



Aviation  
Industry  
Computer Based Training  
Committee

# AICC GUIDELINES and RECOMMENDATIONS

AGR 001  
1 October 1994

VERSION  
1.0

## AICC PUBLICATIONS

### RECOMMENDATION

The AICC recommends that developers and users of aviation industry computer-based training (CBT) adhere to the AICC Guidelines and Recommendations and technical documents identified in this document. These documents have been developed to promote and enhance the interoperability of CBT systems and courseware within the aviation industry.

The AICC further recommends that developers and users of aviation industry CBT become aware of important interoperability issues through the white papers and working documents prepared by the AICC. The AICC does not recommend implementing any guidelines stated in these documents until they have been formally approved by the AICC voting membership.

### 1.0 BACKGROUND

The AICC generates and distributes three different types of documents. The first type of documentation includes the *AICC Guidelines and Recommendations*, or AGRs. AGRs represent the official voice of the AICC with respect to a designated area. All AGRs have been formally voted upon and approved by the general voting membership of the AICC. AGRs are identified by the prefix "AGR" followed by a number (e.g., AGR-001)

The second type of documentation are the technical reports. Technical reports typically contain the technical detail underlying an AGR. Technical reports also represent the official word of the AICC in that they have undergone the same formal approval process as an AGR. Technical documents are identified with a prefix which designates the subcommittee from which they originate as follows:

**CMI**.....Computer-Managed Instruction  
**COM**.....Communications  
**CRS**.....Courseware Technology  
**EXC**.....Executive Committee  
**ITL**.....Independent Test Lab  
**MPD**.....Media and Peripheral Devices  
**PLT**.....Platform  
**WOS**.....Window & Operating Systems

Each document has a three digit suffix. The documents are generally numbered sequentially and chronologically. However, because some documents are superseded and others may be canceled, the documents ID's may skip numbers (e.g. MPD 001, MPD 002, MPD 003, MPD 005).

The third type of documentation are white papers and working documents. These documents do not have formal approval from the general voting membership. Instead, they are working papers generated by a subcommittee in the course of their work toward an AGR or in their development of a white paper. The material in these documents may change radically from one meeting to the next as the issues are clarified and consensus is acquired. Their identification follows the same format as the technical documentation.

## **2.0 AICC GUIDELINES AND RECOMMENDATIONS (AGRs)**

### **AGR 001 - AICC PUBLICATIONS** (1 June 1994)

This document summarizes all of the publications issued by the AICC. It identifies and provides an abstract of current AICC Guidelines and Recommendations, technical documents, and white papers.

### **AGR 002 - COURSEWARE DELIVERY STATIONS** (12 March 1993)

This document contains recommendations to the aviation industry for the acquisition of a computer-based training student delivery station. Recommendations, with accompanying rationale, are provided for a delivery station's CPU, clock speed, bus, power supply, operating system, RAM, CD-ROM, graphic adapter, monitor, mouse, keyboard, digital audio system, videodisc player, and network.

### **AGR 003 - DIGITAL AUDIO** (24 September 1992)

This document recommends guidelines that promote the interoperability of digital audio. Interoperability means the ability of courseware with audio to playback on different PCs with different audio cards in them. It also means the ability of a single PC to playback courses with audio from different vendors.

### **AGR 004 - OPERATING/WINDOWING SYSTEM** (1 February 1993)

This document provides a formal recommendation to the aviation industry for an operating and windowing system used for delivery of CBT. It contains the results of a survey of the major operating and windowing systems conducted by the AICC.

### **AGR 005 - CBT PERIPHERAL DEVICES** (8 March 1994)

This document recommends guidelines that promote the interoperability of the following peripheral devices: video overlay card, videodisk player, and XY input device (such as a touch screen, mouse, or trackball), and part task trainers.

### **AGR 006 - COMPUTER-MANAGED INSTRUCTION** (1 October 1993)

This document recommends guidelines that promote the interoperability of CMI systems. Interoperability means the ability of a given CMI system to manage CBT lessons from different origins. It also includes the ability for a given CBT lesson to exchange data with different CMI systems.

### 3.0 TECHNICAL REPORTS/DOCUMENTS

#### **MPD 001 - Plug & Play Guidelines for AICC CBT Drivers** (18 March 1992)

This document describes the way in which different hardware drivers for CBT peripherals may be designed to work together, in the same system, simultaneously.

#### **MPD 002 - Digital Audio Portability Guidelines** (23 December 1993)

This document is a cooperative effort of the Interactive Multimedia Association (IMA) and the AICC. It defines a standard command set for portability of applications across different digital audio systems. It also defines a format for digital audiofiles which allows audio data to be ported to a different digital audio subsystem. Its intended audience includes digital audio system manufacturers, CBT system integrators, and CBT authoring system developers.

#### **MPD 003 - AICC Extensions to the IMA Recommended Practices** (4 December 1992)

These extensions to the IMA Recommended Practices identify additions to the IMA document Recommended Practices for Multimedia Portability. These extensions to the IMA are necessary to obtain the functionality and performance required by typical interactive video courseware used in the aviation industry.

#### **MPD 005 - Part Task Trainer Interfacing** (17 June 1994)

This document provides a detailed description of the AICC serial cable interfacing of CBT hardware with Part Task Trainers (PTT).

#### **CMI 001 - CMI Guidelines for Interoperability** (19 July 1994)

This document provides a set of recommendations and guidelines for achieving interoperability among different computer-managed instruction (CMI) systems and between CMI systems and computer-based training (CBT) applications. The document defines a number of CMI principles and terms. It addresses interoperability in the following areas: moving course structure and content between systems, communications between a CMI system and a lesson, and storing student performance data. Since each of these areas of interoperability depends upon data files, guidelines for the format and content of these data files are provided.

#### **CRS 001 - Documentation Guidelines for AICC non-AGR Publications** (11 Sept. 1992)

This document describes the form and format of written documentation produced by AICC members. It outlines an effective method for communicating ideas on page and establishes a uniform format for non-AGR documents.

#### **CRS 002 - Glossary of Terms Related to Computer-Based Training** (25 May 1994)

This document provides the definition for numerous terms used in computer-based training operations. The goal is to provide AICC members with a common language for communicating internally about instruction, particularly CBT.

#### **CRS 003 - Hierarchy of CBT Terms for AICC Publications** (23 October 1992)

This document is designed to establish a useful hierarchy of levels of instruction and define terms in the hierarchy that are applicable to the aviation community.

**ITL 001 - CBT Courseware/Hardware Matrix** (15 September 1993)

This document is a catalog of over 70 flight and maintenance CBT courses developed, used, and sold by airframe manufacturers, CBT suppliers, and airlines. This document identifies the specific student delivery station, file server, and peripheral requirements for implementing each course.

**ITL 002 - Test Reports** (14 June 1993)

This document contains final test results of the Independent Test Lab for interoperability of CBT courseware and systems.

**EXC 001 - Roles and Responsibilities of AICC Working Group Chairmen** (5 June 1992)

This document is designed to provide assistance to the chairmen of ACC subcommittees and working groups. It identifies what is expected of a working group chairman. It outlines the roles and responsibilities in organizational matters, establishing technical directions and goals, handling meetings, and generating reports.

#### **4.0 WHITE PAPERS, WORKING DOCUMENTS AND OTHER PUBLICATIONS**

##### **MPD 006 - AICC Audio and the Migration to Windows.**

This document outlines a draft recommendation for accommodating DOS-based ADPCM audio used in AICC Legacy courseware under Windows audio. It presents a strawman strategy for eventually moving to Windows audio.

##### **MPD 007 - Simulation Interoperability.**

This working document describes the evolution of AICC efforts to enable CBT lessons to launch and control desk-top simulation software.

##### **EXC 002 - The AICC Presentation.**

A set of hard copy pages that can be reproduced as overhead transparencies for presentations to others about the AICC. This presentation covers the objectives, organization, operation, achievements, and activities of the AICC. Color overhead transparencies or 35mm slides can be provided through special arrangement.