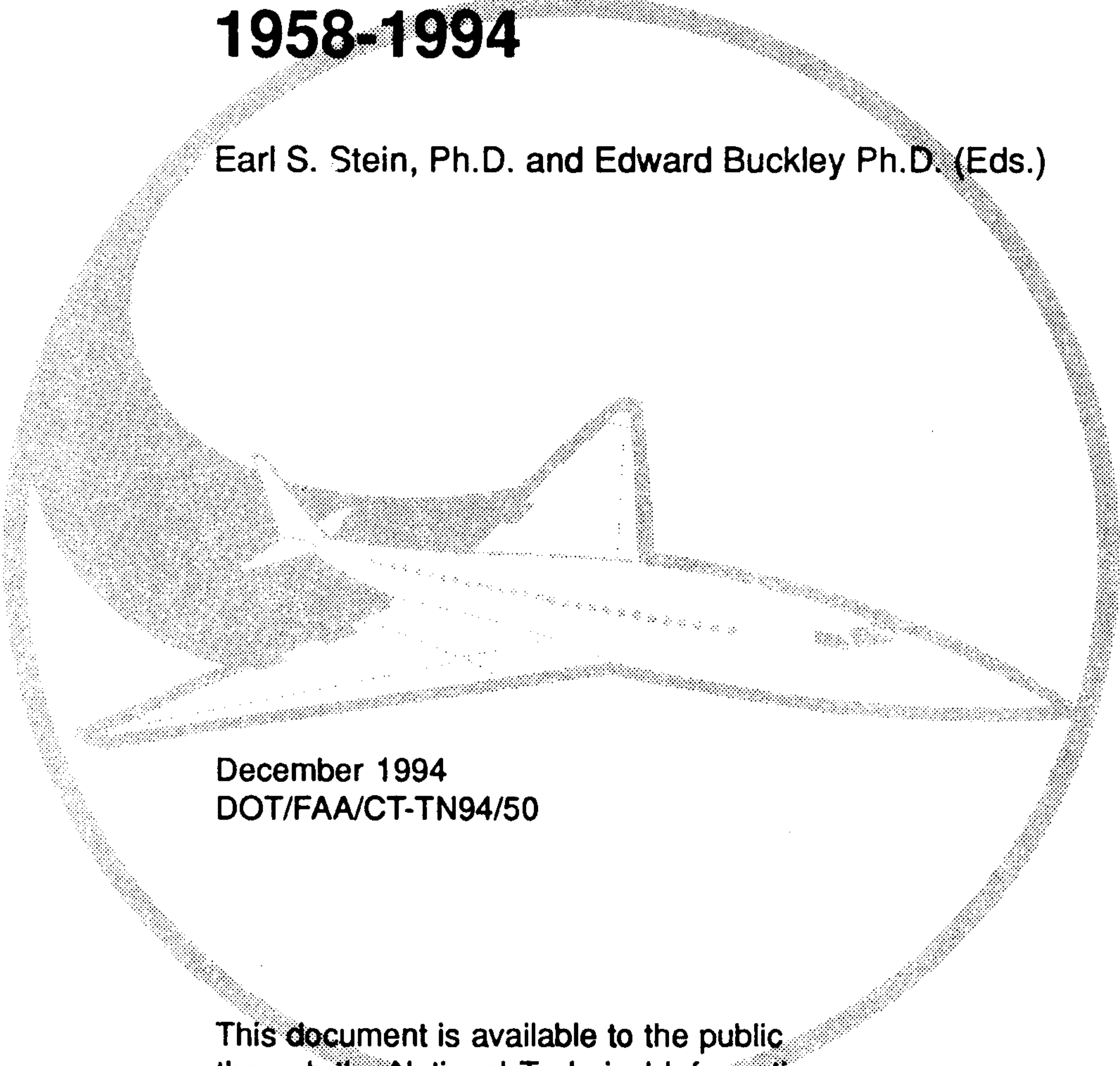


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## **Human Factors at the FAA Technical Center: Bibliography 1958-1994**

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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themselves, the editors do not suggest that everything is retrievable, and, in fact, much of the older work has been superseded by more modern technology and thinking.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.

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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.
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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.
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## INDEX

### AIRCRAFT

COLLISION AVOIDANCE	12 13 16 17 58 67 68 77 108 169 173 215 265 266
DESIGN	150
DISPLAYS	58 67 68 80 81 85 90 149 158 170 173 215 252 266 284
EQUIPMENT	03 04 05 06 07 08 10 15 16 67 68 81 85 93 120 154 175 180 264
HEADS UP	212 271
LANDING LIGHTS	167
NAVIGATION	07 81 154
SIMULATION	07 80 81 83 96 149 174 215 220 253 257 283

### AIRCREW

BRIEFING	139 140
DECISION MAKING	171
GENERAL AVIATION	209 223 224 254
HUMAN ERROR	14 17 157 171
IN FLIGHT MEASUREMENT	224
OBSERVERS	177
PILOT REPORTS	76
PERCEPTION	03 04 05 06 07 08 10 11 12 13 16 17 101 168 194 270
PERFORMANCE	02 9 12 13 14 15 16 17 83 171 173 177 182 193 221 222 227
PSYCHOPHYSIOLOGY	181 182 193
TRAINING	265
WORKLOAD	114 170 172 196 236 250 254 258 259 270

## AIRPORT

LIGHTING	65 95 103 122 130 131 133 134 135 136 138 151 166 207 261 262 278
NOISE	21 22 23 24 25 26 27 28 29 31 59 97 109 116
SECURITY	86 121 146
SIGNS	91 92 111 122
TAXIWAY MARKING	38 39 111 122 278
VASI	90 152 263
VISUAL DISPLAY	30 37

## ATC

ACTIVITY	33 73
ALLOCATION OF FUNCTION	75 233 237 238 282
AUTOMATION	35 50 53 78 79 119129 178 183 234 238
CONTROLLER ERROR	41 42 43 44 46 47 84 113 157
DATA ENTRY	61 163
DECISION MAKING	48 49 117
FACILITY LIGHTING	142
GENERAL AVIATION	85 209
GRAPHIC SIMULATION	124 125 205 232 235
INFORMATION DISPLAYS 216	45 62 63 99 126 127 153 155 156 159 162 203
MATH MODELS	18 27 56 106 203 216
MEMORY	87 88 98 245 251 255 280 285 286
MNI	50 267
OBSERVERS	40 226 279
Operations	158 282

#### ATC CONTINUED

PERCEPTION	11 110 117 194 242 247 248 249
PERFORMANCE	40 41 42 43 44 46 47 51 52 73 74 75 84 98 110 279
PROCEDURES	34 54 74 158
RADAR DISPLAY	01 32 153 155 156 162 267
SECTOR DESIGN	18 70 106 268
SEPARATION	41 42 66 104 105 243 244
SIMULATION	36 37 38 39 41 42 43 44 46 47 66 103 104 105 107 108 160 190 225 226 228 230 239 240 241 243 244 246 285 286
SITUATION AWARENESS	88 89
TRACON	32 35 69 102 208 211 287
TRAINING	71 72
WORKLOAD	18 42 43 44 46 106 137 196 226 228 229 231 246 250

#### COMMUNICATIONS

DATA LINK	94 206 210 272 273 274 275 276
LANGUAGE	49 94 128 143
VOICE	55 56 93 128 143 148 213
VSCS	147 188 189 198 199 200 201 202

#### FLIGHT SERVICE

ACTIVITY	112
DEMONSTRATION	145
DISPLAYS	165
EVALUATION	164 165 184 192
MAINTENANCE MONITOR	144

## HELICOPTER

HELIPORTS 269 281

## HUMAN FACTORS

CHECKLIST 214

EQUIPMENT-  
LABORATORY 96 179 197 277

EYE TRACKING 110 277

LABORATORY 82 118

MEASUREMENT 204

PROGRAM 185

RESEARCH  
PLANNING 256

## IDENTIFICATION BEACONS

AIRCRAFT 167 169

VEHICLE 57

PHYSICS 187

## RUNWAY

APPROACH  
INFORMATION 14 36 37 38 151 152 263 288

LIGHTING 133 134 135 136 138 166 176 207 208 261 262

MARKING 132 152 288

SEPARATION 39 104 105 115

WARNING 19

## SYSTEMS

DESIGN 120 123 127 137 150 157 186 211 214 260 282 287  
289

TEST 119 129 260 282

TOWER

CAB	32 33 34 161
DESIGN	33 64 65 69 73 161
EQUIPMENT	100
SITING	191
SIMULATION	100
WINDOWS	65 161 290

WEATHER

FOG	132
MODELS	20
TELEPHONE ANSWERING SERVICE	217 218 219
WEATHER DISPLAYS	19 60 141 195