

3

Example Pilot and Air Traffic Controller Wake Turbulence Training Program



(This page intentionally left blank)

Example Pilot and Air Traffic Controller Wake Turbulence Training Program

3

Table of Contents

Section	Page
3.0	Introduction 3.1
3.0.1	The Goal of the Example Wake Turbulence Training Program 3.1
3.0.2	Overview of the Example Training Program 3.1
3.1	Ground Training Program 3.1
3.1.1	Ground Training Objectives 3.1
3.1.2	Ground Training Modules 3.1
3.1.3	Ground Training Syllabus 3.2
3.1.4	Additional Ground Training Resources 3.2
Appendix 3-A	Pilot and Air Traffic Controller Guide - Pullout Section
Appendix 3-B	The Pilot and Air Traffic Controller, Student Examination, Instructor's Examination Guide and Summary of Answers
Appendix 3-C	Wake Turbulence Safety Briefing
Appendix 3-D	Wake Turbulence Safety Training Aid - Video Script <i>Wake Turbulence Avoidance - A Pilot and Air Traffic Controller Briefing</i>

(This page intentionally left blank)

Example Pilot and Air Traffic Controller Wake Turbulence Training Program

3

3.0 Introduction

The Example Pilot and Air Traffic Controller Wake Turbulence Training Program is one part of the Wake Turbulence Training Aid. The other parts include Section 1, Wake Turbulence – Overview for Training Aid Users; Section 2, Pilot and Air Traffic Controller Guide to Wake Turbulence; and Section 4, Wake Turbulence Training Aid – Background Data, and a video.

3.0.1 The Goal of the Example Wake Turbulence Training Program

The overall goal of the Wake Turbulence Training Aid is to reduce the number of wake turbulence related accidents and incidents by improving the pilot's and air traffic controller's decision making and situational awareness through increased and shared understanding and heightened awareness of the factors involved in wake turbulence. The example training program's aim is to illustrate the type of training that should be conducted to meet the goal of the Wake Turbulence Training Aid.

3.0.2 Overview of the Example Training Program

Although structured to stand alone, the Example Pilot and Air Traffic Controller Wake Turbulence Training Program can be integrated with existing training and checking programs. This is a ground training program that describes and suggests a method for applying the academic training portions of the Wake Turbulence Training Aid. It suggests a comprehensive review of the subject by use of a pullout guide, Appendix 3-A, to supplement the knowledge learned from Section 2 of this Aid. Additionally, it contains an examination on wake turbulence information, a briefing guide for instructors, and an example briefing aimed at a classroom environment. Finally, it contains information regarding the video portion of the example training program.

3.1 Ground Training Program

The Ground Training Program focuses on improving knowledge and increasing awareness of wake turbulence.

3.1.1 Ground Training Objectives

The objectives of the Ground Training Program are to:

- educate pilots and air traffic controllers on wake turbulence and avoidance of the phenomenon;
- increase the wake turbulence situational awareness of pilots and air traffic controllers (situational awareness being defined as an accurate perception by pilots and air traffic controllers of the factors and conditions currently affecting the safe operation of the aircraft and the crew); and
- provide usable information to develop an effective ground training program.

A suggested syllabus is provided in Section 3.1.3 with the knowledge that no single training format or curriculum is best for all users or training situations. The training materials have been designed to “stand alone.” As a result, some redundancy of the subject material occurs. However, using these materials together in the suggested sequence will enhance overall training effectiveness.

3.1.2 Ground Training Modules

The following ground training modules are available to prepare an academic curriculum:

The Pilot and Air Traffic Controller Guide to Wake Turbulence (Section 2) is a comprehensive treatment of the wake turbulence information and guidance. The Guide is designed as a document that may be reviewed by an individual pilot or controller at any time prior to formal training.

The Pilot and Air Traffic Controller Guide – Pullout Section, Appendix 3-A, is intended to be a condensed version of the Pilot and Air Traffic Controller Guide to Wake Turbulence, Section 2, suitable for review on a recurring basis. It is designed for situations in which time, location, or recurrent training in this subject does not call for use of the other training sections.

The Pilot and Air Traffic Controller Examination, Appendix 3-B, is a set of questions based on the material contained in Section 2. These questions are designed to test the pilot’s and air traffic controller’s knowledge of each section of the Wake Turbulence Training Aid. In a wake turbulence training curriculum, these questions may be utilized in one of two ways:

- 1) As part of a pilot’s or air traffic controller’s review of Section 2, or

- 2) As an evaluation to determine the effectiveness of the pilot or air traffic controller’s self study prior to ground training.

The Wake Turbulence Safety Briefing is a paper copy of view foils with descriptive words for each that can be used for a classroom presentation. The briefing supports a classroom discussion of Section 2.

Video: *Wake Turbulence Avoidance - A Pilot and Air Traffic Controller Briefing* presents the wake turbulence problem, procedures for avoiding wake turbulence, and the interaction of pilots and air traffic controllers necessary to prevent wake turbulence accidents and incidents. Appendix 3-D is a paper copy of the script.

3.1.3 Ground Training Syllabus

Combining all of the previous ground training modules into a comprehensive training syllabus results in the following suggested Ground Training Program:

<u>Training Module</u>	<u>Method of Presentation</u>
• Pilot and Air Traffic Controller Guide to Wake Turbulence (Section 2)	Self Study/Classroom
• Pilot and Air Traffic Controller Guide Pullout Section (Appendix 3-A)	Recurring Self Study
• Pilot and Air Traffic Controller Student Examination (Appendix 3-B)	Self Study/Evaluation
• Wake Turbulence Safety Briefing (Appendix 3-C)	Classroom
• Video: <i>Wake Turbulence Avoidance - A Pilot and Air Traffic Controller Briefing</i> (Appendix 3-D is the storyboard script of the video)	Classroom

3.1.4 Additional Ground Training Resources

The Wake Turbulence Training Aid - Background Data, Section 4, is an excellent source of background information for an instructor

needing a more detailed explanation of the material contained in the Pilot and Air Traffic Controllers Guide to Wake Turbulence or the video: *Wake Turbulence Avoidance - A Pilot and Air Traffic Controller Briefing*.