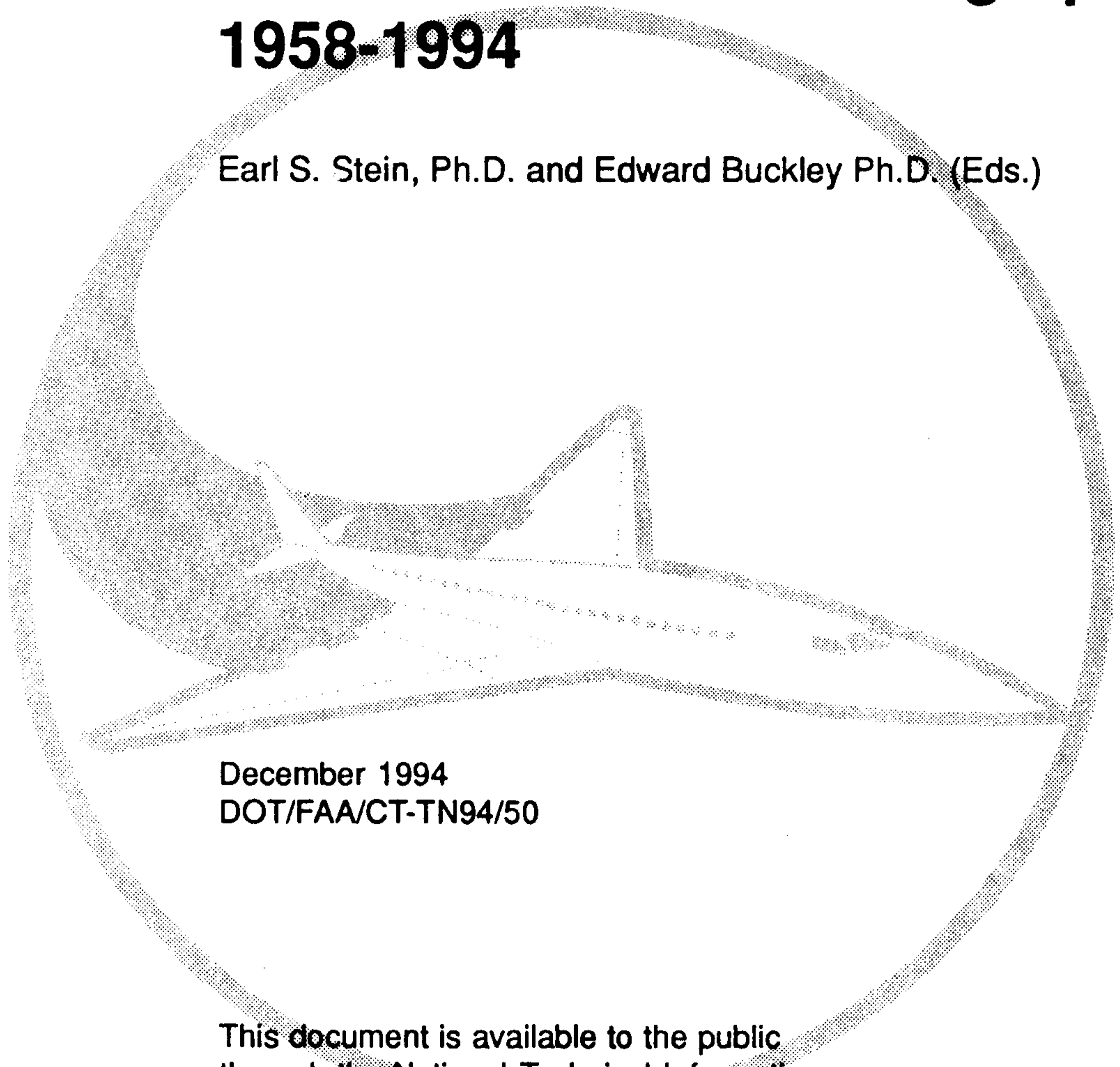


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Human Factors at the FAA Technical Center: Bibliography 1958-1994

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16. Abstract <p>Since the Federal Aviation Administration (FAA) arrived in Atlantic City in 1958, there have been ongoing efforts in aviation human factors. These efforts have taken many forms and have focused on both the ground and air sides of the airspace system. Psychologists, engineers, systems analysts, computer scientists, and others have participated in the studies that have led to the numerous reports and papers cited in the bibliography. While this listing is probably not all inclusive, it covers virtually all work that is referenced in automated data bases plus publications that were identified by current and past researchers, but which never made it to the computerized listings.</p> <p>This bibliography is meant to highlight the work that has gone on over the years. While many of the documents cited are still available from the Technical Center library, or from the authors themselves, the editors do not suggest that everything is retrievable, and, in fact, much of the older work has been superseded by more modern technology and thinking. The research of 30 years ago has served as a foundation for the human factors engineering that is being done today.</p> <p>The references are provided in alphabetical order and indexed by numbers associated with subject matter categories.</p> <p>Human factors research is alive and continues to progress in the FAA and at the Technical Center.</p>					
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INTRODUCTION

me purpose of this bibliography is to provide a listing of all human factors-related publications accomplished by, or under the direction of, the Federal Aviation Administration (FAA) Technical Center since its formation at Atlantic City International Airport in 1958.

Although this is a small community of human factors researchers, in an environment that has had relatively little turnover, researchers have not always been aware of the individual work of others and of what had been done before. While it is standard practice to begin a new project by initiating a literature search, not everything accomplished becomes stored in the various data bases that exist for government publications, psychology, and human factors. Much of this work was done for specific projects and, unfortunately, was not widely disseminated.

If researchers in this rather small community are not aware of everything that has gone on for the past 25 years, it could hardly be expected that human factors personnel outside of the Technical Center, and those with human factors issues to resolve, would know about the body of research conducted at the Technical Center.

The purpose of this publication was to assemble a bibliography of this material and couple it with a referencing system. This referencing system would facilitate looking up the complete American Psychological Association (APA) format citation for anything published or presented (and published in a proceedings) with a human factors content. Only documents that were published in some form or the other were selected for this listing.

METHOD

The process of gathering this information was more complicated than might have been anticipated. This was due, in part, to the nature of the work at the Technical Center, and, in part to the fact that some of what is done is not stored in any data base.

The initial step involved contacting all current human factors researchers still employed by the FAA who have ever worked at the Technical Center. A personal bibliography of work they had completed or knew was done for the Technical Center was requested. Surprisingly, the response often lacked key parts of one or more references for a complete APA citation. These were returned with a request for the retrieval of the necessary information, i.e., report numbers and volume numbers of a proceeding. All information that was available from any source is included here.

While there had been previous computerized literature searches of all reports accomplished at the Technical Center, it was decided to try again with a focus on human factors and related disciplines. The following search strategy was accomplished using the key words below:

FAA Technical Center, DOT/FAA Technical Center, NAFEC, or
National Aviation Facilities Experimentation Facility, and

Human Factors, human factors engineering, aviation human factors, workload, performance, human error, ergonomics, attention, vision, visual, hearing, human behavior, visual displays, vigilance, monitoring, target acquisition or human.

While it was recognized that this was not an all inclusive list, it was hoped that it would produce additional references from those cited by the authors themselves. This search did find some additional citations from those provided by current Technical Center human factors personnel.

References in the bibliography are included in as complete a form as possible based on the information provided by the literature searches and authors. In terms of author-supplied information, there are some missing data fields where memory has failed and documentation has been incomplete.

The editors of this bibliography make no claim to the accessibility of the documents at the Technical Center. The purpose of the bibliography was to provide as broad a listing as possible. This listing shows the nature and breadth of the work that has been conducted by the Technical Center over the years.

The reader will find that some of the documents may be more accessible than others. What follows is a brief guideline on this accessibility.

Documents with FAA report numbers, which may take the form of "DOT/FAA", "RD", "FAA/BRD", "FAA/ARDS", or "FAA/NA", may be accessed through the library at the Technical Center or the library at FAA headquarters in Washington, DC. Those with an NTIS number will be on file with the National Technical Information Service in Alexandria, VA. Articles published in journals can be acquired through interlibrary loan from any library that offers that service. To acquire any documents not covered by one of the groups already cited, it is suggested that the researcher write the author, in care of the Technical Center. If that does not succeed, the senior editor of the this bibliography will make every effort to help acquire the document, if it still exists.

The index which follows the reference list was constructed based on the list itself. The editors reviewed the contents of the list and built what amounted to a taxonomy of the contents. Items are listed alphabetically and are referenced by number in the index. As it turned out, the process of assembling this bibliography was iterative, and additions, with some deletions, took over one year. Referencing by number was the most direct and simplified method.

1. Akers, J. F., & Clark, R. A. (1973, October). Operational evaluation of the ARTS II radar alpha-numeric display subsystem (RADS) (RD-73-149) Interim Report. Atlantic City, NJ: National Aviation Facilities Experimental Center.
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3. Applied Psychology Corporation. (1961, June). Comparative conspicuity of several aircraft exterior paint patterns (FAA/BRD-127 #2). Arlington, VA.
4. Applied Psychology Corporation. (1961, June). Aircraft flight attitude information as indicated by exterior paint patterns (FAA/BRD-127 #3). Arlington, VA.
5. Applied Psychology Corporation. (1961, June). Field study of threshold ranges for aircraft detection and color identification (FAA/BRD-127 #4). Arlington, VA.
6. Applied Psychology Corporation. (1961, December). The role of paint in mid-air collision prevention (FAA/BRD-127 #1). Arlington, VA.
7. Applied Psychology Corporation. (1962, March). Flight simulator tests of altitude-coded lights (FAA/BRD-127 #8). Arlington, VA.
8. Applied Psychology Corporation. (1962, April). Outdoor test range evaluation of aircraft paint patterns (FAA/BRD-127 #7). Arlington, VA.
9. Applied Psychology Corporation. (1962, June). Pilot judgments of aircraft range and relative altitude: Ground-to-air and air-to-air observations (FAA/BRD-127 #10 & #11). Atlantic City, NJ: National Aviation Facilities Experimental Center.

10. Applied Psychology Corporation. (1962, June). Distance estimation of frequency-coded and uniformly flashing lights (FAA/BRD-127 #12). Atlantic City, NJ: National Aviation Facilities Experimental Center.
11. Applied Psychology Corporation. (1962, June). Conspicuity of selected signal lights against city-light backgrounds (FAA/BRD-127 #13). Atlantic City, NJ: National Aviation Facilities Experimental Center.
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20. Bassford, R. S. (1973, August). Technical evaluation of weather clutter feasibility model (RD-73-85) Interim Report. Atlantic City, NJ: National Aviation Facilities Experimental Center. (NTIS No. AD-766-007)
21. Bishop, D. E. (1964, December). Analysis of community and airport relationships/noise abatement: Development of aircraft noise compatibility criteria for varied land uses (RD-64-148) 2. Los Angeles, CA: Bolt, Beranek, and Newman, Inc.
22. Bishop, D. E. (1964, December). Analysis of community and airport relationships/noise abatement: Discussion of some legal aspects of aircraft noise (RD-64-148) 3. Los Angeles, CA: Bolt, Beranek, and Newman, Inc.
23. Bishop, D. E. (1965, December). Analysis of community and airport relationships/noise abatement: Predicting community response to aircraft noise (RD-65-130 Part I) Final Report. Van Nuys, CA: Bolt, Beranek, and Newman, Inc.
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