#### **CHAPTER I**

#### INTRODUCTION

## 1.1 The Background of The Study

Language is representation of thought, feeling, objective, action and destination. People use language to communicate their thoughts to others. But language is not just limited to the act of communication of one's thought. People do many more things with language.

Language is a means of communication in social interactions. It plays a very vital role in human's life. It has various functions such as: to express ideas, feelings, and desires and most of human's knowledge and culture stored and transmitted through language. It means that it is used as a social instrument to show language users identity in a society.

Besides, it is also the expression of human communication throught which knowledge, belief, and behaviour can be experienced, explained, and shared. This sharing is based on systematic, conventionally used signs, sounds, gestures, or marks that convey understood meanings within a group or community. When discussed more technically as a general phenomenon then, a language, particularly used in a conversation conducted between pilots and air traffic controllers or 'air-ground communication' to maneuver the flight operation in order to ensure safe and efficient performance is called 'radiotelephony'. Task-oriented, high-workload, and high-technology context is the best description of

communication setting in which pilots and air traffic controllers have encountered and the particularized language called 'radiotelephony' is emerged.

To provide a brief background of 'radiotelephony', the context of 'airground communication' will be explicitly disclosed. 'Air-ground communication' is a voice communication carried through radio transmission. Most aircraft are equipped with at least one high-quality radio for a communication which operates in the very high frequency (VHF) radio band. The VHF band is between 108 MHz and 137 MHz, which covers its use for commercial and general aviation, radio navigational aids, air traffic control and others. Aircraft fly high enough so that their transmitters can be received hundreds of miles away. The transmission is controlled by push-to-talk system; therefore the speaker needs to push the button every time in order to relay the message.

Otherwise, the message cannot be dispatched to the co-participant. Since 'air-ground communication' is a conversational discourse via specific technological equipment, occasionally interrupted with high frequency noise, the communication pattern and the language use are definitely unique. To conduct the efficient air-ground communication, 'radiotelephony' is deliberately designed for pilots and air traffic controllers represented in narrow, specialized and rigid linguistic subset of English language by the working group of International Civil Aviation Organization (ICAO), named 'International Language for Aviation (ILA)'.

Basically, air-ground communication is performed in correlation with the ground of non face-to-face conversation which occurs between a pilot and an air

traffic controller who perform their activities from different workplaces, an aircraft and a controller center. While controlling the aircraft, a pilot needs to perform a professional communication through a specific radio frequency with an air traffic controller who is more or less the same as a traffic police. A controller also has to initiate the conversation with a pilot from time to time to ensure the aircraft position and to enforce it on the accurate flight path. Within a particular airspace, there are numbers of aircraft operating in and out to their destinations. Therefore, it is necessary to systematically deliver messages and instructions back and forth.

Air traffic controllers and flight crews shall use appropriate communicative strategies to exchange messages and to recognize and resolve misunderstandings (e.g. to check, confirm, or clarify information) in a general or work-related context. The communication can be seen as follow:

LOD	SOURCE	CONVERSATION	MOVE	SPEECH FUNCTION	MOOD
1	Pilot	Elmendorf tower, Yukla two seven heavy. We have an emergency. Lost number two engine, we've taken some birds	K1	Statement	Declarative
2	ATC	Yukla two seven heavy, roger. Say intentions!	K2 (K1)	Question	Imperative
3	Pilot	coming back around for an emergency return Yukla two seven heavy	K1	Statement	Declarative
4	ATC	Two seven heavy, roger	K1	Response statement	

Refer to the above dialogue, when the pilot said "Elmendorf tower, Yukla two seven heavy. We have an emergency. Lost number two engine, we've taken some birds." it mean that the pilot was giving information to the ATC about the emergency situation of lost number two engine that was ingested by some birds. Then ATC acknowledged it by saying "say intentions!" It mean that the ATC wants to know what the pilot will do and the pilot says that they return back to Yukla airport to conduct the emergency landing. So the ATC acknowledged the situation by preparing of assistant on arrival.

The exchange structure is happened between pilot and ATC show that there is marked in using speech function. The ATC asks to pilot 'what he will do? (interrogative sentence)' become imperative. The communication happened above is nonstandard but It permits in emergency situation to avoid miscommunication between pilot and ATC.

According to Halliday (1994: 8) the conceptual framework consist of three distinct closely related senses in its interpretation (1) of text, (2)of the system, and (3) of the elements of linguistic structures. Each element in a language is explained by reference to its function in the total linguistic system. Therefore, a functional grammar is one that construes all the units of a language – its clauses, phrases and so on – as organic configurations of functions.

In other words, each part is interpreted as functional with respect to the whole. Montgomery in thompson (2003 : 38) said that language informs the one thinks, the way one experiences, and the way one interacts with each other. Language provides the basic of the community, but also the grounds of division.

Systematic knowledge about language and practical awareness of how it works is fundamental to the process of building mature communities.

There are two terms mostly involved while interacting or communicating, they are: speaker or writer and listener or audience. In the act of speaking, the speaker adopts for himself a particular speech role, and in so doing assigns to the listener a complementary role which he wishes him to adopt in his turn. For example, in asking question, a speaker is taking on the role of seeker of information and requiring the listener to take on the role of supplier of the information demanded.

The most fundamental types of speech role are (1) giving and (2) demanding. Either the speaker is giving something to the listener, for example, a piece of information or he is demanding something from him. Even these elementary categories already involve complex notions: giving means 'inviting to give". The speaker is not only doing something himself, he is also requiring something of the listener. Typically, therefore, an 'act' of speaking is something that might more appropriately be called an 'interact': it is an exchange, in which giving implies receiving and demanding implies giving in response.

Besides 'giving' and 'demanding' there are another distinction, equally fundamental, that relates to the nature of the commodity being exchanged, namely: either goods -&-services or information. The exchange of goods-&-services refer to the non-verbal exchange commodity, and information refers to a verbal one. These two variables, when taken together, define the four primary speech functions of statement, question, offer, and command.

The discussion of this study refers to the title of this thesis, namely: speech functions of radiotelephony in air ground communication. There are some reasons for choosing the speech functions of radiotelephony in air ground communication. First, Air ground communication is used in a conversation conducted between pilots and air traffic controllers. The language used among them will be analyzed to find out what types of speech functions are used in air ground communication, why these types used as the way they are and in what context the speech functions is used as the ways they are.

Besides that, the studies which focuses on the speech functions in air ground communication is rarely found. The previously research was done by Ms. Paneeta Nitayaphorn (2009). The title is A Reference Grammar of Radiothelepony in Air-Ground Communication. It is deliberately conformed in four crucial linguistic domains; discourse, lexicon, syntax and morphology by examining two sets of data; one from the manual and another from the actual communication. The main communicative functions in air-ground discourse are denoted by *directing, informing* and *eliciting*.

Therefore, this study attempts to investigate the speech functions used in air-ground communication when the unusual situation or emergency occur. The main aspect to be observed is the speech functions such as making an offer, a command, a statement, and a question among the pilot and air traffic controller. These facts seem to be a motivation to conduct the present study dealing with speech functions which are conveyed by pilots & controller in order to find out what types of speech functions used in air-ground communication.

# 1.2 The Problems of The Study

The problems are formulated as the following

- 1. What types of speech functions are used in airground communication?
- 2. Why these types used as the ways they are?
- 3. In what context the speech functions is used as the ways they are?

### 1.3 The Objectives of The Study

In line with the problems, the objectives of the study are:

- 1. to describe what types of speech functions are used in airground communication,
- 2. to investigate why these types used as the ways they are, and
- 3. to investigate in what context the speech functions is used as the ways they are.

# 1.4 The Scope of The Study

This study attempts to investigate the speech functions used in air-ground communication. The main aspect to be observed is the speech functions such as making an offer, a command, a statement, and a question among the pilot and air traffic controller. The focus is on the meaning or speech functions when the unusual situation or emergency occur.

# 1.5 The Significance of The Study

Findings of the study are expected to be significantly relevant theoretically and practically. Theoretically, the research findings can provide a new contribution to the development of the conceptual knowledge about the speech function used in the air-ground communication. Besides, this findings can account for the aspects of the situation in which a speech function occurs and how people use and interpret a speech. Consequently, it will give better understanding and new insight on how speech functions is related to the aspect of functional grammar study.

Practically, the findings of this research can be used for designing the appropriate language curriculum with reference to essential linguistic elements for pilots and air traffic controllers in order to enhance their proficiency in communicative skills especially when applying radiotelephony during flight operations and controlling aeroplane. And improving the language system of radiotelephony defined and used in air-ground communication to prevent misunderstanding.

