM AND HIGHER      | 250               |