

DEDICATED TO HELPING BUSINESS ACHIEVE ITS HIGHEST GOALS.



## **BUSINESS AND COLLEGIATE AVIATION PIPELINE PROGRAM GUIDE**

# NBAA Business and Collegiate Aviation Pipeline Program Guide

*Released February 2011*

## INTRODUCTION

The *NBAA Business and Collegiate Aviation Pipeline Program Guide* provides basic guidance on how National Business Aviation Association (NBAA) Member Companies, regional business aviation associations and University Aviation Association (UAA) collegiate aviation degree programs can build a pipeline of career opportunity between the business aviation and collegiate aviation communities to develop the next generation of business aviation leaders. This guide will help business aviation and collegiate aviation leaders work together to provide mentoring and hands-on learning opportunities for aviation students, who will gain the necessary tools to pursue and succeed in business aviation careers.

This *NBAA Business and Collegiate Aviation Pipeline Program Guide* was produced with significant input from the NBAA Corporate Aviation Management Committee (CAMC) Professional Development Subcommittee, and it reflects their combined knowledge and experience when addressing important issues and challenges. NBAA's staff and Corporate Aviation Management Committee welcome Member comments and suggestions regarding this guide, and comments should be submitted to [feedback@nbaa.org](mailto:feedback@nbaa.org). Member input is essential to this publication's utility and value to business aviation and collegiate aviation functions.

This is an introduction but not a complete guide on aviation training and/or academic policies from which both business aviation and collegiate aviation base their standards. This first edition of the publication includes references – including web sites, industry resources available to academia, pertinent data, official government documents, and industry databases – that should be useful for those who desire further reading on this topic. NBAA will periodically issue updates to this guide, and the latest version will always be available for download online at [www.nbaa.org](http://www.nbaa.org).

## SUMMARY OF THE CHALLENGE

Succession planning is a challenge across most industries today, and business aviation is no exception. As the current generation of leaders in business aviation reach retirement, some natural questions arise: Who will replace the current generation of leaders?

- Are the future leaders receiving the requisite education and training to prepare them to move the industry forward?
- Where should these future leaders receive their education and training?
- Are there specific areas of education and training that stand out as particularly important?

The discussion of such questions is vital to the sustainability of business aviation as an industry.

Experience has shown that an effective education and training venue should marry theory and practice; thus, higher education institutions must partner with industry-related associations and organizations to provide a unique and powerful combination of preparation. The partnership between NBAA and institutions of higher education provides this opportunity. Students can learn foundational concepts in the classroom and bring those ideas to life within the context of an actual business aviation workplace through partnership with industry-related organizations such as NBAA Member Companies.

Through hands-on opportunities like internships and mentorship programs, classroom theory becomes tangible and real to the student.

From numerous fields of study, it is clear that college graduates enter their profession of choice with the tools and resources needed to perform the technical duties necessary for success. What also is clear is that college graduates often lack the necessary "core skills," also referred to as "soft skills" or "people skills." In business aviation, core skills were largely ignored until only recently, as the liabilities that accompany a lack of attention to customer service and internal workplace harmony became painfully obvious.

What, then, should be taught? Clearly, technical thought and technical skills are still one important ingredient to success. But future business aviation managers and leaders must also understand how to resolve conflict, communicate with customers, communicate across departments and gauge customer wants and needs – education and skills associated with the core skills. Here again, the marriage between industry and academia is a powerful combination. Academic study provides concepts, and industry cooperation contextualizes those concepts into real-world experiences.

## HISTORICAL BACKGROUND

Business aviation historically has not had strong involvement in collegiate aviation programs, and only in the past decade have formal “pipeline programs” been launched to link the two communities. For instance, in 2002, a first-of-its-kind career pipeline program linked the Minnesota Business Aviation Association (MBAA) with St. Cloud State University’s business aviation program, providing collegiate aviation students with on-site “lab time” that the university could not afford to simulate. In previous years, several Ohio-based *Fortune* 500 flight departments and business aviation operators had independently initiated industry outreach programs with local collegiate aviation programs.

In 2005, dialogue opened between MBAA leaders and Ohio Regional Business Aviation Association (ORBAA) leaders regarding the implementation of an Ohio version of the MBAA pipeline program. In 2007, Columbus-area business aviation leaders joined forces to create the Business Aviation Collaborative of Ohio, a partnership between industry, state and education officials for the benefit of aviation students. This initiative established a standalone business aviation course at each of the state’s major four-year universities and helped introduce new content into the technical school curricula. By 2008, Minnesota and Ohio leaders had been approached by many other communities for guidance on implementing programs in other regions.

In light of the success of such regional efforts and to provide support for the spread of such programs, the NBAA Corporate Aviation Management Committee (CAMC) proposed to the NBAA Board of Directors a national pipeline program initiative, which was sanctioned by the Board. The NBAA initiative would serve to introduce collegiate aviators to the “real world” of business aviation operations, give the industry an opportunity to give back and share knowledge with future leaders, assist universities by offering students on-site lab time that the schools could not afford to simulate, and promote NBAA’s mission.

By mid-2009, the NBAA Corporate Aviation Management Committee began writing the official *NBAA Business and Collegiate Aviation Pipeline Program Guide* for use by any NBAA Member Companies, regional business aviation associations and UAA member organizations desiring guidance on program implementation within their regions. With the publication of the guide in 2011, the initiative was launched nationwide.

The efforts in Minnesota and Ohio prove that regional pipeline programs can succeed in both introducing business aviation to students who might otherwise not be exposed to it during their college years, and attracting those students to careers in business aviation. Through such programs, aviation students have the opportunity to discover a world that intrigues them, along with a wealth of job options and career opportunities.

The promise of pipeline programs in developing the next generation of business aviation leaders is undeniable.

## TABLE OF CONTENTS

Introduction.....	1
Summary of the Challenge .....	1
Historical Background .....	2
Reasons to Use the Guide .....	4
How to Use the Guide.....	5
Key Stakeholders in Establishing a Pipeline Program.....	6
Business Aviation Industry.....	6
Collegiate Aviation Programs/Institutions.....	6
Regional Business Aviation Associations .....	6
Governance Bodies .....	6
Requirements for Pipeline Program Implementation.....	6
1. Business Aviation Industry Roles and Resources.....	6
2. Collegiate Aviation Programs/Institutions Roles and Resources.....	7
3. Regional Business Aviation Associations Roles and Resources .....	7
4. Governance Bodies Roles and Resources .....	8
Internships .....	11
Frequently Asked Questions .....	12
Appendixes and Templates.....	14

## REASONS TO USE THE GUIDE

The *NBAA Business and Collegiate Aviation Pipeline Program Guide* is a code of best practice. It was developed by the business aviation industry and the collegiate aviation community. Benefits include direct value-added for a company looking to broaden its employee pool, to solid employment opportunities for college graduates, to development of the industry's workforce.

### **Benefits to NBAA Member Companies and Business Aviation Industry**

- Forge and strengthen ties between business aviation industry and collegiate aviation programs
- Supplement company staffing and support company projects through student work
- Expose students to the career potential offered by business aviation
- Develop vital skills for students entering business aviation careers
- Increase industry presence on college campuses where the business aviation story is often not heard
- Identify and invest in potential future employees and industry leaders
- Spread the positive message about business aviation

### **Benefits to Collegiate Aviation Programs and Institutions**

- Forge and strengthen ties between business aviation industry and collegiate aviation programs
- Provide access for students to “real world” knowledge through on-site internships and mentorships
- Provide access for students to the high-tech, rapidly changing world of business aviation that academia often cannot simulate due to budget constraints
- Raise the standards of training and education within collegiate aviation to compliment industry standards and expectations for students entering the business aviation industry
- Provide means to business aviation companies for donate equipment to be used for collegiate training

### **Benefits to Regional Business Aviation Associations**

- Forge and strengthen ties between regional business aviation associations, the industry and academia
- Partner with future association contributors in the early stages of their aviation careers
- Use the collective knowledge of the association to help shape curriculum development, so that future aviation professionals acquire the skills necessary for the success of both the individual and the association

### **Benefits to Governance Bodies (city, county, state, and federal)**

- Forge and strengthen ties between business aviation industry and collegiate aviation programs
- Provide state government with a bridge to industry and academia to increase knowledge of job trends and status of industry health
- Improve industry employment opportunities in the short term
- Develop avenues to maintain a healthy workforce pool for economic strength in the long term

## HOW TO USE THE GUIDE

The *NBAA Business and Collegiate Aviation Pipeline Program Guide* is designed so that all stakeholders may participate at the level determined most appropriate to their organizational mission. It is intended for collegiate aviation programs only, and not for high school programs that would involve minors. To participate in aviation career presentation outreach to high schools, companies should coordinate with their local school districts or state office of education.

### **Utilization Strategies for NBAA Member Companies and Business Aviation Industry**

- Locate collegiate aviation programs within your region
- Reach out, meet faculty and offer support to professors and academic departments
- Release time and resources for aviation department to maintain healthy industry networking relationships
- Ensure employees are fully engaged and want to participate

### **Utilization Strategies for Collegiate Aviation Programs and Institutions**

- Identify key teaching staff and ensure they have the skills/industry experience to network with industry contacts
- Join the regional business aviation association and grant faculty release time for active membership to maintain industry credentials
- Allow freedom of design and oversight of course by faculty/industry partnership – do not allow the department to micro-manage
- Introduce and educate industry contacts about academic world governance
- Design creative faculty workload assignments to meet the industry's 24/7 work schedules
- Be open to revising the usual pedagogy – “think outside the flight deck”

### **Utilization Strategies for Regional Business Aviation Associations**

- Assist in establishing industry advisory boards
- Demonstrate to industry an *active* membership in regional/national professional organizations
- Be aware of academic issues

### **Utilization Strategies for Governance Bodies (city, county, state, and federal)**

- Provide state/regional administrative support to market the program
- Commit to support programs that compliment regional workforce development (state higher education offices)

## KEY STAKEHOLDERS IN ESTABLISHING A PIPELINE PROGRAM

### Business Aviation Industry

Organizations that utilize business aviation and/or business aviation flight departments and the service providers who support their technical needs, such as the 8,000 companies represented by NBAA ([www.nbaa.org](http://www.nbaa.org)).

### Collegiate Aviation Programs/Institutions

Institutions offering higher-education aviation degree programs, such as those represented by the University Aviation Association (UAA). The UAA serves as the voice of collegiate aviation education with more than 525 members, including 105 accredited colleges and universities ([www.uaa.aero](http://www.uaa.aero)).

### Regional Business Aviation Associations

Organizations ranging from regional business aviation associations and state-level aviation groups to airport user groups and other professional organizations. Examples include the Arizona Business Aviation Association, Teterboro Users Group and Midwest Schedulers & Dispatchers Association. NBAA provides the latest list of these organizations in its online Regional Business Aviation Groups Directory ([www.nbaa.org/regional](http://www.nbaa.org/regional)).

### Governance Bodies

City, county, state and federal governance bodies that impact the aviation industry via oversight legislation, rule making and governance oversight of institutions of higher education.

## REQUIREMENTS FOR PIPELINE PROGRAM IMPLEMENTATION

This section outlines the various stakeholder roles and resources required for pipeline program implementation.

### 1. Business Aviation Industry Roles and Resources

#### 1.1. Advisory Boards (i.e., representatives from both aviation industry and government agencies)

- Foster both professional and personal relationships within the industry
- Enhance communication concerning industrial trends
- Actively engage in class syllabus discussion to align with current trends
- Directly impact the quality of prospective employees presented to the work force
- Allow for direct dialogue with the business community's technical requirements
- Make businesses aware of student demographics and trends in student recruitment and activity

#### 1.2. Internships

- Provide students with hands-on experience and better understanding of operational practices

#### 1.3. Guest Speakers/Lecturers/Adjuncts

- Allow up-to-date communication with current practices and future requirements needed within industry
- Provide real learning experiences and enable deeper understanding within the industry and academia
- Allow actively engaged students access to state-of-the-art equipment and technology
- Foster both professional and personal relationships within the industry
- Energize and motivate students on behalf of the industry
- Obtain student insight into the operational aspects of the industry
- Support students financially as well as academically
- Personally guide individuals who are attracted to the industry
- Give industry insight through personal experience and one-on-one interaction

#### 1.4. Tours and Experiential Learning

- Allow students to personally view business aviation operations
- Provide students with real facts while eliminating myths or incorrect information
- Allow students to experience real-time challenges, practices and solutions facing business aviation
- Allow students to experience daily operations and equipment that apply to academic course work
- Allow faculty to experience real-time challenges, practices and solutions facing business aviation
- Allow faculty to experience daily operations to outline academic course work

#### 1.5. On-Site Labs

- Provide students with industry insight and hands-on experience through on-site labs
- Provide faculty with industry insight through on-site labs

### **1.6. Equipment Donations**

- Donate equipment that can be used by academia for business aviation industry training programs

## **2. Collegiate Aviation Programs/Institutions Roles and Resources**

### **2.1. Advisory Boards** (i.e., representatives from both aviation industry and government agencies)

- Advise collegiate aviation programs on specific academic and research issues
- Link the department to its industrial and professional partners
- Provide an opportunity for communication of current and future industry and professional needs
- Identify actions that programs should take to meet special needs
- Provide recommendations on initiatives that programs should undertake to continually improve educational and research initiatives

### **2.2. Internships and Apprenticeships**

- Provide internships, defined as supervised work experience in a student's field of interest for which the student may earn academic credit; work can be part-time or full-time, paid or unpaid, on or off campus
- Provide apprenticeships, defined as on-site training by an employer who helps the apprentice learn the trade in exchange for continuing labor for an agreed-upon period after the apprentice becomes skilled

### **2.3. Guest Speakers/Lecturers/Adjuncts**

- Bring business aviation representatives into the classroom to bridge textbook theory with industry application and often offer expertise that academia cannot always provide in an industry where technology changes continually

### **2.4. Tours and Experiential Learning**

- Provide avenues whereby students can visit industry work sites to gain first-hand knowledge of day-to-day operations and the skill sets demanded of these positions

### **2.5. On-Site Labs**

- Embed on-site lab requirement into course curriculum to ensure that students gain practical experience at industry sites
- Provide students, through course work, access to technology that academia often cannot afford to simulate
- Ensure that collegiate aviation pedagogy maintains relevance to industry standards by encouraging faculty participation in on-site labs, where faculty staff can maintain credentials, stay abreast of the latest technology and "job shadow" working professionals

### **2.6. Equipment Donation Solicitation**

- Allow collegiate aviation programs to solicit companies in business aviation for donation of equipment, which academia often cannot fund

## **3. Regional Business Aviation Associations Roles and Resources**

### **3.1. Financial Commitment**

- Provide financial support for aviation education through monetary and training scholarships
- Partner with local technical training programs, colleges and universities in an effort to build relationships with students
- Invite students to attend regular meetings of the association free of charge to learn more about the industry and to gain informal networking opportunities, thereby strengthening the bond between students and the association/industry
- Hold annual fundraisers, such as raffles and charity golf tournaments, to provide resources for outreach programs, scholarships and training opportunities and to defray costs associated with intern program administration

### **3.2. Resource Allocation**

- Provide equitable allocation of resources and opportunities – whether they be funds, internship opportunities or student/faculty access to association events – among all participating collegiate aviation programs
- Provide equal access to all stakeholders in order to build trust, relationships and long-term success of the effort

### **3.3. Cause Champion**

- Identify a leader within the association who understands that a close working relationship with academia is essential to the success of any outreach effort and is willing to promote that relationship
- Assign a program administrator who is committed to developing the industry/academia partnership while working within the association's financial means (a "champion for the cause")

### **3.4. Single Point of Contact**

- Provide a centralized repository for current, reliable information beneficial to students, faculty and industry, resulting in efficiencies for all stakeholders
- Consolidate and standardize processes for internships, scholarships, etc., where desired, and assist both industry and academia in partnering to the benefit of both stakeholders
- Provide industry with easy, one-stop access to a developing talent pool and opportunity to help shape the skills of future business aviation workers

### **3.5. Link Between Industry and Academia**

- Serve as a natural link between business aviation and collegiate aviation through relationships formed during meetings, outreach, etc.
- Serve as a conduit for industry representatives to give educators real-time reports on the state of the industry, its needs and future requirements
- Routinely schedule meetings between industry and academic stakeholders to discuss curriculum needs and thereby ensure that course work remains current and relevant in today's rapidly changing aviation environment

### **3.6. Internship Creation and Standardization**

- Identify and establish internship opportunities for students (see Appendix A for information regarding business aviation internship programs)
- Through such outreach efforts, provide students with a forum where they can participate, learn and contribute
- Work with industry and academia and use this NBAA guide to standardize internships and provide the best experience for each student
- Consider establishing internships within the association itself to provide a valuable learning opportunity for the intern while the association directly benefits from a motivated, capable contributor

## **4. Governance Bodies Roles and Resources**

### **4.1. Role of State Governance Bodies**

- Establish that business aviation is essential to state's economic and educational aspirations (supported by statistics and studies)
- Identify business aviation as a key growth opportunity with emerging technologies that holds potential for significant future economic benefit to the state
- Identify that the business aviation industry is at the heart of the state's competitive advantage
- Work with stakeholders to help establish the state as one of the key destinations for business aviation industry and education
- Attract industry to the state in order to help attract and retain aviation undergraduates
- Build a job market within the state to help stem the tide of aviation graduates moving out of state to start aviation careers
- Establish industry relationships to ensure business aviation is included in the state's economic development strategic plan
- Establish industry relationships to ensure business aviation is represented on strategic plan advisory teams/ advisory councils

### **4.2. Role of Workforce and Economic Development Officials** (i.e., those providing jobs for students and facilitating academic and industry productivity)

- Collaborate with the business aviation industry to gain insight, analysis and strategic tools to help businesses compete
- Develop creative, cohesive and useful business strategies for promoting and retaining the state's aviation industries, including attracting and nurturing new investment in business aviation

#### **Illustrative Model: Consortium for Aviation Workforce Development in Ohio (CAWDO)**

This structured program, which is designed to engage a wide range of aviation businesses in the creation and standardization of internships to link students with industry, does the following:

- Provides a single point of entry
- Provides a central technology depository
- Provides remote learning
- Aligns state education goals with higher education process
- Supports state department of development in attracting and retaining aviation industry to the state
- Markets industry opportunities both inside and outside the state
- Helps overcome state economic perception problems associated with other industries

#### **4.3. Role of Department of Development/Board of Regents/Chancellor's Office**

- Understand state legislation targets and how they align with state education goals
- Build meaningful internships and real-world learning experiences to attract students to state institutions of higher learning
- Align efforts of industry and schools to meet current equipment and technology needs
- Encourage schools to join and actively participate in industry associations
- Engage the department of development to ensure business aviation is an integral part of the economic development strategy for increasing the state's ability to grow, retain and attract targeted industries and students
- Engage in business matchmaking for businesses the state is trying to attract, connecting industry experts and academia with potential businesses
- Work with the state department of development to reintroduce/reinforce the benefits of living and working in the state to current and former residents and students
- Ensure business aviation is included in centers for workforce excellence
- Collaborate and provide support to ensure academia is well-positioned to compete and win the best, brightest students (e.g., accreditation)

##### **Illustrative Model: Ohio State Skills Bank**

This entity, which is designed to help the state's employers remain globally competitive by ensuring that a skilled talent pool is continuously available, does the following:

- Strategically positions the state's collection of adult education, training and workforce assets to build pipelines of talented graduates and certificate holders to meet targeted economic needs
- Aligns education programs, training opportunities and workforce services
- Focuses on aligning the state's educational assets to meet the skill needs (both quantitative and qualitative) of employers
- Focuses on regionally specific industries, schools and occupations
- Pursues goals such as addressing workforce shortages and ensuring that the workforce is skilled, meets industry needs and is equipped with necessary workplace skills
- Provides integration/access to federal and state funded assets (FAA, ATC, NASA, etc.)

#### **4.4. Government Resources for Curriculum Development**

- Provide resources for curriculum development based on industry feedback/needs
- Gather and report meaningful statistics related to demand for curriculum
- Channel federal funds to state initiatives
- Create and support state-driven policies and tools that channel federal funds to state and local business and educators
- Generate funding for grants, tax credits, internships, co-ops
- Establish a single point of entry via the Internet for seeking and posting grants, tax credits, internships, co-ops
- Provide reference studies, development strategies and plans developed and supported by the state useful to ensuring business aviation is well represented

#### **4.5. Governance Bodies Link With Educators and Industry**

- Provide government resources for curriculum development and alignment
- Provide curriculum oversight and standardization to ensure statewide industry-driven curriculum
- Ensure degree track offerings are aligned with business aviation needs and, therefore, provide the best possible career preparation for students
- Host and facilitate state aviation educators' meetings designed to facilitate collaboration and sharing of resources and technology within the state to the benefit of students and schools
- Use student projects to attract and retain industry
- Provide engaging career services (how-to)
- Create centers of excellence/hubs of innovation (how-to)
- Participate in the process of skilled workforce development
- Facilitate industry solutions through collaboration among industry, academia and legislators
- Ensure relevance and currency of academic offerings to industry

**Illustrative Model: Business Aviation Collaborative of Ohio (formerly Ohio Aerospace Initiative) and the Ohio Cooperative Education and Internship Program**

This Ohio group, which exists to connect state government officials with academia and industry in an effort to better prepare students for careers in business aviation, does the following:

- Collaborates with national and regional industry trade associations
- Uses NBAA resources (including Business Aviation Regional Forums) to establish and support its program
- Encourages participation by aviation industry within the state to bridge the industry-education gap
- Provides state aviation education programs the ability to present career opportunities, facility tours and internship programs
- Ensures at the state level that aviation education objectives are aligned with the needs of the business aviation industry
- Shares information and best practices among the state's constituents
- Serves as single point of contact for the system
- Provides the structure and means to ensure collaboration and cross-pollination of best practices and course materials throughout the state
- Enables standardization of experiential learning

## INTERNSHIPS

- Internships are a form of experiential learning integrating knowledge and theory learned in the classroom with practical application and skill development in a professional setting. Students earn academic credit, or there is some other connection to the curriculum of a degree-granting, educational institution. This work and learning arrangement is overseen by a faculty or staff member of the student's educational institution and by a designated employee of the organization hosting the internship experience. Internships generally run concurrent with the school year and are usually a semester in length but can also run during the summer months. They may be part-time or full-time, paid or unpaid. A learning agenda or learning objectives, which include one or more forms of reflection, is integral to the experience to distinguish it from a volunteer position, job, or apprenticeship.
- Degree programs offered for students interested in an aviation career include aviation management, aeronautical science, aviation human factors, business aviation administration, aviation safety and aviation weather. Additionally, students may be concurrently enrolled in a flight program. Through internships, the intern has the opportunity to connect classroom theory with current industry challenges, and be exposed to the latest aviation technology and trends. The opportunity to converse and interact with a large pool of experienced and talented professionals gives interns deeper insight to the overall operation. Interns are also given the invaluable opportunity to evaluate their own level of interest in pursuing this important career goal.
- A flight department internship is perhaps the best way to introduce aviation students to a career in business aviation. Internship hosts realize the benefits of opening their doors to the young individuals who represent the future of business aviation and offering them exciting work and a rewarding learning experience. The intern gains unique insight into the demands and tasks of the many possible roles within the flight operation, as well as the important internal and external interactions that make up the team.
- Employers from a wide variety of industries indicate that graduates with internship experiences are highly attractive potential employees. The performance of interns is often more professional and they are often able to contribute more effectively and quickly upon entry into the organization. In addition, hosts often comment on the intern's enthusiasm becoming contagious to the whole department. The host organization further benefits from the additional manpower the willing and able intern provides.
- Company mentors can provide specialized guidance that enhances a student's aviation education and career development. Many companies also view a student's participation in an internship as a means to screen, select and recruit for a future permanent position.
- The most important goal in creating a company internship program is to create an experience that is beneficial and rewarding to both student and host. Getting started on this program is as simple as reviewing *NBAA Management Guide*, Section 1.21, titled Undergraduate Student Internship Programs ([www.nbaa.org/management-guide](http://www.nbaa.org/management-guide)), or the NBAA Personnel Considerations web site at [www.nbaa.org/admin/personnel](http://www.nbaa.org/admin/personnel), which both provide guidance on developing company internship programs. Collegiate aviation programs are also a great source of information for companies seeking to launch an internship program.

## FREQUENTLY ASKED QUESTIONS

Below are some frequently asked questions about undergraduate student internships with business aviation flight departments.

*Disclaimer: This section is being provided only as general information and it is not to be construed as legal advice. Each company must consult its own human resources and legal advisors concerning its own situation for determining issues related to an intern's employment status and for any related questions.*

### **1. Are undergraduate student interns “employees” of the host organization?**

Some host organizations consider interns as temporary employees and provide an abbreviated benefits package and on-boarding program to the organization and flight operation as a means of decreasing liability in the event anything should occur in the scope of the intern acting on behalf of the organization. Some organizations structure their internships more informally and do not consider their interns as employees. No lasting or commercial benefit is sought or expected by the parties, other than the intrinsic lasting benefit of the work and study experience intended.

### **2. Are undergraduate student interns paid during the internship?**

Some host organizations provide undergraduate students interns with remuneration in some form while others do not – and is strictly at the discretion of the host organization. It is generally believed that a meaningful work-learning experience is the primary and essential benefit. When remuneration is offered, it is generally in the form of a stipend or scholarship to support the intern's work-learning experience or to defray expenses related to the experience.

### **3. What is expected of the host organization during the internship?**

The host organizations is expected to assign the undergraduate student intern to duties and work schedules that are both reasonable and consistent with that position for others holding similar positions of responsibility. The host will provide direct effective supervision to the intern to ensure prompt high-quality feedback and opportunity for the intern to resolve any questions and/or concerns related to assigned duties and professional growth through the internship. The host will provide a final evaluation to the intern and the intern's home institution documenting the host organization's assessment of the intern's performance during the internship.

### **4. What can the host organization expect of the intern?**

Undergraduate student internships are rich experiences and students are screened and selected by the faculty of the home institution for participation in these experiences. The host organization can expect consistently high quality work and professional work habits from the intern, and a strong commitment to the host organization's success in its mission and operations. Undergraduate student interns understand the importance of maintaining the confidentiality of proprietary information and practices and commit to keeping such business information (contracts, projects ideas, work decisions, etc.) strictly private and confidential.

### **5. What liability is incurred by the host organization during the internship?**

The host organization does not incur legal liability for the safety and well-being of the intern beyond that which would be reasonably expected by a visitor or guest. The host organization is obliged to exercise due care for the safety of its operations, crews and passengers and adhere to relevant state and federal safety and other workplace regulations, and agrees to provide written notification to the intern and the intern's home institution of any special risks to which the intern may be exposed, and the internship is accepted subject to those risks.

### **6. What happens if the host organization is unable to fulfill its obligations?**

The host organization is expected to exercise reasonable care in planning for the internship opportunity and to make a good faith effort to fulfill its obligations to provide a meaningful work-learning experience for the scheduled term. Still, unforeseen circumstances or substantial changes to the host organization's operations may preclude completion of the internship experience. The host organization does not incur legal or contractual liability to the intern or the home institution for the completion of the experience beyond a good faith effort.

### **7. What is the expected work schedule? How much flexibility is there in this schedule?**

Undergraduate student internships are generally planned for a minimum of 15 hours/week on average to a maximum of a full-time commitment arranged in advance by mutual agreement between the host organization and the student. The basic work schedule is usually set by agreement and with regard to the intern's other school commitments (if not serving full time in the internship). Flexibility by both parties is useful in response to variations in the operational tempo of the host organization or during especially busy times in the intern's school calendar. Undergraduate student internships are scheduled for a period of about 12 to 14 weeks.

## **8. How can host organizations identify potential school partners and interns?**

Host organizations can identify potential school partners among colleges and universities offering undergraduate degrees in aviation flight operations, aviation management and related disciplines through two key sources:

- The University Aviation Association (UAA) is the professional association of collegiate aviation and home to colleges/universities, individuals and organizations involved in this work. Information on member schools can be found at [www.aaa.aero](http://www.aaa.aero) or at the home offices of the UAA, 3410 Skyway Drive, Auburn, AL, 36830-6444, tel: (334) 844-2434.
- The Aviation Accreditation Board International (AABI) is the accrediting organization for collegiate aviation programs. Schools that have earned recognition by this body have demonstrated that their programs meet high standards for program and instruction. Information on accredited programs can be found at [www.aabi.aero/programs.html](http://www.aabi.aero/programs.html). Potential intern candidates can be identified by contacting a potential school partner directly. Internship programs are often coordinated by the school's office of career services that can put host organizations in contact with potential candidates or supervising faculty.

## APPENDICES AND TEMPLATES

Within this section, business aviation professionals and educators alike will be able to find templates for establishing elements of a pipeline program, as well as sample intern assignments. The templates are offered for suggestive purposes and are not applicable to every situation. Companies and academic institutions are encouraged to adapt templates to fit their needs.

### Appendix 1: Parameters of Establishing an Internship

#### A1.1. Undergraduate Student Internship Timeline

Undergraduate Student Internships are scheduled for a 12 to 15 week (usually one academic semester) commitment with consideration to company schedules and needs and the academic calendar of the student's home college/university. Suggested application timeline:

- Six weeks prior to the expected start date – Application to flight department/company position
- Four weeks prior to the expected start date – Interviews for intern position
- Three weeks prior to the expected start date – Notification of hire to intern
- Final day– As arranged (12 to 15 week commitment)

#### A1.2. Intern Job Description

Undergraduate student intern position notifications should provide an environment that allows a student an opportunity to gain operational experience with respect to the world of business aviation. When applicable, the company will provide appropriate documentation to satisfy the college or university requirements for participating in the intern program. Some suggested areas of interest for an internship might be:

- Flight operations
- Domestic and international flight operations
- Aircraft maintenance
- Aircraft servicing
- Customer service
- Flight attendant operations
- Aircraft scheduling
- Crew scheduling
- Flight planning

#### A1.3. Responsibilities

Interns should know in advance:

- Work schedule
- Work site
- Supervisor/s
- Deliverables expected daily/monthly/end of internship
- Company culture and how interns are expected to adopt to it (dress code, use of cell phones, computer usage policies, etc.)
- Corporate HR policies
- Corporate safety security background checks in which interns may be asked to participate

#### A1.4. Desired Qualifications of an Intern

- Undergraduate student enrolled in an appropriate bachelor's degree program at an accredited college/university as a junior or senior in good standing
- Strong academic credentials (minimum 3.0 CGPA) or strong practical experience or skills. Many individuals who have struggled with academics have excelled in practical tests and tasks.
- Satisfactory disciplinary record (both at school and in the community)
- Academic preparation appropriate to the internship position

- For pilots: commercial pilot certificate with instrument airplane rating
- Proficient Microsoft Office (Excel, Word) and overall computer skills
- Positive attitude and self-motivated work skills
- Excellent written and verbal communication skills
- Able to provide own housing and transportation during internship
- Any additional items required by company HR offices

## **Appendix 2: Onboard Schedule Day 1 Example**

### **Human Resources Department Presentation**

- Company documents
- Company identification cards

### **Introduction and Training Agenda Overview**

- Outline of onboarding agenda
- Mentor and sponsor assignments
- Present operations manual
- Training log forms (build personal file with copy of application, FAA pilot's licenses, FAA physical, passport, crew roster form for software)

### **Company Overview**

- Company values and operating principles
- Department goals (safe, flexible, reliable, convenient)
- Company aircraft justification and software program
- Cost-cutting procedures/new aircraft on order
- IS-BAO process
- Company organizational structure
- Flight department personnel duties

### **Hangar and Office Orientation Tour**

- Introduce aircraft in hangar
- Introduce department personnel, facility tour
- Cover gate codes, keys, security system, airport ID badges, FBO parking sticker, personal business cards
- Department mailboxes, reading material, bulletin board, software, e-mail, telephone voicemail system, department contact numbers
- FBO department and customer service lobby areas

### **Company's Flight Department Operations Manual**

- Aircrew dress and appearance
- Passenger relations
- Aircraft security (unaccompanied baggage policy, passenger verification policy)
- Accident procedures (NTSB 830), company emergency response plan
- FAA violations and legal considerations (NASA reporting)
- Non-company employment
- Divulgence of company information (security, pilot trip sheets)
- Press relations

### **Airport Identification Fingerprinting**

- Local airport ID

## Appendix 3: Sample Intern Project Assignments

### 3.1. Fuel Price Tracking and Usage

**Description:** Recent increases in fuel and oil prices worldwide have a large impact on flight operation expenses. Department policies to increase operating efficiencies that conserve fuel and attain the best available cost at point of purchase help flightcrews, dispatch and management contribute to these cost saving efforts. Flightcrews have been asked to write the actual posted fuel price on the top of the fuel receipt issued at FBOs where fuel is purchased. By comparing the FBO posted full-priced purchase cost to the actual effective price issued from volume discounts, or other negotiated point of purchase deals, helps define realized cost savings.

**Project Steps:** Partner with dispatch to understand the fuel slip post-flight process in software. In addition, gain an understanding of the existing fuel reports available in software. Analyze the data, examine and construct various methods of presenting our fuel purchase behaviors (savings over retail, etc.). In addition, work with chief pilot to summarize the details of the fuel programs of providers (FBO fuel programs, specialty fuel programs).

**Expected Outcome:** This project will develop familiarization with jet fuel pricing and the importance of aggressive price management for a flight department. Fuel costs account for the largest budget expense line item. This project will enhance your company flight department's ability to present savings activities for supplier negotiation purposes, and to support expense savings initiatives in budget meetings.

### 3.2. Automated Flight Deck Policy

**Description:** Your company operates complex, advanced-technology aviation equipment. HUD, EVS, GPWS, TCAS, FMS, autoflight systems, etc. must be managed from standard flight deck operating procedures to enhance safety. The intern will research industry standards for guidelines, and assist in the development of standardizing operating procedures as they pertain to current and projected flight deck automation within your company flight operations.

**Project Steps:** List aircraft flight deck equipment within current fleet and projected replacement aircraft. Using a variety of credible resources (OEM manuals, industry Internet sites, other operators, industry publications, etc.), research and assist in the development of flight deck operating standards. Review current SOPs for alignment with industry standards, and recommend changes.

**Expected Outcome:** As a review of current SOPs for current equipment, this process will take an independent look at operating practices and their alignment with industry standards. This review of projected equipment will provide a preliminary projection of implementation challenges, and alignment of desired training and maintenance programs.

### 3.3. FAA Airspace Flow Program (AFP)

**Description:** The FAA's slot-based program is designed to reduce airport and enroute delays at constrained areas caused by high volume and inclement weather. Having a known departure slot (expect departure clearance time, or EDCT) required by the AFP makes it possible to forecast departure times, saving fuel and passenger delays.

**Project Steps:** Become familiar with the requirements of the AFP by reading the relevant FAA advisory material, viewing the briefing video and reading supplemental data available through Internet research. Help develop departmental procedures to forecast and identify possible delays impacting flight operations, gain required EDCTs, and relay this information to dispatchers and flightcrews. Quantify data that shows cost and time impacts realized by using the program.

**Expected Outcome:** Since the AFP is a frequent requirement at some of the most utilized airports, the process for forecasting AFP delays and obtaining EDCT slots is an important part of the company's East Coast operations. Quantifying the impact of delays and effective cost savings will help refine flight department procedures that will attain the highest benefits from using the AFP.

### 3.4. IS-BAO Safety Audit

**Description:** The company's flight department has been working to align operating procedures with the International Standard for Business Aircraft Operations (IS-BAO). An integral part of this process is the safety audit, which will be used across the operation. This safety audit will proactively identify safety issues that can be addressed to prevent accidents and improve overall safety efficiency.

**Project Steps:** Identify areas of the flight department that will be evaluated in the safety audit. Use the IS-BAO manual and the company's flight operations manual to design a safety audit form to collect data, and a rating system to help interpret the data. Collect data and evaluate the rating system results to identify areas of the operation that pose the highest risk factors. Partner with the company's safety committee and department managers to build strategies to deal with these risks, and track the effects of the implemented solutions.

**Expected Outcome:** The IS-BAO safety audit will proactively identify risks that exist in the flight department operation. The format and content of this program should accurately gather content and evaluate possible risk factors within flight department operations. The intern will be required to work in partnership with the safety committee and department managers to design, implement, interpret and refine the safety audit procedures.

## **ABOUT NBAA**

Founded in 1947 and based in Washington, DC, the National Business Aviation Association (NBAA) is the leading organization for companies that rely on general aviation aircraft to help make their businesses more efficient, productive and successful.

Contact NBAA at (800) FYI-NBAA or [info@nbaa.org](mailto:info@nbaa.org). Not a Member? Join today by visiting [www.nbaa.org/join](http://www.nbaa.org/join).