INDEX TO FAA OFFICE OF AVIATION MEDICINE REPORTS: 1961 THROUGH 1967

Approved by

J. ROBERT DILLE, M.D.
CHIEF, CIVIL AEROMEDICAL INSTITUTE

Released by

P. V. SIEGEL, M.D.
FEDERAL AIR SURGEON

March 1968

Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Aviation Medicine
ACKNOWLEDGMENT

The diligent assistance of Mary Ellen Allen and "Corky" Koch in compiling this index is gratefully acknowledged.

Qualified requesters may obtain Aviation Medical Reports from Defense Documentation Center. The general public may purchase from Clearinghouse for Federal Scientific and Technical Information, U.S. Dept. of Commerce, Springfield, Va. 22151
INDEX TO FAA OFFICE OF AVIATION MEDICINE REPORTS: 1961 THROUGH 1967

1961

61-1 Trites, D. K.: Problems in air traffic management: I. Longitudinal prediction of effectiveness of air traffic controllers.


62-8 Smith, P. W.: Toxic hazards in aerial application.


62-16 Hawkes, G. R.: Absolute identifications of cutaneous stimuli varying in both intensity level and duration.

62-17 Collins, W. E.: Manipulation of arousal and its effects on human vestibular nystagmus induced by caloric irrigation and angular accelerations.


62-20 Mohler, S. R.: Civil Aeromedical Research: Responsibilities, aims; and accomplishments.


1963


63-3 Collins, W. E.: Observations on the elicitation of secondary and inverted primary nystagmus from the cat by unilateral caloric irrigation.


63-5 Melton, C. E., Jr.: Neural control of the ciliary muscle.

63-6 Balke, B.: A simple field test for the assessment of physical fitness.


63-10 Gogel, W. C.: The perception of depth from binocular disparity.

63-11 Lategola, M. T.: "In vivo" measurement of total gas pressure in mammalian tissue.

63-12 Nagle, F., Balke, B., Ganslen, R. V., and Davis, A. W.: The mitigation of physical fatigue with "spartase".

63-13 Collins, W. E.: Primary, secondary, and caloric nystagmus of the cat following habitation to rotation.

63-14 Collins, W. E.: Nystagmus responses of the cat to rotation and to directionally equivalent and non-equivalent stimuli after unilateral caloric habituation.


63-17 Tobias, J. V.: Application of a "relative" procedure to a problem in binaural beat perception.

63-18 Balke, B.: Experimental evaluation of work capacity as related to chronological and physiological aging.


63-20 Gogel, W. C.: The visual perception of spatial extent.

63-21 Tang, P. C., and Dille, J. R.: Inflight loss of consciousness, a case report.

63-22 Hinshaw, L. B., Page, B. B., Brake, C. M., Emerson, T. E., Jr., and Masucci, F. D.: The mechanisms of intrarenal hemodynamic changes following acute arterial occlusion.


63-27 Dille, J. R., Crane, C. R., and Pendergrass, G. E.: The flammability of lip, face, and hair preparations in the presence of 100% oxygen.


63-32 Hinshaw, L. B., Emerson, T. E., Jr., and Brake, C. M.: Mechanism of autoregulation in the intact kidney.

Tech. Pub.


1964

64-1 Wentz, A. E.: Studies on aging in aviation personnel.
64-2 Naughton, J., Balke, B., and Nagle, F.: The effect of physical conditioning on an individual before and after suffering a myocardial infarction.
64-4 Spieth, W.: Cardiovascular health status, age, and psychological performance.
64-6 Seipel, J. H., and Wentz, A. E.: Unexpected neurologic disease in aviation personnel: Survival following seizures in flight.
64-9 Freud, S. L.: Duration of spiral aftereffect as a function of retinal size, retinal place, and hemiretinal transfer.
64-10 Freud, S. L.: Duration as a measure of the spiral aftereffect.
64-12 Scarborough, W. R.: Comments on progress in ballistocardiographic research and the current state of the art.

64-13 Gogel, W. C.: The size cue to visually perceived distance.
64-16 Tobias, J. V., Collins, W. E., and Allen, M. E.: Aviation medicine translations: Annotated bibliography of recently translated material. II.
64-17 Freud, S. L.: The physiological locus of the spiral aftereffect.
64-18 Melton, C. E., Jr.: Physiological recording from pilots operating an aircraft simulator.
64-19 Perloff, J. K.: The recognition of strictly posterior myocardial infarction by conventional scalar electrocardiography.
64-20 FAA Aviation Medical Library: Aviation medical papers and reports: A bibliography.

1965

65-3 Reighard, H. L.: Medical services at airports.
65-12 Snyder, R. G.: Survival of high-velocity free-falls in water.
65-13 Mohler, S. R.: Fatigue in aviation activities.
65-14 Snow, C. C., and Hasbrook, A. H.: The angle of shoulder slope in normal males as a factor in shoulder-harness design.
65-21 Trites, D. K.: Problems in air traffic management: VI. Interaction of training-entry age with intellectual and personality characteristics of air traffic control specialists.
65-29 Hauty, G. T., and Adams, T.: Phase shifts of the human circadian system and performance deficit during the period of transition: II. West-East flight.

1966

66-4 Tobias, J. V.: A table of intensity increments.


66-8 Mohler, S. R.: The predominant causes of crashes and recommended therapy.


66-21 Naughton, J., Lategola, M. T., and Shanbour, K.: Clinical aviation medicine: A physical-conditioning program for cardiac patients.


66-26 Clark, G.: Problems in aerial application: Histochimistry of Weil stain on liver.


66-29 Mohler, S. R.: Recent findings on the impairment of airmanship by alcohol.


66-33 Young, J. W.: Recommendations for shoulder restraint installation in general aviation aircraft.

66-34 Clark, G.: Problems in aerial application: A comparison of the acute effects of endrin and carbon tetrachloride on the livers of rats and of the residual effects one month after poisoning.

66-35 Melton, C. E., Jr., and Wicks, S. M.: Pilot vision considerations: The effect of age on binocular fusion time.

66-36 Nagle, F. J., Naughton, J., and Balke, B.: Clinical aviation medicine research: Comparison of simultaneous measurements of intraaortic and auscultatory blood pressures with pressure-flow dynamics during rest and exercise.

1967

67-1 Cobb, B. B., Jr.: The relationships between chronological age, length of experience, and job performance ratings of air route traffic control specialists.
67-3 McFadden, E. B.: Development of techniques for evaluating the physiological protective efficiency of civil aviation oxygen equipment.
67-6 Collins, W. E., and Guedry, F. E., Jr.: Adaptation to vestibular disorientation. V. Eye-movement and subjective turning responses to two durations of angular acceleration.
67-7 Guedry, F. E., Jr., and Collins, W. E.: Adaptation to vestibular disorientation. VI. Eye-movement and subjective turning responses to varied durations of angular acceleration.
67-10 Rowland, R. C., Jr., and Tobias, J. V.: Interaural intensity difference limen.
67-12 Collins, W. E.: Adaptation to vestibular disorientation. VII. Special effects of brief periods of visual fixation on nystagmus and sensations of turning.
67-15 Melton, C. E., Jr., and Wicks, S. M.: In-flight physiological monitoring of student pilots.
67-16 Lewis, M. F.: Cross-modality matching of loudness to brightness for flashes of varying luminance and duration.
67-19 Collins, W. E.: Adaptation to vestibular disorientation. VIII. “Coriolis” vestibular stimulation and the influence of different visual surrounds.
67-23 Vereegge, E. J.: Type airmen certification as related to accidents.
## Author Index

<table>
<thead>
<tr>
<th>Name</th>
<th>Report</th>
<th>Name</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bailey, B.</td>
<td>62-6, 63-6, 63-12, 63-18, 63-33, 63-34, 64-2, 64-3, 66-36.</td>
<td>Higgins, E. A.</td>
<td>63-23, 66-14, 66-39.</td>
</tr>
<tr>
<td>Freud, S. L.</td>
<td>64-9, 64-10, 64-17, 66-25.</td>
<td>McClenathan, J. E.</td>
<td>64-7.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moser, K. M.</td>
<td>64-5, 64-7, 64-8.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moses, R.</td>
<td>66-14.</td>
</tr>
<tr>
<td>Name</td>
<td>Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nagle, F. J.</td>
<td>63-12, 63-34, 64-2, 65-36.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naughton, J.</td>
<td>64-3, 66-17, 66-21, 63-36.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newton, N. L.</td>
<td>62-12.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Page, B. B.</td>
<td>63-22.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perloff, J. K.</td>
<td>64-19.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perry, R. B.</td>
<td>64-8.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phillips, E. E.</td>
<td>63-34.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinkerson, A. L.</td>
<td>64-11.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Podolak, E.</td>
<td>65-25.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reighard, H. L.</td>
<td>65-3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reynolds, H. I.</td>
<td>67-4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robinson, S.</td>
<td>63-33.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ross, A.</td>
<td>67-22.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rowland, R. C., Jr.</td>
<td>67-10.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanders, D. C.</td>
<td>67-21.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seipel, J. H.</td>
<td>64-6, 65-4, 67-11.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shambour, K.</td>
<td>66-17, 68-21.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siegel, P. V.</td>
<td>67-25.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spieth, W.</td>
<td>64-4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stavinoha, W. B.</td>
<td>66-11.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobias, J. V.</td>
<td>63-7, 63-17, 63-19, Tech. Pub. #1, 64-16, 65-17, 66-4, 67-10.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Umerger, E. L.</td>
<td>66-25.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wentz, A. E.</td>
<td>64-1, 64-6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wernick, J. S.</td>
<td>63-19.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheelwright, C. D.</td>
<td>62-1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wittmers, L. E.</td>
<td>65-27.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SUBJECT INDEX

Acceleration, angular
arousal effects on nystagmus, 62-17.
arousal effects on vestibular response, 63-29.
rotation device, 64-15.
nystagmus after caloric habituation, 63-14, 64-14,
65-18, 67-2.

Acceleration, linear (see also deceleration)
bibliography, 63-30.

Accidents
alcohol involved, 66-29.
cockpit deethalization, 66-3, 66-12.
fire, smoke protection, 67-4.
infight vertigo and unconsciousness, 63-21.
injuries from seat impacts, 66-18.
injuries in extreme vertical impacts, 62-19.
injuries in rearward facing seats, 62-7.
investigations, human factors findings, 63-35.
older pilots, 67-22.
padding for crash protection, 66-40.
physician pilots, 66-25.
prevention with blind flight instrument, 66-32.
stall warning, 66-31.
 survivability of free-fall impacts, 63-15.
survivability of water impacts, 65-12.

Aerial application
biochemical effects of lindane and dieldrin, 62-10, 63-4.
cholinesterase determination, 63-7.
effects of dieldrin on liver, 63-5, 66-26.
effects of endrin, 66-11, 66-26, 66-34.
effects of organophosphate insecticides, 63-24.
mechanisms of actions of endrin, 63-16, 63-26.
toxic hazards, 62-8.

Age
binocular fusion time effects, 66-35.
 cardiovascular disease and performance, 64-4.
pilots involved in aircraft accidents, 67-22.
pupillary reflex relationship, 65-25.
relation to air traffic controller health, 65-6.
relation to air traffic controller performance, 61-1,
relation to work capacity, 63-18, 63-33.
studies of effects in aviation, 64-1.

Air loads
effects on man, 63-9.
small aircraft decompressions, 67-14.

Air traffic control
simulator for research, 65-31.

Air traffic controllers
aptitude tests for selection, 65-19.
experience as selection criterion, 63-31.
incident reporting, 65-10.
psychological testing, 61-1, 62-2.
selection, 62-2.
symptoms reported, 61-1.

Aircraft
biodiesel fuel additive, 67-21.
cockpit deethalization, 66-3, 66-12.
decompression hazards, 67-14.
evacuation, 62-9, 65-7, 66-42.
fire, smoke protection after accidents, 67-4.
noise effects upon birds, 62-4.
non-gyroscopic blind flight instrument, 66-32.
padding for crash protection, 66-40.
seat impact injuries, 69-18.
simulator operation using drugs, 64-18.
stall warning device, 66-31.

Airport
medical services, 65-3.

Alcohol
findings in general aviation accidents, 66-27, 66-29.

Altitude
decompression hazards, 67-14.
effects on penetrating eye injuries, 62-12.
effects on performance, 60-15.
effects on work tolerance, 63-33.
efficiency of oxygen masks, 62-21, 66-7, 66-9, 66-20,
human tolerance, 62-6.
need for oxygen, 66-28.
performance after decompression, 66-10.

Anthropometry
air traffic controllers, 65-26.
center of gravity, 62-14, 65-23.
facades of children for oxygen mask design, 66-9.
shoulder slope, 65-14.
weight distribution when sitting, 62-1.
Arousal
effects upon nystagmus, 62-17.
effects on vestibular responses, 63-29.

Audiology
binarual beat perception, 63-17.
earphone transient response, 63-7.
teraural intensity difference limen, 67-10.
tape of intensity increments, 66-4.

Ballistocardiography
research and current status, 64-12.
stroke volume relationship, 65-8.

Birds
possible sonotropic effects of a commercial air transport, 62-4.

Blood
autoregulation of renal flow, 63-32.
cerebrovascular disease detection, 65-4.
cholinesterase measurement, 67-5.
clot dissolution therapy, 64-5.
erthrocyte volume spectra, 63-8.
ernoconcentration with endrin poisoning, 65-11.
plasma catecholamine determination, 66-6.
pulmonary flow with glyceryl trinitrate, 64-11.
pulmonary thromboembolism, 64-7.

Caloric irrigation
after habitation to rotation, 63-13.
arousal effects upon nystagmus, 62-17.
eictation of secondary nystagmus, 63-3.
nystagmus after habitation, 63-14, 64-14, 65-18, 67-2.

Cardiovascular
ballistocardiographic research, 64-12, 65-8, 65-15.
blood pressure measurement, 66-16, 66-36.
cerebrovascular disease detection, 65-4.
effects of age and physical training, 63-18, 64-1.
effects of endrin, 63-16, 66-11.
effects of glyceryl trinitrate on pulmonary vasculature, 64-11.
evaluation with treadmill and step test, 64-3.
health, age and performance, 64-4.
heart rates in student pilots, 67-15.
recognition of posterior infarction, 64-19.
rehabilitation after infarction, 64-2, 66-17, 66-21.
responses to hyperpyrexia, 64-8.
thromboembolic disease treatment, 64-5.

Case reports
inflight loss of consciousness, 63-21.
insecticide exposure, 63-24.
physical conditioning after infarction, 66-21.
pulmonary thromboembolism, 64-7.
rheoencephalography in cerebrovascular disease detection, 65-4.
seizures in flight, 64-6.

Center of gravity
adults, 62-14.
children, 65-23.

Circadian periodicity

Clothing
effects on drag forces, 63-9.

Communication
binarual beat perception, 63-17.
earphone response, 63-7.
teraural intensity difference limen, 67-10.
tape of intensity increments, 66-4.
tactile, 62-11, 62-16.

Deceleration
bibliography, 65-30.
cockpit delethallization, 66-3, 66-12.
human tolerance, 62-6.
padding for crash protection, 66-40.
seat impact injuries, 66-18.
survival of extreme vertical impact, 62-19.
survival of free-fall impacts, 63-15.
survival of water impacts, 65-12.
tolerances of face, 65-20.

Decompression
effects on performance, 66-10.
oxygen mask evaluation, 66-20, 67-3.
small pressurized aircraft, 67-14.
light adaptation device, 66-38.

Ditching
seat cushion flotation, 66-13.

Drugs
effects of glyceryl trinitrate on pulmonary vasculature, 64-11.
effects on orthostatic tolerance, 63-34.
effects on performance in aircraft simulator, 64-18.
effects on work capacity, 63-34.
tranquilizer effects on body temperature, 65-23, 66-14.
use in fatigue, 63-12.

Earphones
transient response, 63-7.

Electrocardiogram
diagnosis of posterior infarction, 64-19.

Energy
cost of treadmill work, 62-5.

Equipment
anthropometry in design, 65-26.
blood pressure measurement, 66-16.
emergency lighting, 66-42.
evaporative water loss, 67-17.
fire, smoke protection, 67-4.
light adaptation device, 65-35.
non-geoeosopic blind flight instrument, 66-32.
padding for crash protection, 66-40.
performance testing, 69-19.
protective for aircraft accidents, 63-7, 66-3, 66-12.
Evacuation
after air carrier accidents, 62–9, 65–7.
bibliography, 63–30.
tests using L-1649, 63–42.

Exercise
auscultatory and intra-aortic pressures, 63–36.
before and after myocardial infarction, 64–2,
effects after myocardial infarction, 66–17, 66–21.
ergy cost of treadmill work, 62–5.
tolerance at altitude, 63–33.

Experience
air traffic controller selection, 63–31.
correlation with ATCS age and performance, 67–1.
relation to reported symptoms of ATCS, 65–6.

Eye
age and binocular fusion time, 66–35.
equidistance tendency, 63–11.
near control of ciliary muscle, 69–5.
penetrating injuries, 62–12.
perception of size and distance, 62–15, 64–13, 66–22,
66–24, 67–18.
perception of spatial extent, 63–20.
pupillary movement with fatigue, 65–9.
pupillary reflex with age, 65–25.
reaction time, flash luminance and duration, 67–24.
simulation of objects moving in depth, 65–32.
spiral aftereffect test, 64–9, 64–10, 64–17.
tests for color vision, 67–8.

Fatigue
mitigation with Sparteine, 63–12.
plasma catecholamine determination, 66–6.
pupillary movement with, 65–9.

Federal Air Surgeon

Fire
flammability of toiletries in oxygen, 63–27.

Fuel
biocidal additive, 67–21.

Hearing
binaural bent perception, 63–17.
earphone transient response, 63–7.
tempestual intensity difference limen, 67–10.
table of intensity increments, 66–4.

Heat
maintenance of thermal balance, 66–23.
measurement of evaporative water loss, 66–25.

tranquilizer effects on loss and conservation, 63–23, 66–14.

Human
angle of shoulder slope, 65–14.
body center of gravity, 62–14.
factors in aviation safety, 63–35, 66–8, 66–25, 66–27.
physical fitness testing, 63–6.
responses to hyperpyrexia, 64–8.
responses to photic stimulation, 66–39.
responses to severe weather flying, 66–41.
survivability of free-fall impacts, 63–15, 65–12.
tolerances, 62–6.

Hyperventilation, 62–6.

Hypoxia
human tolerance, 62–6, 63–33.
oxygen need, 66–28.

Injuries
cockpit delethality, 66–3, 66–12.
decompression of small aircraft, 67–14.
eye, 62–12.
facial tolerances to impacts, 65–20.
from smoke and fire, 62–9.
in free-falls, 63–15.
padding for crash protection, 66–40.
rearward facing seats, 62–7.
restraint systems to prevent, 67–13.
seat impacts, 66–18.
vertical crash forces, 62–1.
vertical impact in seated position, 62–19.
water impacts, 65–12.

Kidney
autoregulation mechanism, 63–32.
effects of acute arterial occlusion, 63–22, 65–27.
effects of increased venous pressure, 62–18, 63–1.
effects of pesticides, 63–26, 66–11.

Neurology
central factor in auditory fatigue, 63–19.
drug effects on performance, 64–18.
effects of endrin, 63–16.
effects of organophosphate insecticides, 63–24.
infight vertigo and unconsciousness, 63–21.
photic stimulation, 66–38.
pupillary movement, 65–9, 65–25.
rheoencephalography in cerebrovascular disease detection, 65–4, 67–11.
seizures in flight, 64–6.
spiral aftereffect test, 64–9, 64–10, 64–17.
studies at GCRI, 64–1.

Noise
effects on birds, 62–4.
Nystagmus
- effects of arousal upon, 62-17, 63-29.
- elicitation of secondary by irrigation, 63-3.
- following caloric habituation, 63-14, 64-14, 65-18, 67-2.
- following habituation to rotation, 63-13, 63-24.

Oxygen
- flammability of toiletries, 63-27.
- need at altitude, 66-28.

Oxygen masks
- disposable, 66-7.
- donning time after decompression, 66-10.

Patient
- air transport with eye injuries, 62-12.

Perception
- auditory fatigue, 63-19.
- color, 67-8.
- interaural intensity difference limen, 67-10.
- matching flash loudness and brightness, 67-16.
- of binaural beat, 63-17.
- of spatial extent, 63-20.
- reaction time, flash luminance and brightness, 67-24.
- spinal aftereffect, 64-6, 64-10, 64-17.

Performance
- after decompression, 66-10.
- air traffic controllers, age effects, 61-1, 62-3, 65-21, 67-1.
- aptitude tests for prediction, 65-19.
- experience as predictor, 63-31.
- incident reporting, 65-10.
- decrement with hypoxia, 66-15.
- drug effects in aircraft simulator, 64-18.
- effects of heart disease and age, 64-4.
- effects of physical conditioning program, 66-17, 66-21.
- impairment by alcohol, 66-29.
- tasks for operator-skills research, 66-10.
- work in heat and cold, 66-23.

Pesticides
- biochemical effects of lindane and dieldrin, 62-10, 63-4.
- cholinesterase determination, 67-5.
- CNS effects of organophosphates, 63-24.
- effects of dieldrin on liver, 66-5, 66-20.
- effects of endrin, 66-11, 66-26, 66-34.

Physical fitness
- after myocardial infarction, 64-2, 66-17, 66-21.
- age relationship, 63-18.
- field test for, 63-6.

Physiology
- evaporative water loss device, 67-1.
- gas pressure in tissue, 63-11.
- neural control of the ciliary muscle, 63-5.
- thermal balance, 66-23.

Pilots
- aerial applicator protection, 66-30.
- age of those in aircraft accidents, 67-22.
- effects of drugs in aircraft simulator, 64-18.
- impaired performance by alcohol, 66-29.
- physician accidents, 66-25.
- responses to severe weather flying, 66-41.
- type airman certificate related to accidents, 67-23.
- vertigo, 67-19.

Pressure
- gas pressure in tissue, 63-11.
- oxygen mask, 66-20.

Pulmonary
- function testing, 64-1.
- protection from smoke, fire, 67-4.
- responses to hyperpyrexia, 64-8.
- thromboembolism, 64-7.
- vascular effects of glyceryl trinitrate, 64-11.

Renal function
- autoregulation mechanism, 63-32.
- effects of acute arterial occlusion, 63-22, 65-27.
- effects of increased venous pressure, 62-18, 63-1.
- effects of insecticides, 63-26.

Research, aeromedical
- aging studies at GCRI, 64-1.
- aims and accomplishments, 63-20, 67-25.
- ballistocardiography, 64-12, 65-8, 65-15.
- bibliography of acceleration studies, 63-30.
- emergency evacuation, 65-7.
- index of reports, 63-2, 64-20, 66-1.
- needs, 63-35.

Restraint
- bibliography, 63-30.
- cockpit deletalization, 66-3.
- shoulder harness design, 65-14.
- upper body restraint installation, 66-33.

Rheonecephalography

Seat
- comfort, 62-1.
- injury potential, 66-18.
- pressure distribution, 62-1.
- rearward facing, injuries, 62-7.
Seat belts
center of gravity in design, 62-14, 65-23.
cockpit de lethali zation, 66-3.
evaluation of different systems, 67-13.

Shift-rotation
symptoms reported for ATCS, 65-5, 65-6.

Shoulder harness
angle of shoulder slope in design, 65-14.
cockpit delethali zation, 66-3.
installation in general aviation aircraft, 66-33.

Simulation
air traffic controller radar task, 65-31.
for operator-skills research, 66-10.
movement of objects in depth, 63-32.

Skin
evapori ve water loss, 63-25.
tactile communication, 62-11, 62-16.
flammability of toiletries, 63-27.
galvanic skin response, 64-18.

Smoke
protective passenger hood, 67-4.

Stalls
warning device, 66-31.

Stress
evapori ve water loss device, 67-17.
measurement of evaporative water loss, 63-25.
plasma catecholamine determination, 63-6.
severe weather flying, 66-41.
student pilots, 67-15.
symptoms reported by air traffic controllers, 65-5, 65-6.

Temperature
effects on liver damage by dieldrin, 66-5.
evapori ve water loss, 63-25, 67-17.
human toleran ve, 62-6.
hyperpyrexia, 64-8.
maintenance of thermal balance, 66-23.
tranquili zer effects on body temperature, 63-23, 63-14.

Tests
ballistocardiography, 64-12, 65-8, 65-15.
cholinephori activity, 67-5.
color vision, 67-8.
correlation with experience in ATCS selection, 63-31.
emergency evacuation, 65-7, 66-42.
for physical fitness, 63-6, 63-18, 63-33, 64-8, 66-17.
performance, 66-19.
performance after decompression, 66-10.
performance, age and dis ease, 64-4.
performance and age, 65-21.
performance with hypoxia, 66-15.
spiral aftereffect, 64-9, 64-10, 64-17.
stain for dieldrin and endrin, 66-26.

Tolerance
of face to impact, 65-20, 66-12, 66-40.
of flight stresses, 62-6.
of free-fall impacts, 63-15.
of impacts in water, 65-12.
of vertical impact, 62-19.
ortho static, drug effects, 63-34.

Translations
aviation medicine, 64-16, 65-17, 66-2.
color vision tests, 67-8.

Turbulence
effects of severe weather flying, 66-41.

Venous pressure
described with renal artery occlusion, 63-22.
effects of endrin, 66-11.
effects of increase on renal function, 62-18, 63-1, 63-32.

Vertigo
coriolis stimulation, 67-19.
flicker, 66-39.
infl ied case with unconsciousness, 63-21.
production by spiral aftereffect, 64-9, 64-10, 64-17.

Vestibular function
effects of arousal, 62-17, 63-29.
following caloric habituation, 63-14, 64-14, 65-18, 67-2.
following habituation to rotation, 63-13, 65-24.
rotation device, 64-15.
secondary, tertiary and inverted primary nystagmus, 63-8.

Vibration
bibliography, 63-30.

Vision
age and binocular fusion time, 66-35.
color, diagnostic tests, 67-8.
effects of fixation on nystagmus, 67-12.
light adaptation device, 66-38.
maching flash loudness and brightness, 67-16.
perception of depth, 63-10, 63-28, 67-20.
perception of size and distance, 62-15, 64-13, 65-11,
perception of spatial extent, 63-29.
reaction time, flash luminance and brightness, 67-24.
spiral aftereffect, 64-9, 64-10, 64-17.

Weightlessness
bibliography, 63-30.

Work
age effects on tolerance, 63-33.
altitude effects on tolerance, 63-33.
capacity after myocardial infarction, 64-2, 66-17, 66-21.
capacity related to age, 63-18.
capacity with step test, 64-5.
drug effects on performance, 63-12, 63-34.
effects on blood pressure, 66-30.
energy cost on treadmill, 62-6.
field test for fitness, 63-6.
human tolerance, 62-6.
shift rotation effects, 65-5, 65-6.
thermal balance in heat and cold, 66-23.