# THE COUNCIL ON AVIATION ACCREDITATION: PART ONE – HISTORICAL FOUNDATION

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## ABSTRACT

The Council on Aviation Accreditation (CAA) was established in 1988 in response to the need for formal, specialized accreditation of aviation academic programs, as expressed by institutional members of the University Aviation Association (UAA). The first aviation programs were accredited by the CAA in 1992, and today, the CAA lists 60 accredited programs at 21 institutions nationwide. Although the number of accredited programs has steadily grown, there are currently only 20 percent of UAA member institutions with CAA accredited programs. In an effort to further understand this issue, a case study of the CAA was performed, which resulted in a two-part case study report. Part one focuses on the following questions: (a) why was the CAA established and how has it evolved; (b) what is the purpose of the CAA; (c) how does a program become accredited by the CAA; and (d) what is the current environment in which the CAA operates. In answering these questions, various sources of data (such as CAA documents, magazine and journal articles, email inquiries, and an on-line survey) were utilized. Part one of this study resulted in a better understanding of the CAA, including its history, purpose, and the entire accreditation process. Part two will both examine the contemporary issues being faced by the CAA and provide recommendations to enhance the future growth of the organization.

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**INTRODUCTION**

As the only formal, specialized accrediting agency for aviation academic programs, the Council on Aviation Accreditation (CAA) [1] fulfills an important role in the aviation academic community. Based in Auburn, Alabama, the CAA is a relatively young organization, having been established in 1988. During the past 17 years, the CAA has been actively accrediting various aviation academic programs and today boasts 60 accredited programs at 21 institutions nationwide. However, out of 105 institutional members of the University Aviation Association (UAA), which is an organization representing collegiate aviation with over 800 members, only 20 percent of UAA member institutions currently have CAA accredited programs ("Candidates," n.d.; UAA, n.d.). This is in contrast to an average 59 percent accreditation rate in other academic fields [based on a random sample of 11 accrediting organizations recognized by the Council for Higher Education Accreditation CHEA)].

In an effort to better understand this issue, a case study was conducted from June through December 2005. The primary research question that motivated this research effort concerned why there so few aviation programs accredited by the CAA. Based on this primary research question, secondary research questions (to which answers were obtained as a result of this case study) were formulated and include the following:

1. Why was the CAA founded and how has it evolved?
2. What is the purpose of the CAA?
3. How does a program become accredited by the CAA?
4. What is the current environment in which the CAA operates?
5. What are some of the costs to a program seeking CAA accreditation?
6. What are some of the benefits of being CAA accredited?
7. Why do programs seek CAA accreditation?
8. Why do programs choose not to seek CAA accreditation?
9. What role is the CAA playing in the international aviation academic community?
10. What are some possible strategies the CAA may adopt to enhance the benefits of CAA accreditation and increase the number of CAA accredited programs?

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[1] This case study was undertaken during 2005. In 2006, the Council on Aviation Accreditation (CAA) announced a change of name and identity. Although the CAA is now known as the Aviation Accreditation Board International (AABI), references to the CAA within this article also refer to the AABI.

The first four questions are addressed in part one of this study, while the remaining six questions are addressed in part two of this study.

## METHODOLOGY

In an effort to fully understand the CAA, including the complex issues surrounding the organization and the accreditation process, a comprehensive research strategy was necessary (Yin, 2003). A case study design was chosen because, as Yin explains, "case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (p.1).

Yin (2003) acknowledges that case studies can be conducted by gathering both quantitative and qualitative evidence, yet all case study inquiries rely on multiple sources of evidence, with data converging in a triangulating fashion. The evidence for case studies may come from six sources: (a) documents, (b) archival records, (c) interviews, (d) direct observation, (e) participant observation, and (f) physical artifacts (p. 83). Although each of these sources, according to Creswell (2003), has various strengths and weaknesses, it appeared most appropriate for this case analysis to gather evidence from documents, archival records, and interviews.

Specifically, documents analyzed included all CAA documents [such as the *Accreditation Standards Manual* (CAA, 2003a), *Bylaws* (CAA, 2003c), and *Outline for a Self-Study Report* (CAA, 1999b)] that were accessible on the CAA website. In addition, journal and magazine articles related to accreditation in general, and CAA accreditation in particular were analyzed. Archival records (including the CAA membership list and the listing of CAA accredited programs and candidate programs) were analyzed as well. Interviews were also relied upon extensively during this case study. As Yin explains, "One of the most important sources of case study information is the interview" (2003, p. 89). Two types of interviews were utilized in this research effort. First, a focused interview was conducted via telephone with both the President and Executive Director of the CAA, as well as two administrators of aviation programs (one of which is CAA accredited). These participants were purposefully selected, as described by Creswell (2003), to represent CAA leadership, as well as the views of a CAA accredited and non-accredited program (with the director of the non-CAA accredited program also serving as a CAA trustee). Each telephone interview was completed during a 30-60 minute time period. The second type of interview, recognized by Yin (2003) as having more structured questions and resembling a formal survey, was also utilized. First, a brief questionnaire was sent via email to the entire population of 101 U.S. institutions offering non-engineering degrees in aviation (as determined by the 2003 UAA

Collegiate Aviation Guide and UAA Institutional Member List) that currently do not have programs which are either CAA accredited or candidates for accreditation (UAA, n.d., 2003). Accounting for invalid email addresses, a total of 92 institutions received the email questionnaire. The email survey resulted in an initial response rate of 19.6 percent. A follow-up email encouraged an additional 5 responses (for a total of 23), resulting in a total response rate of 25 percent. Although lower than the preferred response rate, the purpose of the survey was simply to gain a more in-depth understanding of why non-accredited programs chose to remain non-accredited, and even with a lower than desired response rate, this purpose was fulfilled. Next, email questions were sent to various specialized accrediting organizations recognized by the CHEA, as well as to the staff of both the CAA and UAA. These email questions garnered a 100 percent response rate. Last, using the most recent CAA Board of Trustees listing available on the CAA website, each of the officers and educator trustees of the CAA were asked to complete an on-line survey developed specifically for this research effort. One of the educator trustees selected explained that he has recently retired and is no longer a member of the CAA Board of Trustees. Of the 11 individuals selected for this survey, 9 responded, resulting in an 82 percent response rate.

Since the original purpose of the case study was to describe the CAA and the contemporary issues being faced by the organization, the general analytic strategy guiding this research was that of developing a case description. Within this analytical framework, Creswell's (2003) six steps of data analysis and interpretation served as a theoretical guide in making sense of the many sources of evidence and compiling the data into an organized and informative narrative that maintained a focus on the original research questions. First, the many sources of evidence were prepared for analysis by organizing interview notes, collating survey responses, and arranging the data into different types depending on the sources of information. Second, although this was an ongoing aspect of the analysis, all the data was read through to obtain a general sense of the information. As a follow-up to this, the data was analyzed in great detail with a subsequent coding of the data into categories. Fourth, the coding process was used to generate both a description of the CAA and themes appropriate to the research focus. Next, in consideration of the description and themes, a decision was made as to the best manner in which to convey the description and themes in the narrative (which included both a chronology of the events leading up to the formation of the CAA and a discussion of interconnecting themes in response to the research questions). The final step in this case analysis involved interpreting the data by formulating recommendations to improve the organization and enhance the number of accredited programs. As Creswell (2003, p. 195) notes, "Interpretation in qualitative research can take many forms, be

adapted for different types of designs, and be flexible to convey personal, research-based, and action meanings."

In an effort to ensure trustworthy data, the concept of triangulation was employed through the gathering of data via interviews, surveys, and documents to observe patterns in the data. Reliability, specifically concerning the accuracy of observations, was enhanced by the use of detailed notes and audio recordings of the interviews, use of participant quotations in the final case study report, and member checking. Member checking was accomplished by allowing interviewees the opportunity to read the draft case study report and correct any inaccurate statements attributed to them. Additionally, CAA officers and educator trustees were asked to indicate agreement or disagreement (via an on-line survey) with the results of a SWOT (strengths, weaknesses, opportunities, and threats) analysis conducted as part of this case study. To enhance internal validity, six months were allotted for the case study to allow collection of a large amount of evidence and an in-depth analysis of the data. Additionally, detailed notes were taken, abundant use of detail and verbatim language of participants were included in the case study report, and as often as possible, trends identified in one source of data were corroborated by at least one other data source. Lastly, external validity was strengthened through a concerted effort in this case study to accurately describe the data and provide for a more in-depth understanding of the CAA and the issues the organization currently faces. In this way, readers should be able to understand these findings so that they can be applied in other settings.

## HISTORY OF THE CAA

Since the birth of aviation on December 17, 1903, there has been an increasing need to educate and train pilots, mechanics, airport managers, and air traffic controllers. Although several training programs existed prior to World War II, the majority of today's collegiate aviation programs were an outgrowth of the Civil Pilot Training Program, which was established in 1939 in an effort to prepare America for the war, and from wartime training of military pilots at campuses nationwide. Following World War II, Reserve Officer Training Corps programs were popular among students desiring orientation to flight. Later in the 1960s, the introduction of jet aircraft led to the development of programs that addressed the challenges presented by this new generation of aircraft. In fact, more aviation programs leading to a baccalaureate degree were established in one year, 1968, than in all years combined since 1950 (Prather, 1998). Although programs such as flight, maintenance, avionics, and management proved popular, their varied standards and requirements created confusion among these early collegiate aviators (Kiteley, n.d.).

Decades earlier, in July 1947, the National Association of University Administrators of Aviation Education (NAUAAE) had been established. With the name changed to the University Aviation Association (UAA) in 1949, the association went about promoting collegiate aviation and partnering with industry to improve the academic quality of aviation academic programs. It was not until 1974, in an effort to address the wide disparity among aviation programs, that an Academic Standards Committee was created in the UAA. This Committee was later divided into two subcommittees, the first concerned with standards and articulation, and the other with accreditation. The Accreditation Subcommittee soon conducted a survey of institutions with aviation programs to identify current practices and the potential need for curricula accreditation. A report prepared by this Committee in April 1975 led to the formation of a Task Force to develop an Academic Standards Manual. The "College Aviation Accreditation Guidelines" (also known as the Green Book) was developed in October 1976, and served as the first standards manual for associate, baccalaureate, and graduate aviation programs. Several institutions volunteered for program evaluation under the new Guidelines, which became adopted as a recommended standard for aviation curricula. To oversee review of programs in light of these guidelines, an Executive Director of the UAA was hired in 1977 (CAA, 2003a; Kiteley, 2001).

The move toward aviation accreditation received another boost as a result of the 1981 strike by Federal Aviation Administration (FAA) air traffic controllers and the subsequent firing of 11,350 of these striking controllers by President Reagan. The UAA offered to assist the FAA in staffing its technical positions with college graduates. To accomplish this, a UAA Task Force was created to develop a special curriculum targeted toward five FAA occupational specialties. Once the curriculum was developed, the FAA first contracted with the UAA in 1983 to evaluate proposed curricula from institutions desiring to be recognized under the FAA Airway Science Program. By 1985, the UAA was conducting on-site campus evaluations of facilities, administration, faculty, and students of institutions applying for FAA Airway Science Program recognition. These activities were carried out by an UAA Airway Science Curriculum Committee comprised of professional educators who served as both a review and evaluation board for curricula and on-site evaluations. From 1983 to 1988, the UAA gained extensive experience in the review and evaluation of nearly 30 aviation programs throughout the country (CAA, 2003a).

In September 1987, the UAA appointed a Professional Accreditation Task Force to further evaluate the feasibility of formal aviation program accreditation and gauge the level of interest in such a specialized accrediting organization. A survey of UAA institutional members in the spring of 1988 showed general support for the establishment of a formal accrediting

organization for aviation academic programs. The Task Force concluded that there was indeed sufficient interest in such an organization and a general consensus of need, considering that there was no existing accrediting organization with the appropriate statement of purpose and experience to conduct specialized accreditation of non-engineering aviation academic programs. As a result of these findings, in July 1988 the Task Force expanded the previously created "College Aviation Accreditation Guidelines" into an initial draft of what would serve as the foundation of an accreditation standards manual (CAA, 2003a; Connolly, 1991).

In October of that same year, the CAA was established at the UAA Annual Meeting in Dallas. Although the CAA initially functioned as a subsidiary of the UAA for administrative support, the CAA was an autonomous, legally chartered entity with directors and officers elected from within the organization. The CAA formulated bylaws which both governed the organization and embraced the concepts and principles acceptable to the Council on Postsecondary Accreditation (CAA, 2003a).

Initially, during the first four years of operation, the CAA did not accredit any programs. However, in 1992, programs at Embry-Riddle Aeronautical University, Florida Institute of Technology, Middle Tennessee State University, and the University of North Dakota, became the first to be granted CAA accreditation (CAA, 2005). Since that time, growth in the number of institutions with accredited programs has grown fairly consistently (see Figure 1).

**Figure 1. Historical growth in institutions with CAA accredited programs**
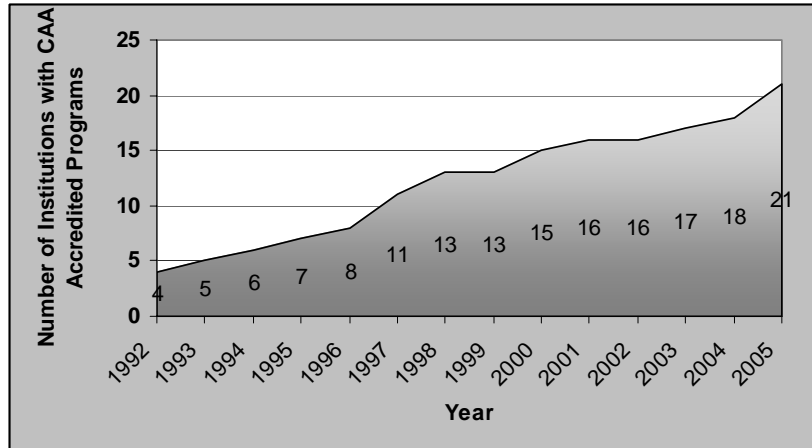


Source: Council on Aviation Accreditation data

## ACCREDITATION IN THE U.S.

Accreditation has been defined as "a procedure of quality assessment aiming at formal approval of a study programme (programme accreditation) or an institution (institutional accreditation) by a non-governmental body of experts and . . . stakeholders (Kohler, 2003). As Wellman (2003) shares, accreditation of higher education is a distinctly American invention. Indeed, this private, non-governmental, volunteer process substitutes for direct governmental regulation of academic standards, which is performed by the central government elsewhere. In the U.S., in fact, although the federal government requires recipients of federal student grants and loans to attend institutions accredited by an organization approved by the government, the accrediting organizations are responsible for assuring academic quality. Likewise, the states often defer to accrediting organizations on matters of academic quality (Eaton, 2003).

Today, three types of accreditation exist. First, regional accreditation is the largest and historically the oldest form of accreditation. There are eight agencies in six regions that together accredit approximately 3,000 institutions enrolling close to 14 million students (Wellman, 2003). National accreditation is usually sought by trade, business, and technical schools in the for-profit sector. Eleven national agencies collectively accredit approximately 3,500 institutions enrolling 4.75 million students. The third type of accreditation is specialized. The specialized agencies accredit individual schools or programs within larger colleges and universities.

The field of specialized accreditation in the U.S. is quite diverse. For instance, the CHEA recognizes 46 specialized accrediting organizations that accredit programs in 48 different academic fields, including audiology, aviation, computer science, forestry, nursing, social work education, and veterinary medicine. Interestingly, although most of these academic fields only have one specialized accrediting organization (similar to aviation), several fields (such as business, nursing, and teacher education) are covered by two organizations. This may be understandable, as these academic fields are quite popular and contain the number of programs that can support additional specialized accrediting organizations (CHEA, 2005).

A quick overview of the industry is possible by reviewing specialized accrediting organizations currently recognized by the CHEA. A random sample of 11 (out of 46) of these organizations reveals the average organizational age to be 65 years (resulting in an average year of establishment of 1940). The oldest of these organizations was founded in 1864 (American Veterinary Medical Association), with the youngest having been established in 1978 (American Association for Marriage and Family Therapy). Thus, it appears that the average specialized accrediting

organization is much older than the CAA (which is a young 17 years). The average number of institutions being accredited by each of these organizations is 221. Obviously, this number is greater than the entire population of institutions offering non-engineering aviation academic programs. However, when looking at percentages, we discover that approximately 59 percent of institutions with eligible programs are accredited by each of these organizations in their respective academic fields, much more than the approximately 20 percent accredited by the CAA (CHEA, 2005; K. Moynahan, R. Coscarelli, D. Pierce, T. Clark, P. Jenness, D. Simmons, & J. Knych, personal communication, July 5, 6, and 11, 2005).

## CAA ACCREDITATION

Accreditation, according to the CAA, assures students and prospective employers that an educational degree program has met "stringent industry standards of quality" ("Purpose," n.d., para. 1). Further, it ensures that graduates have received quality training and are indeed capable of performing a broad range of professional responsibilities. From the CAA perspective, accreditation serves two fundamental purposes: (a) to ensure the quality of the institution or programs, and (b) to assist in the improvement of the institution or program. In that regard, the goals of the CAA are:

> To stimulate aviation program excellence and self-improvement; establish uniform minimum educational quality standards; and increase the credibility, integrity and acceptance of collegiate aviation programs within institutions of higher education and all aspects of the aviation community, to include industry and government. ("Goals," n.d., para. 1)

The specific purposes of the CAA are: (a) to engage in accrediting programs of aviation at the associate, baccalaureate, and graduate levels offered by colleges and universities in the U.S. and throughout the world; (b) to maintain procedures consistent with the recognition requirements of the U.S. Department of Education and other recognized accreditation sanctioning bodies; (c) to publish current information concerning criteria and standards adopted by the CAA for accrediting aviation programs; (d) to report the results of its activities; (e) to provide advisory services to colleges and universities offering or planning programs in aviation; (f) to maintain a list of the colleges and universities with accredited programs of study in aviation; and (g) to review at regular intervals the criteria and standards which CAA has adopted to evaluate programs in aviation. It should be noted that the CAA currently does not have standards for associate degree programs designed only to prepare students for technical careers, nor graduate programs. In a survey of CAA officers and educator trustees, a

combined 100 percent either agreed or strongly agreed that the CAA is adequately fulfilling these various purposes (CAA, 2003a, 2003c).

For institutions seeking CAA accreditation, it may appear, at least on the surface, to be a simple four-step process—application, self-study, accreditation team visit, and subsequent review and action by the CAA Board. In reality, according to Ceci Hogencamp, CAA accreditation and meeting services manager, the process is "rigorous . . . taking two years from the time of submission" (Knauer, 2005, p. 28). Indeed, the CAA lists no less than 29 steps to accreditation (see Appendix). Although CAA accreditation is a rigorous process, 100 percent of survey respondents, composed of CAA officers and educator trustees, disagreed that it should be less rigorous to encourage more programs to seek CAA accreditation. This may be due, in part, to the fact that 67 percent of these respondents disagreed that aviation programs are discouraged from even attempting CAA accreditation due to the rigorous accreditation process.

Those programs desiring accreditation must first submit the following items to the CAA: (a) CAA Form 102-Application for Candidate Status; (b) application fee-currently $1,750 per program, with $350 for each additional program; (c) three copies of the institutional catalog; (d) three copies of aviation course descriptions; (e) three copies of the classroom hour coverage of core topics; and (f) three copies of a curriculum review form. To demonstrate the level of commitment to the accreditation effort, the application must be signed, not only by the program director, but also by the next higher administrative officer and the chief executive officer of the institution (CAA, 2003b).

Once these documents are submitted, two different actions may be taken by the CAA. First, if the aviation program appears to meet CAA standards and criteria, and at least one class will have completed the full program and graduate by the time of the required on-site visit, the institution will be granted Candidate Status. If it appears, however, that the program will be incapable of complying with CAA standards and criteria within the five-year period, the institution will be denied Candidate Status. Based on the actions taken by the CAA, the institution may request reconsideration for cause or withdraw its application and make new application at such time that the deficiencies have been corrected (CAA, 2003b).

If the institution is granted Candidate Status, there are at least 24 additional steps that must occur for the program to become accredited, the most demanding of which is the full self-study resulting in the Self-Study Report. It could easily be argued that the self-study is the most burdensome, as well as the most beneficial, aspect of the accreditation process. Indeed, 89 percent those CAA officers and trustees responding to the survey agreed that the self-study is the most beneficial aspect of the application process. As Ceci Hogencamp (in Knauer, 2005, p. 28) describes, "During the self-study

phase, the college examines every aspect of the program—curriculum, administration, budgets, courses, degrees, staff, and their assignments, aircraft fleet and so on—and prepares a report for the Council." CAA notes that the self-study report serves three fundamental purposes: (a) to guide the aviation program and its faculty through a critical review of program operations; (b) to provide information to the CAA so that a fair evaluation of the program can be made; and (c) to serve as an historical document for the aviation program (CAA, 1999b).

Usually requiring six to nine months to complete (and required to be complete in one academic year), the self-study may be the one deterrent for many programs that would otherwise consider seeking CAA accreditation (CAA, 1999c). Of the CAA officers and educator trustees responding to the survey, only 22 percent agreed that the self-study requirement is the main source of discouragement for programs considering CAA accreditation. Admittedly, however, "attempting accreditation [specifically in the form of a self-study] is a demanding experience" (Eaton, 2003, p. 1). Nonetheless, as Hogencamp (in Knauer, 2005, p. 28) notes, "[the self-study] is very educational for the school. It helps bring a number of important issues to light."

Once the Self-Study Report is accepted by the CAA, the CAA visiting team is organized and a date for the campus visit is coordinated with the institution. This next major phase of the accreditation process allows a team of qualified professional educator peers and industry representatives to visit the campus to examine in detail the information submitted in the Self-Study Report, to assess various intangible qualities of a program, such as the morale of students and staff, and assist the institution in identifying various strengths and weaknesses. The visiting team usually arrives on a campus on Sunday and completes the visit by Tuesday. These three days are quite busy for the visiting team as they meet with program administrators, executive officers of the institution, faculty, staff, and students. The team is also responsible for touring laboratories, classrooms, offices and other physical plant facilities; reviewing samples of student work, textbooks, and syllabi; and discussing operating finances and relationships among institutional and program administrators. The visit culminates in an oral briefing on the final day with the program administrator, the administrator of the next higher unit, and the chief executive officer of the institution (CAA, 1998; Knauer, 2005).

The most important product of the visiting team's effort is the visiting team report. This report, which is drafted by the chair of the visiting team, should: (a) present an objective analysis of the strengths, weaknesses, and undeveloped potential of the aviation program(s) being offered and make constructive suggestions for future development; (b) corroborate, modify, or repudiate the statements made in the application and the institution's Self-Study Report; (c) contain additional information gathered by the visiting

team; and (d) give the Accreditation Committee an evaluation of the program, as a guide for its recommendations. The "Guide to Preparation of the Visiting Team Report" (CAA, 1997) states that this report must stand alone, and will include the following sections: (a) Organization and Administration; (b) Curriculum; (c) Faculty; (d) Students; (e) Facilities and Services; (f) Relations with Industry; (g) Program Assessment; and (h) Summary of Strengths, Weaknesses, Suggestions, and Recommendations. Recommendations must be addressed by the institution prior to being accredited, while suggestions are considered informational. For the team to make a recommendation, the institution must be in non-compliance with a CAA standard (CAA, 1997, 1999a).

Once finalized, the visiting team report is sent to the Chair of the Accreditation Committee and the Executive Director of the CAA. This final report is also sent to the institution for response to recommendations, and, if desired, to suggestions. The Accreditation Committee then prepares their Accreditation Committee Report after studying the visiting team report, the Self-Study Report, and other pertinent documents on hand. This report is forwarded to the CAA Board of Trustees for its consideration with a recommended accreditation status. Finally, the Board acts on the report and makes a decision. If granted, accreditation of a program is normally for a five-year period, with reappraisal required at the end of the period. Due to the time involved in this comprehensive process, institutions are urged to apply for re-accreditation approximately two years before an institution's period of accreditation expires. Additionally, if a program fails to meet CAA standards during an accreditation period, it may be placed on probation for a period of time not to exceed the period of remaining accreditation of the program (CAA, 1999a, 1999b).

## CAA ENVIRONMENT

In addition to understanding the CAA accreditation process, it is beneficial to understand the strengths, weaknesses, opportunities, and threats both internal and external to the CAA. As part of the SWOT analysis of the CAA performed during this case analysis, expert opinion from those most familiar with the CAA was considered important in validating the SWOT findings. As a result, all CAA officers and educator trustees were invited to respond to a brief, on-line survey that was designed to gauge their level of agreement or disagreement with the findings of the SWOT analysis (see Table 1).

**Table 1: SWOT Analysis of the Council on Aviation Accreditation**

| Strengths | Agree | Weaknesses | Agree |
|---|---|---|---|
| Sole, national specialized accrediting organization | 100% | Accredited programs at only 20% of UAA institutions | 63% |
| Strong industry network | 78% | Does not accredit technology-based or graduate programs | 13% |
| Capable staff and dedicated volunteers | 78% | Young organization | 13% |
| Well-developed bylaws, standards, and guidelines | 56% | Recent entrance into international with no intl accredited programs | 0% |
| Strong ties to UAA | 33% | | |
| **Opportunities** | **Agree** | **Threats** | **Agree** |
| Further educate industry, programs, and students | 100% | Future lack of growth or decline in accredited programs | 88% |
| Continue tapping into expertise of volunteers | 78% | Competing accrediting organizations | 25% |
| Expansion into intl realm of aviation accreditation | 67% | | |
| Accredit graduate programs | 33% | | |
| Accredit technology-based programs | 33% | | |

*Note.* Percentages represent the percent of those CAA Officers and Educator Trustees who responded to the survey indicating their agreement with the strengths, weakness, opportunities, and threats presented above. Percentages have been rounded.

The CAA is currently in a strong position within the aviation academic arena, as this organization is the sole, national specialized accrediting organization for non-engineering aviation academic programs. Even though the CAA is a relatively young organization, it has strong ties to the 58 year-old UAA, which could be considered its parent organization. The UAA has a vast membership of over 800 total members, with 105 institutional members. The CAA has also developed a strong network with industry through regularly scheduled industry-educator forums. In addition, the CAA has well-developed bylaws, standards, and guidelines that provide a formal structure for the accomplishment of its mission. Further, the CAA has a sufficient staff (consisting of an Executive Director, an Accreditation and Meetings Services Manager, and support staff), as well as a dedicated group of volunteers in industry and academia that are devoted to the organization. As Ceci Hogencamp (in Knauer, 2005, p. 29) explains, ". . . our organization

depends solely on volunteers. They're dedicated and committed, and truly amazing and inspiring."

The majority of respondents to the survey of CAA officers and educator trustees agreed with four of the five strengths explained above. The only strength to which 100 percent of the respondents agreed, however, was the idea of the CAA being the sole, national specialized accrediting organization for non-engineering aviation academic programs. Conversely, only 33 percent of respondents felt that strong ties to the UAA would be considered a strength. Two respondents noted two additional strengths: (a) "Robust spirit and active membership [with] lots of potential among members;" and (b) "Potential to make a critical difference in standardizing university aviation education and making aviation program graduates the preferred candidates for hiring into professional positions in both civil and military aviation."

To be fair, weaknesses are recognized for the CAA as well. First, the organization is a young organization in a specialized accreditation industry where the average age of specialized accrediting organizations is 65 years (CHEA, 2005). In addition, the organization is just recently entering the international accreditation arena (with no international programs having yet been accredited), as well as the distance education area (having established the ad hoc Committee on Distance Education in 1997). Lastly, although there are currently 21 institutions in the U.S. with CAA accredited programs, this amounts to one-fifth of institutions currently offering non-engineering aviation academic programs (based on 105 UAA institutional members). Although it can be argued that this is not solely the fault of the CAA (as there are many variables involved in deciding whether or not to pursue accreditation, as well as the subsequent granting or denial of such accreditation), this fact may possibly reflect weaknesses in the organization (in areas such as marketing and industry public relations, as well as student outreach, for example).

Interestingly, the only weakness to which the majority of survey respondents (63 percent) agreed was the lack of CAA accredited programs. No respondents felt that having the CAA just recently entering the international accreditation arena was a weakness. This may highlight optimism held by the CAA at the many opportunities available in accrediting international aviation programs. Two additional weaknesses were noted by survey respondents: (a) "A continuing need to engage the non-participating UAA members in accreditation. Progress is that many are at least members and are learning about accreditation and its value. A concerted effort is now underway to improve communications on this subject;" and (b) "Lack of recognition, support, and patronage by business, government, and industry in aviation. In addition to institutional desire for program accreditation, a concerted effort by professional aviation to hire graduates from accredited

degree programs when positions become open will make all the difference in the world."

In addition to these strengths and weaknesses, the organization also faces various opportunities and threats (both from internal and external sources to the organization). First, the CAA has the opportunity to successfully move into the international realm of aviation accreditation (which it is currently pursuing). Second, the CAA has the opportunity to begin accrediting distance education programs, as these types of programs continue growing in popularity. Third, the CAA could develop standards for and begin accrediting graduate programs in aviation. Fourth, the CAA has the opportunity to further educate industry, aviation programs, and prospective students as to the benefits of accreditation (specifically CAA accreditation) and the benefits of attending and subsequently graduating from CAA accredited programs. The CAA also has opportunities to continue tapping in to the expertise and commitment of volunteers (representing both industry and academia) for the purpose of assisting the organization in growing and meeting the challenges that lie ahead.

The majority of survey respondents agreed with three out of five opportunities revealed in the SWOT analysis. Understandably, 100 percent of respondents agreed that further educating industry, aviation programs, and prospective students as to the benefits of CAA accreditation was a great opportunity. Only 33 percent of respondents, however, felt that an opportunity confronted the CAA in the form of accrediting technology-based programs and graduate programs. This is realistic, as the number of technology-based programs and graduate programs is relatively low in comparison to the total population of aviation academic degree programs. One respondent also recognized the following opportunities: "Expand the reach of the [industry-educator] I/E Forum so that all education institutions benefit. Collaboration with UAA is the method being explored for this. Another opportunity is to create a funding source of a foundation in order to smooth the financial fluctuations in the budget."

Considering threats to the organization, if the number of accredited programs (or institutions with accredited programs) begins declining, or in fact, does not continue growing, the CAA will realize reduced revenues and may begin declining in strength and purpose. It is quite possible that the population of aviation academic programs can unintentionally drive the CAA out of business, so to speak, if too few programs utilize the services of this organization. The CAA was initially established because approximately 75 percent of UAA member institutions supported the formation of a specialized accrediting organization that would accredit aviation academic programs (G. Kiteley, personal communication, July 28, 2005). Yet, if there are no programs to accredit, there will be no need for the CAA. Second, although it is unlikely (at least in the U.S.), a similar, competing organization

may be established that may draw clients away from the CAA. Some fields in the U.S. currently have two specialized accrediting organizations, and for good reason, the programs in the field are so plentiful that two organizations are adequately supported. Although this is unlikely in the U.S., it is possible that an international aviation accrediting organization (sponsored by the International Civil Aviation Organization, for instance) could be established and compete with the CAA in the international academic arena.

Of the threats to the CAA recognized by the SWOT analysis, only one (that of a possible future lack of growth or a decline in the number of accredited programs) was agreed to by the majority (88 percent) of survey respondents. In response, one respondent explained that, ". . . accredited programs will gradually increase and to increase them rapidly would place a strain on resources that creates undesirable consequences." Additionally, one respondent felt that "a lack of strategic focus that matches very limited resources with objectives" could be considered a threat to the organization.

## CONCLUSION

In sum, although the CAA is a mere 17 years old, the organization has successfully fulfilled a need in the aviation academic community by introducing formal specialized accreditation of non-engineering aviation academic programs. Even though weaknesses and threats have been identified in the environment of the CAA, strengths and opportunities have been identified as well. However, the question remains as to why so few aviation programs are accredited by the CAA. Part two of this case study addresses this question and presents recommended strategies for the CAA to adopt as the organization strives to increase the number of accredited programs and more fully meet the needs of the collegiate aviation community.

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**APPENDIX**

**COUNCIL ON AVIATION ACCREDITATION STEPS TO ACCREDITATION FORM 112**

1. The institution must be an educator member of CAA to be eligible for accreditation.
2. The institution submits an application (Form 102), application fee, three copies of institution catalog, three copies of the aviation program curriculum, and course descriptions, three copies of the classroom hour coverage of core topics, and three copies of a curriculum review form for each program submitted for candidacy.
3. Executive Director reviews application documents and, if complete submits copies to Accreditation Committee Chair for review. If not complete, Executive Director notifies institution of additional required items.
4. Accreditation Committee Chair determines the institution's status (full self-study or denied).
5. Chair of the Accreditation Committee notifies Executive Director, by letter, of the decision regarding candidate status.
6. Executive Director notifies the institution, by letter, advising status. If approved for full self-study, enclose Form 101 (Accreditation Standards Manual) and Form 104 (Outline for a Self-Study Report). If denied, advise institution of reasons for denial.
7. Institution completes full or preliminary self-study (6-9 month process). Self-study should be completed in one academic year.
8. Institution submits three copies of Self-Study Report to CAA office. If the institution has had a catalog change at any time since submission of their application, three copies of the new catalog should also be submitted. Executive Director reviews Self-Study Report and if complete mails a copy of the Self-Study Report (and new catalog, if applicable) to the Accreditation Committee Chair for review. If not complete, Executive Director notifies institution of additional required items.
9. Accreditation Committee Chair advises the Executive Director, by letter, if the Self-Study Report is accepted. This letter may include items for review by Visiting Team.
10. Executive Director notifies the institution and requests three dates for a team visit. A list of visiting team members is sent to the institution, which has the option of striking any member.
11. When the institution responds, Executive Director selects Chair of Visiting Team. Executive Director, in consultation with Chair of the Visiting Team, selects the date of the visit and visiting team size. Team

members are selected. Executive Director notifies the institution of date of visit and visiting team members and sends Form 106 (Information and Procedures for the Visiting Team), Form 107 (Typical Schedule for a Visiting Team), Form 109 (Guide to Preparation of the Visiting Team Report), and Form 120 (Team Visit Checklist for Institutions).

12. Executive Director sends a copy of Self-Study Report and catalog to the Visiting Team Chair. If this is a reaccredidation, the Chair is also sent the previous visiting team report and interim report(s). The institution sends a copy of Self-Study Report and catalog to the other team members.

13. Executive Director sends to the visiting team a travel expense report (with explanation of travel procedures) to be completed and returned to CAA Central Office and CAA Forms 106 (Information and Procedures for the Visiting Team), 107 (Typical Schedule for a Visiting Team), 108 (Aviation Program Evaluation), 109 (Guide to Preparation of the Visiting Team Report), and 120 (Team Visit Checklist for Institutions). Executive Director sends Form 114 (Team Member Assessment of the Performance of the Visiting Team Chairperson) to team members and Form 115 (Chairperson's Assessment of the Performance of the Visiting Team Member) to Team Chair, to be completed and returned to CAA Central Office. CAA pays the expenses of the visiting team, to include a $50 honorarium for each team member, and invoices the institution for the amount.

14. Executive Director sends to the Visiting Team Chair Form 110 (Visiting Team Recommendation to the Accreditation Committee and Board of Trustees).

15. Executive Director notifies appropriate regional and specialized accreditation association(s) of visit by letter.

16. Visiting Team Chair corresponds with institution to work out a detailed schedule of visit. CAA form entitled CAA Accreditation Visit Timetable Worksheet, leading up to accreditation action, prepared by the Executive Director with final schedule completed by Team Chair and copies sent by Team Chair to institution, team, Accreditation Committee Chair and CAA Central Office.

17. Visiting team members conduct visit. (Executive Director may participate as an observer, if deemed necessary by Visiting Team Chair or Executive Director.)

18. After visit, Chair of the Accreditation Committee and Executive Director receive visiting team first draft report from the Team Chair for review. Their comments sent to Team Chair, who will incorporate comments into second draft of report.

19. Chair of the Visiting Team completes Form 115 (Chairperson's Assessment of the Performance of the Visiting Team) and returns to the CAA Central Office to be filed in the Visiting Team members' files.
20. Visiting Team members complete Form 114 (Team Member's Assessment of the Performance of the Visiting Team Chairperson) and return to the CAA Central Office to be filed in the Chair's file.
21. Chair of Visiting Team sends the visiting team second draft report to the President of the institution for review and correction of factual errors.
22. President reviews second draft and sends comments and draft back to the Chair of the Visiting Team. A final report is completed by Chair and sent to Chair of the Accreditation Committee and Executive Director, along with Form 110 (to Executive Director only).
23. Executive Director sends final report to institution for response to recommendations and, if desired, to suggestions.
24. Institution submits response to final report to Executive Director.
25. Forty days prior to their next meeting, Executive Director sends final visiting team report and the institution's response to the report to all members of Accreditation Committee with Form 111 (Guidelines for Accreditation Committee Review of the Visiting Team Report and Preparation of the Report to the Board of Trustees) and Form 116 (Accreditation Committee Ballot for Initial or Renewal Accreditation) for review and balloting. The completed Form 110 is submitted to the Accreditation Committee Chair.
26. Thirty days prior to their next meeting, Executive Director sends the visiting team report, the institution's response to the report, and Forms 110 to the Board of Trustees.
27. Accreditation Committee reviews the visiting team report and the institution's response to the report, and each member completes Form 116. Upon receipt of the Forms 116, the Chair prepares for the Board of Trustees an Executive Summary as outlined in Form 111. Chair presents Executive Summary to the Board.
28. Board acts on the report and makes decision.
29. If accredited, an official Letter of Notification of the action is sent to the institution by the Executive Director within 30 days of the action.

**Appeal Process**
1. If not accredited, the Executive Director sends a letter, also within 30 days of the action, notifying institution of action and basis of action.
2. Institution may appeal action by notifying CAA within 30 days of receipt of Executive Director's letter.
3. Executive Director submits letter of appeal to CAA President.
4. President appoints three Trustees to Appeal Committee.

5. Appeal Committee meets at next CAA meeting and makes recommendation to Board.
6. Board reviews recommendation and makes decision.
7. Board acts on the report and makes decision.
8. If accredited, an official Letter of Notification of the action is sent to the institution by the Executive Director within 30 days of the action.

**Interim Report**
1. Institution is given period for interim report(s), the items required in the report and deadline date of submittal.
2. Institution submits interim report(s) to CAA.
3. Executive Director reviews report(s) and submits to Accreditation Committee Chair.
4. Accreditation Committee reviews report.
5. Accreditation Committee Chair prepares report for the Board with recommendations.