



AEROSPACE INFORMATION REPORT	AIR4730™	REV. A
	Issued 1996-09 Revised 2016-05 Reaffirmed 2021-04	
Superseding AIR4730		
(R) GSE Training Videos		

RATIONALE

As technology has changed, the terms used should be updated to permit both older production methods and newer ones made available via new technologies.

FOREWORD

This SAE Aerospace Information Report (AIR) is a documentation of basic video information that is useful in technical areas of the aerospace industry for reference or guidance in the production of training videos for maintenance, service, and operation of ground equipment.

It is also intended to minimize cost and effort expended by the aircraft ground support equipment (GSE) users and to make the manufacturer's videos compatible with the needs of the operator, mechanic, and other qualified personnel.

1. SCOPE

This document provides information on the preparation and use of video for operational and maintenance training of qualified personnel associated with GSE.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AS4828 Technical Manual Requirements for Ground Support Equipment

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3. THE REASON FOR VIDEO TRAINING

- 3.1 Training by means of video is widely used, effective, and sometimes a required part of the support package to the end-user of GSE. This document encourages standardization of all course material. Everyone receives the same information on a specific piece of equipment.
- 3.2 Effective training contributes to safe and efficient equipment operation and maintenance.
- 3.3 Video training can significantly decrease the cost of on-site initial and recurrent training.
- 3.4 Students learn faster and more easily when associating visual and verbal learning.
- 3.5 High quality video provides better visual presentation and credibility than other means of training.
- 3.6 Videos facilitate correct procedures by preproduction planning.
- 3.7 Video allows the instructor to communicate to all skill levels of an audience.

4. SUPPLEMENTAL TRAINING MATERIAL

- 4.1 Video productions should not be considered stand-alone training. To be most effective, all training material should supplement the presentation and explanations of a qualified instructor. All material should be a part of a well-planned program that includes the following:
 - a. Qualified instructors
 - b. Handout material (manufacturer or user prepared)
 - c. On-the-job training (OJT)
 - d. Training Video
- 4.2 Highly detailed troubleshooting or service information should be presented in an oral presentation with detailed handouts or with an instructor available to answer questions after a video.

5. VIDEO CONTENT

- 5.1 Perform a needs analysis prior to any production to make sure a video is the best way to present the material intended.
 - a. When, where, and how will the program be shown?
 - b. What other material or presentation will be used in conjunction with this program?
 - c. Will viewing be mandatory or voluntary?
 - d. Will a qualified instructor be available?

5.2 Program Objectives

- a. Know and address the main points of the subject to be presented.
- b. Know the audience age, education level, and language.
- c. Audience's current knowledge of the topic and attitude towards the topic must be understood.
- d. What other people/departments are working on the subject of this program or might be effected by its content?
- e. Establish a level of competence to be achieved from watching the video.

5.3 Legal Consideration

- a. Copyright clearances
- b. Liabilities

5.4 Presentation

The following are presentation considerations:

- a. How do you want the subject matter presented?
- b. Resource information - what is needed/available and who has access to it?
- c. Who will be the author of the program content?
- d. Who will have final script approval, program approval, and budget approval?
- e. What is the budget? Sufficient budget must be available, though it will vary according to the size of company.

6. PREPRODUCTION

The following are preproduction considerations:

- a. Budget
- b. Research - video content (tech/non-tech)
- c. Media content including photographs, slide, audio, video
- e. Props/costumes
- f. Graphics

- 6.1 Safety must be addressed during all phases of video production for GSE.

7. PRODUCTION

The following are production considerations:

- c. All technical information must be approved by the appropriate personnel prior to production of video.
 - d. Reinforce important narrated segments with "words on screen" whenever possible. Seeing and reading increases retention significantly.
 - e. Use split screen or superimposed boxes to show the relationship between an equipment control and its functional operation.
- 7.1 The following equipment when used should be of sufficient quality to provide clear images on the intended viewing devices.
- a. Cameras, Video, or Still images
 - b. Lights
 - c. Tripod or other image stabilization methods

8. POSTPRODUCTION

The following are postproduction considerations:

- a. Video review
- b. Editing
- c. Graphics and Transitions
- d. Video quality and media types
 - 1080p, 720p, etc.
 - .mp4, .avi, .mov, etc.
- e. Duplication and Distribution
 - DVD, email, website, youtube

- 8.1 Master copies of the video should always be created and stored for duplication and record retention.

9. TRAINING VIDEO CONTENT AND ORGANIZATION

- 9.1 With all of these important considerations it is possible to start to look at specifics in training videos for GSE. Some suggestions would be as follows:
- a. To be most effective, all training material should present ideal operating situations.
 - b. Users and equipment manufacturers are advised to maintain a video library.