1. Introduction

A National Weather Association (NWA) Membership Survey was conducted in early 1994. The incoming 1994 President initiated the survey in an attempt to establish a framework for organizational decision makers. The objectives of the survey were: 1) to determine how well the NWA was meeting the needs of its members; 2) to determine which services NWA could improve, change, add or drop; and 3) to obtain a membership profile. The last formal survey had been conducted in 1989. The NWA Officers and Councilors were first briefed on the results of the Survey during their Council meeting in April of 1994. Applicable results were then distributed to the various committees for action or information. A summary of the results was presented to the general membership in October 1994, at the Annual Meeting. The following is the final summary of the Survey results.

2. Representativeness of the Responses

The questionnaire (Fig. 1) was included as part of the annual dues statement that was mailed out near the end of 1993. By mid March 1994, 1497 members had returned their statements with their dues. Of those, 1314 had completed at least part of the survey. Not all members provided responses to all the survey questions. Because the survey was part of the dues statement, it was possible to determine the gender and state of residence of 183 of the members who chose not to respond to any of the survey questions.

3. Characteristics of the Membership

a. Age

Figure 2 shows the age distribution of the members who responded. Ages ranged from two college students still in their teens, to one member who proudly proclaimed that he was not merely over 70 (the highest response on the questionnaire) but was, in fact, over 80! The greatest number of members are in the 30s (360 members) and 40s (353 members). The average age of those members working in the news media was somewhat lower than that of the other groups—exactly half of the broadcasters were in their 30s.

b. Gender

Women comprise 5% of the total membership. By comparison, about 11% of National Weather Service (NWS) meteorologists are women (NWS 1994) and 9% of the American Meteorological Society members are women (Zevin and Seitter 1994). Eight percent of the Association’s members working in the news media are women. A greater fraction of the lower age levels were women—7% of the members in the 20s, and nearly 10% of the members in the 30s. Although women continue to be underrepresented in the profession and the Association, their numbers are increasing. A survey of the Association’s members in 1989 (NWA Newsletter 1990) indicated that only 3% of the members were women at that time.

c. Education

Figure 3 shows the distribution of highest degree earned by members: 6.5% do not have a bachelor’s degree; 48.7% hold a B.A./B.S.; 34.3% a M.A./M.S.; and 10.5% a doctorate. Many of those without a four-year degree were students, or indicated that they had earned an associate degree or had completed some college coursework.

d. Demographics

The NWA has members in every state and several foreign countries (Fig. 4). The distribution of members somewhat reflects the locations of the National Oceanic and Atmospheric Administration (NOAA)/NWS administrative, forecast and training centers. Maryland has the most members, followed by Texas, California, Virginia and New York.

The distribution of members in the news media is very different from that of the membership as a whole (Fig. 5). Most of those working in the media live in the South or near the Great Lakes, few live in the West or the Great Plains. The Weather Channel accounts for many of the members living in Georgia.

Figure 6 shows the locations of those members who have never attended an Annual Meeting of the Association. Cost of travel was frequently cited as a reason why some members were unable to attend a meeting. The Annual Meeting locations are usually alternated between the West, the central states, and the East. Recent meetings have been held in Raleigh, NC, St. Louis, MO, and Salt Lake City, UT. Future meetings are planned for Houston, TX and Atlanta, GA. Since many members in the far West and Great Lakes states have never attended a meeting, those locations would be promising sites for future meetings.

e. Employers

Figure 7 shows the distribution of the membership by principal employer in both 1994 and 1989. The greatest number of the members (36%) work for either the National Weather Service or other segments of the NOAA. The second largest, and most rapidly growing, group (22%) work for the news media; followed by those who are either self-employed or working for private companies (13%); those in academia (9%); and those in the military (6%). About 6% of the members are retired.
# NWA MEMBERSHIP SURVEY

You can greatly assist the 1994 NWA Officers and Councilors by completing this survey. Please circle your answer or fill in the blanks as appropriate. Additional comments will be most welcome.

1. Overall, how well does the NWA fulfill your needs/expectations?

<table>
<thead>
<tr>
<th>Extremely Well</th>
<th>Very Well</th>
<th>Adequately</th>
<th>Not Very Well</th>
<th>Not at All</th>
</tr>
</thead>
</table>

2. Rate the value of current NWA services:

<table>
<thead>
<tr>
<th>Service</th>
<th>Extremely Valuable</th>
<th>Very Valuable</th>
<th>Some Value</th>
<th>Not Much Value</th>
<th>No Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Newsletter</td>
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<td></td>
<td></td>
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<tr>
<td>National Weather Digest</td>
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<tr>
<td>Annual Meeting</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Monographs and Publications</td>
<td></td>
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</table>

3. Rank the operational/research mix provided in NWA services:

<table>
<thead>
<tr>
<th>Mix</th>
<th>Too Operational</th>
<th>Appropriate Mix</th>
<th>Too Much Research</th>
</tr>
</thead>
</table>

4. How often do you read or attend:

<table>
<thead>
<tr>
<th>Publication</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Newsletter</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>The Digest</td>
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<tr>
<td>The Annual Meeting</td>
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</table>

5. Should the NWA change or add products or services? Yes No

If yes, what?

6. Is there a need for more local chapters? Yes No

If yes, can you suggest areas/cities?

7. What are the most important issues for the NWA membership over the next year?

8. What issues should the NWA be concerned with over the next five years?

9. With the expected increase in printing and postage rates would you agree to a dues increase of $3.00 for 1995?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Would you agree to an increase of $5.00 for 1995 if the newsletter was mailed 1st class instead of bulk rate?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</thead>
</table>

10. How can the NWA better serve your needs?

11. Would you volunteer to be an: officer councilor committee member (committee preference? __________)

<table>
<thead>
<tr>
<th>Highest Level of Education Completed:</th>
<th>High School</th>
<th>Bachelor's</th>
<th>Master's</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td>&lt;20</td>
<td>20–29</td>
<td>30–39</td>
<td>40–49</td>
</tr>
<tr>
<td>Sex:</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
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</tbody>
</table>

Employer or School Attending: ________________________________

Primary Work/Studies: ________________________________

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Fig. 1. NWA Membership Survey
Fig. 2. Distribution of members by age group and gender.

Fig. 3. Distribution of members by terminal degree.
Fig. 4. Number of NWA members by state, territory and country.

Fig. 5. Number of NWA weathercasters in each state and Canada.
Fig. 6. Number of NWA members who have never attended an annual meeting by state, territory and country.

Fig. 7. Changes in membership by principal employer between 1989 and 1994.
While the number of members in the news media has increased, those in the military, and in government agencies other than NOAA, have decreased since 1989.

4. Typical Member

Based on the responses received, the typical NWA member is a “40 something” male with some coursework beyond a bachelor’s degree, and works in NOAA. He is satisfied with the NWA, reads the Newsletter and Digest regularly, but has never attended an annual meeting of the Association.

However, most of the members do not fit the stereotypical model. One of our members is a New England author who includes realistic representations of weather in her fictional writing. Another is a self-employed photographer. Investigating accidents for the National Air Traffic Safety Board is the occupation of one member, while yet another is an editor for the Institute of Electrical and Electronic Engineers. Medical doctor, special education teacher, and Associated Press reporter are some of the other occupations of our non-typical members.

5. Members Assessment of NWA Services

The membership indicated that it was generally pleased with the Association overall, including the Newsletter and the National Weather Digest (Fig. 8). Most of the members indicated that they always read the Newsletter and the National Weather Digest (Fig. 9).

The membership, as a whole, rated the value of the annual meeting much lower than any of the other items. However, many of the members also indicated they had never attended an annual meeting (Fig. 9). Of those who responded that they attend the annual meeting Always, Often or Sometimes, 63% rated the meeting as Very Valuable or Extremely Valuable.

The vast majority of the membership (91%) indicated there was the appropriate mix of operations and research provided in the NWA services.

6. Members Suggestions and Recommendations

Several open-ended survey questions encouraged the membership to identify issues for the organization and make suggestions and recommendations. By far, the most mentioned issue for the NWA membership over the next five years was the NWS Modernization and the application of the new research and technology to operational meteorology. Other issues which were frequently identified included the Air Weather Service’s Evolution, Global Climate Change, Training and Education, and maintaining the integrity of the NWA Radio/TV Weathercaster Seal of Approval.

Although most responses indicated that the NWA was currently meeting their needs, there were numerous recommendations for improvements including: more broadcasters involved, more local chapters, expanded and more timely NWA publications, publishing the Annual Meeting papers, increasing membership, more public awareness -especially of the new technologies, employment information, a group health plan, a mentoring program for students, a computer bulletin board, and more regional/specialized meetings and training, especially for the broadcasters.

![Fig. 8. Distribution of responses to questions concerning the value of the various services provided by the NWA.](image-url)
7. Summary

The survey proved to be an excellent organizational management tool. Many of the comments/suggestions from members were implemented immediately and others were developed into action items, goals, and plans for the future. For instance, employment announcements are now included in the Newsletter, 1995 dues were increased by $3.00 instead of $5.00, lists of volunteers for office and committee membership were provided to the various committees, demographic information was taken into consideration in the planning of upcoming Annual Meetings, the Membership Committee is considering the membership profile in identifying target groups for recruiting activities, a special Ad Hoc Committee to upgrade/improve the National Weather Digest was formed, and a NWA computer bulletin board is under development. The authors recommend that similar surveys be conducted every three years.

Acknowledgments

Thanks to all members who participated in this survey. The NWA Officers and Councilors thank the 1994 President, Theresa Rossi Drake, for initiating the survey, analyzing the data and leading the actions necessary to implement the wishes of the members. Special thanks to Bernard N. Meisner who was a NWA Councilor at the beginning of the survey period. He volunteered to type the information into his computer, process the results and show meaningful graphics. He gave much more than he promised as attendees at the 1994 Annual Awards Banquet will attest to. He proved to be a terrific banquet speaker in briefing the results of the survey with facts and humor.

References

