

A SURVEY OF COMMUNICATIVE ENGLISH SKILLS NEEDED
AMONG ENGINEERS OF THE THAI AIRWAYS

A MASTER'S PROJECT
OF
MRS. PATCHARA SUTTHAWATSUNTHON

Presented in partial fulfillment of the requirements for the
Master of Arts Degree in Business English for International Communication
at Srinakharinwirot University
February 2004

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In the fields of air transportation and technology, the ability to communicate effectively in English is a key for an individual to succeed in career advancement and to achieve an organizational success. Therefore, this study was designed in order to examine the importance of basic language skills of listening, speaking, reading, and writing in English considered by engineers. The objectives were also designed to get closer to the needs and desires of the population for communication skills training.

The population in this study was 60 engineers who graduated with a Bachelor's Degree of Engineering and are employed at the Thai Airways International Public Company Limited. They were randomly selected from the volunteers who attended the License Aircraft Engineer Briefing Program from the Boeing fleet type: B737-200, B747-400, and B777. The data in this study were questionnaires collected during July- October 2003 and the data analysis were analyzed in frequency and percentage.

The results of this study clearly revealed that the engineers need to be proficient in English in order to be able to comprehend and communicate. Most engineers felt that the knowledge and technical know-how were very important, but these had to be presented with standard of communication, particularly speaking. Therefore, speaking was the most important and needed skill considered by the THAI's engineers. In addition, this study interestingly revealed that the training needs of the population were completely irrelevant their actual use of English in the workplace. They rated speaking skill as the most needed skill, followed by listening, writing, and reading respectively. Though, their actual use of English in their workplace revealed that reading skill was the most frequently used, followed by writing, listening, and speaking. The result also indicated that the THAI's engineers strongly needed their company to provide an English language training course focussing on speaking skill as a priority.

การสำรวจความต้องการทักษะต่างๆ ในการสื่อสารด้วยภาษาอังกฤษ
ของวิศวกรในบริษัทการบินไทย

บทคัดย่อ

ของ

นางพัชรา สุทธาวาสสุนทร

เสนอต่อบัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ เพื่อเป็นส่วนหนึ่งของการศึกษา
ตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต สาขาวิชาภาษาอังกฤษธุรกิจเพื่อการสื่อสารนานาชาติ
กุมภาพันธ์ 2547

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การทำธุรกิจการบิน ซึ่งเกี่ยวข้องกับเทคโนโลยีขั้นสูง และต้องติดต่อกับองค์กรอื่นๆ

ในยุคไร้พรมแดนนี้ การใช้ภาษาอังกฤษเพื่อสื่อสารโดยอาศัยทักษะทั้ง 4 คือ การฟัง, พูด, อ่าน, และเขียน นั้น มีความจำเป็นและมีความสำคัญอย่างยิ่ง ต่อความเจริญก้าวหน้าของบุคลากร อีกทั้งนำมาซึ่งความสำเร็จขององค์กรอีกด้วย

ดังนั้นสารนิพนธ์ฉบับนี้จึงจัดทำขึ้นโดยมีวัตถุประสงค์เพื่อสำรวจความต้องการ

ในการฝึกอบรม และเรียนรู้ภาษาอังกฤษ ของประชากร โดยหวังว่าผลการสำรวจครั้งนี้จะสามารถนำไปเป็นข้อมูลประกอบการพิจารณา เพื่อจัดอบรมหลักสูตรภาษาอังกฤษ ให้มีเนื้อหาสอดคล้องและสอดคล้องกับความต้องการได้อย่างมีประสิทธิภาพ อันจะเป็นประโยชน์ต่อการพัฒนาทรัพยากรบุคคลขององค์กรต่อไป

ประชากรในสารนิพนธ์ฉบับนี้คือ วิศวกรจำนวน 60 นาย และทำงานในฝ่ายช่าง บริษัทการบินไทย มหาชนจำกัด ได้ให้ความร่วมมือในการตอบแบบสอบถามซึ่งจัดทำขึ้น โดยมีวัตถุประสงค์ที่จะตรวจสอบการใช้ภาษาอังกฤษ พร้อมทั้งสำรวจทัศนคติ และข้อคิดเห็นเรื่องความสำคัญของภาษาอังกฤษ ซึ่งใช้เพื่อติดต่อสื่อสาร โดยผ่านทักษะทั้ง 4 ดังกล่าวข้างต้นอีกด้วย

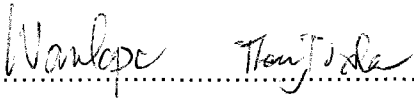
การศึกษานี้ได้เก็บรวบรวมข้อมูลจาก วิศวกรชาย สัญชาติไทย จบการศึกษาในระดับปริญญาตรี สาขาวิศวกรรมศาสตร์ และคัดเลือกให้มาทำแบบสอบถาม โดยการสุ่มจากจำนวนวิศวกรที่มาเข้ารับการอบรมหลักสูตรการซ่อมบำรุงเครื่องบิน Boeing ในแบบ B 737-200, B747-400 และ B 777 กลุ่มละ 20 นาย ทั้งนี้ผู้จัดทำได้เริ่มต้นสำรวจ พร้อมทั้งเก็บข้อมูลตั้งแต่เดือน กรกฎาคม – ตุลาคม 2546

ผลการสำรวจพบว่า วิศวกรเหล่านี้ให้ความสำคัญต่อทักษะการพูดมากที่สุด โดยมีความเห็นว่า การพูดเป็นทักษะสำคัญที่ใช้เพื่อการสื่อสาร หรือเจรจาต่อรองกับเจ้าหน้าที่ จากองค์กรการบินพาณิชย์ และวิศวกร จากบริษัทผู้สร้างเครื่องบินนานาชาติ ส่วนการฟัง , การเขียน ,และการอ่าน นั้น ถูกจัดให้เป็นทักษะที่มีความสำคัญรองลงมา

นอกจากนี้ผลการสำรวจยังพบอีกว่า วิศวกรเหล่านี้ใช้ทักษะการอ่าน ในขณะที่ปฏิบัติงานมากที่สุด ตามด้วย การเขียน , การฟัง , และการพูด ในขณะที่เดียวกันวิศวกรเหล่านี้กลับต้องการเข้ารับการอบรม และพัฒนาภาษาอังกฤษ โดยขอให้บริษัท ฯ จัดหลักสูตรที่เน้นทักษะการพูดให้เป็นลำดับแรก ส่วน การฟัง, การเขียน , และ การอ่าน เป็นความต้องการลดหลั่นลงมาตามลำดับ

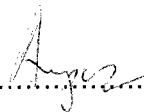
The Master's Project Advisor, Chair of Business English for International Communication Program and Oral Defense Committee have approved this Master's Project as partial fulfillment of the requirements of the Master of Arts Degree in Business English for International Communication of Srinakharinwirot University.

Project Advisor



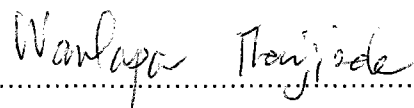
(Dr. Wanlapa Thaijinda)

Chair of Business English for International Communication Program



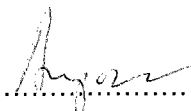
(Assistant Professor Dr. Amporn Srisermbhok)

Oral Defense Committee



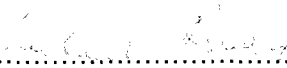
Chair

(Dr. Wanlapa Thaijinda)



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(Assistant Professor Dr. Amporn Srisermbhok)



Committee

(Mr. Michael Rudy)

This Master's Project has been approved as partial fulfillment of the requirements for the Master of Arts Degree in Business English for International Communication of Srinakharinwirot University.



Dean of the Faculty of Humanities

(Associate Professor Supha Panjaroen)

February ...20..., 2004

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CHAPTER 1

INTRODUCTION

Background of the Study

In this age of globalization, having much knowledge in professional's career alone doesn't guarantee your success. You also need to learn English if it is not your mother tongue, because it will put you in touch with more people than any other language. As Richards (2001) assumed that the English language has turned into a new medium for communication across borders globally; a deficiency in this area may result in barriers for graduates' personal and professional development.

Globalization then directly influences industry's needs; a global engineer therefore must be able to easily cross national and cultural boundaries (Crystal. 1997).

When globalization becoming common place with engineering work, an engineer then needs to have an understanding of international communication (Grundwald. 1999). Engineer can relates the same theories of mathematics, mechanics, and technology, but the modern engineer must also be able to communicate effectively in a shared tongue. Crystal (1997) claimed that in today's business, knowing a foreign language is a bit like having an extra instrument or one more piece of software to use. English then has become the medium of a great deal of the world's knowledge, especially in such areas as science and technology.

This reinforced in Riemer's study in 2002, he found that communication skills are necessary and essential for an engineer who aspires to carry out his/her professional practice in the global arena. Also, communication skills basically constitute several core elements such as the fundamentals of visual communication and the fluency in the English language. As Graddol (1997) stated that:

Learning and using English will not only give us the much-needed unifying chord but will also land us into the exciting world of ideas; it will enable us to keep company with kings in the world of ideas and also make it possible for us to share the experiences of our own brothers in the world.....

Graddol also suggested that teaching English to engineers is a delicate and demanding matter in terms of content, methods and techniques, and deciding which are appropriate for this particular area of engineering and English.

Burns and Coffin (2001) spoke that even though air transportation and Internet continue to bring us closer together and reduce the distance of time and space, an idea simply does not pass from one language to another without change. Therefore, the ability to understand and communicate with each other through a common language is still required. English is recognized as a common language and has become ascendant language internationally for the fast growing economy (Crystal.1997).

In Thailand, English, which is not the mother tongue, has become a foreign language and it is considered to be a part of Thai education in schools and higher levels for more than thirteen decades (Aksornkool. 1985). Furthermore, it is accepted

that English is closely associated with Thailand's economic, today (Tourism Authority of Thailand, Statistical Report. 1999).

Grunwald (1999) emphasized that English is the prime means for communication, and can often serve as the global language between two people from two different cultures, wherein English is not the native tongue. For example, French engineers communicated with Egyptian engineers in English during the recent building of the Cairo subway. A collaboration at Airbus Industries between English, French, German and Spanish companies also utilized English as the communication medium between workers (Riemer. 2002).

This situation also applies to the Thai Airways International Public Company Limited, which will be named "THAI" in this study. THAI's employees who are non-English speaking nations also use the English language as a prime form of communication for their international business.

THAI is one of the state-owned enterprises and operates daily for 72 destinations in 33 countries on 4 continents with its fleet of 81 aircraft. THAI has a main base maintenance operator, called "Technical Department". Technical Department is a subsidiary business unit of the Thai Airways that provides 24-hour-a-day routine and emergency services. The Technical Department located at Bangkok International Airport and has more than 4,000 engineers and technicians to handle the aircraft (www.thaitechnical.com. 2003).

From the web site of the thai-technical.com, it is reported that the Technical Department conducts 38,221 maintenance services on aircraft for their own fleet and 2,564 services on aircraft belonging to the fleets of other airlines. It carries out over 58 overhauls for THAI's own fleet and over 16 overhauls for the fleets of leading airlines from Europe, North America and Asia. With more than 40 years experiences in the air and on the ground, Technical Department of the Thai Airways is the most capable, most centrally located maintenance facility in the region (www.thai-technical.com. 2003).

Considering from THAI's businesses as mentioned above, safety and quality are the core elements of THAI, which are performed by engineers. THAI's engineers are the key persons to utilize their fullest potential to meet the company's commitments (see Appendix A).

When studying from the engineering activities, procedures and regulations are the most essential activities that must be strictly followed and operated based on manuals and instructions given from aircraft manufacturers, vendors and authorities which are written in English (see Appendix B). Thus THAI's engineers acquire not only the engineering knowledge to perform their technical tasks but they also need to be proficient in English in order to be able to easily cross national and cultural boundaries through international language, that is English (Riemer. 2002).

THAI has provided technical training skills for engineers in each department, like the Technical Training Department (BKKTX) located at the Bangkok International Airport. However, it is found that most THAI's engineers still have difficulties in using

English for their purposes. Therefore, English language training is considered to be necessary and should be provided for the global engineer as suggested by Kachu (1997) and Riemer (2002).

Although there has been some research conducted in Thailand on a survey of the needs for the English language considered by Thai engineers in the electronic manufacturing (Sopon.2001), there has been no formal survey of English as communication skills needed among engineers of the Thai Airways. Therefore, it is essential to survey, collect and measure reliable data for the work related needs. In addition, these needs will also serve as a guideline for company to provide English which its contents and materials should be created in a particular professional field to meet engineers' requirements as much as possible in the near future.

Statement of the Problem

Obviously, English is the means for communication in the workplace of the Thai Airways. Although engineers employed at the Thai Airways have got some basic skills in English, it seems likely that they have afforded not enough. Ineffective communication skills not only discredit the engineer's ability, but also bring to the less productivity and reduce the company's good image. More importantly, inability in using English language skills would present difficulties in the progress of engineers' career.

In order to overcome these problems, this study aims to examine engineers' perceptions of their training needs and identify what language skills are most essential and required.

Significance of the Study

Normally, THAI's engineers are responsible to establish engineering activities related to maintenance, overhaul and modification of aircraft systems, and perform technical investigation pertaining to aircraft structures and systems in connection with aircraft malfunction and aircraft incidents/accident. THAI's engineers are also responsible to co-ordinate with the aircraft manufacturers and vendors on technical matters concerning the performance of the aircraft structures, aircraft systems and equipment/components (see Appendix C).

Additionally, when THAI's engineers are qualified to become licensed aircraft engineers, they must be proficient in all inspections related maintenance works that they have to inspect, control and supervise other engineers. Also the licensed aircraft engineers are responsible to co-operate and contact with foreign engineers who work on aircraft belonging to the fleets of other airlines. As described earlier, engineers who are able to become licensed aircraft engineers are expected to perform higher level of related maintenance activities. They are also expected to use English effectively because they have to contact auditors from the authorities, such as Federal Aviation Administration (FAA), Joint Aviation Authorities (JAA), Department of Civil Aviation

(DCA) or staff from the aircraft manufacturers and vendors, such as Boeing Company, Airbus Industries, Pratt & Whitney, etc. (see Appendix D). However, it is found that some engineers felt uncomfortable to interact and negotiate with those mentioned persons and foreigners though they had studied the English language for years from their schools and universities.

The result of this study can be used to determine the needs to implement the training required by THAI's engineers. Furthermore, findings in this study indicated the significant requirements for company to provide the appropriate English language skills courses. In order to improve their English language skills and prepare these engineers to be more proficient and be more successful licensed aircraft engineers in the future, contents and materials should be designed and developed consequently by the course designer or educator, including those whom involved in the technical training institute within the Thai Airways.

Research Questions

The research questions for this study were the followings:

1. How do THAI's engineers rate the importance of English as a language for communication skills required in their career?
2. Which skill do THAI's engineers need the most training for their career advancement?

Scope of the Study

This study focussed on the needs of four basic communication skills in listening, speaking, reading, and writing of engineers who work at the Thai Airways. These needs were used as guidelines to analyze the most crucial skill needed of engineers in their technical fields.

Limitation of the Study

The researcher investigated only in the Thai Airways during July-October, 2003. The subjects in this study are Thai citizens who use English as a foreign language and work as engineers in the THAI Technical Department. As the focus of this study was the specific skill needed for the Thai Airways' engineers, the findings would not be appreciable in other companies. Therefore, further study should be conducted in various business firms so that the findings would be more fruitfully applied to develop employee's English skills in engineering context and in other businesses as well.

Definitions of Terms

- Licensed Aircraft Engineer(LAE): An engineer who is responsible to ensure that the aircraft shall not be released to service prior to appropriate rectification or approved deferral.
- Licensed Aircraft Engineer is also responsible to identify and verify the reject reason with reference to THAI standard/ Manufacturer Manuals or other relevant reference documents.
- Communication Skills : The subject's performance in listening, speaking, reading, and writing in English.
- THAI : The Thai Airways International Public Company Limited.

CHAPTER 2

REVIEW OF RELATED LITERATURE

In order to provide appropriate background information to meet the research topic under investigation, the related studies were reviewed in three areas as the followings: (a) business communication skills, (b) business English (c) the importance of speaking skill, and d) needs analysis.

2.1 Business Communication Skills

It has been widely recognized that effective communication is an essential component of organizational success in business contacts. Murphy and Hildebrandt (1991) stated that people spent 70-80 percent of their working hours in communication and people have become a part of communication in every workplace. Murphy and Hildebrandt also indicated that communication is vital in business because a mutual understanding can occur depending on the willingness of both parties to understand the communication processes. According to Maes (1997), communication can be classified into three levels, interpersonal (between individuals), inter-organizational (between organizations), and international (between nations). Since then good communication affects communicators for the growth and success of both individuals and organizations.

Lesikar, Petit, and Flatley (1999) mentioned that communication is essential for business because it can bring people to get closer and to meet a fundamental goal together. Likewise, Clark (1988) pointed out that good communication skills help people within business environment become effective employees in their careers. In addition, not only businessmen but also technical people, such as engineers and scientists who always involve in the technological information need to possess effective communication skills as well (Kachu. 1997).

An effective communication is important and has greatly contributed to organizational success, today. More importantly, Hybels and Neawell (1995) stated that listening, speaking, reading, and writing are the four basic language skills for communication and usually involved in business. Lesikar (1999) classified communication skills into four categories. First, effective speaking is the skill of sending an oral message. Second, effective listening is to concentrate on hearing what is being said and to concentrate on understanding what has been heard and what has been understood. Third, writing is the way a writer influences a reader to understand and to accept a message. Finally, many people need to read a great deal, thus their effectiveness depends on their ability to digest this material adequately and time effectively.

In addition, Clark (1988) emphasized that both employers and employees must have all the four basic communication skills to get things done efficiently and effectively. As Burns and Coffin (2001) stated that good communication skills are the necessary

core in maintaining good organizations. In brief, communication skills will help contribute to a company's success as well as to the success of individuals in the workplace. The importance of any communication skills, according to Richard (2001) could be determined by considering their frequency of use, their difficulty and their quality. To Schmidt and Gardner (1995) listening plays the most important role in assessments of communication competence while oral communication or speaking skill is considered to be very important for businessmen as well. A study of Clyne in 1994 revealed that technical professionals in managerial positions typically spent a quarter to a third of their work by using the following communication skills respectively: reading, writing, listening, and speaking. Similarly, Jandt (1995) found that reading, writing, and speaking skills are essential for technical professionals at every level.

Furthermore, Lahiff and Penrose (1997) mentioned that technicians always read and write instructions, procedures and manuals. Hence reading and writing skills are considered to be important skills for technical fields. Although reading and writing skills are rated to be important for individual's success. Lesikar (1999) spoke that the speaking skill is considered to be more important. Similarly, Clyne (1994) indicated that oral communication is consistently identified as the most important for business environment. In summary, the four basic communication skills are essential for people, especially for the one who need to be success in their business environment.

2.2 Business English

The English language is the most important tie that binds people together. English is now the second most widely spoken language in the world, with only Chinese dialects spoken by more people. English is overwhelmingly the second language of choice for non-English-speaking people. English is the official language of the European Central Bank and the working language of the Asian trade group ASEAN (Crystal. 1997).

The English language plays an ever more important role in world communications and business because a major component of business communication is English and the quality of English is business (Murphy & Hildebrandt. 1991). Jandt (1995) stated that competent skill in listening, speaking, reading, and writing in English is a key to be successful in international business and relations.

In addition, a study of Graddol in 1997 revealed that the requirements of people to acquire knowledge of English for business and professional purposes were increased. Hiranburana (2001) also found that communication skills in English were required by both employers and employees in order to increase their productivity in business.

At present, the English language is a tool for technologies and skills transfer from the Big Three Regions as North America, Europe, and Japan for modern economic and industrial development (Graddol. 1997). Similarly, Richards (2001) assumed

that business professionals and technical employees are required to be not only knowledgeable to perform their tasks but they also need to be proficient in English. As Burns and Coffin (2001) claimed that the English language has grown to dominate in the areas of science, technology, commerce, tourism, diplomacy, and culture. It has also been estimated that 60 percent of today's world population are multilingual. Undoubtedly, English is quite important not only for business but also for the technical fields in expressing themselves in English (Andrews & Hershel. 1996).

Additionally, being able to understand English may allow people to reach all knowledge because English is the medium for 80 percent of the information stored in the books and cyber-space. As we can see that a large proportion of textbooks in the world are written in English and designed either for the internal English speaking market, such as USA, UK, Australia and so forth or for an international market like Japan, Philippines, Indonesia, and others (Edmund.1995).

2.3 The Importance of Speaking Skill

Among four language skills, speaking is one of the most important skill and cannot be avoided to communicate in a workplace. Additionally, speaking skill is recognized as the most frequently used by business people to fulfill all kinds of communicative business tasks (Maes. 1997). Indeed, speaking is more important than any other skills because it involves not only the ability to use language but also the ability to interact with other people (Ellis & Johnson. 1994).

Bygate (1987) emphasized that when speaking takes place, the speakers have to pay attention to listeners and adjust utterances according to the listeners' reaction.

Murphy and Hildebrandt (1991) mentioned 7 steps for preparing business people to become effective speakers as follows: 1) Determine the purpose, 2) Analyze the audience and situation, 3) Choose the main ideas for a message, 4) Research the topic thoroughly, 5) Organize the data and write a draft, 6) Plan visual aids if desirable, and 7) Rehearse the talk and revise where necessary.

Kuhn (1988) spoke that speaking is needed as a communication medium in discussion and negotiation. In a discussion, a written problem-solution is presented as a background, then followed by oral discussion that may lead to decision. For a negotiation, it occurs when two parties are trying to make an agreement for their purposes. Maes et al (1997) also found that adequate speaking is partial factor that results in the successful business transactions. Without speaking skill, the business transaction would not be achieved. Moreover, misunderstandings easily occur from inadequate speaking skill.

In Thailand, the demand for English language skill has developed quickly and recognized as a professional field. More importantly, oral communication is particularly appreciated by the international academic and business communities. It plays important role in thousands of individual and organizational contacts being made all over the globe. Obviously, most employers seek the employees who have good command of

the English language, especially the ability to speak English well because it is a major tool for efficient functioning to do their businesses (Pholsward.1990).

English has been used as a major medium for communication in the work place. In addition, it has become an indicator to determine whether an applicant is well qualified for a job in business (Robinson. 1991). One who has good English language skills will have more opportunities to achieve his/her career advancement. Therefore, the use of effective English is one of the essential components in developing oneself to be more successful in achieving vocational goals (Crystal. 1997).

2.4 Needs Analysis

Richards (2001) described that language curriculum development often starts with determining how syllabus design and address specific needs and wants of learners. Nunan (1996) also stated that procedures used to collect information about learners' needs are known, as needs analysis. The results will then help the provider or educator to select the activities and materials relevant to the learners' needs and desires. According to Richards (2001), needs analysis is the process of needs assessment that allow us to take advantage of the resources to identify the particular skills that the learners will need to perform in learning. If those in charge of training programs want to provide different kinds of training, they are required to demonstrate that a proposed program is a response to a genuine need.

Schultz (1981) also described that needs analysis had been introduced into language teaching through the ESP movement since 1960. Schultz defined that needs refer to wants, desires, demands, expectation, motivation, lacks, constraints, and requirements. Similarly, Pratt (1980) and Yalden (1995) stated that needs are often described in terms of a linguistic deficiency, that is, as describing the difference between what a learner can presently do in a language and what he or she should be able to do. In addition, Nunan (1996) pointed out that needs analysis may take place prior to, during, or after a language program. It also assumes that time and resources are available to plan, collect, and analyze relevant information for a planned program of instruction.

Richards emphasized that the first step in conducting a needs analysis is therefore to decide exactly what its purpose or purposes are. For example, when a needs analysis of restaurant employees is conducted, the purposes might be: to determine current levels of language proficiency of engineers, to determine how many employees are in need of the language training, and to identify employees' perceptions of language difficulties they face on the job. Also, Nunan (1996) stated that questionnaires are one of the most common instruments used. They are relatively easy to prepare, they can be used with large numbers of subjects, and they obtain information that is relatively easy to tabulate and analyze. They can also be used to elicit information about many different kinds of issues, such as language use, communication difficulties, preferred learning styles, preferred classroom activities, and attitudes and beliefs.

Similarly, Graves (2000) emphasized that needs analysis is the measurable discrepancy between current outcomes and desired or required outcomes, or the difference between what is and what ought to be or what is required. In broad terms, needs analysis can be described by Nunan (1996) as the process of determining the needs for which a learner or group of learners requires a language and arranging the needs according to their desires.

There are several studies established based on needs analysis, such as a study of the English language needs in the Thai workplace, conducted by Sapon (2001). Sapon revealed that Thai citizens, who operated multi-national companies and organizations in Bangkok, required the communication skills in English. In addition, Sapon found that reading was rated the most important skill, followed by writing, listening and speaking for their business. Also Thatsanatheb (1999) conducted the study on the English language skills mostly needed by Thai computing professionals in Bangkok. The subjects of this study were 257 managers of computer companies. The subjects ranked reading as the most important skill while listening, speaking and writing skills were considered as secondary skills for their careers.

In conclusion, needs analysis should be the starting point to collect information and requirements of the learners. Needs analysis also takes place in order to create syllabuses, courses, materials and the kind of teaching and learning as well.

CHAPTER 3

METHODOLOGY

The methodology used in the study described the sample of the study, the construction, development, the content of the questionnaire, the collection of data and the analytical methods used.

Population

The population of this study was 60 engineers who were trained to become licensed aircraft engineers. They passed the licensed aircraft engineer's examination and they were participants of the License Aircraft Engineer Briefing Program during July - October 2003.

These engineers are Thai citizens, graduated with a Bachelor's Degree in Engineering and use English as the medium in their workplace. The volunteers to provide information were selected from for Boeing fleet type: B 737-200, B 747-400 and B777.

Research Instrument

The instrument used in this study consisted of questionnaire, which was modified and adapted from the Curriculum Development in Language Teaching by Nunan & Lamb (1996).

The last part was the survey of attitudes towards the English language.

The subjects were also asked to rank the four basic communication skills of which the subjects mostly needed to improve their communication skills by ranking their needs in order 1,2,3, and 4 (see Appendix C).

Pilot Test

Five engineers from the Engineering Department of the THAI Technical Department were selected. The first draft questionnaire was distributed to these subjects via mail and e-mail. Two weeks later, all the questionnaires were returned. The respondents' comments and suggestions were used to revise in order to ensure that all the items were well constructed and the language was unambiguous.

Data Analysis

The obtained data from responses were classified for frequency and percentage to answer the research questions posed in this study.

The questionnaire was piloted and revised before it was distributed with a covering letter stating the purpose of this study. The respondents were asked to complete the questionnaire within two weeks and returned their completed questionnaire by fax, mail or e-mail before October 30,2003. The questionnaire was divided into 3 parts with 40 items. The data from this questionnaire were analyzed by the percentage and frequency distribution.

The first part was the personal information about the respondents who were asked to answer questions on the position level and years of experience in the company. They were requested to give their responses by filling in the provided space.

The second part was a survey of the English using in the work place. To respond to this part, the subjects were asked to rate the frequency of their using English by choosing one of the following degrees: "Seldom" (Once Every Three Months), "Occasionally" (Once a Month), "Frequently" (Once a Week), and "Always" (Almost Every Day). Also, they were asked to check the current tasks based on the four skills of listening, speaking, reading, and writing. Similarly, to rate the importance of English communication skills, the subjects were requested to indicate the importance of English language in their perceptions by choosing one of the following scale: "Not Important", "Slightly Important", "Important ", and "Very Important".

CHAPTER 4

FINDINGS

The data collected from questionnaires were grouped for frequency and percentage by using the program of the Statistical Package for Social Science (SPSS). The findings therefore were presented into 4 parts. The first part presented the primary information of the population. The second part described the degree of English, which was used as communication skills in the respondents' workplace. The third part identified the ranking of the importance of English as communication skills perceived by the respondents and the fourth part showed the results of the survey of respondents' attitudes toward English training courses.

Part I: The Primary Information of the Population.

This study was conducted with 60 engineers who were grouped according to length of services. There were 16 respondents, who have been working between 5-10 years, while 26 respondents who have been working between 11-15 years and 18 respondents had more than 15 years of experiences. The primary information of the population in this study can be used as a guideline in conducting the further study relevant to other English language training programs for engineering students.

Part II: A Survey of English Usage in the Workplace.

The respondents were asked to rate the basic communication skills of listening, speaking, reading, and writing used for their career. The data were then classified and summarized as shown in Table 1.

Table 1 Percentage of English Usage in the Workplace.

Listening Skill	Speaking Skill	Reading Skill	Writing Skill	Total
21.26%	20.54%	31.67%	26.53%	100%

Table 1 shows that reading skill was used most often by the respondents for a value of 31.67%, followed by writing skill for 26.53%, by listening skill for 21.26%, and by speaking skill for 20.54% respectively.

The respondents were also asked to rank their actual tasks based on four basic communication skills of listening, speaking, reading, and writing in English which were used most frequently. The data were classified as shown in Table 2.

Table 2 Ranking of the Actual Tasks Based on Four Basic Communication Skills.

	Tasks	Percentage
1	Reading Manual/Instruction	14.11%
2	Reading e-mail/Technical News	13.79%
3	Writing Report	12.70%
4	Discussion with foreign engineers	12.54%
5	To be audited from foreign auditors	11.9%
6	Introducing Maintenance Documents	10.89%
7	Telephoning	8.78%
8	Seminar	7.92%
9	Presentation	7.37%
	Total	100.00%

Regarding reading tasks, the respondents rated that reading manual and instruction were used the most frequently for a value of 14.11%, followed by reading e-mail and technical news were used almost every day for a value of 13.79%.

Regarding writing tasks, the findings revealed that writing report was used almost every day for 12.70%, while introducing maintenance document was used almost every day for a value of 10.89%.

The findings also revealed that the respondents used both listening and speaking skills for discussion. They discussed with foreign engineers for a value of 12.54%, followed by being audited from foreign auditors for 11.9%, and telephoning was used almost everyday for a value of 8.78%. In addition, speaking and listening skills were used at the least for seminar and presentation for only 7.92%, and 7.37% respectively.

In summary, the findings indicated that engineers employed at the Thai Airways whose specific actual tasks were implemented through reading skill most frequently. Therefore, these findings were related to the findings as mentioned in the Table 1 before.

Part III: Ranking of the Importance of English as Communication Skills.

In response to the perceptions of the respondents regarded the English language competency, the data were categorized as shown in Table 3.

Table 3 Percentage of English Competency as Perceived by THAI's Engineers.

	Yes	No
Is English competence considered to be an important key for your business success?	59 (98.3%)	1 (1.7%)
Do you consider English as your advantage?	56 (93.33%)	4 (6.67%)

From Table 3, almost 99% of the respondents considered that English competency is very important and above 90% of the respondents also considered that English is an advantage or a key for succeeding in their career.

In response to the importance of English language skills considered by the respondents, the data were calculated and identified as shown in Table 4.

Table 4 Percentage of the Importance of English Language Skills

Listening Skill	Speaking Skill	Reading Skill	Writing Skill	Total
26.92%	28.21%	24.36%	20.51%	100%

From Table 4, it was interestingly revealed that above 25% of the respondents considered speaking and listening skills are very important while lower than 25% of the respondents considered reading and writing skills are important.

Part IV: The Attitude towards English Training Courses.

In response to the training needs, the respondents' answers were calculated as shown in Table 5.

Table 5 Percentage of Training Needs Considered by THAI's Engineers.

	Yes	No
Do you want your company to provide English language training course?	60 (100%)	0 (0%)

The results from Table 5 clearly revealed that 60 respondents (100%) strongly needed their company to provide the English language training course for them.

In response to the needs of English language training course, the respondents were asked to consider the four basic communication skills which they mostly needed by ranking in order 1,2,3,and 4. The answers were summarized as shown in Table 6.

Table 6 Percentage of English Language Skills Training Required by THAI's Engineers.

Listening Skill	Speaking Skill	Reading Skill	Writing Skill	Total
28.21%	35.06%	16.03%	20.70%	100%

Table 6 shows that speaking was the most needed skill considered by the respondents as a value of 35.06%, while listening skill was required for a value of 28.21%. In addition, writing skill and reading skill were required as a value of 20.70%, and 16.03% respectively.

The respondents were asked to specify whether the training course should be focused on only one most needed skill or be focused on all skills, the findings then revealed in Table 7.

Table 7 Percentage of Practical Training Course.

Focus on one skill	Integrated skills	Total
39	21	60
(65%)	(35%)	(100%)

From Table 7, 65 % of the respondents required a training course to focus on one skill, while another respondents (35%) required a training course to serve as integrated skills for them.

Regarding to the practical training hours in each skill, the respondents were asked to consider and specify their needs as summarized in Table 9.

Table 9 Percentage of Practical Training Hours.

	10-20 hours	20-30 hours	30-40 hours	40-60 hours
Listening	4 (6.67%)	11 (18.33%)	28 (46.67%)	17 (28.33%)
Speaking	10 (16.7%)	16 (26.7%)	26 (43.3%)	8 (13.3%)
Reading	17 (28.33%)	28 (46.67%)	11 (18.33%)	4 (6.67%)
Writing	17 (28.33%)	28 (46.67%)	11 (18.33%)	4 (6.67%)

From Table 9, more than 40% of the respondents rated 30-40 hours as the most appropriate hours for improving listening and speaking skills, and above 45% of the respondents rated 20-30 hours as the most practical hours for reading and writing skills training.

The respondents were also asked to specify whether the native teacher or Thai teacher would be suitable for them. Their needs' summary is shown in Table 8.

Table 8 Percentage of Practical Teacher for Training Course.

Native	Thai	Total
Teacher	Teacher	
55	5	60
(91.7%)	(8.3%)	(100%)

Table 8 shows that the majority of respondents preferred a native speaker as a value of 91.7%.

The respondents were asked to specify the study topics in English that should be provided for them, the answers were categorized as shown in Table 10.

Table 10 Study Topics Required by THAI's Engineers.

	Topics	Percentage
1	General conversations	100%
2	English for Social Life	95.0%
3	Asking /answering questions techniques	86.7%
4	Presentation Techniques	83.3%
5	Reading and making notes	83.3%
6	Telephoning Practice	81.7%
7	General Grammatical Rule	80.0%
8	Minutes Writing	80.0%
9	Critically Reading	76.7%
10	Other Topics (If require)	00.0%

The results of this item indicated that the topics preferred by the majority of the respondents were the ones involving listening and speaking skills. From Table 10, the results revealed that general conversation and English for social life were strongly required by the THAI's engineers as a value of 100 % and 95%, respectively. In addition, general grammatical rule and minutes writing were considered to be study topics as a value of 80%, and critically reading was considered to be a study topic as a value of 76.7%.

CHAPTER 5

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter is presented in three parts. The first part summarizes the study, personal information of the respondents and discusses the major findings. The second part describes implications and provides a guideline for developing training course for THAI's engineers. The last part contains recommendations for future research.

Summary of the Study

This study was conducted with 60 engineers who are qualified to become licensed aircraft engineers employed at the Thai Airways. Aiming at surveying the actual use of English language. As well, the four basic communication skills were examined and rated to determine the appropriate training for business contacts in their workplace.

Discussion of Major Findings

Following are the major findings, which address the research questions posed in the study.

Research Question No.1: How do THAI's engineers rate the importance of English as a language for communication skills required in their current career?

The questionnaire results of this study clearly revealed that over 98% of the respondents considered that English competence is an important key for business success. It also indicated that over 93% of respondents considered that English is an advantage for their career path (see Table 3).

The researcher also found that most THAI's engineers felt that the knowledge and technical know-how are very important, but these must be presented with standard of communication, particularly speaking. Furthermore, it is realized that the work can be done in the most effective manner through an effective speaking skill.

Even though reading skill was the most frequently used in their workplace, above 25% of the respondents considered speaking, and listening skills were very important while under 24% of the respondents considered reading and writing skills were important (see Table 4). These findings support Maes, Weldy, and Icenogle's study in 1997, which indicated that oral communication is identified as the fundamental skills in communication.

Research Question No.2: Which skill do THAI's engineers need the most training for their career advancement?

The findings in this study clearly revealed that 100% of the respondents needed their company to provide the English language training for them (see Table 5).

The results also revealed that above 28% of the respondents considered speaking was the most needed skill, while lower than 20% of the respondents considered reading and writing were less needed skills because both writing and reading skills require more time to develop and be trained (see Table 6). Additionally, they have much opportunity to use these skills for their routine services while speaking English was used less in their daily life. Therefore, they preferred to have the opportunity to practice speaking rather than reading and writing. To develop higher-level of effective communication skill in speaking, THAI's engineers concerned authorities should take this into consideration.

Notably, this study interestingly revealed that the training needs of the respondents in this study were completely irrelevant to their actual use of English in their workplace.

The results revealed that reading skill was used most frequently, followed by writing, listening, and speaking skills respectively (see Table 1, and Table 2). This can be explained by the fact that they have to read a lot of manuals and instructions, written in English.

Suggestion for Work Related Needs English Training

Based on the findings, the THAI's engineers perceived speaking as the most important skill, followed by listening, reading, and writing (see Table 4). To address this perception, their company should provide the appropriate English training courses for more effective to meet their needs. Therefore, if employees are professionally trained in the right direction, they will develop their English language for their career path.

Furthermore, above 90% of the respondents preferred native speakers rather than Thai teachers. Besides, the native speaker of English can help them to learn something new about themselves and their world through well selected materials. Most of respondents considered that native speakers of English could provide learners a basic feature of conversation. They also need to be trained the appropriate words of expressions, intonation, and stress which are commonly used in conversation among native speakers. They also need to be familiar with English spoken discourse and need to be able to use them quickly and appropriately in different situations. Therefore, the native speakers of English might better benefit for them and can provide them English as a means to enrich their knowledge and fulfill their needs.

In addition, a course syllabus should be designed carefully and focussed on the findings, mentioned in this study. More importantly, in terms of training for speaking and listening skills, the organizer of the course should emphasize on the following

topics: General Conversations, English for Social Life, Presentation Techniques, Telephoning Practice, and Asking/ Answering Questions Techniques. Course contents for writing skill should be emphasized on General Grammatical Rule, while Critically Reading Techniques should also be emphasized to strengthen their reading skill.

Recommendation for Further Study

As this study concentrated only on the Thai Airways International Public Company Limited, a further study therefore, should be conducted in various business firms so that the findings would be fruitfully applied to develop the employee's English language skills. Hence, the results of such studies may reveal additional information on the problems concerning needs of English as communication skills needed in engineering business context and in other businesses as well.

In summary, course designers or English teachers should focus on the data which represents learners' needs in order to implement and provide an effective training course that can be most beneficial to certain groups of learners. Therefore, this can be reaffirmed that needs analysis is the first step for designing any language-training course for those involved in international communication either in a private or public sector.

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APPENDICES

APPENDIX A
POLICY STATEMENT

2.1 POLICY STATEMENT

The Technical Department (DT) is committed to deliver products and services with uncompromising safety and the highest quality, together with sustainable environmental friendly standards. The products and services delivered shall:

- Meet all Aviation Authority requirements and regulations;
- Comply with relevant environmental laws, legislation and regulations;
- Common to the Alliance safety and environment standard;
- Fulfill the wishes and expectations of the customers, and;
- Pose as least environmental impact as the available technologies can facilitate.

In order to achieve this objective, the management of the Technical Department has adopted the quality assurance system based on requirements of THAI DOA, FAR 145, JAR 145, ISO 9002 and ISO 14001 as integral parts of the Technical Department management system. The Technical Department ensures continuous quality improvement and sustainable environmental management by regular review of quality and environmental objectives and targets.

In the Technical Department, safety, quality and environmental care are the most essential qualities of the activities, products and services that all personnel shall consistently strive to maintain. It is the responsibility of all personnel to take immediate action to eliminate any factors, which might compromise these standards. Our commitment extends from the management to all personnel within THAI Technical Department.

APPENDIX B
ENGINEERING ACTIVITIES

ENGINEERING ACTIVITIES

1. GENERAL

Since the maintenance work on THAI aircraft and equipment are assigned to THAI Technical Department (DT); however, some parts of them are delegated to and responsible by the servicing company according to the Technical Service Agreement and/or Special Agreements.

In order to facilitate the understanding of the principles for the assignment of engineering activities the following concepts are used:

CEA (Central Engineering Agency)

CRE (Component Responsible Engineering)

The responsibility of the responsible engineer is assigned as follows:

- 1.1 The CEA shall handle engineering activities which are related to specific aircraft type overhauled at Maintenance Base to which this engineering belongs. In that respect this engineering is called CEA for the aircraft type concerned.
- 1.2 The CEA is assigned to monitor the reliability of specified aircraft systems and shall initiate and follow up actions accordingly.
- 1.3 The CRE is assigned the engineering activities related to specific parts of an aircraft system such as structure members, wiring, tubes, panels, racks, type numbered components and various other equipment.
- 1.4 In some cases, THAI has assigned the engineering responsibility to Servicing Company which called "Engineering Delegation". However all functions should contact the Engineering Department (TE) as the responsible engineer.

2. WORK COORDINATION BETWEEN ENGINEERING AND PRODUCTION

The Workflow of Engineering Activities can be explained as follows:

- 2.1 From authority's requirements, manufacturer's requirements or airline's experiences, the responsible engineer shall issue engineering documents e.g. ED, TO, etc. to the planning in order to issue work order to the production.
- 2.2 After work has been performed, the production unit shall send all information back to the planning. In case that the advice is needed, the production unit shall contact their Production Engineer for assistance.
- 2.3 The Production Engineer shall advise the problem that can be solved within limit, if not, contact the responsible engineer for assistance.

3. ENGINEERING RESPONSIBILITY DISTRIBUTION

- 3.1 The engineering responsibility in distribution of aircraft systems/sub-systems/components between THAI and the servicing company shall, as rule - but not absolutely, follow the physical work distribution.
- 3.2 However, regardless the above mentioned engineering responsibility distribution, the Engineering Department (TE) shall keep monitor the engineering activities even it has been assigned or delegated to other servicing companies.
- 3.3 The agreed assignment of specified engineering responsibilities for aircraft systems/ subsystems/components are as follows:

APPENDIX C
ENGINEERING RESPONSIBILITY

2. MANAGEMENT RESPONSIBILITIES

2.3 DUTIES, RESPONSIBILITIES AND AUTHORITY

2.3.6 ENGINEERING DEPARTMENT (TE)

The Engineering Department Director (TE) reports to the Managing Director, Technical Department (DT) for overall operation of the Engineering Department. In addition, engineers in the Engineering Department are also responsible to:

- Fulfill the requirements of the authorities such as Airworthiness Directives and monitor the adherence to governmental relations in airworthiness matters.
- Establish and control maintenance requirements, manuals and other engineering instructions related to maintenance/overhaul.
- Establish and control ETOPS requirements.
- Administer and control THAI aircraft, aircraft components, engine and equipment specification and modification thereto.
- Perform engineering tasks within THAI as specified in Civil Aviation Regulations.
- Monitor Daily Technical Disturbance.
- Provide engineering support to component/engine work shop and aircraft maintenance/overhaul.
- Keep close liaison with all aircraft, aircraft components, engine and equipment manufacturers/vendors as well as partner airlines in all technical matters.
- Research and develop special projects for the Technical Department (DT)
- Recommend development of maintenance and engineering EDP-based information system within the Technical Department (DT).
- Review and participate in the meeting/symposium of interest to engineering in order to obtain useful and valuable information.
- Develop and monitor a system wide Technical Information System and Reliability System.
- Analyze, evaluate and specify aircraft, systems and airborne equipment.
- Analyze aircraft system and component reliability and participate in establishment of technical activities standard.
- Supervise/analyze technical investigation in connection with aircraft malfunction and aircraft accidents/incidents and has authority to:

- Release Technical Order,
- Reject any Dispensation Request,
- Release any technical instruction deviated from manufacturer's manual,
- Release a Technical Investigation Report.
- Establish engineering activities related to maintenance, overhaul and modification of aircraft systems, systems and components under responsible ATA Chapters.
- Coordinate with the Production Engineer Groups to support the maintenance, overhaul and modification of aircraft structures and aircraft to the Line and Light Maintenance Department (DL) and the Heavy Maintenance Department (DM).
- Coordinate with the manufacturers/vendors on technical matters concerning the performance of the aircraft structures, aircraft systems and equipment/components.
- Handle/investigate technical problems in connection with aircraft/component maintenance/overhaul.
- Perform technical investigation pertaining to aircraft structures and aircraft systems in connection with aircraft malfunction and aircraft incidents/accidents.
- Prepare, investigate, evaluate and recommend on new development in aircraft structures and aircraft systems.
- Ensure that the design level of aircraft structures and aircraft systems reliability and safety are achieved and maintained.
- Develop, implement and revise maintenance program in accordance with new design, maintenance philosophies, serviceability and experience.

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APPENDIX D
LICENSED AIRCRAFT ENGINEER QUALIFYING

LICENSED AIRCRAFT ENGINEER (LAE) QUALIFYING AND AUTHORIZATION

1. PURPOSE

- To define the Technical Department procedure for quality and control of Licensed Aircraft Engineer (LAE).
- To comply with the Technical Department Standards according to the THAI DOA, FAR 145, and JAR 145 requirements.
- To role in Component and Engine Maintenance in view of safety and quality.

2. SCOPE

To describe activities for concern functions in order to check out an Licensed Aircraft Engineer and his privilege.

3. DEFINITION

3.1	DT	Executive Vice President, Technical Department.
3.2	LO	Maintenance Operation and Control Department.
3.3	MA	Aircraft Overhaul Department.
3.4	MG	Component Overhaul Department.
3.5	MN	Engine Overhaul Department.
3.6	TQ	Quality Assurance Department.
3.7	TX	Technical Training Department
3.8	AA	Aircraft Avionics Component
3.9	AE	Aircraft Engine
3.10	AM	Aircraft Mechanical Component
3.11	AP	Airframe and Powerplant.
3.12	AS	Aircraft Structure
3.13	AV	Aircraft Avionics System.

4. RESPONSIBILITIES

The Licensed Aircraft Engineer must be proficient in all inspections that he entitled on his rating. Licensed Aircraft Engineer are rated as AE, AM, AA, AS or PC. Licensed Aircraft Engineer has authorization to serve as a THAI licensed aircraft engineer who shall be granted by the Technical Senior Vice President (DT).

5. PROCEDURE

5.1 SUBMISSION

5.1.1 The Director of Production Department (LO, MA), to whom the applicant directly reports, shall ensure that the applicant meets the qualification requirement tabulated in Appendix A.

5.1.2 The check out process shall be carried out within 30 days including completion of the applicant's training.

5.2 REQUIREMENT

5.2.1 Basic Qualification

Person who wishes to be entitled " Licensed Aircraft Engineer" shall satisfy the following prerequisites:-

- At least 25 years of age.
- At least 4 years experience in aircraft component maintenance work and at least 2 years in the related inspection rating maintenance work.
- Physically healthy, with normal capability of hearing and seeing, so that he or she can perform duty and responsibilities without any Quality Aspect impaired, examined by company provided physician and incorporating with the Quality Assurance Responsible engineer judgement.
- Good conduct and prudence.
- Consent from superior.

5.2.2 Background

- Having a Bachelor Degree of Engineering.
- Having a completed License Training Program

5.2.3 Training

Under close supervision and control of the head, or delegated personnel of each delegated department, the nominee shall undergo the following training/briefing:

5.2.3.1 Briefing in according to Appendix A.

5.2.3.2 On-Job-Training in Light Maintenance Level (LO) and Heavy Maintenance Level (MA) by practicing as Licensed Aircraft Engineer Trainee in the related to his/her specialty for the following period:

- For AP rating
 - 4 weeks in LO.
 - 8 weeks in MA.
- For AV rating
 - 8 weeks in LO.
- For AC rating
 - 4 weeks in LO.
 - 8 weeks in MA.

5.2.3.3 Training for basic knowledge in repair/overhaul of aircraft components/ accessories as followings:

- Aircraft Overhaul shop (MA) for 2 days.
- Component Overhaul shop (MG) for 4 days.
- Engine Overhaul shop (MN) for 2 days.
- Nondestructive shop for 1 day.

6. EXAMINATION

6.1 To be qualified as an Licensed Aircraft Engineer, the nominee must pass all examinations as follows:-

- Writing test including Oral test regard aircraft technical knowledge (system, functional, troubleshooting, etc).
- Practical test regards engine idle run.
- Administrative test (company rules, company regulations, and company procedures.)

6.2 Re-examination is allowed only one time for each test stated in 6.1 and shall be carried out within 30 days for the whole packages.

7. GRANTING AUTHORIZATION

7.1 When the nominee has passed the examination as stated in 7.1, the committee shall forward the result to TO and then issue the Certificate of Authorization.

7.2 DT shall sign the certificate.

7.3 The applicant is then granted company authorization to sign Airworthiness Release on the company's aircraft type endorsed in his Aircraft Maintenance Type II License.

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APPENDIX E
QUESTIONNAIRE

QUESTIONNAIRE

This questionnaire is prepared by Mrs. Patchara Sutthawatsunthon, a graduate student of Business English for International Communication Program, the Department of Western Languages, Faculty of Humanities, Srinakharinwirot University. Mrs. Patchara Sutthawatsunthon is now working on a Master's Project entitled " **A Survey of Communicative English Skills Needed among Engineers of the Thai Airways**". The purpose of this questionnaire is to collect information which will answer the research questions posed in the research study.

The questionnaire is divided into 3 parts as follows:-

Part I : Personal Information of respondent.

Part II : A survey of the actual tasks and degree of English use in communication.

Part III : A survey of attitudes towards the English language.

Your responses to the questions will greatly provide a vital information for conducting this study. Please kindly fill out all the questions and it will be collected by October 30,2003. If you need additional information, please don't hesitate to contact me at : 02-563-8214.

Your kind cooperation is most appreciated.

Part I : Personal Data

Direction: Please fill in this questionnaire by ticking (✓) the appropriate items or writing your answers in the space provided. If you do not wish to reveal your personal information in any part of the question, please write **N/A** for non-applicable information or **X** for unrevealed information in the blank space.

Present Position:Length of appointment :

.....

Length of professional experience with this company:

Part II: A survey of the degree of English usage in communication.

Direction: Please specify a single number of the following list to indicate degree of English using.

- 1 = Seldom (Once Every Three Months)
- 2 = Occasionally (Once a Month)
- 3 = Frequently (Once a Week)
- 4 = Always (Almost Every Day)

1. How often do you use the communication skills to communicate in your workplace?

		Seldom (1)	Occasionally (2)	Frequently (3)	Always (4)
1.1	Listening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. How often do you use the following tasks through the four basic skills of listening, speaking, reading, and writing in your current career?

	Seldom	Occasionally	Frequently	Always
	(1)	(2)	(3)	(4)
2.1 Reading Manual/Instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2 Reading e-mail/Technical News	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3 Writing Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4 Introducing Maintenance Document	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5 Discussion with foreign engineers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6 To be audited from foreign auditors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.7 Telephoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8 Presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.9 Seminar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.10 Others.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part III : A survey of attitudes towards the English language.

3. Is English competence considered to be an important key for your business success?

Yes

No

4. Do you consider English as your advantage?

Yes

No

5. If yes, do you want your company to provide English language training course?

Yes

No

6. If "Yes", please rate the importance of English language skills required in your career path?

		Not Important	Slightly Important	Important	Very Important
		(1)	(2)	(3)	(4)
6.1	Listening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4	Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. To you which skill do you need the most training? Please rank in order 1,2,3, and 4.

7.1 Listening

7.2 Speaking

7.3 Reading

7.4 Writing

8. Would you prefer the training course to focus on only one skill or would you prefer all the four basic skills of listening, speaking, reading, and writing?

Focus on one skill

Integrated skills

9. Would you prefer a native teacher or would you rather have a Thai teacher?

Native Teacher

Thai Teacher

10. How many training hours would be practical for each skill?

10.1 Listening 10-20 20-30 30-40 40-50

10.2 Speaking 10-20 20-30 30-40 40-50

10.3 Reading 10-20 20-30 30-40 40-50

10.4 Writing 10-20 20-30 30-40 40-50

11. If you want to take a course to improve your English skills, which of the following topics would be useful to you? Please specify.

- | | | | |
|-------|---|------------------------------|-----------------------------|
| 11.1 | General conversations | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.2 | English for Social Life | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.3 | Asking /answering
questions techniques | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.4 | Reading and making notes | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.5 | Critically Reading Techniques | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.6 | Minutes Writing | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.7 | Presentation Techniques | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.8 | Telephoning Practice | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.9 | General Grammatical Rules | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 11.10 | Others (if require)..... | | |

Thank You

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APPENDIX F
RAW DATA

Table 11 Number and Percentage of Population Classified by Length of Experience.

Experience	Frequency	Percentage
5-10 Years	16	26.67
11-15 Years	26	43.33
> 15 Years	18	30
Total	60	100

Table 12 Frequency of English Use of Basic Communication Skills.

1. How often do you use the communication skills to communicate in your workplace?

	Seldom (1)	Occasionally (2)	Frequently (3)	Always (4)
Listening	11 (18.3%)	21 (35.0%)	16 (26.7%)	12 (20%)
Mean	= 2.48			
SD	= 1.017			
Speaking	9 (15.0%)	28 (46.7%)	13 (21.6%)	10 (16.7%)
Mean	= 2.48			
SD	= .942			
Reading	0 (0%)	4 (6.7%)	6 (10%)	50 (83.3%)
Mean	= 3.70			
SD	= .788			
Writing	2 (3.3%)	8 (13.3%)	32 (53.4%)	18 (30.0%)
Mean	= 3.10			
SD	= .752			

Table 13 Frequency of the Actual Tasks Based on Four Basic Communication Skills.

2. How often do you use the following tasks through the four basic skills of listening, speaking, reading, and writing in your workplace?

	Seldom	Occasionally	Frequently	Always	Total
	1	2	3	4	
1. reading manual	0	0	10	50	60
2. Reading e-mail/ technical news	2	0	9	49	60
3. Writing report	2	14	31	13	60
4. To be audited	11	6	21	22	60
5. Introducing Maintenance Doc.	11	19	22	8	60
6. Telephoning	26	16	13	5	60
7. Discussion with foreign engineers	4	12	34	10	60
8. Presentation	34	18	7	1	60
9. Seminar	30	19	10	1	60
Total	120	104	147	109	60

Table 14 The Attitude towards English Language.

3. Is English competence considered to be an important key for your business success?

	Frequency	Valid Percent
No	1	1.7%
Yes	59	98.3%
Total	60	100.0%

Table 15 English Language Training Course Required by THAI's Engineers.

4. Do you want your company to provide English language training course?

	Frequency	Valid Percent
No	0	0%
Yes	60	100%
Total	60	100.0%

Table 16 The Importance of English as Communication Skills.

5. Please rate the importance of English language skills required in your career path?

Communication Skills	Not Important	Slightly Important	Important	Very Important
Listening	3 (5%)	9 (15.0%)	24 (40.0%)	24 (40.0%)
Mean	= 3.15			
SD	= .860			
Speaking	7 (11.7%)	4 (6.7%)	13 (21.7%)	36 (60.0%)
Mean	= 3.30			
SD	= 1.030			
Reading	7 (11.7%)	15 (25.0%)	18 (30.0%)	20 (33.3%)
Mean	= 2.85			
SD	= 1.022			
Writing	17 (28.3%)	16 (26.7%)	13 (21.7%)	14 (23.3%)
Mean	= 2.40			
SD	= 1.138			

Table 17 Skills Training Needs.

6. To you which skill do you need the most training?

Communication Skills	Not Needed (1)	Slightly Needed (2)	Needed (3)	Most Needed (4)
Listening	4 (6.6%)	13 (21.7%)	33 (55.0%)	10 (16.7%)
Mean = 2.82				
SD = .792				
Speaking	2 (3.3%)	4 (6.7%)	16 (26.7%)	38 (63.3%)
Mean = 3.50				
SD = .770				
Reading	36 (60.0%)	18 (30.0%)	0 (0%)	6 (10.0%)
Mean = 1.60				
SD = .924				
Writing	18 (30.0%)	26 (43.3%)	10 (16.7%)	6 (10.0%)
Mean = 2.07				
SD = .936				

Table 18 Focussing Skills Required.

7. Would you prefer the training course to focus on only one skill or would you prefer integrated skills (listening, speaking, reading, and writing).

Skill	Frequency	Valid Percent
Integrated Skill	21	35.0%
One Skill	39	65.0%
Total	60	100.0%

Table 19 Practical Teacher.

8. Would you prefer a native teacher or would you rather have a Thai teacher?

	Frequency	Valid Percent
Native Teacher	55	91.7%
Thai teacher	5	8.3%
Total	60	100.0%

Table 20 Evaluation of Practical Training Hours.

9. How many training hours would be practical for each skill?

	10-20 hours	20-30 hours	30-40 hours	40-60 hours	Mean	SD
Listening	4 (6.67%)	11 (18.33%)	28 (46.67%)	17 (28.33%)	3.15	.954
Speaking	10 (16.7%)	16 (26.7%)	26 (43.3%)	8 (13.3%)	2.37	.920
Reading	17 (28.33%)	28 (46.67%)	11 (18.33%)	4 (6.67%)	3.15	.954
Writing	17 (28.33%)	28 (46.67%)	11 (18.33%)	4 (6.67%)	3.15	.954

Table 21 Study Topic Required by THAI's Engineers.

10. If you want to take a course to improve your English skills, which of the following topics would be useful to you? Please specify.

		Yes	No	Mean	SD
1	General conversations	60 (100.0%)	0 (0%)	3.02	1.000
2	English for Social Life	57 (95.0%)	3 (5.0%)	.95	.220
3	Asking /answering questions techniques	52 (86.7%)	8 (13.3%)	.87	.343
4	Reading and making notes	50 (83.3%)	10 (16.7%)	.83	.376
5	Critically Reading	46 (76.7%)	14 (23.3%)	.77	.427
6	Minutes Writing	48 (80.0%)	12 (20.0%)	.80	.403
7	Presentation Techniques	50 (83.3%)	10 (16.7%)	.83	.376
8	Telephoning Practice	49 (81.7%)	11 (18.3%)	.82	.390
9	General Grammatical Rule	48 (80.0%)	12 (20.0%)	.80	.403
10	Other Topics (if require)	-	-	-	-

VISTA

VISTA

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