Public Law 111-216: Effects of New Legislation on Collegiate Aviation Flight Training Programs

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Abstract

In response to the Colgan Air Flight 3407 crash, new legislation has been enacted. Among this new legislation is Public Law 111-216 (PL 111-216) that will require newly hired airline pilots to have acquired an Airline Transport Pilot (ATP) Certificate. This new requirement will affect aspiring pilots and training institutions. Collegiate flight training institutions have been particularly concerned with the implementation of PL 111-216. To explore the potential effects of this new legislation and the perceptions of the survey respondents, this study surveyed collegiate flight training institutions. Results indicate collegiate aviation training institution respondents concerned that as a result of PL 111-216, programmatic and training costs will increase, recruitment and retention of student pilots will be adversely affected, and overall, the law will be detrimental to collegiate aviation flight training programs.

Introduction

On February 12, 2009, a Continental Connection flight operating as Colgan Air Flight 3407 crashed in Buffalo, New York, resulting in the deaths of 50 individuals (49 passengers and crew and one individual on the ground) (Pasztor, 2009). Colgan Air Flight 3407 was a regularly scheduled flight from Newark, New Jersey to Buffalo, New York. The aircraft operated for Flight 3407 was a 74 seat Bombardier Dash 8 Q400 aircraft. Colgan Air Flight 3407 was in its final stages of flight on an instrument approach approximately five minutes before the flight was scheduled to land at Buffalo Niagara International Airport when it crashed (Watch, 2009). On February 13, 2009, the National Transportation Safety Board (NTSB) sent a team of 14 investigators to the crash site. Both flight recorders, the Cockpit Voice Recorder and the Flight Data Recorder, were retrieved for analysis (Karp, 2012). Less than one year following the crash, the NTSB released its final Aircraft Accident Report. This report concluded the cause of the accident was pilot error (Trumbull, 2010). More specifically, the NTSB accident report concluded the probable cause for the crash of Colgan Air Flight 3407 was:

> the captain's inappropriate response to the activation of the stick shaker, which led to an aerodynamic stall from which the airplane did not recover. Contributing to the accident were (1) the flight crew's failure to monitor airspeed in relation to the rising position of the lowspeed cue, (2) the flight crew's failure to adhere to sterile cockpit procedures, (3) the captain's failure to effectively manage the flight, and (4) Colgan Air's inadequate procedures for airspeed selection and management during approaches in icing conditions. (National Transportation Safety Board, 2009, p. 155)

Immediately after the crash of Colgan Air Flight 3407, a great amount of interest and concern from many different groups closely followed developments and information from the pending investigation. These groups included the victims' families, aviation industry insiders, and the flying public. Soon after the events of Flight 3407, many concerns were quickly identified that were related to this accident. These areas of concern included airline code-sharing transparency, pilot training, issues of fatigue, and minimum pilot qualifications (Levin, 2012). These concerns were particularly important to the victims' families who organized and lobbied for a multitude of safety improvements. These items included flight and duty time limits, safety management systems, crew member training, crew member screening and qualifications, Air Transport Pilot (ATP) certificate requirement for all Part 121 flight crew members, mentoring and professional development, stall recognition and recovery, and remedial training programs (PL 111-216 Has Been Signed Into Law, 2010).

Due to the efforts of the victims' families and in an effort to address the multiple issues that the NTSB identified as potential contributing factors to the crash of Flight 3407, several rule changes have been proposed or implemented by the Federal Aviation Administration (FAA). The most significant of these rule changes is The Airline Safety and Federal Aviation Administration Extension Act of 2010, also known as Public Law 111-216 (PL 111-216 Has Been Signed Into Law, 2010). This legislation indicates its purpose is to; *"*amend the Internal Revenue Code of 1986 to extend the funding and expenditure authority of the Airport and Airway Trust Fund, to amend title 49, United States Code, to extend airport improvement program project grant authority and to improve airline safety, and for other purposes*"* (H.R. 5900, 2010 para.1). Among other things, this new legislation re-defines minimum qualification standards for pilots of commercial airlines. This change in standards is particularly important to aspiring pilots and pilot training organizations. As one of the largest and most unified entities of pilot training, collegiate flight training institutions have expressed a great deal of concern with this new legislation and its effects on training procedures and aspiring professional pilots (Everett, 2012; NewMyer, 2010).

While there are many different emphases within Public Law 111-216, this study focuses only on Section 217 – Flight Crewmember Screening and Qualifications. Within Section 217, the legislation indicates that after August 2013, all flight crewmembers of Part 121 operators will be required to have obtained an Airline Transport Pilot (ATP) Certificate. Before enactment of this legislation, airlines would hire pilots without an ATP Certificate, allowing them to earn their ATP as they gained flight time and experience as a first officer with the company. Regulations previously required these newly hired first officers to have an instrument rating and commercial pilot certificate that required 250 flight hours (Karp, 2012).

When this new legislation is enacted, regulations will require pilots to have a minimum of 1,500 flight hours to be eligible for an ATP Certificate. By requiring new pilots to earn an ATP Certificate, this legislation will require aspiring airline pilots to achieve more flight hours and additional certificates before they are eligible for employment with the airlines. The increase in flight time to 1,500 represents an approximate 700 hour increase in flight hours over airline hiring minimums prior to

implementation of this new legislation (Airline Transport Professionals, 2012; Wald & Negroni, 2010). While the intent of this legislation may be to enhance the level of safety by increasing the minimum qualification levels of new airline pilots, opponents argue this new requirement may have negative effects on aspiring pilots by significantly increasing the amount of hours required for employment by airlines. By requiring an ATP Certificate for new airline pilot candidates, these regulatory changes may inadvertently discourage aspiring airline pilots. Pilot training organizations, specifically collegiate flight training institutions, have voiced concern that by increasing minimum qualification standards pilots will be forced to acquire many more flight hours beyond the amount typically included within collegiate academic programs (University Aviation Association, 2012a).

Currently, flight students often will spend four or more years to obtain a collegiate flight training degree at considerable expense. In a recent document, the University Aviation Association (2012a) indicated that the average college debt of newly graduated flight instructors is more than $73,000. Unfortunately, regional airline first officer position salaries are surprisingly low, making it difficult to offset the high cost of education and training. Rebecca Shaw, the first officer of Colgan Air Flight 3407, earned an annual salary of $16,200. This low salary is not uncommon as hourly wages for regional pilots start at $12.50 per hour (Fox News, 2009). Considering cost of education or training compared to the starting salaries, opponents to PL 111-216 express concern that adding additional requirements to earn an ATP Certificate will further exacerbate the required costs and discourage individuals from pursuing a career as an air carrier pilot (University Aviation Association, 2012a).

Before the passage of PL 111-216, many collegiate flight training institutions expressed hope that they may be allowed consideration in final enforcement of this law if their flight training degree program was accredited by the Aviation Accreditation Board International (AABI). Wording within the PL 111-216 legislation states *"*the Administrator may allow such credit based on a determination by the Administrator that allowing a pilot to take specific academic training courses will enhance safety more than requiring the pilot to fully comply with the flight hour requirement*"* (Congress, 2010, p. 22).

Institutions felt consideration may be given to pilots by allowing credit towards flight hours from academic training courses completed with institutions that have their flight training programs accredited by AABI. With history tracing back to 1974, "AABI accreditation has three fundamental purposes: to ensure the quality of the institution or program, to assist in the improvement of the institution or program, and to maintain relevance of education with the industry it serves" (Aviation Accreditation Board International, 2012a, para. 2). At the time of this study, there are 28 flight training programs that have earned AABI accreditation for their flight training program (Aviation Accreditation Board International, 2012b). AABI has also been active in offering feedback, concerns, and responses in assistance and support to the authoring and development of PL 111-216.

Methodology

Exploratory in nature, this study was designed to elicit collegiate flight training institution information and perceptions related to PL 111-216 and its effect on collegiate aviation flight training institutions.

To guide this study the following research questions were created:

1. How will PL 111-216 affect collegiate aviation flight training programs?

2. In response to PL 111-216, do collegiate aviation flight training programs find Aviation Accreditation Board International accreditation of their flight training programs necessary?

Research Population

The research instrument was electronically administered to University Aviation Association (UAA) member collegiate flight training institutions that offer flight training for academic credit. "The UAA is the voice of collegiate aviation to its members, industry, government and the general public" (University Aviation Association, 2012b, para. 1). With a history dating back to 1947, "the UAA currently has more than 525 members that include 105 accredited college or universities" (University Aviation Association, 2012b, para. 2). The author used the 2011 Institutional Membership list of the UAA to identify potential participant collegiate flight training institutions. From this list, each institution's website was reviewed for evidence of an active flight training program for academic credit. Only institutions within the U.S. were included for consideration in this study.

Of the U.S. institutions on the membership list, 85 institutions had active flight training programs for academic credit. Each of these institutions was then sent a solicitation email asking them to voluntarily participate in this study by completing the on-line research instrument. Emails were sent to the institutional membership representative's email address as indicated on the membership list. Of the 85 institutions solicited, 59 completed the research instrument (response rate of 69.4%), 18 did not respond to the solicitation or chose the option to not complete the research instrument within the electronic survey, and 8 partially completed the research instrument. To standardize data results, partially completed results were excluded from analysis. Permission to perform this research study involving UAA member flight training institutions was approved by the Institutional Review Board at Oklahoma State University.

Research Instrument

The research instrument, developed by the author, was formulated to identify demographic information related to the participating collegiate flight training institutions and to seek the perceptions of these institutions related to the effects of PL 111-216. The survey instrument of this study consisted of three parts: demographic information, Likert-

scale statements, and open-ended personal comment questions. The first part of the research instrument solicited demographic information regarding each participating institution. The Likert-scale statement section of the research instrument offered respondents an ordinal measurement pattern that included options ranging from: Strongly Agree, Agree, Disagree, and Strongly Disagree. The participants were required to respond to three statements by choosing one of the Likert-scale options described above. These statements were designed to identify the perceptions of the institutions regarding direct and indirect effects of PL 111-216 to their flight training program. The final part of the research instrument asked participants open-ended questions offering them an open text box to author their unique response.

Statistical Measures

For statistical analysis, this study applied descriptive statistics to analyze the data. Analysis of data included measure of variability (standard deviation) (Fraenkel & Wallen, 2006). Standard deviation statistical measures are indicated as SD in the results section of this study.

Internal Consistency Measurement

Cronbach's α reliability test was applied to test internal consistency of Likert-scale statements. Cronbach's α is a general formula for estimating internal consistency based on a determination of how all items on a test are related to all other items and to the total test (Gay, Mills, & Airasian, 2006). The following Chonbach's α acceptance scale has been established by George and Mallery (2003): " ≥ .9 – Excellent, ≥ .8 – Good, ≥ .7 – Acceptable, ≥ .6 – Questionable, ≥ .5 – Poor, and ≥ .5 – Unacceptable" (p. 231). For analysis, all Likert-scale statement data were entered into a Microsoft Excel spreadsheet and exported into SPSS version 19.0. These data resulted in an overall α of .776. Based on the established acceptance scale, .776 represents an acceptable level of internal consistency.

Results

Participating collegiate flight training institutions were asked to identify how many undergraduate students were enrolled in their professional pilot/flight training program. The research instrument had six available enrollment sub-groups for which respondents could choose, defined in increments of 50 students. Table 1 indicates the majority of participants (80%) had fewer than 150 enrolled flight training students.

The number of training aircraft of each participating institution is indicated in Table 2. Each sub group was defined by increments of 5 aircraft. The majority of institutions (78%) possess between 1-25 training aircraft. The most common sub group was 6-10 training aircraft receiving 26% of responses.

Table 1
Institution's Flight Training Enrolled Students

Enrolled Students	Responses	Percentage of Responses
1-50	17	29%
51-100	23	39%
101-150	7	12%
151-200	3	5%
201-250	3	5%
250 or More	6	10%
Total	*59*	*100%*

Table 2
Institution's Flight Training Aircraft Fleet Size

Number of Training Aircraft	Responses	Percentage of Responses
1-5	6	10%
6-10	15	26%
11-15	8	14%
16-20	12	20%
21-25	6	10%
26-30	0	0%
31-35	2	3%
36-40	6	10%
41-45	1	2%
46 or More	3	5%
Total	*59*	*100%*

Table 3
Institutions Flight Training Degree Program AABI Accreditation Status

Is Program AABI Accredited	Responses	Percentage of Responses
Yes	24	41%
No	35	59%
Total	*59*	*100%*

The next four research instrument questions were related to AABI, and how responding institutions regarded AABI accreditation in relationship to PL 111-216. Of responding institutions, 24 (41%) had flight training degree programs that were accredited by AABI, whereas 35 (59%) did not have flight training degree programs with AABI accreditation.

Responding institutions that did not have AABI accreditation for their flight training degree programs were further asked if they were considering or pursuing AABI accreditation. Table 4 indicates that 8% of respondents are pursuing AABI accreditation. However, 41% of respondents chose the option *Not Applicable*, indicating they have earned AABI accreditation. Considering this, of the 35 respondents whose flight training programs are not accredited by AABI, 30 (85.7%) are not pursuing accreditation.

Table 5 details the number of institutions that do not have AABI accreditation and are considering accreditation for their flight training degree programs. Respondents indicated that 27 (45%) are considering AABI accreditation. However, 41% of respondents chose the option *Not Applicable*, indicating they have earned AABI accreditation. Considering this, of the 35 respondents that do not have flight training programs that are AABI accredited, 27 (77.1%) are considering AABI accreditation.

Table 4
Institutions that are Pursuing AABI Accreditation

Pursuing AABI Accreditation	Responses	Percentage of Responses
Yes	5	8%
No	30	51%
Not Applicable	24	41%
Total	*59*	*100%*

A follow up question asked responding institutions if they were considering AABI accreditation for their flight training degree programs in response to PL 111-216. Institutions indicated that 22 (37%) were considering accreditation in response to PL 111-216 as detailed in Table 6. However, 41% of respondents chose the option *Not Applicable*, indicating they have already earned AABI accreditation. Considering this, of the 35 respondents that do not have flight training programs that are AABI accredited, 22 (62.8%) are considering accreditation in response to PL 111-216.

To explore how PL 111-216 will affect flight training degree program expenses, participants were asked how program expenses will be affected in response to PL 111-216. Table 7 details that 31 (53%) of responding institutions expect expenses to increase, 28 (47%) expect expenses to decrease, and 0 (0%) expect expenses to remain at the same approximate level.

Likert-scale statements that examine the perception of flight training institutions in regards to PL 111-216 effects are presented in Table 8. Fifty eight percent of respondents

Table 5
Institutions that are Considering AABI Accreditation

Considering AABI Accreditation	Responses	Percentage of Responses
Yes	27	45%
No	8	14%
Not Applicable	24	41%
Total	*59*	*100%*

Table 6
Institutions that are Considering AABI Accreditation in Response to PL 111-216

Considering Accreditation in Response to PL 111-216	Responses	Percentage of Responses
Yes	22	37%
No	13	22%
Not Applicable	24	41%
Total	*59*	*100%*

Table 7
Institution's Expectation of Program Expenses

Program Expenses	Responses	Percentage of Responses
Increase	31	53%
Decrease	28	47%
Stay Approximately the Same	0	0%
Total	*59*	*100%*

disagreed or strongly disagreed, compared with 42% that agreed or strongly agreed with the statement: *PL 111-216, section 217, will create additional opportunity for collegiate aviation flight training programs*. A majority of responding institutions (67%) agreed or strongly agreed with the statement: *PL 111-216, section 217, is detrimental to collegiate aviation flight training programs*. The remaining 33% either disagreed or strongly disagreed with this statement. When asked to respond to the statement: *Collegiate aviation programs will be more likely to pursue AABI accreditation as a result of PL 111-216, section 217*, the majority of respondents (85%) agreed or strongly agreed, whereas 15% of respondents disagreed or strongly disagreed.

Table 8
Institution's Perceptions Related to PL 111-216

Likert-Scale Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Statistical Measures
PL 111-216, section 217, will create additional opportunity for collegiate aviation flight training programs.	6 (10%)	19 (32%)	25 (42%)	9 (16%)	SD: 0.87
PL 111-216, section 217, is detrimental to collegiate aviation flight training programs.	15 (25%)	25 (42%)	15 (25%)	4 (8%)	SD: 0.88
Collegiate aviation programs will be more likely to pursue AABI accreditation as a result of PL 111-216, section 217.	22 (38%)	28 (47%)	7 (12%)	2 (3%)	SD: 0.78

The research instrument also asked respondents to answer three different open-ended questions related to PL 111-216. To respond to these questions, participants authored their own unique responses in an open text box. The research instrument asked respondents to answer the following three questions: 1), What are your most significant concerns regarding PL 111-216, section 217?, 2)What effects do you perceive PL 211-216, section 217 will have on collegiate aviation flight programs?, and 3)Please indicate any additional comments you may have. Fortunately, respondents were very willing to offer comments in this section of the research instrument. Not all respondents replied to each question and some respondents identified multiple concerns or effects for each question. Results of the participant responses identified common concerns or effects regarding PL 111-216. These common concerns or effects have been identified and sorted by common themes and indicated in Tables 9, 10, and 11.

Samples from responses that represent these common concerns are indicated below.

- Once prospective students realize how limited their employment opportunities will be without an ATP, I believe there will be so few students pursuing a degree in professional piloting that most schools will have to close their programs down. Furthermore, enrolled students may decide to switch majors.
- PL111-216 ties pilot quality and safety to flight hour experience, which is a false premise. It is the quality of that instruction and the richness of the experience that leads to improved proficiency and safety.
- My greatest concern about this legislation is that it will further centralize flight training. My fear is that if only AABI schools can compete, then only accredited or accreditation-eligible schools will continue to operate. Centralizing flight training within fewer providers will likely drive up prices and decrease options for potential students.

Table 9
Responses to the question: What are your most significant concerns regarding PL 111-216, section 217?

Concerns	Responses	Percentage
Costs (student)	8	23%
Student recruitment and/or retention	8	23%
Final details of law	4	11%
Ability of students to meet requirements of law	4	11%
Costs (institution)	3	9%
The law favors or gives advantage to AABI accredited schools	3	9%
Other (bill is not realistic, does not meet need of industry, none)	3	9%
Quality of training versus quantity of hours	2	5%

Table 10
Responses to the question: What effects do you perceive PL 211-216, section 217 will have on collegiate aviation flight programs?

Effects	Responses	Percentage
Reduction in enrollment	17	41%
Increase in institutional costs	7	17%
To be determined (depends on the final implementation of law)	6	15%
Increase in enrollment	4	10%
Reduction in overall number of collegiate flight programs	4	10%
Little or minimal effect	2	5%
Collegiate flight programs will adjust how they offer training	1	2%

Table 11
Responses to the question: Please indicate any additional comments you may have

Comments	Responses	Percentage
PL-111-216 was a knee-jerk/ineffective/inappropriate response	7	39%
Other (none, N/A, interesting subject/study, etc.)	5	28%
Final law details/implementation need to be known	3	17%
Concern regarding increased costs	2	11%
Safety will be impacted	1	5%

Samples from responses that represent these common concerns continued:

- This bill is not driven by factual data and needs.
- Due to the cost of flight training, it is very difficult to get students to complete. This could be another roadblock to getting a job with an airline and may result in students not choosing to be a pilot.
- In my opinion, the law makes the pursuit of a professional piloting degree (and the career field in general) less desirable and less practical.
- Impact on smaller, less well-financed collegiate aviation programs (especially at some community colleges and smaller four year schools) and their inability to respond to what might be the more expensive aspects of preparing students for an airline flight career.
- If colleges are required to purchase equipment (jet sims, for example) the impact will be significant. Smaller schools can't effectively utilize such equipment to make it cost effective.
- It could limit the amount of students that would consider piloting as a career choice.
- Recruitment and retention in collegiate aviation flight programs will suffer.
- Many training institutions, including smaller collegiate programs, will be unable to bear the costs of new requirements and will go out of business.
- More expense for the student will decrease the attractiveness of a collegiate pilot training program.
- Decreased student enrollment, reduction in the number of students considering professional pilot as a career.
- Costs will increase for both the school and the students.
- Flight hours by boring holes into the sky vs real training.
- It will take the average student pilot much longer to make it to the regional airlines.
- It may leave the two year schools with nowhere to go unless they have agreements with the 4 year schools to accept their students.

Samples from responses that represent these common effects are indicated below.

- Numerous (non-AABI) collegiate flight programs will die, some will get stronger and increase student enrollments, but we will experience a substantially smaller number of strong collegiate aviation programs in existence within the United States before 2018.
- For two year programs, it is my opinion it will hurt student enrollment because the costs for students to get that job will be greater.
- I can't imagine colleges can afford to re-tool to add too many more capital assets to provide additional training unless the economy deals them a windfall of some sort.
- The result will be that many potentially great aviators will not enter the profession and regional carriers will have an even smaller pool of first officer applicants.
- Students will be forced to pursue flight training at collegiate providers opposed to GA/FBO private providers.

- It will make things much more expensive.
- Many of the smaller schools will suffer low enrollment.
- Increased flight hours and instruction requirements will stress smaller collegiate programs and possibly force them out of business.
- Probably good for them (collegiate aviation flight training) in the sense of driving students to them. The FBO world will suffer.
- Fewer students will be able to see the light at the end of the tunnel or any way to cope with the crushing burden of student loans while trying to make a living flying.
- It will result in minimal effects for collegiate aviation.
- For the GA route of becoming an ATP, we believe collegiate aviation will be the only viable solution for most people.
- More costs of training simply cannot be absorbed by the student pilot or the university. Debt is simply too high already. The industry will need to step in to help with training requirements.
- PL 111-216 was a knee-jerk reaction to a human factors problem. More flight time does not necessarily translate into safer operations.
- Safety will be impacted as future work force tries to find cheap ways to build time.
- Congress screwed up in a big way by fixing something that wasn't broken just so they could beat their chest and show they'd by God done something.
- The requirement for second officers to hold ATP is ridiculous. Congress didn't do their homework. There is no scientific or statistical data base that suggests this action was needed.
- I do not feel that this measure will have an appreciable effect on airline safety. To gain the additional hours, students are likely to repeat the "same flight hour" a few hundred more times. "Real experience" is not gained until you are out of the practice area. A genuine and relevant mentoring program, established by the airlines, might be a better means to achieve a measurable increase in safety. Subsequently, the industry, especially at the entry level, will have to undergo some major revisions.
- Flight training programs may have to support their training curriculum with expensive FTD/simulator equipment in order to compete with other flight training programs with extensive alumni and collegiate financial support.
- The Colgan Air disaster was tragic and avoidable. Both pilots involved had well over the 1,500 flight hours required for an ATP and the depth of their experience, or lack of same, did not serve to prevent the accident. The challenges imposed by PL111-216 will have a profound affect across the aviation industry from the FAA to the smallest teaching FBO. It will only be through a coordinated joint effort by all stake holders that we will avert severely adverse consequences across the industry.

Discussion

The development and anticipated enforcement of PL111-216 has been a highly charged issue since its inception, especially within collegiate aviation flight training

institutions. Individual institutions and institutions collectively, through the UAA, have expressed multiple concerns and have been instrumental in offering advice and feedback during development of PL 111-216. Many of these concerns expressed both formally and informally, are echoed in the results of this study.

In response to the first research question, *how will PL 111-216 affect collegiate flight training programs*, the majority of respondents indicated that PL 111-216 will cause program expenses and flight training costs to increase. While only a small majority of respondents (53%) indicated overall program expenses would increase, many respondent comments expressed concern for increases in flight training costs. As a result of an anticipated increase in flight training costs, many respondents expressed concern for a negative effect on collegiate flight training program recruitment and retention of students. The prospect of significant increases in training time and student costs that will be required before employment by a Part 121 operation may discourage prospective professional pilots from pursuing a career as an airline pilot. Furthermore, this issue is exacerbated when considering the low level of pay for newly hired or low experienced Part 121 pilots. Overall, respondents indicated that PL 111-216 would have a negative effect on collegiate aviation flight training institutions. In their responses, 67% of participants agreed or strongly agreed with the statement: *PL 111-216, section 217, is detrimental to collegiate aviation flight training programs*. Additionally, 58% of respondents disagreed or strongly disagreed with the statement: *PL 111-216, section 217, will create additional opportunity for collegiate aviation flight training programs*.

In response to the second research question; *in response to PL 111-216, do collegiate flight training programs find Aviation Accreditation Board International accreditation of their flight training programs necessary*, respondents indicated that AABI accreditation is necessary. Of the 59 responding institutions, 24 (41%) had been granted AABI accreditation for their flight training degree programs while 35 (59%) had not. Of these 35 institutions, five were currently pursuing AABI accreditation and 27 were considering AABI accreditation. When asked if they were considering pursuing AABI accreditation in response to PL 111-216, 22 respondents indicated yes. This indicates that of the 27 institutions pursuing AABI accreditation, 81% are doing so in response to PL 111-216. Furthermore when responding to the Likert statement: *collegiate aviation programs are more likely to pursue AABI accreditation as a result of PL 111-216*, 85% of respondents agreed or strongly agreed.

Additional concerns expressed from respondents included the concern for future vitality of smaller collegiate flight programs (small four-year and two-year institutions) after implementation of PL 111-216. Respondents indicated concern for these programs to compete with larger institutions and their inability to afford significant increases in costs (both in updating training capabilities and possible AABI accreditation costs).

Additionally, respondents indicated that the resulting legislation of PL 111-216 is not an effective improvement in quality or safety. Respondents indicated PL 111-216 is based on the false assumption that there is a correlation between number pilot flight hours and quality of pilot skill. As one respondent stated; “Both pilots involved had well over the 1,500 flight hours required for an ATP and the depth of their experience, or lack of

same, did not serve to prevent the accident." Another respondent added; "To gain the additional hours, students are likely to repeat the "same flight hour" a few hundred more times. Real experience is not gained until you are out of the practice area. A genuine and relevant mentoring program, established by the airlines, might be a better means to achieve a measurable increase in safety."

Overall, the majority of collegiate aviation flight training institutions indicated concern with PL 111-216 and its eventual effect on collegiate flight training and potential future for aspiring Part 121 pilots. Since the tragic flight of Colgan Air 3407, there has been many adjustments and evolutions involved with the eventual creation of PL 111-216. Before its final implementation date of August 2013, there is likely to be additional refinement or interpretation. Therefore, its final effect on collegiate aviation training institutions may not yet be fully understood. As one survey respondent indicated, "the devil may be in the details."

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