SITUATION SIMULATOR FOR FIREFIGHTERS

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PREFACE

This report was prepared by Hughes Associates; Inc., 2730 University Blvd West; suite 902, Wheaton MD 20902 under MIPR Number N87-66. Hughes Associates, Inc., is under a Task Order contract to Naval Research Laboratory, Washington D.C. 20375. This work was conducted for the Air Force Engineering and Services Center, Engineering and services Laboratory (AFESC/RDCF), Tyndall Air Force Base, Florida 32403-6001. Project was funded by USAF/PRAM office at Wright-Patterson Air Force Base, Ohio.

This report summarizes work done between December 1984 and March 1986. HQ AFESC/RDCF program manager was Joseph L. Walker, Wade H. Grimm was the project manager.

The authors wish to recognize and thank the following personnel for their technical consultant support on the program: Mr Hampton Cayson, Fire Chief Fred Hill, CMSgt Hans Finkbeiner, and Mr Miles Young.

This report has been reviewed by the Public Affairs Office (PA) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nationals.

This technical report has been reviewed and is approved for publication.

WADE H. GRIMM
Project Manager

ROBERT J. MAJKA, Lt Colonel, USAF
Chief, Engineering Research Division

JAMES R. VAN ORMAN
Dep Director, Engineering & Services Laboratory

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INTRODUCTION

A. OBJECTIVE

The objective of this effort is to develop, construct, test and evaluate a training situation simulator which will be used to train firefighters in fire suppression hoseline operations, apparatus placement and usage, decision-making tactics, strategy, communications, and situation responses commensurate with their skill levels and positions.

B. BACKGROUND

Increased environmental restrictions on the open burning of hydrocarbon fuel and the increased maintenance and fuel cost for firefighting vehicles have placed severe restraints on firefighting training. Indications are that environmental restrictions will continue to increase. Likewise, the practice of using actual firefighting vehicles for training will become increasingly cost-prohibitive. Fuel shortages and environmental constraints have made the continuance of this type of training unacceptable. The effects of these trends are that the proficiency level of the Air Force firefighters is decreasing. Equipment and training aids must be made available to fire departments to curb this decline in proficiency. A situation simulator system is required to augment the newly developed vehicle training simulator and reinforce the classroom instruction program of the required training subjects as required by AFR 92-1 for proficiency training.

Air Force firefighter training at base level consists of on-the-job training for newly assigned firefighters and recurring proficiency training for qualified fire protection specialists. The training of firefighters requires considerable time and resources. Valuable resources are consumed in creating and extinguishing live fires. While these training situations expose the firefighter to the heat, smoke, and noise of a fire, they are relatively short, the environment is degraded and the fire situation is not reproduced due to wind, weather, etc. In addition to actual live training fires, a multitude of other training requirements are essential to produce a well-rounded and proficient firefighter. An objective rating scale for firefighter efforts is difficult to establish because of changing circumstances. Due to the consistently large turnover of personnel, maintenance cost of the vehicle fleet and fuel consumption, a more economical method of training firefighters is needed. This situation simulator will be designed
specifically to meet the training requirements outlined in AFR 92-1 for recurring proficiency training. A significant aspect of the situation simulator is that it will be able to provide "what if" situations impossible to duplicate in a normal training scenario.

C. SCOPE

The scope of this work consists of: the development of a working model situation simulator design; the construction of a working model fire/crash rescue training situation simulator; the test and evaluation of the simulator; a technical report detailing all the work accomplished in the project; and the preparation of a preliminary purchase description specification for the situation simulator.
SECTION II
PROJECT DEVELOPMENT

The Air Force Situation Simulator for Firefighters was developed as a pilot project to study the effectiveness of interactive video instruction for enhanced firefighter training. The study and drill consist of simulated interior and exterior fire scenarios involving the C-141B wide-body aircraft, as well as aircraft familiarization material. System hardware consists of a laser disc storage medium (which permits high speed, random access to large volumes of data), a microcomputer with touch-sensitive screen, and a standard printer.

Rationale for testing interactive video instruction includes its unique advantages:

- realistic audio/visual fire scenarios
- "what-if" capability
- immediate feedback
- standardized training
- accessibility outside the usual training schedule
- low cost
- frees resources for other uses
- self-paced learning

A. PHASE I - PROJECT DEFINITION

In August 1984, personnel from Hughes Associates, Inc., the Air Force Engineering and Services Center, the Military Aircraft Command, Naval Air Systems Command and the U.S. Naval Research Laboratory met to discuss the role interactive videodisc technology could play in Air Force firefighter training. The discussion was based on a proposal by Hughes Associates, Inc. A decision was made to produce a prototype system based on most frequent/most severe incidents.

In late December a meeting was held with instructors at the Air Force's Chanute Technical Training Center Fire School. The main objective was to determine the most frequent/most severe types of incidents involving wide-body aircraft. Based on the discussion, two scenarios were chosen for the prototype system:

1. A wide-body aircraft with interior electrical fire performs safe emergency landing. Plane is carrying litter patients and attendants.
2. An aircraft with 30,000 gallons of JP-4 fuel develops engine fire on the flight line.

The C-141 was chosen as a "typical" wide-body plane.

A tentative list of elements to be included in each scenario was also developed during this meeting.

1. An introduction to the aircraft including cockpit layout, engines, entries and exits, etc. would be developed.

2. A verbal description of the incident (e.g., "A C-141 loaded with hazardous cargo develops a smoking brake during landing") would be included.

3. Where possible, actual film footage of an incident involving conditions used in the scenario.

4. The development of scenario elements including the results and consequences of decisions would be shown with graphics and animation interspersed where possible with actual film footage.

5. A series of decision paths would be available which would lead to control of the incident with various levels of damage and/or injuries. At least one decision path would lead to the destruction of the aircraft and loss of life.

6. Each decision point would have at least three possible decisions, of which one would lead to worsening conditions.

7. Random selection of fire scene conditions would be designed to provide depth of decision-making and to prevent easy mastery of the scenarios.

8. Each scenario would end with:

   a. an estimate of injuries to aircraft occupants, firefighters, and/or bystanders;

   b. an estimate of fatalities;

   c. an estimate of total damage to aircraft and exposures; and

   d. a summary of decisions which were significant in the control of the incident and those which caused increased loss or injuries.
Another outcome of the meeting at Chanute was a set of training system goals.

1. Improve skills needed to combat interior and exterior fires on the C-141
2. Reinforce conventional training
3. Stress established procedures
4. Provide experience in size-up
5. Increase aircraft familiarization
6. Improve decision-making skills
7. Build confidence
8. Provide cross-training of personnel
9. Stress need for communications
10. Prepare trainee for promotion
11. Drill in resource utilization

These goals were used as guidelines during all phases of the project.

B. PHASE II - PROJECT DESIGN

The Situation Simulator for Firefighters is designed to supplement and reinforce standard Air Force practice and procedures. All course material is from CDC 57130 and 57150 manuals, IFSTA manuals, and the C-141 flight manual. Where additional information was required, Air Force personnel were consulted. From the broad range of topics covered in the Career Development Course manuals, specific skills were selected to receive particular attention in the prototype program. Specific skills addressed are listed in Figure 1. Figure 2 cross-references these skills to the appropriate section of CDC 57130. All skills addressed are those required by the Air Force for advancement from Level 3 to Level 5.

The C-141 course is designed in two main sections: untimed, unscored study of basic information and skills; and timed, high-pressure application of that knowledge.

Basic skills and information are taught through study of the C-141 Aircraft Information and the Basic Operations segments. The Aircraft Information section is designed to familiarize the student with the aircraft and includes cockpit layout, location of entries, engine diagrams, etc.
HANDLINE OPERATIONS
- size up
- locating "seat" of fire
- placement of agent on fire, not smoke
- agent selection
- protection of rescue operations
- protection of exposures
- efficient agent application
- pattern selection

AIRCRAFT FAMILIARIZATION
- C-141 description
- cockpit
- interior plan
- latches
- normal entry points
- emergency entry points
- cut-in locations

SAFETY

RESOURCE UTILIZATION
- size up
- efficient use of apparatus
- efficient use of firefighters
- efficient use of agent
- efficient use of backup assistance

SECURING THE AIRCRAFT
- electrical
- APU
- fuel
- oxygen
- emergency engine shutdown

PLACEMENT OF APPARATUS
- size up at arrival
- fire location
- environmental conditions
- equipment limitations

VENTILATION
- location selection
- size up

COMMUNICATIONS
- reporting to crash control
- reporting to incident commander
- discipline - give information as briefly as possible

Figure 1. Skills Addressed in Prototype Course
<table>
<thead>
<tr>
<th>Video Course Subroutine</th>
<th>AFSC 57130 Crash Firefighter training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign Units</td>
<td>Teamwork (p. 6)</td>
</tr>
<tr>
<td>Handline</td>
<td>Hoseline Pattern Selection (p. 6)</td>
</tr>
<tr>
<td>Prefire Plans</td>
<td>Aircraft Components (pp. 9-12)</td>
</tr>
<tr>
<td>Enter Aircraft Ventilation</td>
<td>Entry Procedure (pp. 12-17)</td>
</tr>
<tr>
<td>Secure Aircraft, Prefire Plans</td>
<td>Aircraft Systems (pp. 18-21)</td>
</tr>
<tr>
<td>Position Apparatus, Arrivial,Environmental Condition, Rescue</td>
<td>Positioning (pp. 29-31)</td>
</tr>
<tr>
<td>Turret, Handline</td>
<td>Control (p. 31)</td>
</tr>
<tr>
<td>Turret, Handline Hand Extinguisher</td>
<td>Extinguishment (p. 31)</td>
</tr>
<tr>
<td>Turret, Handline, Penetrator</td>
<td>Overhaul (p. 32)</td>
</tr>
<tr>
<td>Handline, Heat Scanner</td>
<td>Crew Chief Duties (p. 33)</td>
</tr>
<tr>
<td>Command and Control activities</td>
<td>Turret Operation (p. 33)</td>
</tr>
<tr>
<td>Control, Protect, Extinguish</td>
<td>Handline Operations (p. 33-35)</td>
</tr>
<tr>
<td>Control, Protect, Extinguish, Overhaul</td>
<td>Ventilation (pp. 49-50, 129-141)</td>
</tr>
<tr>
<td>Rescue, Secure Aircraft</td>
<td>Rescue (pp. 65-70)</td>
</tr>
<tr>
<td>Dispatch messages, wind shifts</td>
<td>Runway Numbering (C02)</td>
</tr>
<tr>
<td>Assign Units - Units assigned as a team</td>
<td>Teamwork (C01)</td>
</tr>
<tr>
<td>Dispatch messages contain required</td>
<td>Dispatch Message Content (C01) information</td>
</tr>
<tr>
<td>Game approach - student plays</td>
<td>Cross-training (C01) (C16)</td>
</tr>
<tr>
<td>variety of positions</td>
<td>Wind (C10)</td>
</tr>
<tr>
<td>turret; handline; position of apparatus</td>
<td>Type of Aircraft (C10)</td>
</tr>
<tr>
<td>Rescue, position of apparatus, turret, handline</td>
<td>Positioning (C11)</td>
</tr>
<tr>
<td>Position apparatus, turret, handline</td>
<td>Rescue (C12)</td>
</tr>
<tr>
<td>Prefire plans, protect exposures, rescue, handline, turret, control fire</td>
<td>Protection of Exposures (C12) (C13)</td>
</tr>
<tr>
<td>Protect exposures, handline, turret</td>
<td>Extinguishment (C12)</td>
</tr>
<tr>
<td>Extinguish fire, turret, handline, penetrator</td>
<td>Use of Auxiliary Equipment (C12)</td>
</tr>
<tr>
<td>Request Assistance, Size up</td>
<td>Overhaul (C13)</td>
</tr>
<tr>
<td>Overhaul, handline, heat scanner</td>
<td>Engine fires (C13)</td>
</tr>
<tr>
<td>Exterior scenario</td>
<td>Nozzleman Duties (C16)</td>
</tr>
<tr>
<td>Handline</td>
<td>Training Progression (C16)</td>
</tr>
<tr>
<td>Game approach</td>
<td>Crew Chief (C16)</td>
</tr>
<tr>
<td>Command and control</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Basic Skills
Basic Operations is designed to reinforce materials in IFSTA manuals and in CDC 57150. It covers numerous topics such as extinguishing agents, ventilation, overhaul and handline operations. Each topic has an information section and a series of questions and answers. Basic Operations contains study material and exercises in a number of areas. These include:

1. Control
2. Extinguishment
3. Positioning apparatus
4. Agent selection
5. Protecting exposures
6. Overhaul
7. Ventilation
8. Pattern selection
9. Locations to apply agent

The students then have the opportunity to apply this basic knowledge during the interior and exterior fire scenario courses. Both courses are designed in such a way that students who have not mastered basic skills will find it difficult to extinguish the fire and minimize life and property loss within the time allotted. During these courses, the student will gain simulated experience in handline applications, communications, situation assessment, ventilation, resource utilization, rescue, agent selection and rapid decision-making under pressure. The program design will permit the user to experience a fire scenario from two vantage points - that of the line firefighter and the incident commander. This reinforces the need for following directions by allowing the student to experience a fire from another perspective. It also helps prepare students for additional responsibilities and promotion opportunities.

Both the interior and exterior courses contain random variables so that students face different initial conditions each time they play. Variables include fire size at arrival, blocked doors, equipment available, personnel to be rescued, wind, and temperature. Wind speed, direction, and temperature have no effect on the game but are included as distractors to the student.

1 All course material, including firefighting tactics and techniques, was verified during meetings with Air Force fire protection managers, fire chiefs and training instructors held in Albuquerque NM in May of 1985 and with personnel from AFESC, Tyndall AFB FL throughout the project.
In addition, unlimited variations of the course will be encountered because the fire progression depends on student actions (or lack thereof) and reaction time. The computer program constantly checks the quantity and flow rates of available agent; whether the vehicle is close enough to the chosen application site for the stream to reach; effect of ventilation; smoke level; death and rescue rates; agent application locations; and numerous other factors in order to produce a realistic fire scenario. For instance, in the interior fire, the death rate increases if Halon is used before all passengers are rescued.

A printout of student activity during a scenario will be provided. This printout will also contain a summary of lives lost, property damage, and recommended study topics.

C. PHASE III - PRODUCTION

1. Audio/Visual

Maintaining student interest in computer-based training is facilitated by effective use of audio and visual elements. An extensive review of visual approaches was conducted.

Use of new or existing films was discarded very early. Videodisc production requires high-quality film. Existing footage of this type to support the scenarios being developed was not found. Shooting live fire footage was not feasible.

The next approach considered was cartooning. Two factors eliminated this approach. It was decided that cartoons conveyed too much of a "game" atmosphere and the cost to develop them was very high.

The graphics finally selected mix several approaches. Those used in the Aircraft Information section are still photographs with gfa text overlays. Basic Operations uses computer-generated text and graphics. Both the Interior and Exterior Courses use photographs of the C-141B overlaid with animated smoke and flame. When combined with various audio tracks, the result far exceeds any other graphically simulated fire we have seen.

2. Hardware

Finding a hardware system capable of meeting the requirements for this interactive video program was much more difficult than originally anticipated. A number of systems are on the market and all were considered.
Digital Equipment's IVIS system is currently the top-of-the-line interactive video system available. It was ruled out immediately because of cost (about $50,000 at this time) for a development unit. Additional units for fire station installation currently cost about $15,000.

Several reputable companies offer an Apple computer-based system. The main reason for not selecting one was that each component was from a different manufacturer and service could be a problem.

Initial project development was on a Sony SMC 70 system. This arrangement did not work out as expected. Hardware deliveries were held up; software, though promised, was not available; and it had insufficient internal memory.

The prototype was finally delivered on NCR's InteracTV-2 - a unit designed specifically for interactive video training. Appendix B contains technical specifications for this system and a Life Cycle/Cost Analysis is included as Appendix C, covering hardware, maintenance, and supplies.

IBM has announced development of a system similar to NCR's. It is due to be released in March 1986. The two systems should be interchangeable with a minimum of programming effort. It is expected that at least three manufacturers will be in a position to offer systems that will meet Air Force requirements.
SECTION III
TESTING AND EVALUATION

The prototype system was delivered to Andrews Air Force Base on 3 February 1986 for testing and evaluation. It was installed in the training room and was run approximately 8 hours per day, 7 days per week for 3 weeks. A total of 42 fire department personnel with experience ranging from 4 months to 26 years used the system. Each user played a minimum of four Interior Courses, four Exterior Courses, one Basic Operations Unit and one Aircraft Information Unit. Sessions lasted 2 1/2 - 3 hours. Prior to using the Simulator, users were told that they were not being evaluated but were helping to evaluate the machine. They were given a brief description of the system and were assured of the confidentiality of their scores and opinions. At the conclusion of each session, each user was given a survey sheet to complete (Appendix D). A summary of results is provided in Figure 3.
1. Did you like using the Situation Simulator?

<table>
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<tr>
<th>Scale</th>
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<th>Liked Very Much</th>
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<td>5</td>
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(# of Responses) 1 1 2 12 26

2. How easy was it to use?

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(# of Responses) 1 4 14 13 10

3. Would you like to take more training this way?

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(# of Responses) 1 1 2 5 33

4. Is the Aircraft Information section easy to understand?

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(# of Responses) 0 0 7 12 23

5. Is the Basic Operations section easy to understand?

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<th>Scale</th>
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<th>Clear</th>
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(# of Responses) 0 0 4 15 23 3

6. Were the fire situations realistic?

<table>
<thead>
<tr>
<th>Scale</th>
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<th>liked very much</th>
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(# of Responses) 0 0 5 12 22 3

Figure 3. User Survey Sheet Summary Andrews Air Force Base
User response to the Situation Simulator was positive. Ninety percent of those tested indicated their desire for more of this type of training. Those individuals who were uncomfortable with the system cited their dislike of a "machine judging people." No correlation was found between acceptance level and age or experience.
Studies conducted on the effectiveness of videodisc training and student acceptance indicate that this approach can be highly successful. The most comprehensive study to date concludes with these general statements:

1. Interactive videodisc represents a new medium, unique from earlier approaches, containing the many strengths, but fewer weaknesses, of other media. It should be treated as distinct and separate from either educational videotape or computer-assisted forms of instruction.

2. New instructional design methods and models should be used to develop new types of instruction if the benefits of the new technology are to be realized.

3. Interactive videodisc instruction which is thoughtfully and systematically developed, and shows creative new instructional strategies, is beginning to demonstrate consistent positive results.

4. Typically, learners who use interactive systems are achieving scores significantly higher than learners using other approaches. They often do this although they spend less time in instruction. Uniformly, these learners report they enjoy and prefer working with interactive videodisc systems over conventional mediated approaches.

5. The concept has been proven, interactive videodisc lessons can be created, the equipment can be successfully integrated, and it stands up, (often better than other video systems) under thousands of hours of use.²

During the testing period at Andrews AFB, the following observations were made:

1. Students became very involved in the simulations.

2. The simulations frequently served as a basis for further discussion with the Training Instructor.

3. Some users stated they were going to go "read the manuals" so that they could "do better next time."

---

4. Most users wanted to come back and try again.

5. Users liked seeing the overall fire scene and how each action they took changed the fire growth and death rate.

There is no doubt that the Situation Simulator can make a significant impact on Air Force firefighter training, both in the area of basic skills (equipment use, first aid, etc.) and in application of that knowledge in fire simulations.

To complete the evaluation of interactive video as an integral component of Air Force firefighter training, it is recommended that:

1. Two to three additional programs should be developed in other subject areas to allow verification of the system's adaptability and acceptance. While maintaining the basic concepts of the C-141 situation simulator, the development of additional programs should include alternative approaches to the training software program. A specific recommendation is for the development of a simulator which, for a specific class of problems, is capable of a large number of different fire scenarios. Here the videodisc-based graphics and computer-generated graphics are used to their maximum advantage, resulting in more flexible training tools. Additional alternative approaches, consistent with the existing simulator should also be investigated.

2. Formal testing and evaluation of the program should be pursued following completion of additional courseware.

3. A computer-based instructional program (using computer-generated graphics only) should be developed and tested to assess user acceptance.
NOTE: So that this can be used separately, a Table of Contents is provided and the Figures are not numbered as Appendix Figures.
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SECTION I
INTRODUCTION

This training simulation system will help you to develop and maintain the skills needed to be an effective member of a USAF crash/rescue team. These skills will help you to better protect lives and property, as well as advance within your profession.

These training courses are presented in a format which makes the system fun, as well as educational. In a way, they are similar to video arcade games that you may have played. A unique feature of these courses is that you will be able to experience the consequences of your actions and decisions—both right and wrong. This feedback will help you understand the effects that your decisions, and the order and speed with which you make them, have on the success of a crash/rescue operation.

The consequences of your actions as you go through a particular training course will usually involve:

- Aircraft passengers rescued or killed
- Firefighters killed
- Extent of fire spread
- Amount of property damage

Your job is to rescue as many people as rapidly as you can. You must also control and extinguish the fire properly and as rapidly as possible to minimize damage. Obviously, your results can vary from one extreme to the other each time you attempt a given course.

One important point to remember is that each time you use the system, the situation presented to you will differ from the one before because of the random events in a particular training session. Therefore, you can use the system over and over without repeating a particular scenario.

The remainder of this manual consists of:

Section II - A discussion of training course objectives and the basis for establishing your accomplishments

Section III - A description of the training system hardware
Section IV - The identification of the procedures for interacting with the system

Section V - A discussion of the actions you can take throughout this simulation

Section VI - System installation instructions

Section VII - A summary of training system operating instructions

Section VIII - System startup procedures
SECTION II

TRAINING COURSE OBJECTIVES

The fundamental objective of the Situation Simulator for Firefighters is to help you develop and maintain your skills in aircraft firefighting and rescue. This knowledge, and simulated experience, will help you to better protect lives and property, as well as to advance within your profession.

Specific training system objectives are to:

Improve fireground decision-making skills at all grade levels;

Build confidence at all levels; Prepare trainee for promotional opportunities;

Enhance cross-training of all fire department personnel;

Reinforce the use of standard communications procedures;

Provide reinforcement of conventional training; Stress use of established procedures;

Provide simulated experience in situation assessment (sizeup);

Improve the capability to effectively place apparatus and deploy personnel;

Provide static and dynamic drills in aircraft familiarization, including securing aircraft systems (i.e., engine, electrical, etc.);

Improve trainee capability to combat interior and exterior fire/rescue operations.
SECTION III

TRAINING SYSTEM HARDWARE

The heart of the system is a laser disc player. This unit plays a disc which is similar in appearance to a long-playing phonograph record, but which contains 30 minutes of audio and video on each side. The disc contains the sights and sounds you will see and hear as you go through the training course.

The video disc player is controlled by a microcomputer. When you enter a decision by touching the screen, this computer determines the expected impact on the fire and selects the corresponding programmed images from the video disc.

The computer monitor is the component of the system which you will use directly. All images and associated audio from the video disc, and messages from the computer, will be received through this monitor. All your instructions to the computer and actions taken throughout the simulation will be entered by touching the screen. When touching the screen, be sure to touch the center of the touch area next to the response that you have selected.

The system also includes a printer which will produce a report at the conclusion of each training session. This report will contain the result you achieved—in terms of life and property loss—and a summary of the actions you took throughout the course.
1. laser disc player
2. microcomputer
3. printer
4. touch sensitive monitor
5. keyboard
6. speaker

Figure 1. Pilot System Hardware - NCR InteracTV2.
SECTION IV

ACTIVITIES ALLOWED

The C-141 course contains four study units, each designed to give you important information about wide-body aircraft firefighting aircraft. Information consists of a "walk-through" of the C-141B including general information, cockpit, engines, etc. Thorough mastery of this section will enhance your effectiveness during actual fires as well as in the simulated fires contained in the course. Basic operation is a review of general firefighting information. This section covers topics such as agent selection, pattern selection, ventilation, etc. Information presented in Basic Operations is designed to reinforce material from Air Force manuals. The Interior and Exterior Courses give you a chance to apply your knowledge of crash/rescue firefighting in simulated fire situations.

When you begin the training course you will be asked to choose a section to work with. The menu will look like this:

- TRAINING SECTIONS
- TOUCH CHOICE
- AIRCRAFT INFORMATION
- BASIC OPERATIONS
- EXTERIOR COURSE
- INTERIOR COURSE
- SYSTEM INFORMATION
- EXIT TO SYSTEM

Figure 2. Main Menu.
Touch the circle next to your choice. If, for instance, you touch AIRCRAFT INFORMATION, the system will ask you what topic you want to study. Touching QUIT at any time during a course returns you to the menu above.

TOUCH Topic to Study

- C-141B General Information
- Cockpit
- Engines
- Entrances
- Engine Shutdown
- Quit

Figure 3. Aircraft Information Menu.
Choosing **BASIC OPERATIONS** leads to a list of study topics. Each topic has both an information and an exercise section designed for self-study.

**BASIC OPERATIONS**

**TOUCH STUDY TOPICS**

- ○ AGENT SELECTION
- ○ AGENT APPLICATION
- ○ CONTROL
- ○ EXTINGUISHMENT
- ○ OVERHAUL
- ○ PATTERN SELECTION
- ○ POSITION APPARATUS
- ○ PROTECT EXPOSURES
- ○ VENTILATION
- ○ QUIT

Figure 4. Basic Operations Menu.
Each time you select the Interior or Exterior course you will be given a slightly different situation. For example, a different time of day, weather conditions, or the stage of the fire at the beginning of the training session. You can take each training course many times without repeating the same scenario. You will be given basic background information at the beginning of each course.

You will also be given the number and type of resources available to you.

CRASH 3 / P15 ON SCENE
CRASH 4 / P2 ON SCENE
CRASH 5 / P2 ON SCENE
RESCUE 6 / P10 ON SCENE
ENGINE 7 / STRUCTURAL TRUCK ON SCENE
CRASH 9 / P13 ON SCENE
To go through the training course, you must touch one of the activities listed on the screen.

The activities, as shown here, will always be at the right of the screen. You may touch an activity at any time and as often as you wish. When you touch an activity, the system will automatically lead you through the series of steps necessary to accomplish that activity.

![Activity Menu](image)

Figure 5. Activity Menu

The following pages show samples of the monitor screens as activities are selected.
Touching **COMMAND** causes the command menu to appear

**COMMAND MENU**

**TOUCH CHOICE**

- POSITION APPARATUS
- SECURE AIRCRAFT
- COMMUNICATE
- REQUEST ASSISTANCE
- RETURN UNITS

**CANCEL**

*Figure 6. Command Menu.*
Touching **POSITION APPARATUS** causes the screen below to appear.

To position apparatus, touch the truck you wish to position (left-hand column) and then touch the position you want it to go to.

You must position apparatus before starting firefighting activities.

---

**SELECT UNIT**

**TOUCH CHOICE**

- ![Truck Drawing]
- ![Truck Drawing]
- ![Truck Drawing]
- ![Truck Drawing]
- ![Hydrant Drawing]
- ![Modulate Drawing]
- ![Stand-by Drawing]

**Figure 7. Position Apparatus Menu**

When you are finished, touch **EXIT**.
Another choice in the command menu is **SECURE AIRCRAFT**.

Use **SECURE AIRCRAFT** to shut off aircraft systems (electrical, engine, oxygen, etc.)
Touching COMMUNICATE permits the student to select and see either of two reports below.

**SITUATION STATUS**

WING AND ENGINE FIRE = 150
RUNNING FUEL FIRE = 5 FEET
FUEL SPILL = 780 SQUARE FEET
POOL FIRE = 780 SQUARE FEET
GAME TIME = 321 SECONDS

TOUCH TO CONTINUE

**UNIT STATUS**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>STATUS</th>
<th>ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRASH 3</td>
<td>STANDING BY</td>
<td></td>
</tr>
<tr>
<td>CRASH 4</td>
<td>IN POSITION</td>
<td>HANDLINE</td>
</tr>
<tr>
<td>CRASH 5</td>
<td>IN POSITION</td>
<td></td>
</tr>
<tr>
<td>RESCUE 6</td>
<td>STANDING BY</td>
<td></td>
</tr>
<tr>
<td>ENGINE 7</td>
<td>NOT ON SCENE</td>
<td></td>
</tr>
<tr>
<td>CRASH 9</td>
<td>STANDING BY</td>
<td></td>
</tr>
</tbody>
</table>

TOUCH TO CONTINUE

Figure 8. Communicate Options.
Touch REQUEST ASSISTANCE

To call for additional help. You may select additional help from the menu below.

TOUCH CHOICE

○ OFF-DUTY PERSONNEL
○ AIRCRAFT MAINTENANCE
○ DISASTER CONTROL
○ SCBA AIR RESUPPLY
○ MUTUAL AID FIRE
○ FOAM RESUPPLY
○ TECH SERVICES

CANCEL

Figure 9. Request Assistance Menu.
CONTROL, EXTINGUISH, PROTECT

These activities are the heart of firefighting. Each is accomplished by making a series of choices. For example touching CONTROL produces the following screen.

HOW WOULD YOU LIKE TO CONTROL?

TOUCH CHOICE

〇 HANDLINE
〇 PENETRATOR
〇 PORTABLE EXTINGUISHER
〇 TURRET

CANCEL

Figure 10. Control Menu.
Selecting (touching) **HANDLINE** or one of the other choices in the previous menu results in appearance of the following screen.

**SELECT AGENT**

**TOUCH CHOICE**

- [ ] **AFFF**
- [ ] **DRY CHEMICAL**
- [ ] **HALON**
- [ ] **WATER**

**CANCEL**

Figure 11. Agent Selection Menu
When an agent is selected by touching the previous screen, the screen below appears which provides numerous choices of where to enter the aircraft.

Figure 12. Entrance Selection Menu.
The next screen to appear after an entry location is selected is:

**HOW WOULD THIS DOOR BE OPENED?**

TOUCH CHOICE

- PULL T-HANDLE, ROTATE CLOCKWISE
- PRESS TRIGGER, ROTATE COUNTERCLOCKWISE
- LIFT RELEASE RING, PULL UPWARD
- STRIKE BUMP PLATE

Figure 13. Door Entrance Procedure Menu

If the door is opened correctly you will then enter the aircraft and be given further decisions to make.
VENT

Touching VENT in the activities list will permit you to ventilate the aircraft through doors, hatches, and designated cut-in areas. After choosing where you want to ventilate, you will go through a series of steps to complete the ventilation process. If you wish to ventilate in more than one area, you must complete the process for the first location, and then touch VENT again to repeat the procedure.

RESCUE

Rescue allows you to assign a team (or teams) to rescue duty.

CANCEL

Cancel the assignment you are in the process of making.

SIZE-UP

Size-up is used to send an initial report of conditions to control.

HELP

Help permits you to review aircraft information and system information.

QUIT

Quit returns you to the opening menu.

CLOCK

The clock records the elapsed game time.

To help you review your training, you will get a printout of your results at the conclusion of the scenario. This printout will include a general description of the situation presented to you; what actions you took in what order; when and how long it took you to accomplish various activities; if, or when, rescue and extinguishment were completed; and the number of lives lost and extent of property damage. Figure 14 is a sample print-out.
C-141
SITUATION SIMULATOR
FOR
FIRE FIGHTERS

EXTERIOR COURSE

INITIAL DISPATCH / ARRIVAL
------------------------
CRASH 3 ON SCENE
CRASH 4 ON SCENE
CRASH 5 ON SCENE
RESCUE 6 ON SCENE
ENGINE 7 ON SCENE
CRASH 9 ON SCENE

Figure 14. Sample Printout, Exterior Course.
Figure 14. Sample Printout, Exterior Course (Continued).
DECISIONS MADE BY THE STUDENT

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>EXTINGUISH/TURRET</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIT ASSIGNED</td>
<td>CRASH 3/P15</td>
</tr>
<tr>
<td>TIME</td>
<td>45 SECONDS</td>
</tr>
<tr>
<td>FIRE SIZE</td>
<td>4 FEET</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>EXTINGUISH/TURRET</td>
</tr>
<tr>
<td>UNIT ASSIGNED</td>
<td>CRASH 4/P2</td>
</tr>
<tr>
<td>TIME</td>
<td>66 SECONDS</td>
</tr>
<tr>
<td>FIRE SIZE</td>
<td>6 FEET</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>EXTINGUISH/TURRET</td>
</tr>
<tr>
<td>UNIT ASSIGNED</td>
<td>CRASH 3/P15</td>
</tr>
<tr>
<td>TIME</td>
<td>158 SECONDS</td>
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<tr>
<td>FIRE SIZE</td>
<td>20 FEET</td>
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<tr>
<td>ACTIVITY</td>
<td>EXTINGUISH/TURRET</td>
</tr>
<tr>
<td>UNIT ASSIGNED</td>
<td>CRASH 4/P2</td>
</tr>
<tr>
<td>TIME</td>
<td>183 SECONDS</td>
</tr>
<tr>
<td>FIRE SIZE</td>
<td>45 FEET</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>EXTINGUISH/HANDLINE</td>
</tr>
<tr>
<td>UNIT ASSIGNED</td>
<td>CRASH 9/P13</td>
</tr>
<tr>
<td>TIME</td>
<td>220 SECONDS</td>
</tr>
<tr>
<td>FIRE SIZE</td>
<td>7 FEET</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>EXTINGUISH/HANDLINE</td>
</tr>
<tr>
<td>UNIT ASSIGNED</td>
<td>CRASH 9/P13</td>
</tr>
<tr>
<td>TIME</td>
<td>255 SECONDS</td>
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<tr>
<td>FIRE SIZE</td>
<td>6 FEET</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>RESCUE</td>
</tr>
<tr>
<td>UNIT ASSIGNED</td>
<td>RESCUE 6/P10</td>
</tr>
<tr>
<td>TIME</td>
<td>269 SECONDS</td>
</tr>
<tr>
<td>FIRE SIZE</td>
<td>6 FEET</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>SECURE A/C</td>
</tr>
<tr>
<td>UNIT ASSIGNED</td>
<td>ENGINE 7/STRUCTURAL TRUCK</td>
</tr>
<tr>
<td>TIME</td>
<td>308 SECONDS</td>
</tr>
<tr>
<td>FIRE SIZE</td>
<td>6 FEET</td>
</tr>
</tbody>
</table>

Figure 14. Sample Printout, Exterior Course (Continued).
INITIAL FIRE CONDITIONS

HEAVY SMOKE COMING FROM ENGINE, FLAMES AT REAR OF ENGINE JUST BECOMING VISIBLE

DAMAGE TO PLANE

ENGINE TOTALLY DESTROYED, WING SUFFERED ONLY MINOR DAMAGE

GENERAL COMMENTS/SUGGESTED STUDY AREAS

THE FIRST ACTION TAKEN BY THE STUDENT IN ANY FIRE EMERGENCY SHOULD BE TO SIZE UP THE SITUATION

ALWAYS SEARCH THE AIRCRAFT TO MAKE SURE NO ONE IS ON BOARD

Figure 14. Sample Printout, Exterior Course (Concluded).
That's it! You can know how to use this training system - but we haven't given all our secrets away, so stay alert. Good luck and have fun.
SECTION V
INSTALLATION INSTRUCTIONS

A. HOW TO COPY THE PROGRAM TO THE HARD DISK

Insert your DOS disk in drive A and turn on the system. When the screen displays a prompt (A, B, or C), remove the system disk and place disk #1 of the program in the drive. Type

COPY A:.* C:*.*

Then hit Enter. A list of files that have been copies will be displayed on the screen. When the process is complete, the same prompt as before should appear on the screen.

Example:

A> COPY A:.* C:*.*
A: VCONFIG.EXE
A: ITVDIAG.EXE
A: ITV9550.EXE
A: ITVTOUCH.COM
A: ITVSYS2.COM
A: ITV1000.COM
A: BASVID.LIB
7 File(s) copies

A>

Repeat copy procedure with disk #2 of software.

When the A> appears type C and hit Enter.

Proceed to calibrate the touchscreen following the instructions on the next page starting with step 2.
B. HOW TO CALIBRATE THE TOUCHSCREEN

Step 1: Exit to the computer operating system from the main menu.

Step 2: The C drive prompt will appear C , type "itvdiag" and hit the Enter key. The NCR diagnostics program menu will appear. Choose 8 by hitting "8" key and follow the instructions.

NCR Video System Diagnostics
1 Software Drive Summary
2 Linearity/White/Black
3 Color Bars
4 Video Disc Player
5 Video Mixer
6 Graphics Adapter
7 Touch Screen Test
8 Calibrate Touch Screen
X Exit to DOS

SELECT

To return to the operating system, hit the "x" key. Once in the operating system C will appear. Type "vintro" and hit the enter key to restart the course.
C. SYSTEM HOOK-UP

Your Situation Simulator will be assembled for you when delivered. If it becomes necessary to disassemble the equipment, Figure 15 should be used as a guide to connecting the cables.
SECTION VI
SYSTEM OPERATING INSTRUCTIONS

A. SUMMARY

1. The objective of this simulation-based training course is to rescue as many people as rapidly as you can, and to control and extinguish the fire properly and as rapidly as possible to minimize damage.

2. Each time you use the training system you will be given a slightly different situation. Thus, you can use the system many times to continue to develop your knowledge and skills.

3. You will be given basic information such as environmental conditions, resources on duty, etc., before starting a training session. This information can also be obtained during the simulation through the Help or Communicate functions.

4. Instructions on using the system are always available to you, even during the course of the simulation through the Help function.

5. You may review Aircraft Information before, or during, a simulation through the Help or Communicate functions.

6. The touchscreen monitor is the only device you will need to use.

7. All images and audio associated with the simulation will be received through this screen.

8. Your instructions to the system will be entered by touching the screen in the designated areas.

9. When touching the screen, be sure to touch the center of the touch area next to the response that you have selected.

10. Upon completion of a training session, you will receive a report of the results you achieved in terms of life and property loss. A summary report will be displayed on the monitor and a detailed report will be printed.
SECTION VII
SYSTEM STARTUP PROCEDURES

Once the system has been installed (see Section V), startup is simple. Turn the system on, using the switch located on the power strip, and sit back. In one minute, the Situation Simulator is ready to use.

Turning the system off is accomplished the same way—flip the switch.

If the touchscreen is not working right, "Exit to System" and refer to Section V, "How to Calibrate the Touchscreen."
SECTION VIII

SITUATION SIMULATOR FOR
FIREFIGHTERS QUICK REFERENCE

All commands are issued by touching the appropriate area of the screen.

Main Menu

Aircraft Information – basic facts about the C-141B

Basic Operations – review of general fire fighting principles

Exterior Course – a simulated engine fire

Interior Course – a simulated interior electrical fire

Activities Allowed

Use **COMMAND** to:

- Position Apparatus
- Secure Aircraft
- Communicate
- Request Backup Assistance
- Return Units

Use **CONTROL** to control the fire

Use **EXTINGUISH** to extinguish the fire

Use **OVERHAUL** to overhaul the plane

Use **PROTECT** to protect exposures

Use **RESCUE** to rescue personnel

Use **SIZE-UP** to send initial message to Crash Control

Use **VENT** to ventilate the aircraft

Use **HELP** to review Aircraft Information or the activities allowed

Use **QUIT** to go back to the main menu

Use **CLOCK** records elapsed time from arrival on the fire scene

**NOTE:** Just as in real life, there is a delay between the time you issue a command and the time it is executed!
Introducing InteracTV-2, the newest, standard Level III interactive video system from NCR.

InteracTV-2 offers the most advanced features available including a state-of-the-art graphic overlay that simultaneously combines full (not partial) resolution of 640 x 400 pixels with full 80 column x 25 line text on a 14-inch color monitor. An interactive laser disc control allowing for random display of up to 54,000 pictures or 30 minutes of moving video per side of a videodisc. Special effects like fade-in and fade-out. Full PC-compatibility NTSC and PAL compatibility. An optional touch screen that customizes user-friendliness. And much more.

A powerful tool for product sales and promotion, training, or information distribution. Tutorials, or information on company line software, newsworthy audio amplifiers, software created to fit any NCR service and support system.

InteracTV-2 Features

Level III interactive video system PC XT hardware/software compatible High resolution analog RGB monitor Overlay of text and graphics on a single monitor with high resolution (640x400), with 16 colors. Intensity of video image can be varied under software control (fade-in, fade-out). NTSC or PAL video interface Dual channel audio amplifier Supplied with authoring language and systems "NCR Pilot II" and TSS Authority Bundled bootware disk Exceptionally competitive price Excellent NCR service and support

InteracTV-2 Accessories

Choice of three industrial laser videodisc players Optional resistive touch screen Graphics software Two audio speakers An industry standard PC periphery and options available

Systems Components

InteracTV-2 processor Video and graphic controller boards Analog RGB monitor with touch screen Analog RGB monitor without touch screen Pioneer LD-V1000 disc player (NTSC) Hitachi 9550 disc player (NTSC) Philips 831 disc player (PAL) Speaker pair

Specifications


Options

Video Output Adapters RGB RS-170 composite sync 75 ohm source impedance Peripheral Adapter Centronics parallel interface RS-232C serial interface Communications Adapter RS-232C serial interface, async sync: NCR PC/2/PCC local area network

Physical Dimensions:

Processor Monitor
Height - 5.5" Height - 13.5"
Width - 19.5" Width - 15.5"
Depth - 15.0" Depth - 15.5"
Weight - 23 lbs Weight - 28.7 lbs
(without drives)

Keyboard
Height - 1.9" Height - 5.8"
Width - 20.3" Width - 20.7"
Depth - 7.9" Depth - 15.6"
Weight - 2.9 lbs Weight - 28.7 lbs

Power Requirements:

Power Requirements 115/230 volts AC 50/60 Hz Environmental 10-35 degrees Operating temperature Relative Humidity 5-90%

Videodisc Player
Pioneer Hitachi 110/120 volts at 50/60 Hz 50 watts Philips 220/240 50 Hz: 50 watts

NCR
APPENDIX C

LIFE CYCLE COST ANALYSIS
LIFE CYCLE COST ANALYSIS

Situation Simulator for Fire Fighters

<table>
<thead>
<tr>
<th></th>
<th>Yr 1</th>
<th>Yr 2</th>
<th>Yr 3</th>
<th>Yr 4</th>
<th>Yr 5</th>
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Hardware costs are based on the per system cost of NCR's InteracTV2, cabinet, and a standard 80 column printer. Although five years was chosen as the life cycle of this equipment, with regular maintenance it can be expected to last well beyond this period.
APPENDIX D

TEST AND EVALUATION DATA
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 11 Jan 86   AFSC: 57130   Location: Andrews

How often did you use:

- Interior Course 4
- Exterior Course
- Aircraft Information
- Basic Operations

1. Did you like using the situation simulator? (circle answer)

   
   disliked

   liked very much

   Why?

   __________________________________________

2. How easy was it to use? (circle answer)

   
   very difficult

   very easy

   Why?

   __________________________________________

3. Would you like to take more training this way? (circle answer)

   
   absolutely not

   definitely

   Why?

   __________________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

   
   not clear

   clear

   Why?

   __________________________________________
5. Is the information presented in the Basic Operations section easy to understand?
   1 2 3 4 5
   not clear clear
   Why? ____________________________________________
   ____________________________________________
   ____________________________________________

6. Were the fire situations realistic? (circle answer)
   1 2 3 4 5
   disliked liked very much
   Why? ____________________________________________
   ____________________________________________
   ____________________________________________

7. What changes would you make to the Situation Simulator?
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________

8. Comments: This was very helpful and can be used for many other aspects of the fire service
   ____________________________________________
   ____________________________________________
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 2/3  AFSC: 57130  Location: Andrews

How often did you use:
Interior Course  Exterior Course  Aircraft Information  Basic Operations

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked  liked very much
   Why? But computers were always making people upset.

2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult  very easy
   Why? Should sit down for an hour and learn all the commands.

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not  definitely
   Why? Don't like the idea of computers judging a human ability.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear  clear
   Why? Some things need to be more accurate, such as...
   Safety, cancel, etc.
5. Is the information presented in the Basic Operations section easy to understand?
   
   1 2 3 4 5
   
   not clear
   
   Why? Need more time to understand and read.
   
   6. Were the fire situations realistic? (circle answer)
   
   1 2 3 4 5
   
   disliked
   
   Why? Excellent video of real life situations.
   
   7. What changes would you make to the Situation Simulator?
   
   Have a control board where you can control by hand then by touchscreen.
   
   8. Comments: I enjoyed the simulator very much at some points I get very uptight by using the computer.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 3 FEB 86  AFSC: 3715C  Location: ANDREWS

How often did you use:

Interior Course 4  Exterior Course 4  Aircraft Information  4  Basic Operations  

1. Did you like using the situation simulator? (circle answer)

1 2 3 4 5
disliked  liked very much

Why?  yes Because IT SAVES you THE PAIN  

2. How easy was it to use? (circle answer)

1 2 3 4 5
very difficult  very easy

Why?  you HAVE TO GET USE TO THE MACHINE, TO LEARN THE DIFFERENT INSTRUMENTS ARE AT ALL HOW THE

3. Would you like to take more training this way? (circle answer)

1 2 3 4 5
absolutely not  definitely

Why?  it's good to see how the decision is made  

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1 2 3 4 5
not clear  clear

Why?  it explains itself well

60
5. Is the information presented in the Basic Operations section easy to understand?

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Why? Operations were explained well

6. Were the fire situations realistic? (circle answer)

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<td>disliked</td>
<td>liked very much</td>
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Why? Very much as to what can happen and what does

7. What changes would you make to the Situation Simulator?

Being able to respond, working with it more to where I know the machinery.

8. Comments: I enjoyed the use of the simulator very much and I want to use it in the future. It gave me problems very life like and I could make a decision and see what happens.
Survey Sheet

Date: __/__/91  AFSC: 5750  Location: Andrews

How often did you use:
Interior Course 4  Exterior Course 4  Aircraft Information 7  Basic Operations 1

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked  liked very much
   Why?  
   
2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult  very easy
   Why?  
   
3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not  definitely
   Why?  
   
4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear  clear
   Why?  
   
62
5. Is the information presented in the Basic Operations section easy to understand?

not clear clear

Why? ________________________________________________________________

6. Were the fire situations realistic? (circle answer)

disliked liked very much

Why? ___________________________________________________________________

7. What changes would you make to the Situation Simulator?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

8. Comments: ____________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 2/4    AFSC: 57150    Location: Andover

How often did you use:
Interior Course    Exterior Course
Aircraft Information    Basic Operations

1. Did you like using the situation simulator? (circle answer)

   1   2   3   4   5
   disliked   liked very much

   Why? ____________________________________________
   ____________________________________________

2. How easy was it to use? (circle answer)

   1   2   3   4   5
   very difficult    very easy

   Why? ____________________________________________
   ____________________________________________

3. Would you like to take more training this way? (circle answer)

   1   2   3   4   5
   absolutely not    definitely

   Why? ____________________________________________
   ____________________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

   1   2   3   4   5
   not clear    clear

   Why? ____________________________________________
   ____________________________________________
5. Is the information presented in the Basic Operations section easy to understand?
   
   1  2  3  4  5
   
   not clear  clear
   
   Why?  
   
   6. Were the fire situations realistic? (circle answer)
   
   1  2  3  4  5
   
   disliked  liked very much
   
   Why?  
   
   7. What changes would you make to the Situation Simulator?
   
   If possible, quicker reactions as far as pulling lines and turret operations go. Everything else was very realistic.
   
   8. Comments:
   
   Made me think why people were dying. (didn't vent)
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 2/4/86 AFSC: 57130 Location: Andrews

How often did you use:
Interior Course ______ Exterior Course ______
Aircraft Information ______ Basic Operations ______

1. Did you like using the situation simulator? (circle answer)
   1 2 3 4 5
   disliked liked very much
   Why? I think makes learning a lot more fun & interesting.

2. How easy was it to use? (circle answer)
   1 2 3 4 5
   very difficult very easy
   Why? Being a 3 level I thought it was a little over my head, but I still learned a lot about Basic Operations.

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not definitely
   Why? It's interesting & fun also challenging.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear clear
   Why? ____________________________________________
5. Is the information presented in the Basic Operations section easy to understand?

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Why? __________________________________________________________

6. Were the fire situations realistic? (circle answer)

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<tr>
<td>disliked</td>
<td>liked very much</td>
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</table>

Why? Due to the lack of actual fire situations.
I really couldn't say.

7. What changes would you make to the Situation Simulator?

None that I knew of. I think it does exactly what it's intended to do.

8. Comments: It makes learning both challenging and interesting. I enjoyed it!
I want another chance!
Date: 3/5/86  AFSC: 57150  Location: Andrews

How often did you use:
Interior Course  Exterior Course  Aircraft Information  Basic Operations

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked  liked very much
   Why? The stages of spread and high loss factor will really make you think.

2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult  very easy
   Why? Anybody can understand.

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not  definitely
   Why? You can see what you forgot to accomplish right away on printout.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear  clear
   Why? It's easy to understand but there are many variations of incense.
5. Is the information presented in the Basic Operations section easy to understand?

1  2  3  4  5
not clear  clear

Why?

6. Were the fire situations realistic? (circle answer)

1  2  3  4  5
disliked  liked very much

Why? The fuel flow and line deviations were all the engine ports at all times

7. What changes would you make to the Situation Simulator?

1. Either a keyboard or joystick for vehicle
2. Some type of verbal command module

8. Comments: I liked this very much and would like to have one to utilize at all times for various aircraft.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 2/5  AFSC: 57/50  Location: Andrews

How often did you use:
Interior Course ☐  Exterior Course ☐
Aircraft Information ☐  Basic Operations ☐

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked  liked very much

Why? ____________________________________________________________

2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult  very easy

Why? ____________________________________________________________

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not  definitely

Why? ____________________________________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear  clear

Why? ____________________________________________________________
5. Is the information presented in the Basic Operations section easy to understand?
   
   1  2  3  4  5
   
   not clear  clear
   
   Why?
   
   6. Were the fire situations realistic? (circle answer)

   1  2  3  4  5
   
   disliked  liked very much
   
   Why?
   
   7. What changes would you make to the Situation Simulator?
   
   8. Comments:
   
   71
How often did you use:

Interior Course 4 Exterior Course 4
Aircraft Information 4 Basic Operations 4

1. Did you like using the situation simulator? (circle answer)

1 2 3 4 5

disliked liked very much

Why? it is interesting aid it gives a person who doesn't get advance at command control to see what he can do

2. How easy was it to use? (circle answer)

1 2 3 4 5

very difficult very easy

Why? just touch the screen

3. Would you like to take more training this way? (circle answer)

1 2 3 4 5

absolutely not definitely

Why? i think it could be a good training aid

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1 2 3 4 5

not clear clear

Why? or some things could be easier
5. Is the information presented in the Basic Operations section easy to understand?

1  2  3  4  5
not clear  clear

Why? It was ok

6. Were the fire situations realistic? (circle answer)

1  2  3  4  5
disliked  liked very much

Why? It is what you would expect to see

7. What changes would you make to the Situation Simulator?
       from what I see there is only one way to win! But in this business there is no one way to accomplish extinguishment. But the bad results can be the same.

8. Comments: Just as dry chemical on a running fuel fire
SITUATION SIMULATOR
"OR FIREFIIGHTERS
C-141
Survey Sheet

Date: 2/5
AFSC: 57130
Location: [Address]

How often did you use:
Interior Course 1/4 Exterior Course 1/4 Basic Operations 1/4

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked liked very much
   Why? WAS FUN & A CHALLENGE

2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult very easy
   Why? SOME DIFFICULT AT FIRST until EASY

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not definitely
   Why? EASIER & MORE SIMULATED
   NOTING OVER YOU - MAKING YOU NERVOUS

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear clear
   Why? PRESENTED IN A CLEAR UNDERSTANDABLE
5. Is the information presented in the Basic Operations section easy to understand?

1  2  3  4  5
not clear  clear

Why?  **Basically - I didn't know anything about C-141's**

6. Were the fire situations realistic? (circle answer)

1  2  3  4  5
disliked  liked very much

Why?  **Sort of - all began the same + some were the same type fire repeatedly**

7. What changes would you make to the Situation Simulator?

**Beginnings + all fires completely different**

8. Comments:  **none**
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: __ _ AFSC: 57150 Location: Andrews
15 years experience

How often did you use:
Interior Course / Exterior Course / Aircraft Information / Basic Operations /

1. Did you like using the situation simulator? (circle answer)

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<td>disliked</td>
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<td>liked very much</td>
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Why? TRAINING IS NEEDED FOR THIS TYPE OF SITUATION

2. How easy was it to use? (circle answer)

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<tr>
<td>very difficult</td>
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Why? SELF EXPLANATORY

3. Would you like to take more training this way? (circle answer)

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<tr>
<td>absolutely not</td>
<td>definitely</td>
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Why? ON MY TIME, IN ANOTHER WORDS, MORE OF MY SPARE TIME WOULD BE USED ON THIS TYPE OF TRAINING PROGRAM

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

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Why? SELF EXPLANATORY, BUT YOU CAN'T FORGET COMMON SENSE

76
5. Is the information presented in the briefing section easy to understand?

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not clear clear

Why? ________________________________________________

6. Were the fire situations realistic? (circle answer)

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disliked liked very much

Why? SHOWS AIRCRAFT ACTUAL

7. What changes would you make to the Situation Simulator?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

8. Comments: THIS TYPE OF TRAINING SHOULD NOT BE USED UNTIL A FIRE FIGHTER HAS ENOUGH TRAINING ON AREA'S OF COMMAND & CONTROL

________________________________________________________________________
SITUATION SIMULATOR FOR FIREFIGHTERS C-141
Survey Sheet

Date: ______ AFSC: 57130 Location: Andrews

How often did you use:
Interior Course 4 Exterior Course 4
Aircraft Information ______ Basic Operations ______

1. Did you like using the situation simulator? (circle answer)

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disliked liked very much

Why? ________________________________________

________________________________________________________________________

2. How easy was it to use? (circle answer)

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very difficult very easy

Why? ________________________________________

________________________________________________________________________

3. Would you like to take more training this way? (circle answer)

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absolutely not definitely

Why? ________________________________________

________________________________________________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

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not clear clear

Why? ________________________________________

________________________________________________________________________
5. Is the information presented in the Basic Operations section easy to understand?

[1 2 3 4 5]
not clear  clear

Why? ________________________________________________

6. Were the fire situations realistic? (circle answer)

[1 2 3 4 5]
disliked liked very much

Why? ________________________________________________

7. What changes would you make to the Situation Simulator?

None.

8. Comments: It was an easy way to learn how to react in an actual situation.
Date: 2/6/96  AFSC: 57180  Location: Andrews

How often did you use:
Interior Course  Exterior Course
Aircraft Information  Basic Operations

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked  liked very much
Why?  Educational as well as entertaining.

2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult  very easy
Why?  I personally am not familiar with computers.

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not  definitely
Why?  Educational

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear  clear
Why?  Same Information Taught at Tech-School.
5. Is the information presented in the Basic Operatic easy to understand?

   1  2  3  4  
   not clear  clear

   Why? ____________________________________________________

6. Were the fire situations realistic? (circle answer)

   1  2  3  4  
   disliked  liked very much

   Why? ____________________________________________________

7. What changes would you make to the Situation Simulator?

   ___________________________  
   None

8. Comments: ________________________________________________________

   _____________________________________________________________
How often did you use:

Interior Course  Exterior Course  Aircraft Information  Basic Operations

1. Did you like using the situation simulator? (circle answer)

1 2 3 4 5

liked very much

Why?

2. How easy was it to use? (circle answer)

1 2 3 4 5

very easy

Why?

3. Would you like to take more training this way? (circle answer)

1 2 3 4 5

absolutely not

Why?

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1 2 3 4 5

not clear

Why?

5. Is the information presented in the Basic Operations section easy to understand?

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Why? ________________________________

6. Were the fire situations realistic? (circle answer)

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<td>disliked</td>
<td>liked very much</td>
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Why? ________________________________

7. What changes would you make to the Situation Simulator?

[Handwritten: Mutley at the line]

8. Comments:

[Handwritten: I think it will help for lines throughout the company]
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 2-7-86  AFSC: 57170  Location: 

How often did you use:
Interior Course 4  Exterior Course 4  Aircraft Information 1  Basic Operations 1

1. Did you like using the situation simulator? (circle answer)

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disliked  liked very much

Why? Actual Thinking + Knowledge Situation

2. How easy was it to use? (circle answer)

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very difficult  very easy

Why? Easy Touch

3. Would you like to take more training this way? (circle answer)

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</table>

absolutely not  definitely

Why? Very Much of Visual Work is Almost of Real Situations

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

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not clear  clear

Why? Too Information that personal should know

---

84
5. Is the information presented in the Basic Operations section easy to understand?

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Why? General Knowledge

6. Were the fire situations realistic? (circle answer)

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<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>liked very much</td>
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Why? The Best I have ever seen.

7. What changes would you make to the Situation Simulator?

Number of vehicles on screen

8. Comments: I think work more Dist's of Aircraft and Structural Situations.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141
Survey Sheet

Date: 2/7/86  AFSC: 57/XX  Location: HAFB
28 years experience

How often did you use:
Interior Course  /  Exterior Course  /  Aircraft Information  /  Basic Operations  /

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked  liked very much
   Why? Excellent as a classroom training aid.

2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult  very easy
   Why? Everything is self-explanatory

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not  definitely
   Why? Excellent way to stay proficient on fire ground operations

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear  clear
   Why? ____________________________

86
5. Is the information presented in the Basic Operations section easy to understand?

1  2  3  4  5
not clear clear

Why? ________________________________

_____________________________

6. Were the fire situations realistic? (circle answer)

1  2  3  4  5
disliked liked very much

Why? ________________________________

_____________________________

7. What changes would you make to the Situation Simulator?

_____________________________

8. Comments:

_____________________________

_____________________________
# SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

<table>
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How often did you use:

<table>
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<tr>
<th>Aircraft Information</th>
<th>Basic Operations</th>
<th>Exterior Course</th>
<th>Interior Course</th>
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1. Did you like using the situation simulator? (circle answer)

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<tbody>
<tr>
<td>dislike</td>
<td></td>
<td></td>
<td></td>
<td>like very much</td>
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Why? LIKED THE UNIT. IT'S FUN. HOWEVER PEOPLE NEED TO GET THE FEEL OF THE MACHINE TO BE EFFECTIVE

2. How easy was it to use? (circle answer)

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<tbody>
<tr>
<td>very difficult</td>
<td></td>
<td></td>
<td></td>
<td>very easy</td>
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Why? AGAIN THE MORE THE PERSON USES IT THE BETTER THE OPERATION

3. Would you like to take more training this way? (circle answer)

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<th>5</th>
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</thead>
<tbody>
<tr>
<td>absolutely not</td>
<td></td>
<td></td>
<td></td>
<td>definitely</td>
</tr>
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Why? BECAUSE IT CAN HELP ME IN SITUATIONS THAT HIGHLY OCCUR HERE TO GET SEQUENTIAL THINGS TO DO

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

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Why? YES. BUT IT'S EASY TO FORGET BECAUSE OF THE AMOUNT OF TIME A PERSON IS ALLOWED PRACTICE.
5. Is the information presented in the Basic Operations section easy to understand?

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Why? Most of the information.

---

6. Were the fire situations realistic? (circle answer)

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<tbody>
<tr>
<td>disliked</td>
<td></td>
<td></td>
<td></td>
<td>liked very much</td>
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</tbody>
</table>

Why? Yes

---

7. What changes would you make to the Situation Simulator?

- Number the Vehicles on the screen, such as the P15, P22, P3, etc. Display P3 on the screen.
- When Vehicle Control Center you don't really know what device is calling.

---

8. Comments: Very Good learning Aid. The Unit has to be learned used to be effective.

---

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SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141
Survey Sheet

Date: ___________ AFSC: ___________ Location: ___________

How often did you use:
Interior Course □/□ Exterior Course □/□
Aircraft Information □/□ Basic Operations □/□

1. Did you like using the situation simulator? (circle answer)

2 3 4 5

Why?

2. How easy was it to use? (circle answer)

2 3 4 5

Why?

3. Would you like to take more training this way? (circle answer)

2 3 4 5

Why?

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1 2 3 4 5

Why?
5. Is the information presented in the Basic Operations section easy to understand?

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Why? ____________________________ ____________________________ ____________________________

6. Were the fire situations realistic? (circle answer)

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<tbody>
<tr>
<td>disliked</td>
<td></td>
<td>liked very much</td>
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</table>

Why? ____________________________ ____________________________ ____________________________

What changes would you make to the Situation Simulator?

______________________________

______________________________

______________________________

8. Comments: Simulator will serve a good purpose if the machine were covered, such as training on the machine and students understanding the machine itself. Training will consist of lots of flight with the students offset.
Survey Sheet

Date: 3-25-86  APSC: 47150  Location: Andrews AFB

How often did you use:
Interior Course 1  Exterior Course 1
Aircraft Information 1  Basic Operations 1

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5 (5)
   disliked  liked very much
   Why?  Does you in the position to make some kind of decision and see what the result are?

2. How easy was it to use? (circle answer)
   1  2  3  4  5 (4)
   very difficult  very easy
   Why?  In the beginning it is difficult to remember the location of the type of action you want to take. But after you are on it awhile, it is pretty easy.

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5 (5)
   absolutely not  definitely
   Why?  For example the repetition of shut-down procedures become instinctive (at least you have to start slowly). Overall doing the right things become instinctive, that's important.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5 (5)
   not clear  clear
   Why?  Self explanatory!
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5

not clear clear

Why? **Self Explanatory**

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5

disliked liked very much

Why? **I think actually the situations were real enough; however, I feel in a real life situation the effects of the agent would be more dominating.**

7. What changes would you make to the Situation Simulator?

**Numbering of vehicles making it easier to keep track of these assignments. Also having some way of resolving apparatus from a Hydrant.**

8. Comments: **I think it is very hard to simulate actual training and make it seem realistic. This type of simulation not only makes it somewhat realistic, it enables you to set goals and see the outcome.**
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: ______ Location: Andrews AFB

AFSC: 57150

How often did you use:

Interior Course Exterior Course Aircraft Information Basic Operations

1. Did you like using the situation simulator? (circle answer)

1 2 3 4 5

disliked liked very much

Why? IT WAS VERY INTERESTING ALSO TAUGHT ME A LOT ABOUT THE C-141.

2. How easy was it to use? (circle answer)

1 2 3 4 5

ever difficult very easy

Why? IT TELLS YOU ANYTHING YOU NEED TO KNOW IN HOW TO CONTROL, RESCUE, ETC.

3. Would you like to take more training this way? (circle answer)

1 2 3 4 5

absolutely not definitely

Why? I THINK WITH THIS AT EACH BASE IT WOULD BE A VERY GOOD TRAINING AIDS IT HAS SOMETHING UNDER ALL SITUATIONS.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1 2 3 4 5

not clear clear

Why? EVERYTHING DISCUSSED WAS ALSO PRESENTED ON THE SCOID FULLY.
5. Is the information presented in the Basic Operations section easy to understand?

   1  2  3  4  5
   not clear  clear

   Why? IT WAS WELL SHOWN AND EASY TO COMPREHEND.

6. Were the fire situations realistic? (circle answer)

   1  2  3  4  5
   disliked  liked very much

   Why? THEY WERE VERY REALISTIC.

7. What changes would you make to the Situation Simulator?

   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

8. Comments: I THOUGHT IT WAS AND IS A VERY GOOD IDEA AND SHOULD BE USED AT EVERY BASE TO TEACH FIREFIGHTERS. ALSO EXPAND TO OTHER AIRCRAFT AND ALSO HAZ MAT AND STRUCTURE FIREFIGHTING. IT IS A VERY GOOD TRAINING DEVICE.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 2-21-86  AFSC: 57170  Location: Andrews AFB

How often did you use:
Interior Course  Exterior Course  Aircraft Information  Basic Operations

1. Did you like using the situation simulator? (circle answer)
   1  2  3  4  5
   disliked  liked very much
   Why?  The course was well set up and instructor had to rely on experience and knowledge to be effective.

2. How easy was it to use? (circle answer)
   1  2  3  4  5
   very difficult  very easy
   Why?  Students would benefit by being more familiar with mechanics of basic use of equipment.

3. Would you like to take more training this way? (circle answer)
   1  2  3  4  5
   absolutely not  definitely
   Why?  The type training would keep student more alert to fireground tactics.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1  2  3  4  5
   not clear  clear
   Why?  Student must be familiar with aircraft system to understand information as presented. Use of
   terminology.

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5. Is the information presented in the Basic Operations section easy to understand?

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Why? Detailed information given for student with knowledge of aircraft systems.

6. Were the fire situations realistic? (circle answer)

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<tbody>
<tr>
<td>disliked</td>
<td>liked very much</td>
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</table>

Why? Few general commands needed time to opening exits or accessing aircraft systems.

7. What changes would you make to the Situation Simulator?

8. Comments:
Surveysheet

How often did you use:

Interior Course / Exterior Course / Aircraft Information / Basic Operations

1. Did you like using the situation simulator? (circle answer)
   
   disliked 2 liked very much

   why? It was different and kept my attention:

2. How easy was it to use? (circle answer)
   
   very difficult 3 very easy

   why? After I got used to the machine it was easy but
   there is a lot to remember. Not difficult after I knew where
   everything was:

3. Would you like to take more training this way? (circle answer)
   
   absolutely not 4 definitely

   why? Because it was interesting and helped me in
   making decisions. Also made me aware quick decisions
   decisions are very important:

4. Is the information presented in the Aircraft Information
   section easy to understand? (circle answer)
   
   not clear 5 clear

   why? It was easy to understand but the pictures
   presented could be clearer (too fuzzy):
5. Is the information presented in the Basic Operations section easy to understand?

1  2  3  4  (5)
not clear clear

Why? It gives all the info needed if you

6. Were the fire situations realistic? (circle answer)

1  2  3  4  (5)
disliked liked very much

Why? They were realistic but I would have liked to see
more of a variety of situations.

7. What changes would you make to the Situation Simulator?

0) Make the fires in different locations 3) Make rescue more effective
5) By using, say, the pumpers because they have more men 6) The pumper
has longer lines than the creek trucks and can lay in from a hydrant
7) For resupply should take this into consideration 8) Make resupply of creek trucks possible

8. Comments: Basically I like the idea of the program. It will be
a good training aid for getting to know aircraft and the capability
of the vehicles.

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SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141
Survey Sheet

Date: ___ AFSC: ___ Location: ___

How often did you use:
Interior Course / Exterior Course / Aircraft Information / Basic Operations

1. Did you like using the situation simulator? (circle answer)
   1 2 3 4 5
   disliked  liked very much

   Why? __________________________________

2. How easy was it to use? (circle answer)
   1 2 3 4 5
   very difficult  very easy

   Why? __________________________________

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not  definitely

   Why? __________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear  clear

   Why? __________________________________

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5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5
not clear clear

Why? ________________________________

_______________________________

_______________________________

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5
disliked liked very much

Why? Fire started well, vehicle running out of agent

Good.

_______________________________

_______________________________

7. What changes would you make to the Situation Simulator?

_______________________________

_______________________________

_______________________________

8. Comments: ________________________________

_______________________________

_______________________________

_______________________________
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: _______  AFSC: _______  Location: _______

How often did you use:
Interior Course  ___  Exterior Course  ___  Aircraft Information  ___  Basic Operations  ___

1. Did you like using the situation simulator? (circle answer)

1  2  3  4  5

disliked  liked very much

Why?  Teaches timely and effective responses from personnel involved in emergency situations.

2. How easy was it to use? (circle answer)

1  2  3  4  5

very difficult  very easy

Why?  Some difficulty at first understanding some of the functions, but became easier with each use.

3. Would you like to take more training this way? (circle answer)

1  2  3  4  5

absolutely not  definitely

Why?  Gives opportunity to see and understand all phases of operations.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1  2  3  4  5

not clear  clear

Why?  Sometime seeing how something operates is better than just reading or being told how it works.
5. Is the information presented in the Basic Operations section easy to understand?

\[
\begin{array}{ccccc}
1 & 2 & 3 & 4 & 5 \\
\text{not clear} & & & & \text{clear}
\end{array}
\]

Why? \underline{SEE 4 preceding question}

6. Were the fire situations realistic? (circle answer)

\[
\begin{array}{ccccc}
1 & 2 & 3 & 4 & 5 \\
\text{disliked} & & & & \text{liked very much}
\end{array}
\]

Why? Realistic enough, could only be improved with the real thing.

7. What changes would you make to the Situation Simulator?

None at this time in training.

8. Comments: I like the unit because of the variables in different arrangements, apparatus positioning, etc.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141
Survey Sheet

Date. AFSC: Location: \\

How often did you use:
Interior Course  Exterior Course  Aircraft Information  Basic Operations \\

1. Did you like using the situation simulator? (circle answer)

1 2 3 4 5 \\
disliked liked very much

Why? ________

2. How easy was it to use? (circle answer)

1 2 3 4 5 \\
very difficult very easy

Why? ________

3. Would you like to take more training this way? (circle answer)

1 2 3 4 5 \\
absolutely not definitely

Why? ________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1 2 3 4 5 \\
not clear clear

Why? ________
5. Is the information presented in the Basic Operations section easy to understand?
   
   |   |   |   | 4 | 5 |
   | not clear | clear |
   
   Why? **Evaluating Complete details**

6. Were the fire situations realistic? (circle answer)
   
   |   |   |   | 4 | 5 |
   | disliked | liked very much |
   
   Why? **The Fire Situations seem Real**

7. What changes would you make to the Situation Simulator?
   
   None

8. Comments: **The Situation Simulator is very good**
   
   __________________________
   __________________________
How often did you use:

- Interior Course
- Exterior Course
- Aircraft Information
- Basic Operations

1. Did you like using the situation simulator? (circle answer)
   1 2 3 4 5
   disliked liked very much
   Why? **VERY GOOD FOR TRAINING**

2. How easy was it to use? (circle answer)
   1 2 3 4 5
   very difficult very easy
   Why? **AFTER YOU GET USE TO THE DIFFERENT SELECTIONS & WHAT THEY DO IT WAS EASIER TO UNDERSTAND.**

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not definitely
   Why? **ALMOST LIKE REAL OPERATION IT MAKES YOU THINK WHAT YOU WOULD REALLY DO.**

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear clear
   Why? ________________________________

---

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5. Is the information presented in the Basic Operations section easy to understand?

   1     2     3     4     5
   not clear clear

   Why?

6. Were the fire situations realistic? (circle answer)

   1     2     3     4     5
   disliked liked very much

   Why?

7. What changes would you make to the Situation Simulator?

8. Comments: Simulator was very realistic. It would be nice to see this as permanent training as soon as possible.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 19 Feb 86 AFSC: 57/50 Location: Andrews AFB

How often did you use:
Interior Course 4 Exterior Course 4
Aircraft Information 1 Basic Operations 2

1. Did you like using the situation simulator? (circle answer)
   1 2 3 4 5
   disliked liked very much

   Why? excellent training method

   ______________________________________________________________________

2. How easy was it to use? (circle answer)
   1 2 3 4 5
   very difficult very easy

   Why? It's a totally new experience

   ______________________________________________________________________

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not definitely

   Why? excellent opportunity for training also offers capacity to train without use of actual aircraft

   ______________________________________________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear clear

   Why? It takes a while to get used to. We need to have about 6 more, year round...

   ______________________________________________________________________
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5

not clear clear

Why? It's not a matter of being clear, the information takes a while to digest, presented as it is...

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5

disliked liked very much

Why?

7. What changes would you make to the Situation Simulator?

One scene on the interior course is misleading (P2 drives up to the front of the aircraft...)

8. Comments: This may be the best training method ever used by the Air Force. It offers almost unlimited capabilities... We need about 6 to use year round...
SITUATION SIMULATOR FOR FIREFIGHTERS
C-141

Survey Sheet

Date: _______ AFSC: _______ Location: _______

How often did you use:
Interior Course [ ] Exterior Course [ ]
Aircraft Information [ ] Basic Operations [ ]

1. Did you like using the situation simulator? (circle answer)
   1 2 3 4 5
   disliked liked very much
   Why? Because it made you think of the worst case and it gave you a chance to review.

2. How easy was it to use? (circle answer)
   1 2 3 4 5
   very difficult very easy
   Why? It took some time to remember which button did which result.

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not definitely
   Why? It's helpful in the first instance.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear clear
   Why? It takes a little time to understand.
5. Is the information presented in the Basic Operations section easy to understand?
   
   1  2  3  4  5
   not clear  clear
   
   Why?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

6. Were the fire situations realistic? (circle answer)
   
   1  2  3  4  5
   disliked  liked very much
   
   Why? Because some of the situations it doesn't fit you into.
   __________________________________________________________
   __________________________________________________________

7. What changes would you make to the Situation Simulator?
   
   NONE
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

8. Comments: Easy to understand, Everybody needs a refining change sometime.
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: _ _ _ _ _ AFSC: 57150 Location: Andrews AFB

How often did you use:
Interior Course  Exterior Course  Aircraft Information  Basic Operations

1. Did you like using the situation simulator? (circle answer)

   1  2  3  4  5

   disliked  liked very much

   Why? ______________________________________________________
_________________________________________________________________

2. How easy was it to use? (circle answer)

   1  2  3  4  5

   very difficult  very easy

   Why? WHEN YOU STARTED IT WAS HARD BUT AFTER
                  IT LITTLE WHILE IT GETS EASIER.
                   ______________________________________________________

3. Would you like to take more training this way? (circle answer)

   1  2  3  4  5

   absolutely not  definitely

   Why? ______________________________________________________
_________________________________________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

   1  2  3  4  5

   not clear  clear

   Why? ______________________________________________________
_________________________________________________________________
5. Is the information presented in the Basic Operations section easy to understand?

1  2  3  4  5
not clear  clear

Why? __________________________________________

6. Were the fire situations realistic? (circle answer)

1  2  3  4  5
disliked  liked very much

Why? __________________________________________

7. What changes would you make to the Situation Simulator?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

8. Comments: __________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141
Survey Sheet

Date: 19 FEB 86  AFSC: 57150  Location: ANDREWS

How often did you use:
Interior Course  IIII  Exterior Course  IIII  Aircraft Information  I  Basic Operations  I

1. Did you like using the situation simulator? (circle answer)

   1  2  3  4  5  6
   disliked  liked very much

   Why?  BECAUSE I LEARNED THINGS ABOUT
          THE AIRCRAFT AND FIGHTING FIRE IN DIFFERENT
          SITUATIONS THAT I DIDN'T KNOW BEFORE

2. How easy was it to use? (circle answer)

   1  2  3  4  5
   very difficult  very easy

   Why?  IT WAS EASY BUT SOME TIMES
          THE MACHINE DELAYED AND WASTED
          YOUR TIME

3. Would you like to take more training this way? (circle answer)

   1  2  3  4  5
   absolutely not  definitely

   Why?  IT WAS EDUCATIONAL  PLUS IT WAS
          FUN WHILE YOU LEARNED

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

   1  2  3  4  5
   not clear  clear

   Why?  IT WAS VERY CLEAR AND WELL
          ORGANIZED EASY TO UNDERSTAND
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5

not clear clear

Why? __________________________________________
____________________________________________
____________________________________________

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5

disliked liked very much

Why? __________________________________________
____________________________________________
____________________________________________

7. What changes would you make to the Situation Simulator?

____________________________________________
____________________________________________
____________________________________________
____________________________________________

8. Comments:

____________________________________________
____________________________________________
____________________________________________
____________________________________________
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 1/ Feb 86  AFSC: J-1570  Location: AMOROSO

How often did you use:
   Interior Course  /  Exterior Course  
   Aircraft Information  /  Basic Operations  /

1. Did you like using the situation simulator? (circle answer)
   
   | 1 | 2 | 3 | 4 | 5 |
   |  |  |  |  |  |
   disliked  liked very much

   Why? I didn't use or did you ask a
does this happen? The flight attendant did your demonstration

2. How easy was it to use? (circle answer)

   | 1 | 2 | 3 | 4 | 5 |
   |  |  |  |  |  |
   very difficult  very easy

   Why? Everybody is very temporary

3. Would you like to take more training this way? (circle answer)

   | 1 | 2 | 3 | 4 | 5 |
   |  |  |  |  |  |
   absolutely not  definitely

   Why? You had less time to set there and see

   what your problem

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

   | 1 | 2 | 3 | 4 | 5 |
   |  |  |  |  |  |
   not clear  clear

   Why? Pictures could be clearer

   Pictures where was the main picture

   You see pictures with most of things and you
can hardly read them because of pictures
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5
not clear  clean

Why? ________________________________

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5
disliked  liked very much

Why? ________________________________

7. What changes would you make to the Situation Simulator?

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

8. Comments: ________________________________

________________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________
How often did you use:

- Interior Course
- Exterior Course
- Aircraft Information
- Basic Operations

1. Did you like using the situation simulator? (circle answer)

   1  2  3  4  5
   disliked liked very much

   Why? I learned from it, it makes the situation's seem more realistic than just reading material on the correct procedures.

2. How easy was it to use? (circle answer)

   1  2  3  4  5
   very difficult very easy

   Why? You just had to touch the screen.

3. Would you like to take more training this way? (circle answer)

   1  2  3  4  5
   absolutely not definitely

   Why? I feel you could learn a great deal from using it.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

   1  2  3  4  5
   not clear clear

   Why? It explains, and pictures were realistic and good.
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5

not clear clear

Why? ___________________________________________________________

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5

disliked liked very much

Why? ___________________________________________________________

7. What changes would you make to the Situation Simulator?

__________________________

8. Comments: This is a good machine and should be kept.

and serious training should be practiced on it.
SITUATION SIMULATOR FOR FIREFIGHTERS C-141
Survey Sheet

Date: 2/24/86  AFSC: 57150  Location: Andrew AFB

How often did you use:
Interior Course  III  Exterior Course  III
Aircraft Information  I  Basic Operations  I

1. Did you like using the situation simulator? (circle answer)

1  2  3  4  5

disliked liked very much

Why? YES, BUT I FEEL IT COULD CAUSE
PROBLEMS IN FUTURE IF TOO MUCH DEPENDENCE
IS PLACED ON IT, GETTING AWAY FROM HANDS ON

2. How easy was it to use? (circle answer)

1  2  3  4  5

very difficult very easy

Why? TIMING AND THING THE WAY THE MACHINE
IS DESIGNED TO THINK WHICH IS IN MANY
SITUATIONS DIFFERENT TO ACTUAL OPERATIONS

3. Would you like to take more training this way? (circle answer)

1  2  3  4  5

absolutely not definitely

Why? I FEEL THE CONTINUED USE AND PRACTICE
OF THE ORGAN (GETTING THE BUTT OUT) WILL
BE BENEFICIAL TO ALL OF STANDARDIZING MCT FCO

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1  2  3  4  5

not clear clear

Why?
4. Is the information presented in the Basic Operations section easy to understand?

1  2  3  4  5
not clear clear

Why? ____________________________________________________________

5. Why?

6. Were the fire situations realistic? (circle answer)

1  2  3  4  5
disliked liked very much

Why? I believe they are as realistic as possible.

7. What changes would you make to the Situation Simulator?

I don't know how many variables can be put into it but some of the conditions on fire fighting are typical. If it must tell it to go to extinguishment from contact if a firefighter must be instructed to do this it

8. Comments: Has no business in the position.

Along with who ever taught him, I feel this is the ideas that will be drilled into the young users. Don't move fast or any thing without an order.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 35/6/86        AFSC:       Location: ________

How often did you use:
Interior Course    Exterior Course
Aircraft Information Basic Operations

1. Did you like using the situation simulator? (circle answer)

1      2      3      4      5

liked very much

Why? It is a way to learn without endangering life or

property.

2. How easy was it to use? (circle answer)

1      2      3      4      5

very difficult very easy

Why? It was easy after you got to know the location of
the controls.

3. Would you like to take more training this way? (circle answer)

1      2      3      4      5

absolutely not definitely

Why? It is a cheaper way to learn than burning a C-141

4. Is the information presented in the Aircraft Information
section easy to understand? (circle answer)

1      2      3      4      5

not clear clear

Why? Because it showed the location of switches before
everything happened and the area information was
very basic.
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5
not clear clear

Why? Types of equipment available

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5
disliked liked very much

Why? Yes, because it shows what can happen in fire situations.

7. What changes would you make to the Situation Simulator?

More types & areas of fire on the aircraft

8. Comments: This type of equipment would be very valuable. It would be nice to see different types of aircraft.

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SITUATION SIMULATOR FOR FIREFIGHTERS C-141

Survey Sheet

Date: 25 Feb 96  AFSC: 50  Location: Andrews

How often did you use:

Interior Course  / / /  Exterior Course  / / /
Aircraft Information  / /  Basic Operations  / /

1. Did you like using the situation simulator? (circle answer)

1  2  3  4  5
disliked liked very much

Why?  confusing because I was new to the machine

2. How easy was it to use? (circle answer)

1  2  3  4  5
very difficult very easy

Why?  touch screen sometimes inaccurate in selections

3. Would you like to take more training this way? (circle answer)

1  2  3  4  5
absolutely not definitely

Why?  you do learn a little

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1  2  3  4  5
not clear clear

Why?  

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5. Is the information presented in the Basic Operations section easy to understand?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>not clear</td>
<td>clear</td>
<td></td>
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</table>

Why? ____________________________________________________________
________________________________________________________________
________________________________________________________________

6. Were the fire situations realistic? (circle answer)

<table>
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<tbody>
<tr>
<td>disliked</td>
<td>liked very much</td>
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</tr>
</tbody>
</table>

Why? ____________________________________________________________
________________________________________________________________
________________________________________________________________

7. What changes would you make to the Situation Simulator?

I would like to see a keyboard instead of a touch screen

Why? ____________________________________________________________
________________________________________________________________
________________________________________________________________

8. Comments: ____________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 25 Feb 76    AFSC: 7/30    Location: Bldg. 1287

How often did you use:
Interior Course    Exterior Course
Aircraft Information    Basic Operations

1. Did you like using the situation simulator? (circle answer)

1     2     3     4     5

 disliked         liked very much

Why? Very realistic and constructive.

2. How easy was it to use? (circle answer)

1     2     3     4     5

very difficult    very easy

Why? It's hard at the beginning to get used to it.

3. Would you like to take more training this way? (circle answer)

1     2     3     4     5

absolutely not    definitely

Why? It's easy to learn this way and learn more.

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

1     2     3     4     5

not clear    clear

Why? It's pretty well presented and simple.
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5
not clear clear

Why? It was simple and explained in detail.

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5
disliked liked very much

Why? The pictures are very realistic and with the voices of the people from the computer it feels like you are in a real fire.

7. What changes would you make to the Situation Simulator?

Make more different situations.

8. Comments:

I enjoyed pretty much because it gave me the chance of make decision from different positions like: crew chief, assistant chief, hand line, driver, etc.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 25 Feb 76  AFSC: 57160  Location: ____

How often did you use:
Interior Course  /  Exterior Course  /  Aircraft Information  /  Basic Operations  /

1. Did you like using the situation simulator? (circle answer)
   
   1  2  3  4  5
   
   disliked  liked very much

   Why? gave me self an idea of what goes on outside of the individual truck

2. How easy was it to use? (circle answer)
   
   1  2  3  4  5
   
   very difficult  very easy

   Why? after a couple of tries it goes up to a 5

3. Would you like to take more training this way? (circle answer)
   
   1  2  3  4  5
   
   absolutely not  definitely

   Why? gives more insight

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   
   1  2  3  4  5
   
   not clear  clear

   Why? sometimes it didn't make sense
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5
not clear clear

Why? ________________________________

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5
disliked liked very much

Why? ________________________________

7. What changes would you make to the Situation Simulator?

______________________________

8. Comments: ________________________________
SITUATION SIMULATOR FOR FIREFIGHTERS

C-141

Survey Sheet

Date: 7/7/80  AFSC: 57150  Location: AN HUNTS 197B

How often did you use:
- Interior Course
- Exterior Course
- Aircraft Information
- Basic Operations

1. Did you like using the situation simulator? (circle answer)
   1 2 3 4 5
   disliked liked very much
   Why? Help with decision making process

2. How easy was it to use? (circle answer)
   2 3 4 5
   very difficult very easy
   Why? Takes sometime getting familiar with using hands to put info on screen into proper areas

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not definitely
   Why? More time would allow for more experimentation

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear clear
   Why? Takes sufficient to make sense

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5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5

- not clear
- clear

Why? Not to detailed

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5

- disliked
- liked very much

Why? appear to be common areas that fires may be expected on actual emergencies

7. What changes would you make to the Situation Simulator?

- None

8. Comments:

-
Survey Sheet

Date: 27 Feb 86  AFSC: 57150  Location: APFB

How often did you use:
- Interior Course 4
- Exterior Course 4
- Aircraft Information 4
- Basic Operations 4

1. Did you like using the situation simulator? (circle answer)
   1 2 3 4 5
   disliked    liked very much
   Why? Gave the feeling of control in fireground situation

2. How easy was it to use? (circle answer)
   1 2 3 4 5
   very difficult very easy
   Why? It was moderately hard to operate due to student being color blind and entrances to aircraft were hard to identify

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not definitely
   Why? Helps you make fireground decisions more accurate and faster

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear clear
   Why? Aircraft information was good, explained, easy to understand
5. Is the information presented in the Basic Operations section easy to understand?
   
   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 |
   | not clear | clear |
   
   Why? very well illustrated
   

6. Were the fire situations realistic? (circle answer)
   
   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 |
   | disliked | liked very much |
   
   Why? liked the way the fire situations were set up
   

7. What changes would you make to the Situation Simulator?
   
   Changes I would like to see would be that symbols should be used instead of colors to identify entrance / into aircraft
   

8. Comments:
   
   ________________________
   ________________________
   ________________________
   ________________________
   ________________________
Date: 1-5-88  AFSC: 53160  Location: Hawkins F. O.

How often did you use:
- Interior Course 3
- Exterior Course 5
- Aircraft Information
- Basic Operations

1. Did you like using the situation simulator? (circle answer)
   
   disliked  2  3  4  liked very much

   Why? A NEW APPROACH TO TRAINING

2. How easy was it to use? (circle answer)
   
   very difficult  2  3  4  5  very easy

   Why? FOR SOMEONE NOT USED FOR COMMUTERS
   IT MAY PROVE TO BE A LITTLE DIFFICULT TO USE

3. Would you like to take more training this way? (circle answer)
   
   absolutely not  2  3  4  definitely

   Why?

4. Is the information presented in the Aircraft Information
   section easy to understand? (circle answer)
   
   not clear  2  3  4  clear

   Why?
5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 ☐
not clear clear

Why? ________________________________

6. Were the fire situations realistic? (circle answer)

1 2 3 4 ☐
disliked liked very much

Why? GIVES YOU DIFFERENT SCENARIOS THAT YOU COULD FACE ON THE FIREGROUND.

7. What changes would you make to the Situation Simulator?

THAT IT IS SET UP TO COUCG F.0. SAPi

8. Comments: THIS IS GOOD TRAINING AID. IT ALLOWS YOU TO HAVE COMMAND OF SITUATIONAL TACTICS AND APPLY THEM.
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: JUN 76  AFSC:  7750  Location: Andrews

How often did you use:
Interior Course  Exterior Course  Aircraft Information  Basic Operations

1. Did you like using the situation simulator? (circle answer)

   1  2  3  4  5
   disliked  liked very much

   Why? ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

2. How easy was it to use? (circle answer)

   1  2  3  4  5
   very difficult  very easy

   Why? ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

3. Would you like to take more training this way? (circle answer)

   1  2  3  4  5
   absolutely not  definitely

   Why? ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)

   1  2  3  4  5
   not clear  clear

   Why? ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

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5. Is the information presented in the Basic Operations section easy to understand?

1 2 3 4 5

(5)

clear

Why? ________________________________________

6. Were the fire situations realistic? (circle answer)

1 2 3 4 5

disliked liked very much

Why? To "real" situations (1) crew is able to ventilate and secure systems, begin rescue efforts, and also a handline can be operated in conjunction with turns for exterior fires.

7. What changes would you make to the Situation Simulator?

Add in the units from mutual aid response to the Command/Position/Apparatus phase and be able to direct them. Wouldn't hurt to have a medical unit involved for triage etc.

8. Comments: Very Good
SITUATION SIMULATOR
FOR FIREFIGHTERS
C-141

Survey Sheet

Date: 2/4 AFSC: 37150 Location: Andrews  2 years experience

How often did you use:
Interior Course  III Exterior Course III
Aircraft Information [ ] Basic Operations [ ]

1. Did you like using the situation simulator? (circle answer)
   0 2 3 4 5
   disliked liked very much
   Why? To help calm personnel in tense situation

2. How easy was it to use? (circle answer)
   1 2 3 4 5
   very difficult very easy
   Why? Different

3. Would you like to take more training this way? (circle answer)
   1 2 3 4 5
   absolutely not definitely
   Why? Self study

4. Is the information presented in the Aircraft Information section easy to understand? (circle answer)
   1 2 3 4 5
   not clear clear
   Why? 
5. Is the information presented in the Basic Operations section easy to understand?

    1  2  3  4  5
    not clear  clear

Why? __________________________________________

6. Were the fire situations realistic? (circle answer)

    1  2  3  4  5
    disliked  liked very much

Why? __________________________________________

7. What changes would you make to the Situation Simulator?

______________________________________________

______________________________________________

______________________________________________

8. Comments:

______________________________________________

______________________________________________

______________________________________________
THE PRAM PROGRAM OFFICE

A co-managed Air Force organization (ASD and AFALC) whose mission is to reduce AF Operational and Support costs and enhance the combat effectiveness of fielded systems. PRAM has the funds and the expertise required to prototype and test new ideas. Since 1975, PRAM has initiated projects to:

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- Adapt commercial equipment and methods to AF use.
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