

Γνώθι σεαυτόν

– Know yourself –

(Inscription found at the Apollo's temple in Delphi, Greece)

To Maria and Hans

Linguistik

Franz Rubenbauer

**Linguistics and flight safety:
Aspects of oral English communication in aviation**

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Abstract

Spoken is not yet heard; heard is not yet understood; understood is not yet agreed; agreed is not yet applied; and applied is not yet always applied. The quotation of the Austrian ethologist and Nobel-Prize winner Konrad Lorenz reflects general aspects of human behaviour, especially when it comes to communication. Successful *verbal* communication is a human activity, which concerns the lives of many people when it is used for aeronautical purposes. This book gives a linguistic overview of how the English language has been adopted and adapted to serve the demands of international aeronautical communication. More specifically, it explains how Standard English has been modified to improve efficient communication between pilots and air traffic controllers from all over the world. After a brief historical outline of the development of English as *the* language of aviation, its standardised use will be exemplified by means of a hypothetical flight. This follows a general discussion of a code suitable for aeronautical communication and the newly introduction of language proficiency requirements in plain English with all its implications. The ensuing presentation of structural layers of Standardised Phraseology as the procedural-operational part of Aeronautical English starts with the conscious reduction of the phonemic inventory which ensures better understanding and easier pronunciation, followed by a description of the lexical core areas including criteria for the preference and selection of certain expressions and word groups. A discussion of the (morpho)syntactic simplifications and the semantic features shows the goal of this application of English: to deliver unambiguous messages as efficiently as possible in a professional environment where speedy communicative exchange is vital. After each chapter, and under the heading “linguistics and flight safety”, findings are presented that highlight the ambiguities in communication which have occurred and resulted in accidents or near-accidents, involving both non-native and native speakers of English worldwide. Ultimately, this book connects two systems: the aeronautical system and language, being considered a system itself.

List of abbreviations

AIP	Aeronautical Information Publication
AOM	Aircraft Operating Manual
ASRS	Aviation Safety Reporting System
ATC	Air Traffic Control/ air traffic controller(s)
CAA	Civil Aviation Authority
CAIR	Confidential Aviation Incident Report
CDA	Critical Discourse Analysis
CRM	Cockpit (or Crew) Resource Management
CVR	Cockpit Voice Recorder
EFL	English as a Foreign Language
EGP	English for General Purposes/ Standard English/ plain English
EIL	English as an International Language
ESP	English for Specific Purposes
FAA	Federal Aviation Administration (US civil aviation authority)
FL	Flight Level
GPWS	Ground Proximity Warning System
HF	High Frequency
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
MDA	Minimum Descent Altitude
MIILPR	Manual on the Implementation of ICAO Language Proficiency Requirements
NATO	North Atlantic Treaty Organisation
POH	Pilots' Operating Handbook
RT	Radiotelephony
SID	Standard Instrument Departure
SOP	Standard Operating Procedure(s)
SP	ATC/ Standard Phraseology/ standard words and phrases/ "Airspeak"
STAR	Standard Arrival Route
TEM	Threat and Error Management
UTC	Universal Time Co-ordinated
VFR	Visual Flight Rules