

# **The Airmanship and the Commercial Pilot Competency of the Commercial Aviation Students in Thailand**

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## **Abstract**

This research is to study 1) the levels of Airmanship of the aviation students in Thailand 2) to study the levels of Commercial Pilot Competency of the aviation students in Thailand 3) to compare the levels of Airmanship of the aviation students, categorized by the types of aviation students 4) to compare the levels of Commercial Pilot Competency of the aviation students, categorized by the types of aviation students 5) to find the correlation between Airmanship and the Commercial Pilot Competency of the aviation students in Thailand. The sample group consisted of aviation students studying at the 3 commercial aviation schools in Thailand, using categorization in the types of the aviation students. The 278 persons in the sample group is by Krejcie and Morgan chart. Tools used are questionnaires, statistic is by mean, t-Test, pearson's simple correlation moment product. It is found from the study that the levels of Airmanship of the aviation students are in the high levels. The levels of Commercial Pilot Competency of the aviation students are in the high levels. The comparison of the levels of Airmanship of the aviation students, categorized by the types of the students, are not different. The comparison of levels of Commercial Pilot Competency of the aviation students, categorized by the types of the students are not different. It is also found that the levels of correlation between the Airmanship and the Commercial Pilot Competency are in the high levels with statistic significant at .01, coefficient correlation .789

**Key word** Airmanship, Commercial Pilot Competency, Aviation school

## 1. Background

Air transportation is an important mean of transportation which has been receiving more popularity and there has been a rapid expansion of growth (Watchara Khumkiew 2015)). However, aviation industry is a business which has a special characteristic of its own. With high management expenses, needing knowledgeable, skilfully experience and special expertise personnel (Sakol Boonsin, 2012; Piyakanit Chotiwanit, 2013). There must be a management with safety consideration, to prevent any serious situations, according to the safety standards of both, domestic and international organizations.

Thailand is one of the many countries who gives an importance to the aviation industry. There has been strategy planning in producing personnel in aviation ( The Office of National Legislation Commission 1, 2016). From the study, it is found that at the present day, there is a high demand for pilots which derives from the growth of low-cost carriers, increased of flight routes of LCCs carriers, increased of passengers travelling in-out of the country, and an increase in aircraft productivity (Tanoo Saowaros & Vichian Puncreobutr, 2016; Pimkarn Yothathammasit and nantarat Charoenkul, 2014; Tida Choksuchart, 2010)

When there is more demand for pilots, providers of aviation training services must be prepared to face the problem of shortage of pilots (Booton, 2013). In order not to let the problem of shortage of pilots, disrupting the airlines' operation (Bellitti, 2012), there must be a planning together, both in the policy, with the airlines and with the trainers of aviation training services (Pat Winmoon, 2013). In the past, it is found that the success in working together, managing the aviation industry has been in the moderate level. It is also found that the correlation levels of the achievement in administration of the aviation industry and the achievement in administration of Thailand's state enterprise aviation industrial units are at the moderate levels (Vichian Puncreobutr, Worapote Siriwunsakul, Pratyush Mohan, 2016). As for the operation of the aviation training providers or aviation schools in Thailand, it is found from the study that there has been a high level of effectiveness in teaching and learning management of both the government and private sectors. The students are both, those who received scholarship from the airlines and privately funding. The graduates are qualified to meet the demands of airlines (Vichian Puncreobutr, 2016). However, to create professional pilots, aviation teacher must be the one who molds and links the Airmanship and Commercial Pilot Competency for the students, enabling them to be able to pass each flight training (Kanin Supirayanun, Ratpong Sornsupap, 2014).

Airmanship needs the correlations of Capstone Outcomes, Pillars of Knowledge, Bedrock Principles in molding , creating Proficiency, Skill, Discipline, Knowledge, befitting a good aviation performer (Prajit Prakakjit, Piya Sirisuthi, Suwan Phuteng, 2010). As for the Commercial Pilot Competency, there has been a study stating that there should be 4 models of specific competency of commercial pilot: Habits and Individualism, Knowledgeable, Working Behavior, Work Performance (Khumphol Pinyokul, Somyot Awakiet, 2017)

To build up the confidence in the operation of the aviation training providers or the Thai aviation schools, it is of the researcher's opinion that there should be a study of Airmanship and of the Commercial Pilot Competency of the aviation students in Thailand. To be useful to the providers of aviation training or the aviation schools, to be able to receive information and use the findings in developing aviation personnel and to develop and

improve aviation training curriculum. Apart from this, the findings will be useful for those concerned, as guidelines in developing aviation industry of the country and ASEAN further.

## **2. Objective**

1. To study the levels of Airmanship
2. To study the levels of Commercial Pilot Competency of the aviation students in Thailand
3. To compare the levels of Airmanship of the aviation students in Thailand, categorized by the types of the students
4. To compare the levels of Commercial Pilot Competency of the aviation students in Thailand, categorized by the types of the students
5. To find the correlation levels between Airmanship and the Commercial Pilot Competency of the aviation students in Thailand

## **3. Methodology**

### **1. People and sample group**

The people used in this research consisted of 1000 commercial aviation students, studying at 3 commercial aviation schools in Thailand. The sample group consisted of commercial aviation students in the Thai aviation schools, using random search by categories, using the types of the students as stratification. The 278 persons in the sample group are by the Krejcie and Morgan chart

### **2. Variables**

The following Variables in the study are:

2.1 Independent variables are: Types of the aviation students, consisted of 2 types: The airlines 'staffs who received the scholarship from the airlines and the general aviation students

2.2 Dependent variables consisted of the followings:

2.2.1 Airmanship (Tony Kern referring from Prajit Prajakjit, Piya Sirisuthi, Suwan Puteng, 2010), consisted of 4 aspects: Proficiency, Skills, Discipline and Knowledge .

2.2.2 Commercial Pilot Competency (Amphol Pinyokul, Somyot Awakiet, 2017) consisted of 4 competencies: Habits and individualism, Ability, Working behavior, and Performance

3. Tools used are questionnaires the researcher set up self with discriminating power of .39 - .796, reliability .86, statistic is by mean t-Test และ pearson's simple correlation moment product.

4. The research was done during August – December 2017

#### 4. The Findings

The findings from the study are as followed:

##### 1 The study of the levels of Airmanship

Airmanship of the aviation students in Thailand as shown in Table 1

Table 1 Shows the levels of airmanship of the aviation students in Thailand (N=278)

Aspects	mean	S.D.	Level
Proficiency	3.9107	.64161	high
Skill	3.9245	.58690	high
Discipline	3.9658	.56055	high
Knowledge	4.0342	.60874	high
Overall, airmanship level	3.9588	.53548	high

From the Table, it is found that the level of airmanship of the aviation students, overall, is in the high level (3.95). Considering in each aspect, it is found that airmanship in all the aspects are in the high levels, Proficiency (3.91) Skill (3.92) Discipline (3.96) Knowledge (4.03) accordingly.

##### 2. Commercial Pilot Competency

Commercial Pilot Competency of the aviation students in Thailand, as shown in Tables 2- 6

Table 2 Shows the levels of commercial pilot competency of the aviation students in Thailand, overall (N-278)

Competency	mean	S.D.	Level
Habits and Individualism	3.9510	.54674	high
Ability	3.9784	.65674	high
Working Behavior	3.8932	.60426	high
Working Performance	3.9116	.59011	high
Overall, Competency	3.9256	.57468	high

From Table 3 it is found that Commercial Pilot Competency of the aviation students in Thailand, overall, the level is at the high level (3.92). Considering each competency, it is found that in all the competencies, the levels are high with Working Behavior at (3.89), Working Performance (3.91), Habits and Individualism (3.95) and Ability (3.97)

Table 3 Shows the levels of Commercial Pilot Competency of the aviation students in Thailand, in the aspect of Habits and Individualism (N=278)

Competency	mean	S.D.	Level
Discipline based on pilot's tradition	4.0516	.62260	high
Behavior	4.0281	.61527	high
Human Relation	3.8177	.68766	high
Cooperation and Team Work	3.9137	.71074	high
Punctuality	3.9245	.71071	high
Honesty	3.9110	.66395	high
Overall, Habits and Individualism Competency	3.9510	.54674	high

From Table 3 it is found that commercial pilot competency, in the aspect of Habits and Individualism, overall, the competency level is in the high level. Considering in each sub-capacity, it is found that in all the sub-capacities are at high levels with Human Relation (3.81), Honesty (3.91), Cooperation and Team Work (3.91), Punctuality (3.92), Behavior (4.02) and Discipline based on pilot's tradition (4.05)

Table 4 Shows the levels of commercial pilot competency of the aviation students in Thailand, in the aspect of Ability (N=278)

Competency	mean	S.D.	Level
Leadership	3.9667	.71347	high
Self Development	4.0144	.76461	high
Communication Skill	3.9721	.64914	high
Overall, Ability Competency	3.9784	.65674	high

From Table 4, it is found that the commercial pilot competency in the ability competency, overall, the level at a high level (3.97). Considering in each sub-capacity, it is found that all the sub-capacities are at the high levels with Leadership (3.96), Communication Skill (3.97), Self Development (4.01) accordingly.

Table 5 Shows the levels of Commercial Pilot Competency of the aviation students in Thailand, in the aspect of Working Behavior competency (N=278)

Competency	mean	S.D.	Level
Responsibility	3.8750	.64774	high
Ability to Perform	3.9290	.68844	high
Industriousness and Enthusiasm	3.8939	.63265	high
Coordination	3.8750	.64774	high
Initiative	3.9149	.70380	high
Decision Making	3.8933	.62522	high
Planning	3.8768	.66797	high
Overall, Working Behavior competency	3.8932	.60426	high

From Table 5, it is found that the Commercial Pilot Competency, in the aspect of Working Behavior, overall, the level is at the high level. Considering in each sub-capacity, it is found that in all the sub-capacities are at high levels with Responsibility (3.87), Coordination (3.87), Planning (3.87), Decision Making (3.89), Industriousness and Enthusiasm (3.89), Initiative (3.91) and Ability to Perform (3.92)

Table 6 Shows the levels of Commercial Pilot Competency of the aviation students, in the aspect of Performance competency (N=278)

Competency	mean	S.D.	Level
The amount of work corresponding with the productivity	3.9388	.70345	high
Quality of work	3.9197	.67410	high
Timeliness	3.8543	.66731	high
Human Resource Worthiness	3.9622	.66189	high
Workable Achievement	3.8651	.73143	high
Overall, Performance Competency	3.9116	.59011	high

From Table 5, it is found that the Commercial Pilot Competency in the aspect of Performance competency, overall, the level is at a high level (3.91). Considering in each sub-capacity, it is found that in all the sub-capacities, the levels of competency are at high levels with Timeliness (3.85), Workable Achievement (3.86), Quality of Work (3.91), The amount of work corresponding with the productivity (3.93) and Human Resource Worthiness (3.96) accordingly.

### 3. The comparison of the levels of Airmanship

Comparing the levels of Airmanship of the aviation students in Thailand, as shown in Table 7

Table 7 The comparison of the levels of Airmanship of the aviation students in Thailand categorized by the types of students

Aspect	Not of airline staff (n=288)		Airline staff (n=82)		t	P
	mean	S.D.	mean	S.D.		
Proficiency	3.9157	.67433	3.9028	.58942	.168	.867
Skill	3.9539	.60379	3.8781	.55889	1.050	.295
Discipline	3.9745	.59391	3.9522	.50596	.323	.747
Knowledge	4.0500	.65343	4.0093	.53284	.568	.570
Overall, Airmanship Level	3.9735	.56921	3.9356	.47923	.575	.566

\* p< .05 \*\* p< .01

From Table 7 the comparison of the levels of Airmanship of the aviation students, categorized by the types of the students, overall, it is found that both the types of students who are not staffs of airlines and the students who are staffs of airlines, have different levels of Airmanship with no statistic significant. Considering in each aspect it is found that the levels of Airmanship of both types of students in every aspects are different in levels with no statistic significant.

### 4. The comparison of levels of the Commercial Pilot Competency

Comparing the levels of Commercial Pilot Competency of the aviation students in Thailand, as shown in Table 8

Table 8 The comparison of levels of Commercial Pilot Competency, categorized by the types of students

Competency	Not of airline staff (n=288)		Airline staff (n=82)		t	P
	mean	S.D.	mean	S.D.		
Habits and Individualism	3.9542	.57128	3.9459	.50827	.126	.900
Ability	3.9888	.69618	3.9620	.59212	.343	.732
Working Behavior	3.8980	.63823	3.8857	.54935	.170	.865
Work Performance	3.9132	.61568	3.9090	.55025	.060	.952
Overall, Leadership in Multicultural	3.9302	.60475	3.9183	.52653	.173	.863

\* p< .05 \*\* p< .01

From Table 8 the comparison of levels of the Commercial Pilot Competency, categorized by the types of aviation students, overall, it is found that the students who are not airline staffs and who are airline staffs have a different level of Commercial Pilot Competency with no statistic significant. Considering in each competency, it is found that in all competencies, both types of students have a different level of Commercial Pilot Competency with no statistic significant.

### 5. To find the correlation levels between Airmanship and Commercial Pilot Competency

Finding the correlation levels between Airmanship and Commercial Pilot Competency of the aviation students in Thailand, as shown in Table 9

Table 9 Shows the correlation levels between Airmanship and Commercial Pilot Competency

	Proficiency	Skill	Discipline	Knowledge	Airmanship
Habits and Individualism	.660**	.732**	.741**	.774**	.812**
Ability	.583**	.590**	.606*	.617**	.670**
Working Behavior	.650**	.680**	.706*	.698**	.764**
Work Performance	.770**	.733**	.745**	.727**	.833**
Overall, Commercial Pilot Competency	.684**	.710**	.728	.733**	.798**

\*\* p< .01

From Table 9, it is found that there is a correlation between Airmanship and Commercial Pilot Competency at a high level, with statistic significant at .01, coefficient correlation .789. Considering in each aspect, it is found that in every aspects of Airmanship and Commercial Pilot Competency, the correlation is from moderate levels to high levels with statistic significant at .01, coefficient correlation .590-.770. Apart from this, it is also found that overall, Airmanship has a correlation with Commercial Pilot Competency in the Work Performance competency, in a high level with statistic significant at .01, coefficient correlation .833.

### 5. Conclusion

1. The overall level of Airmanship of the aviation students in Thailand is high. Considering in each aspect, it is found that all the 4 aspects are at a high level

2. The overall level of Commercial Pilot Competency, is high. Considering in each competency, it is found that mostly in 4 competencies are at a high level.

3. Comparing the levels of Airmanship of the aviation students in Thailand, categorized by the types of the students, it is found that the different types of students have no different level of Airmanship, both in overall and in each aspect.

4 Comparing the levels of Commercial Pilot Competency of the aviation students in Thailand, categorized by the types of students, it is found that the different types of aviation students have no different of level in Commercial Pilot Competency, overall and in each competency



5. Finding the correlation between Airmanship and Commercial Pilot Competency of the aviation students in Thailand, it is found that there is a high level of correlation with statistic significant at .01, coefficient correlation .789

## **6. Discussion**

From the study it is found that both types of aviation students who are not airline staffs and those who are airline staffs have different levels of Airmanship with no statistic significant and have different levels of Commercial Pilot Competency with no statistic significant. It is, therefore shown that all the aviation schools in Thailand has an effective administration of the school which is the reason for the productivity of the aviation schools in Thailand or the commercial pilots graduated from the aviation schools in Thailand, are of internationally recognized.

From the study it is found that, overall, Airmanship has a high level of correlation with Commercial Pilot Competency in the issue of Work Performance, with statistic significant at .01, coefficient correlation .833. It is shown that the productivity of the aviation schools in Thailand or the commercial pilots graduated from the aviation schools in Thailand, are pilots with determination to have an excellent work performance which is the result of commercial pilots with quality.

## **7. Recommendation**

Recommendation to use the findings from the study

From the study it is found that there is a high level of correlation between Airmanship and Commercial Pilot Competency, with statistic significant at .01, coefficient correlation .789, therefore, each aviation school should set up the knowledge in training airmanship and developing the competency of commercial pilot. In order to set as an internal level of curriculum. Together with any other departments concerned, to use as guidelines, and using the knowledge obtained as tools in administration, promoting and developing the increasing aviation schools in the future. Also to increase the effectiveness of aviation organizations and raising Thailand aviation higher.

Recommendation for further research: From the study it is found that there is a high level of correlation between Airmanship and Commercial Pilot Competency of the aviation students in Thailand. In order to have a continuous development, there should be an additional study of factors effecting Airmanship and Commercial Pilot Competency of the aviation students in Thailand, to be able to use as tools in raising the qualitative level of Thai aviation education, to be of international standard further.

## Reference

- Bobbi Bellitlo. (2012). **ASEAN Aviation Pilot Training**. Retrieved. August 10, 2013 from <http://www.asianaviation.com/articles/364/pilot-training>.
- Boonton Jennifer. (2013). **Boeing to Ramp Up Pilot Training, Install More Flight Simulators**. Retrieved. August 10, 2013 from <http://www.foxbusiness.com/industries/2013/04/16/boeing-to-ramp-up-pilot-training-install-more-flight-simulators/>.
- Dissertation, Doctor of Business Administration, Marketing Management Department. Bangkok: Ratchabhat Suan Sunanta University.
- Heracleous, Loizo; Wirtz, Jochen; & Nitin, Pangarkar, (2006). **Flying High in a Competitive Industry: Cost-Effective Service Excellence at Singapore Airlines**. Singapore: McGraw-Hill Education (Asia).
- Kamphol Pinyokul, Somyot Awakiet. (2017).). **Competency Development Model of Commercial Pilot in Thailand**. Sripatham Review: Humanities and Social Science Issue 17(1): 54-61
- Kanin Supiriyannun, Ratpongse Sornsupab. (2014). **The Foundation of Thai Pilot Airmanship**. Journal, Finance, Investment, Marketing and Business Administration 4(1): 259-272
- Office of Commission 1 (2016) **Report on “ Producing Aviation Personnel at Bangkok Aviation Center: BAC”** Field trip, the Office of Transport Commission, National Legislative Commission, Bangkok: The Office of National Legislative Commission
- Pat Winmoon (2013). **Commercial Pilot Curriculum and the Changing of Aviation World**, Bangkok: Bangkok Aviation School
- Prajit Prajakjit, Piya Sirisuthi, Suwan Pooteng (2010). **Redefining Airmanship**. McGraw Hill Education.
- Piyakanit Chotiwanit ( 2013). **Creating Loyalty** in Using the Services of Thai Airways International Public Company Limited.
- Pimkarn Yothathammasit and nantarath Charoenkul. (2014). A study of the state of educational management of Bangkok aviation school. **OJED**, 9(3), 156-169.
- Sakol Boonsin (2012). **Creating a Learning Organization of Servicing Business, Case Study of Thai Airways International Public Company Limited**. Business Administration Journal, Commerce and Accounting Faculty, Thammasart University 35(133) January-March: 46-61.
- Tanoo Saowaros & Vichian Puncreobutr. (2016). The Necessity of ASEAN Community in Producing Pilots. **Journal of Education and Practice**. 7(12): 85-89.
- Tida Chokesuchart (2010). **ASEAN Economic Community: The Importance and Readiness of Thailand** |Huachiew Chalermprakiet University Academic, 27,99-112
- Vichian Puncreobutr, Worapote Siriwunsakul, Pratyush Mohan. (2016). **Achievement in Administration of the Aviation Industry and the Achievement in Administration of Thailand's State Enterprise Aviation Industrial Units**. Political Institutions: Bureaucracies & Public Administration e-Journal. 11(29):2-5.
- Vichian Puncreobutr. (2016). **Pilot Learning and Teaching Management in Thailand. Emerging Markets: Theory & Practice e-Journal**. 6(29): 1-5.
- Watchara Khumkiew (2015). **Components of Excellent Aviation Business of Thailand**. Journal, Srinakharinwirot Business Administration 6(2). July-December: 1-19