

## **Comments on DOT NPRM 14 CFR Part 382**

**NPRM:**                    **Accommodations for Individuals Who Are Deaf, Hard of Hearing, or Deaf-Blind**  
**14 CFR Part 382**  
**RIN 2105-AD41**  
**OST Docket No. 2006-23999**

**Submitted by:**        **World Airline Entertainment Association (WAEA)**

**Submission Date:**    **23 June 2006**

### **World Airline Entertainment Association (WAEA)**

Founded in 1979, the WAEA is a not-for-profit international organization representing nearly 100 passenger airlines and over 250 suppliers to the airline inflight entertainment (IFE) industry (including aircraft manufacturers, major electronics manufacturers, motion picture studios, audio/video post-production labs, broadcast networks, licensing bodies, communications providers, etc.) worldwide. The WAEA sponsors international conferences and exhibitions, educational workshops, technology meetings, industry forums, and industry research and publishes industry periodicals. Through its Technology Committee and Working Groups, the WAEA also develops recommended technical and operational standards and guidelines for the industry. The WAEA main headquarters is located in McLean, Virginia, USA. For more information on the WAEA and the IFE industry, please visit the WAEA website at [www.waea.org](http://www.waea.org). *See complete list of WAEA Member-Companies attached.*

### **Introduction to Comments on Proposed Rule (with specific reference to §382.69)**

The positions set forth in this statement are the result of a consensus process which includes review by all WAEA members. WAEA is confident that these positions represent the views of the airline inflight entertainment industry generally. Members of WAEA reserve the right to submit supplemental or differing comments on behalf of their individual companies.

The airline inflight entertainment (IFE) industry wishes to respond to the needs of the disability community in terms of making inflight audio-visual content accessible to passengers who are deaf or hard of hearing. However, some of the captioning requirements and implementation timelines proposed in this NPRM (and specifically §382.69) would impose undue and unacceptable financial burdens on an already beleaguered airline industry. Moreover, some of the requirements are simply not technically or operationally feasible given the:

- technical limitations of both legacy and new IFE systems,
- variations among proprietary IFE systems currently in service and being installed,
- limited space for and readability of captioning on both small “personal” inflight screens and on more distant “communal” inflight screens,

- intrusion factor of open captions for non-impaired passengers,
- limited cabin-server storage for additional captioned video files to complement up to eight languages offered on board, and
- lengthy aircraft retrofit/fleet order cycles and IFE system design/certification time periods.

**Basis for WAEA Comments (with specific reference to §382.69)**

The following key points are drawn from our forum-discussions with WAEA-member airlines, IFE system manufacturers/engineers, motion-picture studios and distributors, broadcast networks, audio/video post-production labs, and other companies who would be directly impacted by the proposed rule changes:

1. In practice and implementation, the new requirements (proposed under the NPRM) are mostly dependent on the *IFE system* and not the *aircraft*; and, the Rule requirements should be addressed to the specific IFE systems currently available.
2. The proposed Rules make no distinction between English-language and non-English-language safety, informational, and entertainment product. Particularly due to limitations of video files that may be available on the aircraft, WAEA requests that these Rules be expressly made applicable only to require that accommodations be made for English-language video product. Furthermore, as non-U.S. countries could likewise create their own native-language captioning requirements for entertainment product, which would again significantly reduce or even eliminate entertainment product due to limitations of video files if added to an English-language accommodation, WAEA requests that accommodations with respect to entertainment product be limited to those flights wherein the majority of the entertainment product exhibition occurs while in United States territory.
3. Typically, today's installed IFE systems are based on proprietary rather than standard architectures and technologies.
4. In general, today's installed base of IFE systems are *not* of the kind that "only requires the pressing of buttons that already exist on the television or audiovisual equipment." Airline inflight systems were not designed to accommodate today's *broadcast* closed-captioning signals and technologies.
5. There are significantly different issues between "open captions" and "closed captions."
6. There are significantly different issues between "safety videos" and some "informational videos" versus "entertainment" content.
7. There are significantly different issues between communal viewing screens and personal viewing screens.

Screen-size/Intrusion. For the aircraft cabin that utilizes communal screens, there are issues of screen size, passenger distance from the screen, the readability of open captions, and the amount of "intrusion" on the picture that is imposed by the captions.

There are also issues with respect to the limitations of the captions. That is, given screen size and distance from the passenger, can full “descriptive” captions (rather than dialogue-only captions) be accommodated?

Captions *Not* System-Controllable. Today, open captions must be “burned into” the video frame and are *neither* system-controllable, *nor* (in the case of personal video screens) seat-controllable. If an airline wishes to offer passengers a choice of a movie with captions and without, two *separate* versions of the movie must be stored, thus limiting the number of movie titles and programming available to the system (and the passenger). Future systems and systems that can be upgraded should support controllable captioning.

Providing portable IFE units specially equipped for hearing-impaired passengers might be an option if the passenger notifies the airline in advance, however this presents a new cost and operational challenge that does not exist today. (We refer to portable media players or portable DVD players.)

### **Notes on “Captioning” and “Subtitling” as it applies to the Airline Inflight Environment and IFE System Technology**

- Captions are either open or closed.
  - Open Captions reside on the picture and cannot be turned off.
  - Closed Captions are text displayed *as an overlay* to the picture and can be turned on or off by the viewer if the particular IFE equipment has this capability.
- Captions are generally understood as providing a *text description* of all sounds coming from the program to help a hearing-impaired person experience the program, but subtitles may be used in the same manner as either open or closed captions. Subtitles provide a text translation of dialogues only.

We propose that subtitles in the English language be permitted when captions are not available from the entertainment provider.

Given the limitations of IFE screens (size and distance from viewer), we would request greater flexibility in the implementation of captioning regarding type-size/color, background color, etc. Instead of white letters on black background, we would like to have the choice of using the same process as subtitling, which provides readable characters while keeping most of the picture visible. This type of implementation also interferes less with the appearance of the entertainment product, which is always a significant concern of the copyright holders.

Moreover, since many non-English programs are *not* provided with captions or English subtitles, yet many flights may have foreign passengers who want to see product in their own language and would be denied the opportunity if such product was required to be captioned or subtitled, we recommend that no accommodation be required with respect to such entertainment product unless the product provider has made a subtitled or captioned version available. This will provide greater opportunity for entertainment providers to

make a broader scope of entertainment available for viewing, while still providing appropriate accommodations for persons who are deaf or hard of hearing.

Finally, various factors must be considered in preparation of the final product that requires flexibility in the rules to ensure the widest possible consumer choices. For instance, without choice in a method of captioning, there may be delay in providing the product to airlines. Moreover, in some cases, talent or others involved in the production of a motion picture must provide their approvals before the product is distributed, and such approval may be withheld if the captioning is overly invasive in the product.

### **Comments/Suggested Revisions to Specific Requirements of § 382.69**

#### ***§ 382.69 What requirements must carriers meet concerning the accessibility of videos, DVDs and other audio-visual presentations shown on board aircraft to individuals who are deaf and hard of hearing?***

*(a) As a carrier you must ensure that all videos, DVDs and other audio-visual displays played for safety and/or informational purposes in aircraft are high-contrast captioned (e.g., white letters on consistent black background).*

*You must meet this requirement according to the following timetable:*

*(1) Safety briefings. You must provide high-contrast captioning (e.g., white letters on a consistent black background) on new and existing systems within [a date one-hundred and eighty (180) days after the effective date of this rule].*

Response: US Flagged airlines already offer English-language captioning as high-contrast open captions for safety announcements when their aircraft supports video displays of such announcements. These high-contrast captions are not necessarily white letters on black background but are deemed just as legible. And provided the proposed Rule requires only English-language captions, we don't anticipate any implementation problem by the due date of 180 days after the effective date of this Rule. If, however, the Rule requires captioning in each language for which there are audio presentations of safety announcements, implementation would take considerably longer than 180 days. It should be noted that airlines already provide printed safety information in each seat pocket throughout the aircraft cabin.

*(i) Prior to [a date one-hundred and eighty (180) days after the effective date of this rule], you must ensure that video, DVD, and other audio-visual displays addressing safety issues are accessible to deaf and hard of hearing persons by using open captioning or an inset for a sign language interpreter as part of the video, DVD, or other audio-visual presentation unless the open captioning or inset for a sign language interpreter would interfere with the video presentation as to render it ineffective or unreadable. In such circumstances, you may use an equivalent non-video alternative to this requirement. This temporary provision applies only to U.S. air carriers*

Response: Most U.S. airlines already offer English-language captioning as high-contrast open captions, again, not necessarily white letters on black background. Provided the proposed Rule requires only English-language captions, we don't anticipate any implementation problem by the due date of 180 days after the effective date of this rule. It should be noted that airlines already provide printed safety information in each seat pocket throughout the aircraft cabin.

(ii) [Reserved]

(2) *Informational briefings. You must provide high-contrast captioning (e.g., white letters on a consistent black background) on new and existing systems by [a date two-hundred and forty (240) days after the effective date of this rule].*

Response/Revisions:

1. “Safety/Informational Briefings” captions are feasible for “pre-recorded” video content only within the proposed time line.
2. For aircraft equipped with audio-only systems, it would be economically (and, in the case of many smaller regional aircraft, technically) infeasible to install video systems strictly for the purpose of displaying captioning to complement the audio announcements. Printed safety information is already offered in each seat pocket throughout the aircraft.
3. Captions or other means for all pilot/crew live announcements are not currently technically feasible. This would require voice recognition in a very noisy environment. To be implemented if and when such systems become technically and economically feasible.

*(b) As a carrier you must also ensure that all videos, DVDs and other audiovisual displays shown for entertainment purposes on new aircraft are high-contrast captioned (e.g., white letters on consistent black background). For purposes of this subsection, new aircraft are aircraft ordered after [insert effective date of this rule] or delivered after [insert date two years from the effective date of this rule], or in which the cabin audio-visual elements have been replaced after [insert the effective date of this rule].*

Response/Revisions:

1. Again, we need to have more flexibility in the implementation of captioning in entertainment content by allowing the entertainment provider the choice to caption or subtitle the product in the manner it deems most appropriate, and limiting the accommodation requirements regarding entertainment product to:
  - (a) English-language product unless the entertainment provider has made non-English subtitles or captions available;
  - (b) the English language; and
  - (c) flights on which the majority of the exhibition of the entertainment product occurs within United States territory; and excluding product made before the advent of captioning if such product is being made available through Video on Demand or multiple channels on individual “seat boxes” because otherwise the expense of captioning or subtitling will eliminate such product from availability, thereby reducing a passenger’s options for entertainment.

Without these limitations, given that many airlines offer up to eight languages for a single video file, the limited onboard video-storage that could not accommodate separate captioned video files for each language would force airlines to substantially reduce their current entertainment content offering, which would have an adverse effect on passengers (who are accustomed to the large library of content available today).

2. We would like to replace the words "new aircraft" with the words "next-generation IFES" (In-Flight Entertainment System) in the NPRM text and request "grandfathering" of all existing IFES.
3. Closed captioning requires user-selection, and existing IFE systems cannot be modified economically to do this.
4. Open captioning can be provided for IFE systems only at the expense of passenger entertainment. Most passengers may find the open captions annoying, spoiling their entertainment experience. Moreover, with respect to the smaller overhead screens utilized to show entertainment product, attempting to read the captions from afar, given the long running time of entertainment product, may prove frustrating at best. Therefore open captioning is not recommended for existing IFES.
5. Finally, many IFE systems currently in development have milestone clauses, which, if missed, would impose severe financial penalties to IFES manufacturers.

In light of all of the foregoing, WAEA recommends that to implement closed captioning for entertainment purposes in new IFES:

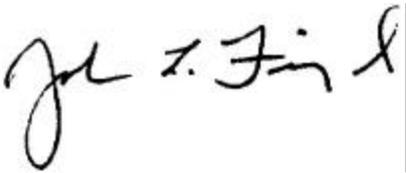
- all IFE systems and equipment be "Grandfathered" that have been or will be FAA-certified during the period prior to the availability for purchase by airlines of closed-captioned-compliant next-generation IFE systems that can comply with this Rule, and
- after such next-generation equipment is available for purchase, require that all new aircraft and all retrofitted aircraft that are changing out all of their "seat boxes" to next generation IFES seat boxes install only compliant equipment (Previously "Grandfathered" equipment installed within an airline's fleet may be installed in other aircraft within the airline fleet and remain "Grandfathered."), and
- while the next-generation systems should support closed captioning, use of open captioned product on that system should also be compliant, thus providing greater choice in available content and passenger viewing options, the captioning to be either in the form of subtitles or descriptive captions.

### **In Conclusion**

As the DOT surely knows, airlines are currently facing record-high fuel costs at a time when many carriers are still struggling to recover from the financial losses resulting from 9-11 and the SARS-scares. The DOT's Rules, as proposed, would impose undue and unacceptable financial burdens on the airline industry. While the IFE industry is eager to address the needs of hearing-impaired passengers, airlines must be allowed to do this by means that are technically and financially feasible and within time-frames that accommodate the product-cycles that are unique to our industry. We believe that our proposed revisions to the requirements and deadlines presented in this NPRM will permit this.

The WAEA appreciates this opportunity to respond to this NPRM on behalf of the inflight entertainment industry. We are available for further discussion on these important issues.

On behalf of the WAEA Board of Directors and membership, respectfully submitted by:

A handwritten signature in black ink, reading "John L. Fiegel", followed by a vertical line.

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## List of WAEA Member-Companies

### Airlines

Aer Lingus	Lufthansa German Airlines
Aeroflot Russian Intl. Airline	Malaysia Airlines
AeroMexico	Mexicana Airlines
AeroSvit Ukrainian Airlines	Northwest Airlines, Inc.
Air Canada	Pakistan Int'l Airlines
Air Europa Lineas Aereas S.A.	Philippine Airlines
Air Mauritius, Ltd.	Qantas Airways Ltd.
Air New Zealand	Qatar Airways
Air Seychelles	Royal Brunei Airlines
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Alaska Airlines	Singapore Airlines Ltd.
Alitalia	SN Brussels Airlines
All Nippon Airways Co., Ltd.	South African Airways
American Airlines	Southwest Airlines
Asiana Airlines	SriLankan Airlines
ATA Airlines, Inc.	Sun Country Airlines
BMI	Swiss International Air Lines
British Airways	TACA International Airlines
Cathay Pacific Airways Ltd.	TAM-Brazilian Airlines
China Airlines	TAP Air Portugal
Continental Airlines	Thai Airways International
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Emirates	US Airways
Etihad Airways	Varig Brazilian Airlines
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EVA Airways Corporation	Virgin America
Finnair	Virgin Atlantic Airways, Ltd.
Frontier Airlines	WestJet Airlines
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Japan Airlines Int'l Co., Ltd.	
Jet Airways (India) Ltd.	
JetBlue Airways	
Kenya Airways	
KLM Royal Dutch Airlines	
Korean Air	
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LOT Polish Airlines	
LTU International Airways	

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Access Inflight Media  
Aero Vista Entertainment  
AEROGROUP  
AeroVision Avionics, Inc. (AAI)  
Agence France-Presse  
Air Travel Video Technologies  
Airbase Services, Inc.  
Airborne Entertainment Ltd.  
Airborne Interactive Ltd.  
Airbus  
Airbus KID-Systeme GmbH  
AirCell, Inc.  
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Airline 35 'Linking People'  
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Atlas Air Film + Media Service  
AVID Airline Products  
AV-Jet Int'l Media Co., Ltd  
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Casinos Austria AG  
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DTI-Software  
Duke International  
E! Networks  
e.Digital Corporation  
ECS  
eFlyte, Inc.  
Electric Sky  
EM. Entertainment GmbH  
Emphasis Media Ltd.  
EMS SATCOM  
Entertainment In Motion  
Euro Communications Co., Ltd  
Europe Images International  
Fairdeal Multimedia Pvt Ltd  
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Film Company  
Flight Level Media Ltd.  
Flight Line Products, Inc.  
Fortune Star Entertainment Ltd.  
France Televisions Distribution  
France Vision Services  
Fremantle Media Ltd.  
Genonsha Co. Ltd.  
Global AirWorks  
Global Solution GmbH  
Phantom Media Ltd.

Ground Glass Media	Phitek Systems Limited
Hamilton Sundstrand	Pilot Film and TV Productions
Hawar Center	Positronic Industries
HBO	Post Modern Edit, LLC
HCL Technologies Limited	Presto S. Publishers
Henry J. Creative Services	Quest International, Inc.
Highpoint Films & TV	RDF Rights
IFE Services Ltd.	RedPoint Media Group Inc.
Images in Motion	RHI Entertainment LTD
Impact International Media	Rockwell Collins
IMS Inflight	Row 44, LLC
Inflight Canada Inc.	SAGEM Avionics, Inc.
Inflight Dublin, Ltd.	SBS Technologies GmbH & Co.KG
Inflight Entertainment, Inc.	SeaTec
Inflight Peripherals Limited	Securaplane Technologies Inc.
Inflight Productions Ltd	Shemaroo Video PVT LTD.
InflightTelevisionInt/EuroNews	Shree International
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Inmarsat Ltd.	SmartJog
INTERACT	Sodielec
Intheairnet	Sony Pictures Releasing
Jaguar Distribution Corp.	Spafax
Jetstream Pictures	Spafax
Just For Laughs	SPC Skyline Ltd.
Latecoere	Starling Advanced Comm.
LiveTV, LLC	Stellar Inflight
LongProsperEnterpriseCo.Ltd	Stonegate Eng. Consulting
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Lumexis Corporation	Sumitomo Corporation
Mark IV IDS - Luminator	SWANK Motion Pictures
Meringue Productions Ltd.	Swedish Film AB
Monster Distributes Ltd.	TEAC Aerospace Technologies
Mphasis, Incorporated	TECOM Industries, Inc.
NAT Seattle	Teledyne Controls
NBC Universal	Telefonix, Inc.
Neptune Enterprises	Television Syndication Co./The
NHK Joho Network Inc.	Terry Steiner International
Nintendo of America Inc.	Thales Avionics Inc.
O.T.D. SA	Thermax
O3 Productions	TOMORROW FOCUS
Octagon CSI	Technologies
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OnBoard International Ltd.	Triagnosys GmbH
Pace Communications	T-Systems International
Panasonic Avionics Corporation	Turner Inflight Services
Paramount Pictures	TV5 Monde
Parthenon Entertainment LTD	Twentieth Century FoxFilmCorp.
Pascall Electronics Limited	TWI
PGA Avionics	Verizon Airfone Inc.
	Video Refurbishing Services
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Warner Bros. Distributing Inc.  
Western Outdoor Interactive  
World Wide Entertainment  
Worldwide Creative Group Inc.  
ZED