
In Search of Membership Satisfaction: The University Aviation Association (UAA) Survey

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ABSTRACT

The beliefs, attitudes, and values of the over 550 members of the University Aviation Association (UAA) were the subject of a satisfaction survey sent to all members. Members were asked a variety of questions about their opinions concerning specific association functions, communication methods, meetings, general organizational operations, as well as questions about internal and external relations. Additionally, a section was provided for respondents to make anecdotal comments. Over 40 percent of the members responded to the initial mailing of the survey.

INTRODUCTION

The University Aviation Association was founded almost fifty years ago and is an organization of over 550 members. Most members are either college and university aviation educators, aviation industry professionals interested in collegiate aviation programs, or individuals from the government and aviation association sector.

Among the objectives of UAA, as stated in the Bylaw (UAA, 1995), are the following:

1. To encourage and support the attainment of the highest standards in aviation education at the college level,
2. To provide a means of developing a cadre of aviation experts,
3. To furnish a national vehicle for research and the exchange of information, and
4. To actively support aviation--oriented teacher education.

UAA addresses these objectives by conducting its business at several annual meetings, by maintaining a central office, and by providing numerous vehicles for association communication dissemination and member interaction. A Board

of Trustees determines UAA policy and an executive director administers the day--to--day central office functions.

BACKGROUND

Prior to the 1980s, UAA was largely an organization that just met several times a year; while there was always activity during the year, the association tended to maintain a somewhat low profile. However, in 1984 with the implementation of the Federal Aviation Administration's (FAA) Airway Science (AWS) program, UAA suddenly became the primary contact between the FAA and the collegiate aviation community. This contact has had a significant impact on the entire fabric of UAA. Specifically, through the financial impact of the AWS grant program on both member institutions, as well as on UAA itself, the size, scope, and the general thrust and focus of UAA changed and in many ways broadened. Additionally, although there was never any direct financial support of UAA membership services as a result of AWS, there was central office enhancement which added value to members indirectly.

Recently though, funding for the AWS program has come under scrutiny. This is a result of extensive federal budget modifications, as well as a result of the FAA's desire to play a less active role in AWS. Thus, certain contracted UAA programs, previously supported by federal sources, may be reduced or even eliminated. Consequently, the UAA membership, finance, and strategic planning committees deemed it critical to examine the current state of the association and attempt to determine the need to modify the future goals of the organization. Additionally, as the possibility of more burden being placed on the membership in the form of increased reliance on dues as a primary revenue stream for UAA, the health of the organization, as well as the attitudes and beliefs of the membership needed to be determined. Also, consideration needed to be given to the analysis of both the "corporate culture" and the possible need to "re-engineer" the organization.

POSSIBLE ORGANIZATIONAL CHANGE

The corporate culture, or in this specific instance the organizational culture "can be defined as the set of values, beliefs, understandings, and norms shared by members of an organization" (Daft, 1994, p. 124). These values, although they can not be observed directly, manifest themselves in the way that members interact with each other. Such behavior can have a positive, as well as a negative affect on any organization. Within most organizations, the existence and influence of the informal group within the formal organizational structure is clearly documented in the literature. As cited in Daft, Chester Barnard first identified the existence of the informal organization and found that "informal relationships are powerful forces that can help the organization if managed properly"

(Daft, 1994, p. 50). In the case of UAA, data needed to be gathered about such value laden ideas as the following.

1. Do members share equally in the work of the organization?
2. Do all member institutions (2 year schools and 4 year schools) benefit equally from association membership?
3. What is the state of organization?
4. Does UAA wish to change:
 - a. the way the association does business both internally and externally,
 - b. the organization's goals, objectives, and mission,
 - c. any procedure, process, or plan?
5. What is the perception of the members as to the state and direction of the association?

A current strategy for organization analysis and change is the process of organizational "re-engineering." Re-engineering is an investigative evaluation of all facets of the organization, its mission and goals, its processes and procedures, its marketing and service focus, and its people and their purposes. Re-engineering involves a bottom-up, systems analysis approach that strives to answer the questions, "how and why do we do what we do" and "is this or another way best." There is employee/member ownership and active participation in all phases of the process.

Thus, with the fiscal portion of the AWS program changing and the need to consider re-engineering UAA apparent, a more detailed determination of the state of the organization was imperative. With this in mind, the association's executive committee and heads of several committees met and began the first step in the process, i.e. asking the members what they thought. Such a methodology is consistent with that suggested by Gable who stated "the only way to understand what a member expects from the organization is to ask" (1994, p. 421).

It was determined that an abbreviated SWOT (strengths, weaknesses, opportunities, and threats) survey would be the initial data gathering effort. This survey was sent to a stratified sample of members. The results of this survey was then the basis of a more extensive survey that was distributed to all members.

SURVEY METHODOLOGY

A questionnaire was selected as the full survey instrument. This method of data collection was chosen since such an approach makes "it possible to measure what a person knows (knowledge or information), what a person likes and dislikes (values and preferences), and what a person thinks (attitudes and beliefs)" (Tuckman, 1988, p. 213). Of these areas of focus, the last two seemed to be most important to UAA.

Sample Selection

The entire membership of UAA ($n = 577$) was selected to receive the survey. Such a strategy eliminated any selection bias and allowed generalization of the results to the entire organization. Of the 577 members, 411 are classified as Individual which are either Professional (educators) or Associate (aviation professional), 54 are Corporate, 100 are Institutional (a college or university), and 12 are Affiliate (students).

Survey Question Development

The development of the survey questions was the result of SWOT data and analysis of satisfaction survey literature. The SWOT results indicated that the strengths, weakness, opportunities, and threats to UAA included concerns about communication, the relationship between industry and UAA, revenue sources and funding issues, equality of institution participation, and internal association relations.

It appears that the SWOT observations above are consistent with those found in other association peer self-evaluation. Coughlan states ``that the complex and vibrant nature of associations makes it imperative that they undergo continual and critical evaluation to ensure that they are providing value to members. In many association peer review evaluations,...five categories have merited review:

1. Mission, purpose, and goals,
2. Governance,
3. Finance,
4. Membership recruitment and retention,
5. Communication" (1994, p. 75--76).

Consequently, using the data above and selected literature, the final survey included eleven demographic questions, forty--six scale questions, and a place for the respondent to offer anecdotal comments. The demographic questions focused on the respondent's category of membership, length and vitality of membership, degrees earned, the highest institutional degrees granted (if a faculty member), past meeting attendance, aviation background and interests, and access to electronic mail and facsimile transmission.

The Likert questions used the scale 1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree, and 6 – Do Not Know. Questions in this section focused on the respondent's feelings and attitudes about internal and external association relationships, organizational leadership, fiscal and communications issues, membership services, and meeting planning.

Survey Distribution

A survey packet was sent to all members. The packet consisted of a cover letter explaining the need for the survey, the survey itself, and a self-addressed, stamped return envelope. All respondents were assured that their responses would be confidential. There was no plan for the sending reminders to non-respondents, as the time frame from when the survey was mailed to when initial data was needed was just five weeks.

DATA ANALYSIS

The analysis of the returned survey data was accomplished using *Minitab for Windows Statistical Software Adapted for Education* (Minitab, Inc., 1995). The statistical computations consisted of both descriptive and inferential statistics. Specifically, frequency distributions for all questions were tallied and several chi-square cross-tabulations were performed.

Although there were forty-six Likert scale questions, the following section will highlight only extremely noteworthy areas of concern. These areas centered on the organizational culture, fiscal matters, external relations, communications, and college and university relations. Discussion in these areas will include both tabular data, as well as anecdotal comments relative to the specific area subject. In the following section, the text of survey questions will appear in quotation marks.

A total of 235 surveys were returned of the 577 sent for a return rate of 40.7 percent. By category of membership, Individual respondents totaled 163, or 39.6 percent, Corporate respondents totaled 17, or 3.6 percent, Institutional respondents totaled 45, or 45.0 percent, and Affiliate respondents totaled 7, or 5.8 percent; three respondents did not indicate a category.

Demographics

The typical respondent had been a UAA member for more than five years (55.0 percent), held at least a Master's Degree (55.0 percent), considered themselves not a very active member (45.0 percent) and if an educator, were associated with an institution that offered a four-year degree (40.0 percent) or a graduate degree (38.0 percent); only 22.0 percent of the educator respondents taught at a school that offered a two-year degree.

Concerning meeting attendance, the respondents indicated that they attended more UAA fall meetings (36.0 percent) than spring meetings (23.0 percent), or had never attended a fall meeting (30.0 percent) or spring meeting (44.0 percent). The respondents' aviation background was primarily military (35.0 percent) or general aviation (45.0 percent), as compared to their current interest/focus of air carrier (13 percent) and general avia-

tion (56 percent). With respect to communication channels that were available to them, 177 or 76.0 percent of the respondents indicated that they had access to electronic mail and 221 or 95.0 percent could receive a fax.

Survey Questions

Organizational Culture: Numerous survey respondents indicated that an informal network within UAA exists. One individual stated "UAA is a 'good ol' boy' association. If you are in the 'in group' it is a fine organization and if you are not, it's not."

To attempt to determine the "equality" and "friendliness" within UAA, several survey questions focused on the organizational culture. A cross-tabulation compared how long an individual had been a member (less than three years, three – five years, and more than five years) with the survey question, "the association represents all members fairly." The relationship was found insignificant [$\chi^2(10, N = 168) = 9.087, P.05$]. Data for all respondents is included in Table 1.

The actual definition of 'fairly' may be somewhat subjective. Eighty--

TABLE 1
Level of Agreement By UAA Members to the Statement,
"The association represents all members fairly"

<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Don't Know</i>
21 (9%)	38 (16%)	49 (21%)	76 (33%)	11 (5%)	35 (15%)

seven, or 38.0 percent, of the respondents agreed or strongly agreed that the association represented members fairly, 59, or 25.0 percent, disagreed or strongly disagreed.

When asked if UAA "is a friendly organization," 138 respondents, or 59.0 percent, agreed or strongly agreed. A cross tabulation between length of membership and this survey question found no significant relationship. However, when a cross-tabulation was performed comparing how long someone had been a member and whether "new members to UAA are made to feel welcome," there was a significantly different response. Specifically, $\chi^2(10, N = 230) = 23.38, P < .05$. Data for that computation is contained in Table 3.

When considering the number of respondents that indicated that they did not know about 'feeling welcome,' 26, or 45.0 percent, had been members less than three years as compared to 23, or 18.0 percent, who had been members more than five years.

2 (1%) 7 (3%) 9 (4%) 87 (38%) 98 (42%) 1 (.5%)

TABLE 6
Level of Agreement By UAA Members to the Statement,
“The use of E-mail for association, as well as for member to member communication
should have a high priority”

<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Don't Know</i>
7 (3%)	19 (8%)	50 (22%)	87 (38%)	57 (25%)	10 (4%)

Of those that had an opinion concerning the ‘sense of welcome,’ 52, or 41.0 percent, of those that had been members for over five years agreed or strongly agreed. It appears that newer members are less certain about the hospitality of UAA.

Fiscal Matters: Forty--nine percent of the respondents indicated that “the health and vitality of UAA was better than when they joined.” However, when asked about alternate financial sources, 41.0 percent of the respondents did not know if UAA “was overly dependent on a few benefactors” and 38.0 percent did not know if UAA “was overly dependent on federal contracts.”

While 113, or 49.0 percent, of those responding agreed or strongly agreed that the “health and vitality of UAA is better than when they joined,” only 22, or 9.5 percent, indicated that they agreed or strongly agreed that “the financial health of UAA is good.” The respondents indicated that they were also not in general agreement concerning the financial health of the association as shown in Table 3. One hundred--eight, or 47.0 percent, of the respondents did not know about the financial health of the organization. It appears there is no agreement about the state or the definition of health and vitality of the organization, as well as, a lack of knowledge concerning alternate revenue streams other than dues.

TABLE 2
Cross-Tabulation of the Length of Membership and Sense of Welcome

<i>Years</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Don't Know</i>
Less than 3	1 (2%)	5 (9%)	8 (14%)	10 (17%)	8 (14%)	26 (45%)
3-5	2 (4%)	10 (22%)	7 (16%)	10 (22%)	4 (9%)	12 (27%)
More than 5	7 (6%)	14 (11%)	31 (24%)	40 (32%)	12 (9%)	23 (18%)

Note: All percentages are by row and may not add up to 100 percent due to rounding.

TABLE 5
Level of Agreement By UAA Members to the Statement,
“The UAA Newsletter is an important means of association communication”

<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Don't Know</i>
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External Relations: There was little agreement concerning the manner in which the respondents perceived the identity of UAA within the aviation community. As shown in Table 4, 36.0 percent of the respondents disagreed or strongly disagreed that "UAA is well known within the aviation industry" while 33.0 percent agreed or strongly agreed; 30.0 percent either were neutral or did not know. One respondent stated "the benefits of UAA membership seems to be unknown to many of the corporate members. I feel the services provided to the institutions are adequate, but have a hard time finding the connection between the corporate and academia. Should there be a session (at meetings) on possible partnerships? More internships, etc.?" Another respondent's comment identified another concern in that, "UAA should try to obtain more contributions from the industry. Although it is an university association, the aviation industry benefits greatly from it."

However, the exact interface between UAA and industry needs may be unclear. One individual stated that, "the focus of the UAA is aviation flight training. The industry also demands a well educated manager. More support and

<i>Degree</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>Don't Know</i>
2-year	3 (8%)	9 (26%)	10 (27%)	5 (13%)	2 (5%)	9 (24%)
4-year	6 (9%)	14 (29%)	19 (29%)	7 (11%)	1 (9%)	19 (29%)
Graduate	9 (14%)	20 (17%)	11 (17%)	8 (13%)	3 (9%)	13 (20%)
Total	18 (11%)	43 (26%)	40 (24%)	20 (12%)	6 (4%)	41 (24%)

Note: All percentages are by row and may not add up to 100% due to rounding

acceptance needs to be given to those institutions working in the management/transportation sector."

Communications: Two facets of communications seemed to solicit strong opinions from the respondents. Those areas were the importance of the UAA Newsletter and the need for more electronic communications. A total of 80.0 percent of the respondents (Table 5) agreed or strongly agreed that "the UAA Newsletter is an important means of association communication." Only 4.0 percent of the respondents disagreed or strongly disagreed. In another survey question, 87.0 percent of the respondents agreed or strongly agreed that they "read the Newsletter as soon as they receive it."

Concerning electronic communication, the respondents indicated that such a medium is important. In Table 6, 144 or 63.0 percent of the participants in the survey indicated that "the use of e-mail for association, as well as, for member to member communication should have a high priority." Additionally, several comments by respondents echoed the consensus of the survey. One said, "UAA needs to build a strong and visionary infrastructure that includes information services (WWW) . . . [and] address educational issues from a global perspec-

tive" Another said "UAA needs to get on the Internet, use e-mail, and have a World Wide Web page."

College and University Relations: The respondents make a high number of anecdotal comments concerning the manner in which UAA addresses the needs of member institutions, particularly with respect to two-year and four-year schools. In most cases, the perceptions of those commenting indicated that a great deal of work needs to be done to foster a better climate. Perhaps the essence of the problem was captured by one individual who stated, "there are well over 100 two-year colleges with excellent aviation programs that feel like second class citizens or orphans because we are not a university. You can revitalize and infuse new blood into the organization if UAA really made it a point to encour-

age two-year colleges to be active in membership. We are not treated as equals and made to feel welcome."

To test the significance of whether there is equal participation in association duties with respect to the highest degree granted by an institution, a cross tabulation was computed. The resulting value, $\chi^2(10, N = 168) = 6.868, 1 P < .05$, was not significant. However, as shown in Table 7, 61, or 37.0 percent, of the respondents indicated that they disagreed or strongly disagreed concerning fair and equitable participation in association duties among the membership.

One individual may have expressed the prevailing sentiment on this issue. "Upon joining UAA twelve years ago I was told that it is an organization for three or four institutions; I have see nothing to change that view. One need not read the names of persons going to Washington to testify, to serve on special

committees, or to meet with industry as it is clear what institutions they will be from. That doesn't take away from the UAA fall meetings and such things as newsletter, journal, paper presentations, etc. But it is awfully boring!!"

ADDITIONAL SURVEY RESULTS

- Almost three--fourths of the respondents (162, 71.0 percent) agreed or strongly agreed that "committees provide a valuable service to UAA, its members, and the organization."
- Over two--thirds of the respondents (153, 67.0 percent) agreed or strongly agreed that they "value the experiences they have had as a UAA member."
- Over half of the respondents (135, 56.0 percent) agreed or strongly agreed that they "get a fair return on their dues."
- Over 60.0 percent of the respondents indicated that both the president and the executive director provide adequate leadership and the central office staff was responsive to members requests.

CONCLUSIONS AND RECOMMENDATIONS

The purpose of the membership satisfaction survey was to answer the following questions: (a) do all members share equally in the work of the organization, (b) do all member institutions benefit equally from association membership, (c) what is the state of organization, (d) are changes needed internally and externally, (e) what is the direction of the association. Although a 40.0 percent return rate does not indicate the attitudes and beliefs of the entire membership, the opinions by the respondents nonetheless indicate that certain trends have developed and tentative conclusions may be drawn. These conclusions will be in three areas which mirror the questions above. The three areas are as follows:

1. Equity and Institutional Focus
2. Organizational Culture
3. Fiscal Health, Communication, and Association Visibility

Conclusions

Equity and Institutional Focus: Although many anecdotal comments by the respondents seemed to indicate that there exists an informal organization within UAA, whether this influences association fairness and equity was not clearly defined. Thirty--eight percent of the respondents (Table 1) indicated that the association "treats represents all members fairly." Conversely, 37.0 percent of the respondents answered either neutrally or that they did not know. However, with respect to the issue of whether "There is equal participation in association duties," 37.0 percent of the respondents (Table 7) indicated that they disagreed

or strongly disagreed. It would appear that there is some ambivalence concerning these issues.

Whether there is truly a bias within UAA concerning the degree granted by the school and whether there is equality in association participation was not determined by this survey with any great degree of certainty. There were many anecdotal comments by respondents indicating there is a great deal of concern among the members about whether certain institutions are favored over others and whether schools granting two--years degrees were treated fairly by other members. However, no survey data supported this contention.

Organizational Culture: Although a majority (67.0 percent) of the respondents valued the experiences they have had as UAA members and 56.0 percent of the respondents felt they got a fair return on their dues, there is not a uniform sense of welcome felt by the respondents (Table 2). Numerous (45.0 percent) members of less than three years did not know about the sense of welcome within UAA, while 41.0 percent of the respondents that had been members over 5 years were more certain about a positive UAA hospitality.

Fiscal Health, Communication, and Association Visibility: Whether the state of UAA financial matters was well known to the respondents was not evident; 47.0 percent did not know about the financial health of the association. However, 49.0 percent stated that the health and vitality are better than when they joined. There was no clear indication from the respondents that UAA is overly reliant on certain benefactors or on federal contracts.

The value placed on the *UAA Newsletter* as an important means of association communication was high (Table 5); 80.0 percent of the respondents agreed or strongly agreed to the worth of the publication for that purpose. The use of e-mail for association and member--to--member communication (Table 6) appeared to have a high priority among the respondents; 63.0 percent agreed or strongly agreed to the association's increased use of this communication medium.

Concerning the visibility of UAA within the aviation community, responses of survey participants were mixed. While 33.0 percent of the respondents agreed or strongly agreed that UAA is well known within the aviation community (Table 4), 36.0 percent disagreed or strongly disagreed. It appears that there is a polarized perspective on this question.

Recommendations

The process and steps taken for UAA membership satisfaction survey have provided mixed results in many areas. The fact that there was not a more complete return rate, which could possibly have been enhanced with a second questionnaire mailing or by the use of a reminder mailing, was disappointing. Nonetheless, there are several recommendations that are apparent from the data.

- 1.

The satisfaction survey should be repeated at a later date and a reminder letter sent to all nonrespondents. This strategy may enhance the return rate. However, the data, although somewhat incomplete, does indicate that there are concerns among the members concerning many value laden issues. Additional data about these issues could assist the Board of Trustees in developing a clearer focus so as to begin to honestly examine association values, beliefs, and purposes and to then consider whether to begin a change process.

2. Member opinions, both from survey data and comments, indicate that there is not a clear sense of hospitality or member and institutional equity within UAA. All members of the association, from all types of institutions, should be made to feel welcome at all association activities. Additionally, the corporate culture should be constantly reviewed so that each member places high value on organization membership and association duties.
3. The need for a total re--engineering effort of UAA is not readily apparent from the data. The respondents were generally satisfied with the leadership of the organization and administration of the central office. The association is not currently in any grave state but the uncertainty of AWS funding could cause a possible change in this status. A suggested strategy would be to periodically review the state of the organization with a focus on always maintaining a strong, vital association.

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