

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

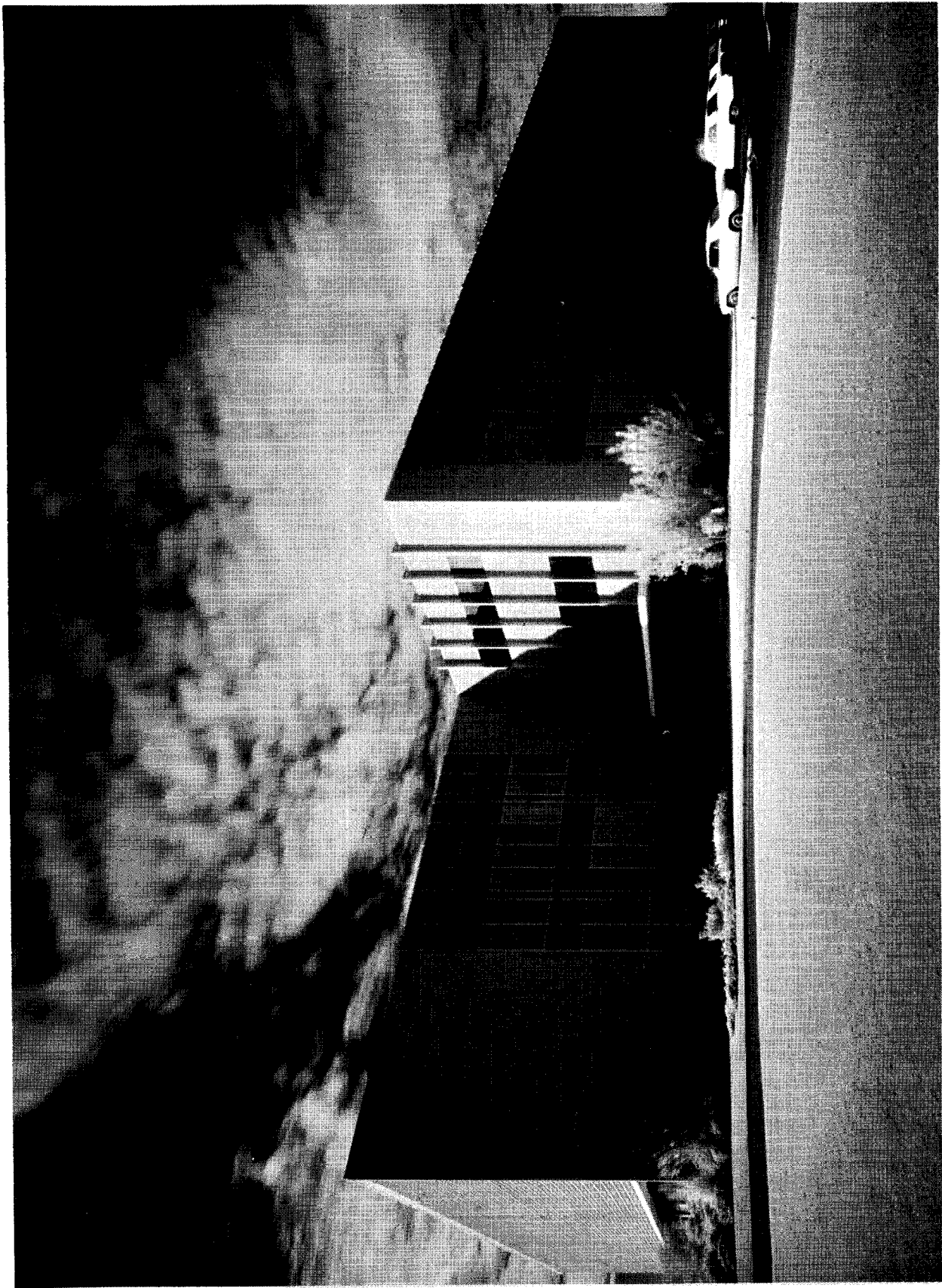
Department of Transportation  
**FEDERAL AVIATION ADMINISTRATION**  
Office of Aviation Medicine

---

### **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





RC1054  
U5A4  
1968:1-14

## INDEX TO FAA OFFICE OF AVIATION MEDICINE

BIOLOGY  
LIBRARY

### REPORTS: 1961 THROUGH 1967

#### 1961

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

#### 1962

62-1 Swearingen, J. J., Wheelwright, C. D., and Garner, J. D.: *An analysis of sitting areas and pressures of man.*

62-2 Cobb, B. B., Jr.: *Problems in air traffic management: II. Prediction of success in air traffic controller school.*

62-3 Trites, D. K., and Cobb, B. B., Jr.: *Problems in air traffic management: III. Implications of age for training and job performance of air traffic controllers.*

62-4 Swearingen, J. J., and Mohler, S. R.: *Sonotropic effects of commercial air transport sound on birds.*

62-5 Iampietro, P. F., and Goldman, R.: *Prediction of energy cost of treadmill work.*

62-6 Balke, B.: *Human tolerances.*

62-7 Hasbrook, A. H., and Earley, J. C.: *Failure of rearward facing seat-backs and resulting injuries in a survivable transport accident.*

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

62-9 Hasbrook, A. H., Garner, J. D., and Snow, C. C.: *Evacuation pattern analysis of a survivable commercial aircraft crash.*

62-10 Daugherty, J. W., Lacey, D. E., and Korty, P.: *Problems in aerial application: I. Some biochemical effects of lindane and dieldrin on vertebrates.*

62-11 Hawkes, G. R.: *Tactile communication.*

62-12 Dille, J. R., Newton, N. L., and Culver, J. F.: *The effects of simulated altitude on penetrating eye injuries.*

62-13 Swearingen, J. J., Hasbrook, A. H., Snyder, R. G., and McFadden, E. B.: *Kinematic behavior of the human body during deceleration.*

62-14 Swearingen, J. J.: *Determination of centers of gravity of man.*

62-15 Gogel, W. C.: *The visual perception of size and distance.*

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.*

62-18 Hinshaw, L. B., Brake, C. M., Iampietro, P. F., and Emerson, T. E., Jr.: *Effect of increased venous pressure on renal hemodynamics.*

62-19 Snyder, R. G.: *A case of survival of extreme vertical impact in seated position.*

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

62-21 McFadden, E. B., Raeke, J. W., and Young, J. W.: *An improved method for determining the efficiency of crew and passenger oxygen masks.*

#### 1963

63-1 Emerson, T. E., Jr., Hinshaw, L. B., Brake, C. M., and Iampietro, P. F.: *The development of reversible hematuria and oliguria following elevation of renal venous pressure.*

- 63-2 Mohler, S. R., and Dille, J. R.: *Resumé and index of reports of the Civil Aeromedical Research Institute 1961-1962.*
- 63-3 Collins, W. E.: *Observations on the elicitation of secondary and inverted primary nystagmus from the cat by unilateral caloric irrigation.*
- 63-4 Daugherty, J. W., Lacey, D. E., and Korty, P.: *Problems in aerial application: II. Effects of chlorinated hydrocarbons on substrate-linked phosphorylation.*
- 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.*
- 63-7 Tobias, J. V., and Jeffress, L. A.: *Relation of earphone transient response to measurement of onset-duration.*
- 63-8 McKenzie, J. M., Fowler, P. R., and Lyne, P. J.: *Calibration of an electronic counter and pulse height analyzer for plotting erythrocyte volume spectra.*
- 63-9 Swearingen, J. J., and McFadden, E. B.: *Studies of air loads on man.*
- 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 habituation 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.*
- 63-15 Snyder, R. G.: *Human survivability of extreme impacts in free-fall.*
- 63-16 Emerson, T. E., Jr., Brake, C. M., and Hinshaw, L. B.: *Mechanisms of action of the insecticide endrin.*
- 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.*
- 63-19 Wernick, J. S., and Tobias, J. V.: *A central factor in pure tone auditory fatigue.*
- 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.*
- 63-23 Higgins, E. A., Iampietro, P. F., Adams, T., and Holmes, D. D.: *The effects of a tranquilizer on body temperature.*
- 63-24 Dille, J. R., and Smith, P. W.: *Central nervous system effects of chronic exposure to organophosphate insecticides.*
- 63-25 Adams, T., Funkhouser, G. E., and Kendall, W. W.: *A method for the measurement of physiologic evaporative water loss.*
- 63-26 Reins, D. A., Holmes, D. D., and Hinshaw, L. B.: *Acute and chronic effects of the insecticide endrin on renal function and renal hemodynamics.*
- 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.*
- 63-28 Gogel, W. C.: *Size cues and the adjacency principle.*
- 63-29 Collins, W. E.: *Task-control of arousal and its effects of repeated unidirectional angular acceleration on human vestibular responses.*
- 63-30 Snyder, R. G., Ice, J., Duncan, J. C., Hyde, A. S., and Leverett, S., Jr.: *Biomedical research studies in acceleration.*
- 63-31 Trites, D. K., and Cobb, B. B., Jr.: *Problems in air traffic management: IV. Comparison of pre-employment, job-related experience with aptitude tests as predictors of training and job performance of air traffic control specialists.*
- 63-32 Hinshaw, L. B., Emerson, T. E., Jr., and Brake, C. M.: *Mechanism of autoregulation in the intact kidney.*

- 63-33 Dill, D. B., Robinson, S., Balke, B., and Newton, J. L.: *Work tolerance: Age and altitude.*
- 63-34 Ganslen, R. V., Balke, B., Phillips, E. E., and Nagle, F.: *Effects of some tranquilizing, analeptic and vasodilating drugs on physical work capacity and orthostatic tolerance.*
- 63-35 Pearson, R. G.: *Human factors aspects of lightplane safety.*

**Tech. Pub.**

- No. 1 Collins, W. E., Tobias, J. V., Capps, M. J., and Allen, M. E.: *Annotated bibliography of recently translated material. I.*

**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.*
- 64-3 Nagle, F., and Balke, B.: *The gradational step test for assessing cardiorespiratory capacity: An experimental evaluation of treadmill and step test procedures.*
- 64-4 Spieth, W.: *Cardiovascular health status, age, and psychological performance.*
- 64-5 Moser, K. M.: *Current status of clot dissolution therapy.*
- 64-6 Seipel, J. H., and Wentz, A. E.: *Unsuspected neurologic disease in aviation personnel: Survival following seizures in flight.*
- 64-7 Houk, V. N., Hufnagel, C. A., McClenathan, J. E., and Moser, K. M.: *Chronic thrombotic obstruction of major pulmonary arteries.*
- 64-8 Moser, K. M., Perry, R. B., and Luchsinger, P. C.: *Cardiopulmonary consequences of pyrogen-induced hyperpyrexia in man.*
- 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.*
- 64-11 Pinkerson, A. L., Kot, P. A., and Knowlan, D. M.: *Effect of glyceryl trinitrate on pulmonary vasculature of anesthetized dogs.*
- 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.*

- 64-14 Capps, M. J., and Collins, W. E.: *Effects of bilateral caloric habituation on nystagmus responses of the cat.*

- 64-15 Collins, W. E., and Huffman, H. W.: *Design and performance characteristics of a mechanically driven vestibular stimulator.*

- 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**

- 65-1 Capps, M. J., and Collins, W. E.: *Auditory fatigue: Influence of mental factors.*

- 65-2 Collins, W. E., and Capps, M. J.: *Effects of several mental tasks on auditory fatigue.*

- 65-3 Reighard, H. L.: *Medical services at airports.*

- 65-4 Seipel, J. H., Ziemnowicz, S. A. R., and O'Doherty, D. S.: *Cranial impedance plethysmography—Rheoencephalography as a method of detection of cerebrovascular disease.*

- 65-5 Hauty, G. T., Trites, D. K., and Berkley, W. J.: *Biomedical survey of ATC facilities: 1. Incidence of self-reported symptoms.*

- 65-6 Hauty, G. T., Trites, D. K., and Berkley, W. J.: *Biomedical survey of ATC facilities: 2. Experience and age.*

- 65-7 Mohler, S. R., Swearingen, J. J., McFadden, E. B., and Garner, J. D.: *Human factors of emergency evacuation.*

- 65-8 van Brummelen, A. G. W., Scarborough, W. R., and Josenhans, W. K. T.: *On the elimination of pulse wave velocity in stroke volume determination from the ultralow-frequency displacement ballistocardiogram.*

- 65-9 Lowenstein, O., Feinberg, R., and Loewenfeld, I.: *Pupillary movement during acute and chronic fatigue.*
- 65-10 O'Connor, W. F., and Pearson, R. G.: *ATC system error and appraisal of controller proficiency.*
- 65-11 Gogel, W. C.: *The equidistance tendency and its consequences: Problems in depth perception.*
- 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.*
- 65-15 Scarborough, W. R. (Joint NASA-FAA publication): *Ballistocardiography: A bibliography.*
- 65-16 Hauty, G. T., and Adams, T.: *Pilot fatigue: Intercontinental jet flight 1. Oklahoma City-Tokyo.*
- 65-17 Allen, M. E., Collins, W. E., Tobias, J. V., and Crain, R. A.: *Aviation medicine translations: Annotated bibliography of recently translated material. III.*
- 65-18 Collins, W. E.: *Adaptation to vestibular disorientation: I. Vertigo and nystagmus following repeated clinical stimulation.*
- 65-19 Cobb, B. B., Jr.: *Problems in air traffic management: V. Identification and potential of aptitude test measures for selection of tower air traffic controller trainees.*
- 65-20 Swearingen, J. J.: *Tolerances of the human face to crash impact.*
- 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.*
- 65-22 Trites, D. K., Miller, M. C., and Cobb, B. B., Jr.: *Problems in air traffic management. VII. Job and training performance of air traffic control specialists: Measurement structure and prediction.*
- 65-23 Swearingen, J. J., and Young, J. W.: *Determination of centers of gravity of children, sitting and standing.*
- 65-24 Collins, W. E.: *Adaptation to vestibular disorientation: II. Nystagmus and vertigo following high-velocity angular accelerations.*
- 65-25 Feinberg, R., and Podolak, E.: *Latency of pupillary reflex to light stimulation and its relationship to aging.*
- 65-26 Snow, C. C., and Snyder, R. G.: *Anthropometry of air traffic control trainees.*
- 65-27 Brake, C. M., Reins, D., Wittmers, L. E., and Hinshaw, L. B.: *Intrarenal hemodynamic changes following acute partial renal arterial occlusion.*
- 65-28 Hauty, G. T., and Adams, T.: *Phase shifts of the human circadian system and performance deficit during the period of transition: I. East-West flight.*
- 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.*
- 65-30 Hauty, G. T., and Adams, T.: *Phase shifts of the human circadian system and performance deficit during the period of transition: III. North-South flight.*
- 65-31 Pearson, R. G., Hunter, C. E., and Neal, G. L.: *Development and evaluation of a radar air traffic control research task.*
- 65-32 Gogel, W. C., and Mertens, H. W.: *Problems in depth perception: A method of simulating objects moving in depth.*
- 1966
- 66-1 Allen, M. E., and Mohler, S. R.: *Aviation medicine reports: An annotated catalog of Office of Aviation Medicine reports: 1961 through 1965.*
- 66-2 Allen, M. E., and Crain, R. A.: *Aviation medicine translations: Annotated bibliography of recently translated material. IV.*
- 66-3 Mohler, S. R., and Swearingen, J. J.: *Cockpit design for impact survival.*
- 66-4 Tobias, J. V.: *A table of intensity increments.*
- 66-5 Clark, G.: *Problems in aerial application: A comparison of the effects of dieldrin poisoning in cold-adapted and room-temperature mammals.*



- 66-6 Fiorica, V.: *Fatigue and stress studies: An improved semi-automated procedure for fluorometric determination of plasma catecholamines.*
- 66-7 McFadden, E. B.: *Evaluation of the physiological protective efficiency of a new prototype disposable passenger oxygen mask.*
- 66-8 Mohler, S. R.: *The predominant causes of crashes and recommended therapy.*
- 66-9 Young, J. W.: *Selected facial measurements of children for oxygen-mask design.*
- 66-10 O'Connor, W. F., and Pendergrass, G. E.: *Effects of decompression on operator performance.*
- 66-11 Hinshaw, L. B., Reins, D. A., Emerson, T. E., Jr., Rieger, J. A., Jr., Stavinoha, W. B., Fiorica, V., Solomon, L. A., and Holmes, D. D.: *Problems in aerial application: I.—V.*
- 66-12 Swearingen, J. J.: *Injury potentials of light-aircraft instrument panels.*
- 66-13 McFadden, E. B., and Simpson, J. M.: *Flotation characteristics of aircraft-passenger seat cushions.*
- 66-14 Iampietro, P. F., Fiorica, V., Dille, J. R., Higgins, E. A., Funkhouser, G., and Moses, R.: *Problems in aviation personnel: Influence of a tranquilizer on temperature regulation in man.*
- 66-15 O'Connor, W. F., Scow, J., and Pendergrass, G. E.: *Hypoxia and performance decrement.*
- 66-16 Lategola, M. T., Harrison, H. F., and Barnard, C.: *The aeromedical assessment of human systolic and diastolic blood-pressure transients without direct arterial puncture.*
- 66-17 Naughton, J., Shanbour, K., Armstrong, R., McCoy, J., and Lategola, M. T.: *Problems in aeromedical certification: Cardiovascular responses to exercise following myocardial infarction.*
- 66-18 Swearingen, J. J.: *Evaluation of head and face injury potential of current airline seats during crash decelerations.*
- 66-19 Pearson, R. G.: *Performance tasks for operator-skills research.*
- 66-20 McFadden, E. B., and Lategola, M. T.: *Evaluation of the Sierra hanging quick-don crew pressure-breathing oxygen mask.*
- 66-21 Naughton, J., Lategola, M. T., and Shanbour, K.: *Clinical aviation medicine: A physical-conditioning program for cardiac patients.*
- 66-22 Gogel, W. C., and Mertens, H. W.: *Problems in depth perception: Perceived size and distance of familiar objects.*
- 66-23 Iampietro, P. F., and Adams, T.: *The achievement of thermal balance and its maintenance during environmental stress.*
- 66-24 Agee, F. L., Jr., and Gogel, W. C.: *Problems in depth perception: Equidistance judgments in the vicinity of a binocular illusion.*
- 66-25 Mohler, S. R., Freud, S. F., Veregge, J. E., and Umberger, E. L.: *Physician flight accidents.*
- 66-26 Clark, G.: *Problems in aerial application: Histochemistry of Weil stain on liver.*
- 66-27 Dille, J. R., and Morris, E. W.: *Human factors in general aviation accidents.*
- 66-28 Mohler, S. R.: *Oxygen in general aviation.*
- 66-29 Mohler, S. R.: *Recent findings on the impairment of airmanship by alcohol.*
- 66-30 Mohler, S. R., and Harper, C. R.: *Protecting the Ag pilot.*
- 66-31 Von Rosenberg, C. W., Keen, F. R., and Mohler, S. R.: *The "stall barrier" as a new preventive in general aviation accidents.*
- 66-32 Mohler, S. R., and Hasbrook, A. H.: *In-flight response to a new non-gyroscopic blind flight instrument.*
- 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 intra-aortic and auscultatory blood pressures with pressure-flow dynamics during rest and exercise.*

- 66-37 Collins, W. E.: *Adaptation to vestibular disorientation. III. Influence on adaptation of interrupting nystagmic eye movements with opposing stimuli.*
- 66-38 Mertens, H. W.: *A homogeneous field for light adaptation.*
- 66-39 Melton, C. E., Jr., Higgins, E. A., Saldivar, J. T., and Wicks, S. M.: *Exposure of men to intermittent photic stimulation under simulated IFR conditions.*
- 66-40 Swearingen, J. J.: *Evaluation of various padding materials for crash protection.*
- 66-41 McKenzie, J. M., and Fiorica, V.: *Physiological responses of pilots to severe weather flying.*
- 66-42 Garner, J. D., and Blethrow, J. G.: *Emergency evacuation tests of a crashed L-1649.*

### 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.*
- 67-2 Mertens, R. A., and Collins, W. E.: *Adaptation to vestibular disorientation. IV. Responses to angular acceleration and to bilateral caloric stimulation following unilateral caloric habituation.*
- 67-3 McFadden, E. B.: *Development of techniques for evaluating the physiological protective efficiency of civil aviation oxygen equipment.*
- 67-4 McFadden, E. B., Reynolds, H. I., and Funkhouser, G. E.: *A protective passenger smoke hood.*
- 67-5 Fowler, P. R., and McKenzie, J. M.: *Problems in aerial application: Detection of mild poisoning by organophosphorus pesticides using an automated method for cholinesterase activity.*
- 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.*
- 67-8 Lewis, M. F., and Ashby, F. K.: *Diagnostic tests of color defective vision: Annotated bibliography, 1956-1966.*
- 67-9 McFadden, E. B., Harrison, H. F., and Simpson, J. M.: *Performance characteristics of constant-flow phase dilution oxygen mask designs for general aviation.*
- 67-10 Rowland, R. C., Jr., and Tobias, J. V.: *Interaural intensity difference limen.*
- 67-11 Seipel, J. H.: *The biophysical basis and clinical applications of rheoencephalography.*
- 67-12 Collins, W. E.: *Adaptation to vestibular disorientation. VII. Special effects of brief periods of visual fixation on nystagmus and sensations of turning.*
- 67-13 Young, J. W.: *A functional comparison of basic restraint systems.*
- 67-14 Swearingen, J. J.: *An evaluation of potential decompression hazards in small pressurized aircraft.*
- 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.*
- 67-17 Funkhouser, G. E., and Billings, S. M.: *A portable device for the measurement of evaporative water loss.*
- 67-18 Gogel, W. C.: *Cue-enhancement as a function of task-set.*
- 67-19 Collins, W. E.: *Adaptation to vestibular disorientation. VIII. "Coriolis" vestibular stimulation and the influence of different visual surrounds.*
- 67-20 Gogel, W. C., and Mertens, H. W.: *Perceived depth between familiar objects.*
- 67-21 Crane, C. R., and Sanders, D. C.: *Evaluation of a biocidal turbine-fuel-additive.*
- 67-22 Mohler, S. R., Bedell, R. H. S., Ross, A., and Veregge, E. J.: *Aircraft accidents by older persons.*
- 67-23 Veregge, E. J.: *Type airman certification as related to accidents.*
- 67-24 Lewis, M. F., and Mertens, H. W.: *Reaction time as a function of flash luminance and duration.*
- 67-25 Siegel, P. V.: *Aviation medicine, FAA-1966.*

## AUTHOR INDEX

Name	Report	Name	Report
Adams, T. -----	63-23, 63-25, 65-16, 65-28, 65-29, 65-30, 66-23.	Goldman, R. F. -----	62-5.
Agee, F. L., Jr. -----	66-24.	Guedry, F. E., Jr. -----	67-6, 67-7.
Allen, M. E. -----	Tech. Pub. #1, 64-16, 65-17, 66-1, 66-2.	Harper, C. R. -----	66-30.
Armstrong, R. -----	66-17.	Harrison, H. F. -----	66-16.
Ashby, F. K. -----	67-8.	Hasbrook, A. H. -----	62-7, 62-9, 62-13, 65-14, 66-32.
Aviation Medical Library, FAA -----	64-20.	Hauty, G. T. -----	65-5, 65-6, 65-16, 65-28, 65-29, 65-30.
Balke, B. -----	62-6, 63-6, 63-12, 63-18, 63-33, 63-34, 64-2, 64-3, 66-36.	Hawkes, G. R. -----	62-11, 62-16.
Barnard, C. -----	66-16.	Higgins, E. A. -----	63-23, 66-14, 66-39.
Bedell, R. H. S. -----	67-22.	Hinshaw, L. B. -----	62-18, 63-1, 63-16, 63-22, 63-26, 63-32, 66-11.
Berkley, W. J. -----	65-5, 65-6.	Holmes, D. D. -----	63-23, 63-26, 66-11.
Billings, S. M. -----	67-17.	Houk, V. N. -----	64-7.
Blethrow, J. G. -----	66-42.	Huffman, H. W. -----	64-15.
Brake, C. M. -----	62-18, 63-1, 63-16, 63-22, 63-32, 65-27.	Hufnagel, C. A. -----	64-7.
van Brummelen, A. G. W. -----	65-8.	Hunter, C. E. -----	65-31.
Capps, M. J. -----	Tech. Pub. #1, 64-14, 65-1, 65-2.	Hyde, A. S. -----	63-30.
Clark, G. -----	66-5, 66-26, 66-34.	Iampietro, P. F. -----	62-5, 62-18, 63-1, 63-23, 66-14, 66-23.
Cobb, B. B., Jr. -----	62-2, 62-3, 63-31, 65-19, 65-22, 67-1.	Ice, J. -----	63-30.
Collins, W. E. -----	62-17, 63-3, 63-13, 63-14, 63-29, Tech. Pub. #1, 64-14, 64-15, 64-16, 65-1, 65-2, 65-17, 65-18, 65-24, 66-37, 67-2, 67-6, 67-7, 67-12, 67-19.	Jeffress, L. A. -----	63-7.
Crain, R. A. -----	65-17, 66-2.	Josenhans, W. K. T. -----	65-8.
Crane, C. R. -----	63-27, 67-21.	Keen, F. R. -----	66-31.
Culver, J. F. -----	62-12.	Kendall, W. W. -----	63-25.
Daugherty, J. W. -----	62-10, 63-4.	Knowlan, D. M. -----	64-11.
Davis, A. W. -----	63-12.	Korty, P. -----	62-10, 63-4.
Dill, D. B. -----	63-33.	Kot, P. A. -----	64-11.
Dille, J. R. -----	62-12, 63-2, 63-21, 63-24, 63-27, 66-14, 66-27.	Lacey, D. E. -----	62-10, 63-4.
Duncan, J. C. -----	63-30.	Lategola, M. T. -----	63-11, 66-16, 66-17, 66-20, 66-21.
Earley, J. C. -----	62-7.	Leverett, S. -----	63-30.
Emerson, T. E., Jr. -----	62-18, 63-1, 63-16, 63-22, 66-11.	Lewis, M. F. -----	67-8, 67-16, 67-24.
Feinberg, R. -----	65-9, 65-25.	Loewenfeld, I. E. -----	65-9.
Fiorica, V. -----	66-6, 66-11, 66-14, 66-41.	Lowenstein, O. -----	65-9.
Fowler, P. R. -----	63-8, 67-5.	Luchsinger, P. C. -----	64-8.
Freud, S. L. -----	64-9, 64-10, 64-17, 66-25.	Lyne, P. J. -----	63-8.
Funkhouser, G. E. -----	63-25, 66-14, 67-4, 67-17.	McClenathan, J. E. -----	64-7.
Ganslen, R. V. -----	63-12, 63-34.	McCoy, J. -----	66-17.
Garner, J. D. -----	62-1, 62-9, 65-7, 66-42.	McFadden, E. B. -----	62-13, 62-21, 63-9, 65-7, 66-7, 66-13, 66-20, 67-3, 67-4, 67-9.
Gogel, W. C. -----	62-15, 63-10, 63-20, 63-28, 64-13, 65-11, 65-32, 66-22, 66-24, 67-18, 67-20.	McKenzie, J. M. -----	63-8, 66-41, 67-5.
		Melton, C. E., Jr. -----	63-5, 64-18, 66-35, 66-39, 67-15.
		Mertens, H. W. -----	65-32, 66-22, 66-38, 67-20, 67-24.
		Mertens, R. A. -----	67-2.
		Mohler, S. R. -----	62-4, 62-20, 63-2, 65-7, 65-13, 66-1, 66-3, 66-8, 66-25, 66-29, 66-30, 66-31, 66-32, 67-22.
		Morris, E. W. -----	66-27.
		Moser, K. M. -----	64-5, 64-7, 64-8.
		Moses, R. -----	66-14.

Name	Report
Nagle, F. J. -----	63-12, 63-34, 64-2, 66-36.
Naughton, J. -----	64-2, 66-17, 66-21, 66-36.
Neal, G. L. -----	65-31.
Newton, N. L. -----	62-12.
O'Connor, W. F. -----	65-10, 66-10, 66-15.
O'Doherty, D. S. -----	65-4.
Page, B. B. -----	63-22.
Pearson, R. G. -----	63-35, 65-10, 65-31, 66-19.
Pendergrass, G. E. ---	63-27, 66-10, 66-15.
Perloff, J. K. -----	64-19.
Perry, R. B. -----	64-8.
Phillips, E. E. -----	63-34.
Pinkerson, A. L. -----	64-11.
Podolak, E. -----	65-25.
Raeke, J. W. -----	62-21.
Reighard, H. L. -----	65-3.
Reins, D. A. -----	63-26, 65-27, 66-11.
Reynolds, H. I. -----	67-4.
Rieger, J. A., Jr. ----	66-11.
Robinson, S. -----	63-33.
Ross, A. -----	67-22.
Rowland, R. C., Jr. --	67-10.
Von Rosenberg, C. W. --	66-31.
Saldivar, J. T. -----	66-39.
Sanders, D. C. -----	67-21.
Scarborough, W. R. --	64-12, 65-8, 65-15.
Scow, J. -----	66-15.
Seipel, J. H. -----	64-6, 65-4, 67-11.

Name	Report
Shanbour, K. -----	66-17, 66-21.
Siegel, P. V. -----	67-25.
Simpson, J. M. -----	66-13, 67-9.
Smith, P. W. -----	62-8, 63-24.
Snow, C. C. -----	62-9, 65-14, 65-26.
Snyder, R. G. -----	62-13, 62-19, 63-15, 63-30, 65-12, 65-26.
Solomon, L. A. -----	66-11.
Spieth, W. -----	64-4.
Stavinoha, W. B. ----	66-11.
Swearingen, J. J. ----	62-1, 62-4, 62-13, 62-14, 63-9, 65-7, 65-20, 65-23, 66-3, 66-12, 66-18, 66-40, 67-14.
Tang, P. C. -----	63-21.
Tobias, J. V: -----	63-7, 63-17, 63-19, Tech. Pub. #1, 64-16, 65-17, 66-4, 67-10.
Trites, D. K. -----	61-1, 62-3, 63-31, 65-5, 65-6, 65-21, 65-22.
Umberger, E. L. -----	66-25.
Veregge, J. E. -----	66-25, 67-22, 67-23.
Wentz, A. E. -----	64-1, 64-6.
Wernick, J. S. -----	63-19.
Wheelwright, C. D. --	62-1.
Wicks, S. M. -----	66-35, 66-39, 67-15.
Wittmers, L. E. -----	65-27.
Young, J. W. -----	62-21, 65-23, 66-9, 66-33, 67-13.
Ziemnowicz, S. A. R. --	65-4.

## SUBJECT INDEX

### Acceleration, angular

- adaptation, 66-37, 67-6, 67-7, 67-12, 67-19.
- arousal effects on nystagmus, 62-17.
- arousal effects on vestibular response, 63-29.
- rotation device, 64-15.
- nystagmus after rotation habituation, 63-13, 65-24.
- nystagmus after caloric habituation, 63-14, 64-14, 65-18, 67-2.

### Acceleration, linear (see also deceleration)

- bibliography, 63-30.

### Accidents

- agricultural aircraft, 66-27, 66-30.
- alcohol involved, 66-29.
- causes, 66-8, 66-27, 66-29, 67-23.
- cockpit delethalization, 66-3, 66-12.
- evacuation patterns, 62-9, 65-7.
- fire, smoke protection, 67-4.
- inflight 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.
- use of seat cushions for flotation, 66-13.

### Aerial application

- accidents, 66-27, 66-30.
- biochemical effects of lindane and dieldrin, 62-10, 63-4.
- cholinesterase determination, 67-5.
- effects of dieldrin on liver, 66-5, 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, 62-3, 65-21, 67-1.
- 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

- age effects on performance, 61-1, 62-3, 65-21, 67-1.
- anthropometry, 65-26.
- aptitude tests for selection, 65-19.
- biomedical survey, 65-5, 65-6.
- experience as selection criterion, 63-31.
- incident reporting, 65-10.
- performance evaluation, 61-1, 65-22.
- psychological testing, 61-1, 62-2.
- selection, 62-2.
- symptoms reported, 61-1.

### Aircraft

- accident causes, 66-8, 66-25, 66-27, 66-29, 66-30, 67-23.
- accident investigation, 62-7, 62-9, 63-21, 63-35, 67-22.
- biocidal fuel additive, 67-21.
- cockpit delethalization, 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.
- restraint installation, 66-33, 67-13.
- seat cushion flotation, 66-13.
- seat impact injuries, 66-18.
- 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, 66-15.
- effects on work tolerance, 63-33.
- efficiency of oxygen masks, 62-21, 66-7, 66-9, 66-20, 67-3, 67-9.
- 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.
- faces 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**

- auditory fatigue, 63-19, 65-1, 65-2.
- binaural beat perception, 63-17.
- earphone transient response, 63-7.
- interaural intensity difference limen, 67-10.
- table of intensity increments, 66-4.

**Ballistocardiography**

- bibliography, 65-15.
- 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.
- erythrocyte volume spectra, 63-8.
- hemoconcentration with endrin poisoning, 66-11.
- oxygen saturation, 66-7, 66-15, 66-20, 67-3, 67-9.
- plasma catecholamine determination, 66-6.
- pulmonary flow with glyceryl trinitrate, 64-11.
- pulmonary thromboembolism, 64-7.

**Caloric irrigation**

- after habituation to rotation, 63-13.
- arousal effects upon nystagmus, 62-17.
- elicitation of secondary nystagmus, 63-3.
- nystagmus after habituation, 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**

- disruption of intercontinental flights, 65-16, 65-28, 65-29, 65-30.

**Clothing**

- effects on drag forces, 63-9.

**Communication**

- binaural beat perception, 63-17.
- earphone response, 63-7.
- interaural intensity difference limen, 67-10.
- table of intensity increments, 66-4.
- tactile, 62-11, 62-16.

**Deceleration**

- bibliography, 63-30.
- cockpit delethalization, 66-3, 66-12.
- human tolerance, 62-6.
- kinematics of human body, 62-13.
- padding for crash protection, 66-40.
- restraint systems, 67-13.
- 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.
- depth perception, 62-15, 63-10, 63-20, 63-28, 64-13, 65-11, 65-32, 66-22, 66-24, 67-18, 67-20.
- 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, 63-23, 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, 66-38.
- non-gyroscopic blind flight instrument, 66-32.
- oxygen, 62-21, 66-7, 66-9, 66-10, 66-20, 67-3, 67-9.
- padding for crash protection, 66-40.
- performance testing, 66-19.
- protective for aircraft accidents, 65-7, 66-3, 66-12.
- restraint systems, 67-13.

seat cushion flotation, 66-13.  
stall warning, 66-31.

### Evacuation

after air carrier accidents, 62-9, 65-7.  
bibliography, 63-30.  
tests using L-1649, 66-42.

### Exercise

auscultatory and intra-aortic pressures, 66-36.  
before and after myocardial infarction, 64-2.  
effects after myocardial infarction, 66-17, 66-21.  
energy 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, 65-11.  
lateral movements in student pilots, 67-15.  
neural control of ciliary muscle, 63-5.  
penetrating injuries, 62-12.  
perception of depth, 63-10, 63-28, 67-20.  
perception of size and distance, 62-15, 64-13, 66-22,  
66-24, 67-18.  
perception of spatial extent, 63-20.  
photic stimulation, 66-39.  
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

auditory, 63-19, 65-1, 65-2.  
in aviation activities, 65-13.  
intercontinental jet flights, 65-16, 65-28, 65-29, 65-30.  
mitigation with Spartase, 63-12.  
plasma catecholamine determination, 66-6.  
pupillary movement with, 65-9.

### Federal Air Surgeon

review of 1966 program, 67-25.

### Fire

effects in air carrier accidents, 62-9, 65-7.  
flammability of toiletries in oxygen, 63-27.  
protective passenger hood, 67-4.

### Fuel

biocidal additive, 67-21.

### Hearing

auditory fatigue, 63-19, 65-1, 65-2.  
binaural beat perception, 63-17.  
earphone transient response, 63-7.  
interaural intensity difference limen, 67-10.  
table of intensity increments, 66-4.

### Heat

maintenance of thermal balance, 66-23.  
measurement of evaporative water loss, 63-25.

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

### Human

angle of shoulder slope, 65-14.  
body center of gravity, 62-14.  
body kinematics on deceleration, 62-13.  
center of gravity, 62-14, 65-23.  
factors in aviation safety, 63-35, 66-8, 66-25, 66-27.  
factors in emergency evacuation, 65-7.  
factors research in ATC, 65-31.  
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.  
tolerances to facial impacts, 65-20, 66-12, 66-40.

### Hyperventilation, 62-6.

### Hypoxia

human tolerance, 62-6, 63-33.  
oxygen need, 66-28.  
performance decrement, 66-10, 66-15.

### Injuries

cockpit delethalization, 66-3, 66-12.  
correlation with kinematic behavior, 62-13.  
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.  
inflight vertigo and unconsciousness, 63-21.  
photic stimulation, 66-38.  
pupillary movement, 65-9, 65-25.  
rheoencephalography in cerebrovascular disease de-  
tection, 65-4, 67-11.  
seizures in flight, 64-6.  
spiral aftereffect test, 64-9, 64-10, 64-17.  
studies at GCRI, 64-1.

### Noise

auditory fatigue, 63-19, 65-1, 65-2.  
effects on birds, 62-4.

## **Nystagmus**

- effects of adaptation, 66-37, 67-6, 67-7, 67-12, 67-19.
- 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, 65-24.
- translations of reports, Tech. Pub. No. 1, 64-16, 65-17, 66-2.

## **Oxygen**

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

## **Oxygen masks**

- design for children, 66-9.
- disposable, 66-7.
- donning time after decompression, 66-10.
- evaluation, 62-21, 66-7, 66-20, 67-3, 67-9.

## **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 depth, 63-10, 63-28, 65-11, 65-32, 67-20.
- of size and distance, 62-15, 64-13, 66-22, 66-24, 67-18.
- of spatial extent, 63-20.
- reaction time, flash luminance and brightness, 67-24.
- spiral aftereffect, 64-9, 64-10, 64-17.
- tactile, 62-11, 62-16.

## **Performance**

- after decompression, 66-10.
- after intercontinental flights, 65-16, 65-28, 65-29, 65-30.
- air traffic controllers, age effects, 61-1, 62-3, 65-21, 67-1.
- aptitude tests for prediction, 65-19.
- evaluation, 61-1, 65-22.
- experience as predictor, 63-31.
- incident reporting, 65-10.
- radar simulator, 65-31.
- decrement with hypoxia, 66-15.
- drug effects in aircraft simulator, 64-18.
- effects of heart disease and age, 64-4.
- effects of mental tasks on auditory fatigue, 65-1, 65-2.
- effects of physical conditioning program, 66-17, 66-21.
- impairment by alcohol, 66-29.
- student pilots, 67-15.
- tasks for operator-skills research, 66-19.
- work in heat and cold, 66-23.

## **Pesticides**

- aerial application aircraft accidents, 66-27, 66-30.
- 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, 66-26.
- effects of endrin, 66-11, 66-26, 66-34.
- mechanisms of action of endrin, 63-16, 63-26.
- symptoms and treatment of poisoning, 62-8.

## **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, 67-17.
- 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.
- stress in student pilots, 67-15.
- 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, 62-20, 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.
- translated material, Tech. Pub. No. 1, 64-16, 65-17, 66-2.

## **Restraint**

- bibliography, 63-30.
- cockpit dealthalization, 66-3.
- comparison of systems, 67-13.
- kinematics with seat belt restraint, 62-13.
- shoulder harness design, 65-14.
- upper body restraint installation, 66-33.

## **Rheoencephalography**

- cerebrovascular disease detection, 65-4, 67-11.

## **Seat**

- comfort, 62-1.
- cushion flotation, 66-13.
- injury potential, 66-18.
- pressure distribution, 62-1.
- rearward facing, injuries, 62-7.
- impact in seated position, 62-19.



**Seat belts**

- center of gravity in design, 62-14, 65-23.
- cockpit delethalization, 66-3.
- evaluation of different systems, 67-13.
- kinematics of restrained subjects, 62-13.

**Shift-rotation**

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

**Shoulder harness**

- angle of shoulder slope in design, 65-14.
- cockpit delethalization, 66-3.
- comparison of types, 67-13.
- installation in general aviation aircraft, 66-33.

**Simulation**

- air traffic controller radar task, 65-31.
- for operator-skills research, 66-19.
- movement of objects in depth, 65-32.

**Skin**

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

**Smoke**

- effects in air carrier accident, 62-9, 65-7.
- protective passenger hood, 67-4.

**Stalls**

- warning device, 66-31.

**Stress**

- evaporative water loss device, 67-17.
- measurement of evaporative water loss, 63-25.
- plasma catecholamine determination, 66-6.
- 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.
- evaporative water loss, 63-25, 67-17.
- human tolerance, 62-6.
- hyperpyrexia, 64-8.
- maintenance of thermal balance, 66-23.
- tranquilizer effects on body temperature, 63-23, 66-14.

**Tests**

- air traffic controller selection, 61-1, 62-2, 65-19, 65-21.
- ballistocardiography, 64-12, 65-8, 65-15.
- cholinesterase 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, 64-3, 66-17.
- performance, 66-19.
- performance after decompression, 66-10.
- performance, age and disease, 64-4.
- performance and age, 65-21.
- performance with hypoxia, 66-15.
- pupillary movement, 65-9, 65-25.
- 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 intercontinental flights, 65-16, 65-28, 65-29, 65-30.
- of vertical impact, 62-19.
- orthostatic, drug effects, 63-34.

**Translations**

- aviation medicine, 64-16, 65-17, 66-2.
- color vision tests, 67-8.
- nystagmus and vestibular function, Tech. Pub. No. 1.

**Turbulence**

- effects of severe weather flying, 66-41.

**Venous pressure**

- changes 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.
- inflight case with unconsciousness, 63-21.
- production by spiral aftereffect, 64-9, 64-10, 64-17.

**Vestibular function**

- effects of adaptation, 66-37, 67-6, 67-7, 67-12, 67-19.
- 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, 63-3.
- translations of reports, Tech. Pub. No. 1, 64-16, 65-17, 66-2.

**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.
- matching 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, 66-22, 66-24, 67-18.
- perception of spatial extent, 63-20.
- 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, 64-3.
- drug effects on performance, 63-12, 63-34.
- effects on blood pressure, 66-36.
- energy cost on treadmill, 62-5.
- 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.