# Committee on Vision 1944-1973

The National Academies Committee on Vision was organized as an offshoot of a committee set up jointly by the Army and Navy in World War II. In early 1944 the Army and Navy, with the assistance of the wartime Office of Scientific Research and Development (OSRD), established the Army-Navy-OSRD Vision Committee in order to investigate problems of vision in relation to military activity. The Committee's headquarters were located at the National Academy of Sciences office building in downtown Washington, DC. With the end of World War II and the consequent disbanding of the OSRD, the Committee was reorganized as the Army-Navy-National Research Council Vision Committee; its mission was essentially unchanged.

The Committee on Vision collection includes correspondence, reports, and meeting minutes, and covers the years 1944-1973 for a span of 10 linear feet.

#### **ADMINISTRATION**

#### EXECUTIVE BOARD

- Armed Forces-NRC Vision Committee
  - o Annual Reports
    - Jul 1, 1952 Jun 30, 1953
  - Background Materials
    - Foreign Articles Translations: 1947-1951
  - Executive Council
    - Meetings
      - 1953
        - o Apr
        - Nov: Agenda
        - 1952
          - Apr: Agenda
          - Nov: Agenda
      - 1951
        - Nov: Agenda
      - 1950
        - May: Agenda, Minutes
        - o Nov
  - Funding
    - Budgets: 1946-1953
  - Meetings
    - Tables of Contents of Minutes & Proceedings of Meetings 1-35 of Vision Committee: 1944-1954
      - Thirty-third: Nov 1953
        - Minutes & Proceedings
        - o General: 1952-1954
      - Thirty-second: Apr 1953

- Minutes & Proceedings
- o General: 1952-1953
- Thirty-first: Nov 1952
  - Minutes & Proceedings
  - o General: 1952-1953
- Thirtieth: Apr 1952
  - Minutes & Proceedings
  - o General: 1952
- Twenty-ninth: Nov 1951
  - Minutes & Proceedings
  - o General: 1951-1952
- Twenty-eighth: Apr 1951
  - Minutes & Proceedings
  - o General: 1950-1951
- Twenty-seventh: Nov 1950
  - Minutes & Proceedings
  - o General: 1950
- Twenty-sixth: May 1950
  - Agenda
  - Minutes & Proceedings
  - o General: 1950
- Twenty-fifth: Feb 1950
  - Minutes & Proceedings
  - Twenty-fourth: Nov 1949
    - Agenda

- Minutes & Proceedings
- Twenty-third: Mar 1949
  - o Minutes & Proceedings
  - o General: 1949
- Twenty-second: Nov 1948
  - Minutes & Proceedings
  - o General: 1948
- Twenty-first: May 1948
  - Minutes & Proceedings
  - General: 1948
- Twentieth: Oct 1947
  - o Agenda
  - o Minutes & Proceedings
- Nineteenth: May 1947
  - o Agenda
  - Minutes & Proceedings
- Eighteenth: Jan 1947
- Minutes & Proceedings
- General: 1946-1947
- Membership: 1947-1953
- Reorganization: 1950
- o Reports

- History 1944-1949 & Description of Organizational Structure 1949
- Publications
  - Annotated Bibliography of Flicker Fusion Phenomena Covering Period 1740-1952 Landis C, Columbia University: 1953
  - Literature Survey of Material Published Relating to Specifications of Handheld Binoculars: 1953
- Status: 1949-1952
- Requests for Advice
  - Air Force
    - Ophthalmic Corrections for Navigational Instruments: 1953
    - Problem of Air Defense Radar: 1951
    - Standard Radomes for Ground Electronic Equipment Paint Camouflage Problem: 1952-1953
    - Visual Aids for Low Level Observation from Aircraft: 1951
    - Visual Problems of Radar Observation 1952
  - Army
    - Intense Illumination Screen to Cover Military Operations: 1949
    - Medical Research Laboratory
      - Nausea Induced by Using Airborne Optical Instruments: 1953-1954
    - Office of Quartermaster General
      - Sunglasses: 1951
  - Ballistic Research Laboratories
    - Ordnance Department
      - Ballistic Visibility: 1951
  - Department of Defense (DoD)
    - Research & Development Board
      - Committee on Human Resources
        - Working Group on Human Behavior: 1949-1952
  - Depth Perception in Field: 1953
  - Filters Useful for Increasing Visual Acuity in Presence of Aerial Haze: 1953
  - Navy
    - Medical Research Laboratory
      - Field Test of Night Myopia
        - Camp LeJeune: 1953-1954
    - ONR (Office of Naval Research)
      - Anatomical Center for Color Vision: 1947
      - Atmospheric Polarization: 1948
      - Brightness Constancy & Nature of Neutral (Achromatic) Colors: 1948
      - Dark Adaptation: 1947
      - Development of Improved Pseudo-Isochrornatic Test of Color Vision: 1949
      - Development of Neuromuscular Mechanisms: 1947
      - Effect of Illumination of One Eye Upon Visual Thresholds of Other Eye: 1947

- Effects of Changing Illumination on Peripheral Visual Acuity under both Scotopic & Photopic Conditions: 1947-1948
- Experimental Investigation of Vernier Acuity Light Adaptation Electrical Recording & Monocular Movement Parallax: 1947
- Facilitative Effect of Red Light on Dark Adaptation: 1953
- Factors in Perception of Size or Area as Related to Maps: 1949
- Freeman Illuminant-Stable Color Vision Test: 1948-1953
- $\circ \quad \text{Inserting Radar Images into Telescopic Fields: 1947}$
- Instantaneous Threshold of Eye Following Adaptation to Various Brightness Levels: 1949
- Possibilities of Research on Training in Recognition & Other Visual Performances: 1948
- Prevost-Fechner-Benham Subjective Colors: 1949
- Problems of Industrial Ophthalmology: 1951-1952
- Recommendations for Revision of Visual Requirements for Midshipmen & Newly Commissioned Officers: 1950-1951
- Relation of Variables of Visual Tasks: 1948
- o Reliability of Verhoeff Test of Depth Perception Report
- Trumbull R: 1951-1952
- Research on Night Vision: 1949
- Scotopic Visibility Function: 1948
- Simplified Contrast-Brightness Threshold Meter: 1948
- Stereoscopical Method of Producing Movie Pictures: 1948
- Study of Electrical Activity of Retina of Human Eye in Normal & in Certain Color-Blind Subjects: 1947
- Vibration Characteristics of Submarine Periscope Tubes: 1949-1950
- Visual Acuity in Myopia Through Visual Training: 1947-1948
- Visual (Space) Perception Studies: 1947
- ORI (Office of Research & Inventions)
  - Statistical Analysis of Results of Field Tests of Optical Equipment
     Follow-up: 1948
- NRC

- Division of Anthropology & Psychology
  - Committee on Aviation Psychology
    - Survey of Problems in Approach & Contact Landing Light Systems: 1948
- Royal Canadian Air Force
  - Comments on Demonstration of Stereoscopic Rangefinder at Vision Committee Thirty-second Annual Meeting - Fort Knox: 1953-1954
- US Marine Corps
  - Night Vision Training for Military Personnel in Night Combat Operations: 1953
  - Visual Problems in Driving under Blackout Conditions: 1952
- Visibility under Snow Conditions: 1953
- Weather Bureau

- Department of Commerce
  - Problems Involved in Visibility Determinations at Meteorological Stations: 1949

- Studies
  - Aircraft
    - Periscopes Problems Proposed: 1953
    - Night Lookout Training: 1951
    - Visual Detection Factors in Aircraft Collisions Proposed: 1953
    - Visual Reconnaissance Problems Proposed: 1952
- Subcommittee on Color Vision
  - Meetings: 1950
- Requests for Advice
  - Navy
    - ONR (Office of Naval Research)
      - Prevost-Fechner-Benham Subjective Colors: 1949
    - General: 1948-1949
- Subcommittee on Illumination
  - Meetings: 1949
  - Membership: 1948-1949
  - Reports
    - Progress: 1948
  - Requests for Advice
    - Instrument Illumination for Military: 1949-1950
    - General: 1948-1949
- o Subcommittee on Instrument Legibility
  - Reports

- Final: 1948
- General: 1948
- General: 1947-1948
- o Subcommittee on Night Vision
  - Meetings: 1950
  - General: 1950
- Subcommittee on Reflection Optics
  - Background Materials
    - Conferences Bouwers A: 1949-1950
  - Meetings: 1950
  - Membership: 1950
  - Reports
    - Bulletin: 1950
  - General: 1950
- Subcommittee on Sunglasses: 1949-1950
- o Subcommittee on Visibility & Atmospheric Optics
  - Meetings
    - May 1950
      - Agenda, Minutes
    - 1948
  - Membership: 1947-1948

- General: 1948-1951
- Subcommittee on Visual Displays: 1949-1950
- Subcommittee on Visual Standards
  - Meetings: 1950
  - Membership: 1947-1949
  - Reports
    - Manual of Instructions for Clinical Testing of Visual Acuity Revised Edition: 1951
    - Manual of Instructions for Testing Heterophoria & Prism Divergence at Near Final: 1947
  - General: 1947-1950
- Subcommittee on Visual Testing: 1947-1950
- Working Groups
  - A-0 (American Optical Company) Vision Testing Device: 1953
  - Battlefield Illumination (Artificial Moonlight): 1950-1953
  - Camouflage Detection Goggles Proposed: 1951
  - Chart Reading under Red Illumination
    - Background Conference: Sep 1952
    - Reports Final: 1953
  - Cockpit & Instrument Lighting: 1950-1951
  - Color Coding for Compressed Gas Cylinders & Pipelines: 1951-1952
  - Criteria for Meteorological Estimates of Visibility: 1951-1952
  - Human Behavior: 1949-1952
  - Illumination & Dark Adaptation: 1953
  - Navy Color Lantern
    - Membership: 1953
    - General: 1953
  - Night Vision Testing: 1951-1953
  - Night Vision Training: 1950-1952
  - Optical Gunsights: 1951-1953
  - Problems of Night Combat USMC: 1952-1953
  - Recommendations for Revision of Visual Requirements for Midshipmen & Newly Commissioned Officers of US Navy: 1950-1951
  - Reflection Optics
    - Membership: 1950
    - Reports
      - Bibliography on Reflection Optics as Applied to Telescopes Microscopes, etc. - Final: 1950
      - Progress Presented at Vision Committee 27th Meeting: 1950
      - Studies of Visual Telescope System Employing Reflection Optics – Final: 1951
      - Usefulness of Reflecting Telescope Systems for Military Applications – Draft: 1950
    - General: 1950-1954
    - Standard Color Filters for Electronic Equipment 1952
  - Sunglasses
    - Requests for Advice

- o Army
  - Office of Quartermaster General: 1951
- Tank Searchlights: 1953
- Taxiway Lighting & Destination Marking Systems: 1951-1953
- Thermal Screens: 1952-1954
- Visibility at High Altitudes: 1952-1953
- Visual Acuity Test Charts: 1953
- Visual Aids for Low Level Observation from Aircraft
  - Proposed: 1951
- Visual Screening Examination
  - Reports
  - Manual of Instructions Armed Forces Vision Tester Revision: 1952
  - General: 1950-1952
- General: 1947-1953
- Army-Navy-NRG Vision Committee
  - o Executive Council
    - Meetings
      - May 1946
        - Agenda
  - Meetings
    - Table of Contents of Minutes & Proceedings of Meetings 1-17 of Vision Committee: 1944-1946
      - Seventeenth: Oct 1946
        - Agenda
          - Minutes & Proceedings
      - Sixteenth: Jun 1946
        - Minutes & Proceedings
        - o General: 1946
      - Fifteenth: Feb 1946
        - Minutes & Proceedings
      - Fourteenth: Sep 1945
        - o Agenda
        - o Minutes & Proceedings
      - Thirteenth: Jul 1945
        - $\circ$  Agenda
        - Minutes & Proceedings
      - Twelfth: Jun 1945
        - Minutes & Proceedings
      - Eleventh: Apr 1945
        - Agenda
        - Minutes & Proceedings
      - Tenth: Mar 1945
        - Agenda
        - Minutes & Proceedings
      - Ninth: Jan 1945
        - o Agenda
        - Minutes & Proceedings

- Eighth: Dec 1944
  - Minutes & Proceedings
- Seventh: Nov 1944
  - Minutes & Proceedings
- Sixth: Oct 1944
  - Minutes & Proceedings
- Fifth: Sep 1944
  - Minutes & Proceedings
- Fourth: Jul 1944
  - Minutes & Proceedings
- Third: Jun 1944
  - Minutes & Proceedings
  - Second: May 1944
    - Agenda
    - Minutes & Proceedings
- First: Apr 1944
  - Minutes & Proceedings
- Membership: 1944-1946
- o Procedures for Operation of Committee on Vision: 1946
- o Reports
  - Monthly Progress: 1944-1945
- Requests for Advice
  - Navy
    - Bureau of Ships
      - Mark V Surface Lookout Alidade: 1945-1946
    - ONR (Office of Naval Research) Visibility of Guided Missiles: 1946
    - ORI (Office of Research & Inventions)
      - Statistical Analysis of Results of Field Tests of Optical Equipment
        - Follow-up: 1948
        - General: 1946
- Subcommittee on Design & Use of Binoculars
  - Meetings: 1945-1946
  - Membership: 1945-1946
  - General: 1946
- o Subcommittee on Standards & Procedures for Visual Examinations: 1945-1946
- Subcommittee on Sunglasses
  - Meetings: 1945
- Subcommittee on Visibility Theater: 1945
- Subcommittee on Visual Acuity: 1945-1946
- Subcommittee on Visual Standards
  - Meetings: 1946
  - Reports Progress: 1946
  - General: 1945-1946
- o General: 1944-1946

#### **GOVERNING BOARD**

- Armed Forces-NRC Vision Committee
  - Executive Council
    - Meetings
      - 1955
        - Apr, Sep
        - 1954
          - o Mar: Agenda
          - Nov: Agenda
  - Meetings
    - Table of Contents of Minutes & Proceedings of Meetings 34-35 of Vision Committee: 1954
      - Thirty-sixth: Spring 1955
        - Cancelled: 1954-1955
      - Thirty-fifth: Nov 1954
        - Minutes & Proceedings
        - o General: 1954
      - Thirty-fourth: Apr 1954
        - Minutes & Proceedings
        - o General: 1953-1955
  - o Membership
    - Roster: 1954-1955
    - General: 1954-1955
  - o Reorganization: 1955
  - Requests for Advice
    - Navy
      - ONR (Office of Naval Research)
        - Problem of Marking & Lighting of Tall Structures & Tall Guyed Structures Including Their Guy Wires
          - Consultant to Subcommittee on Aerodromes Air Routes & Ground Aids: 1954-1955
    - Royal Canadian Air Force
      - Comments on Demonstration of Stereoscopic Rangefinder at Vision Committee 32nd Annual Meeting
        - Ft. Knox: 1953-1954
    - Visibility Problems in Reading Rote Manuals Especially under Low Illumination: 1955
  - Working Groups
    - Midshipmen Myopia at Annapolis: 1954
    - Navy Color Lantern
      - Membership: 1954
      - General: 1954
    - Night Vision Testing: 1954-1955
    - Reflection Optics
      - Bibliography on Reflecting Optics Final Revision (including
    - supplement): 1955 Visual Acuity Test Charts: 1954
  - General: 1954-1955

## INSTITUTIONS – ASSOCIATIONS & INDIVIDUALS

- Advisory Group for Aerospace Research & Development (AGARD)
  - Aerormedical Panel: 1953-1954
  - General Electric Company
    - Publications
      - Contributions of Lighting Research Laboratory to Science of Seeing: 1911-1948
- Illuminating Engineering Research Institute
  - o Annual Report: 1957
  - o Symposiums
    - Research Second: 1958
- Illuminating Engineering Society
  - National Technical Conferences
    - Papers Presented Preprints: 1950-1952
- National Physical Laboratory
  - Establishment of Vision Committee in India: 1961
- Optical Society of America
  - o Publications
    - Applied Optics: 1963-1965
- Polyak S
  - Financial Support for Publication of Book
    - Vertebrate Visual System: 1952-1953

## INTERNATIONAL RELATIONS

- Institutions Associations Abroad
  - o Carl Zeiss Optical Works Germany
    - Obtainment of Optical Equipment: 1946
  - o Commission Internationale de l'Eclairage (International Commission on Illumination)
    - Review of In-House Military Research in Vision: 1966-1967
- International Organizations
  - World Meteorological Organization
    - Commission on Instruments & Methods of Observation
      - Sub commission on Atmospheric Optics: 1948-1953
      - Working Group on Visibility: 1954-1956

## ASSEMBLIES & COMMISSIONS OF THE NRC

- Assembly of Behavioral & Social Sciences Committee on Vision
  - Symposiums
    - Color Vision: 1971
    - Proceedings: 1973

## **DIVISIONS OF THE NRC**

## ANTHROPOLOGY & PSYCHOLOGY

- Committee on Vision
  - Executive Council
    - Meetings
      - Fourteenth: Oct 1962
      - Thirteenth: Apr 1962
      - Twelfth: Dec 1961
      - Eleventh: Mar 1961
      - Tenth: Nov 1960
      - Ninth: Apr 1960
      - Eighth: Dec 1959
      - Fourth: Apr 1958
      - Third: Nov 1957
      - Second: May 1957
      - First: Oct 1956
  - o Meetings
    - Annual
      - 1962
      - 1961
        - Papers Presented
          - o General: 1960-1961
      - 1960 (Thirty-ninth Consecutive)
        - Papers Presented
        - o General
      - 1959 (Thirty-eighth Consecutive)
      - 1958 (Thirty-seventh Consecutive)
        - Papers Presented
        - o Symposiums
        - o General
      - 1957 (Thirty-sixth Consecutive)
        - o Papers Presented
        - o General
  - Membership
    - 1957-1961
    - 1962
      - International Correspondents
      - General
  - Procedures for Operation of Committee on Vision: 1956-1960
  - Reorganization: 1956
  - Reports
    - Publications
      - Foreign
        - Contrast Threshold of Eye with Relation to Problem of Visibility -Foitzik L: 1958
    - Visual Problems of Armed Forces: 1962
    - Vision Research Reports: 1960
  - Requests for Advice
    - Army

- Office of Chief Signal Officer
  - Military Applications for Pinhole Apertures in Contact Lenses: 1959-1960
- Effects of Radiation on Eye: 1958
- FAA (Federal Aviation Agency)
  - Office of Civil Air Surgeon
    - Review of Civil Air Regulations: 1960
- Symposiums
  - Conference on Perception of Three-Dimensional Space (Depth): 1959-1961
  - Form Discrimination as Related to Military Problems: Apr 1957
  - Illumination & Visibility of Radar & Sonar Displays: 1958
  - Physiological Optics
    - Joint with Optical Society of America & Inter-Society Color Council
      - o Agenda: 1962
      - o Participants
        - Invited Russian Scientists: 1960-1961
      - Proceedings: 1963
    - General: 1960-1962
  - Visual Search Techniques: Apr 1959
    - Proceedings: 1960
    - General: 1958-1959
- Working Groups
  - Visual Screening Examination
    - Reports
      - Manual of Instructions Armed Forces Vision Tester Reprint: 1957-1958
    - Group 20
      - Visual Requirements for Flying
        - Background Materials: 1953-1962
        - General: 1961-1962
    - Group 19
      - Night Lighting for Carrier Flight Operations: 1960-1961
    - Group 18
      - Heterophoria: 1960-1961
    - Group 17
      - Need for Glaucoma Detection in Armed Forces: 1960-1961
    - Group 16
      - Conference on Perception of Three-Dimensional Space (Depth)
        - Meetings: 1961
        - Membership: 1960-1961
        - o General: 1959-1961
    - Group 15
      - Awards: 1961-1962
    - Group 14
      - Longitudinal Studies of Vision & Aging: 1962-1963
    - Group 12
      - Visual Problems in Space Flight: 1960

- Group 10
  - Feasibility of Establishment of Visual Standards in Terms of Performance on Job
  - Background Papers: 1956-1961
  - Meetings: 1960-1961
  - Membership: 1960-1963
  - Reports: 1962
  - General: 1960-1961
- Group 8
  - Classified Symposia on Visual Search Techniques
    - o Background Materials
      - Symposium: Apr 1959
    - o General: 1959-1963
- Group 7
  - Recommendations for Marking of Coast Guard Aircraft for Maximum Protection Against Collision: 1958-1959
- Group 6
  - Visual Displays
    - Conference on Information Requirements for Control of Combat Forces: Jun 1959
      - Proceedings Summary: 1960
      - Meetings: 1959-1962
      - Membership: 1959-1962
      - o Reports
        - Inquiry into Methods Used to Obtain Military Information Requirements
          - Internal: 1960
          - Technical Edition: 1962
      - o General: 1959-1961
- Group 5
  - Visual Problems of Space Travel
    - o Membership: 1960-1961
    - Reports
      - Final: 1962
      - Update-Proposed: 1968
      - General: 1961-1962
    - o General: 1962
- Group 4
  - Visual Standards as Related to Visual Problems: 1959-1960
- Group 3
  - Visual Factors in Automobile Driving
    - Background Materials: 1956-1959
      - o Membership: 1958-1960
    - Reports Progress: 1958
    - o Symposiums: Nov 1957
      - Summary Report: 1958
        - General: 1957-1958

- o General: 1957-1961
- Group 1
  - Airport Runway Lighting: 1957-1959
- General: 1957-1962

#### **BEHAVIORAL SCIENCES**

- Committee on Vision
  - o Executive Council
    - Meetings
      - Thirty-fifth: Nov-Dec 1972
      - Thirty-fourth: May 1972
      - Thirty-third: Oct 1971
      - Thirty-second: May 1971
      - Thirty-first: Nov 1970
      - Thirtieth: May 1970
      - Twenty-ninth: Nov 1969
      - Twenty-eighth: Nov 1969
      - Twenty-seventh: Nov 1968
      - Twenty-sixth: Aug 1968
      - Twenty-fifth: Dec 1967
      - Twenty-fourth: Oct 1967
      - Twenty-third: May 1967
      - Twenty-second: Oct 1966
      - Twenty-first: May 1966
      - Twentieth: Oct 1965
      - Nineteenth: May 1965
      - Eighteenth: Nov 1964
      - Seventeenth: Apr 1964
      - Sixteenth: Oct 1963
      - Fifteenth: May 1963
  - Meetings
    - Annual
      - 1972
      - 1971
        - Symposiums
          - Proceedings
      - 1970
      - 1969
      - 1968 Joint with CHABA (Committee on Hearing Bioacoustics & Biomechanics)
        - Agenda
      - 1967
      - 1966
      - 1965
        - o Symposiums
          - Measurement of Visual Function

- Proceedings
- General: 1965
- 1964
- 1963
  - Proceedings
    - Recent Developments in Vision Research: 1966
  - General: 1963-1965
- Membership: 1963-1973
- Panel on Enhancement of Perception 1963-1965
- Panel on Sensory Aids Proposed: 1964
- Panel on Visual Standards for Retention of Personnel in US Army: 1969
- Panel on Visual Standards for Soldering Ad Hoc: 1966
- o Projects
  - Revision of OSRD/NDRC Division 16 Summary Technical Report
    - Volume II Camouflage (1945) Proposed: 1967
- Requests for Advice
  - Air Force
    - Effective Color for Cockpit Lighting: 1966-1967
    - Tactical Night Operation System: 1963
  - American Optometric Association
    - Use of Impact-Resistant Eyeglasses by Armed Services: 1968-1969
  - Army
    - Cycloplegic Refractions for Candidates to Service Academies: 1966-1968
    - Optics of Army Tank Fire Control Systems
      - o **Conference** 
        - Frankford Arsenal Pennsylvania: 1963
    - Project DAZZLE: 1968
    - Visual Standards for Combat Officers Airborne Ranger & Special Forces

       Panels Ad Hoc: 1966-1967
  - Association of American Railroads
    - Problem of Screening for Color Deficiency in Job Applicants & Employees & to Review Colorimetric Standards for Signal Lights: 1968-1973
  - Battelle Memorial Institute
    - Eye Fatigue (Caused by Imperfect Optical Devices): 1963
    - Connolly P
      - Green Automobile Taillights Proposed: 1966
  - Department of Justice
    - Immigration & Naturalization Service
      - Possible Hazards of Ultraviolet Light Equipment at INS Stations:
      - 1966
  - FAA (Federal Aviation Agency)
    - Equivalency of Near Vision Tests: 1971
    - Evaluation of Sperry Gyroscope All-Weather System for Aid to Landing: 1964-1965
  - Federal Trade Commission
    - Tinted Windshields: 1966

- NASA
  - Review of NASA Research Proposals: 1968-1971
  - Visual Standards for Soldering: 1966
- Navy
  - Bureau of Naval Weapons
  - Effect of Increased Oxygen Tension on Dark Adaptation: 1964
- NRC
  - Division of Medical Sciences
    - Committee on Ambulance Design Criteria: 1970
- U of Wisconsin
  - Laboratory of Genetics Smithies 0
    - Traffic Control Signals & Color Blindness: 1969-1972
- Subcommittee on Recommended Methods & Practices for Establishing Performance & Safety Criteria: 1973
- Symposiums
  - Color Vision: 1971
    - Proceedings: 1973
    - Measurement of Visual Function: 1965
      - Proceedings: 1968
  - Physiological Optics Joint with Optical Society of America & Inter-Society Color Council: 1962
    - Proceedings: 1963
  - Visual Tasks in Space Flight: Aug 1964
- o Working Groups
  - Laser Eye Effects: 1964-1969
  - Photo Interpretation Proposed: 1963
  - Group 40
    - Visual Detection of Air & Ground Targets
      - Background Materials: 1970-1972
      - Meetings: 1972
      - Reports Final: 1973
      - o General: 1972-1973
  - Group 39
    - Standards for Testing Visual Fields & Visual Acuity: 1971-1972
  - Group 37
    - Prototype Mail Sorting System at Cincinnati Post Office Joint with CHABA (Committee on Hearing Bioacoustics & Biomechanics) Working Group 68
      - Reports Final: 1972
  - Group 36
    - Effects of Drugs on Vision: 1971-1973
  - Group 35
    - Ocular Effects of Microwave Radiation Meetings: 1971
      - Membership: 1971
      - General: 1971-1972
  - Group 34
    - Visual Elements in Flight Simulation: 1973-

- o Background Materials
  - Reports Trip: 1971
- o Membership: 1970
- Reports

- Preliminary Report of WG 34 Activities: 1971
- General: 1970-1972
- Group 33
  - Visual Aids to Maritime Navigation
    - o Meetings: 1969-1970
    - o Reports Final: 1971
    - Requests for Advice
      - NRC Division of Medical Sciences
        - Committee on Ambulance Design Criteria: 1970
    - o General: 1969-1971
- Group 32
  - Review of Standards for Ophthalmic Lenses & Room Illumination
    - o Meetings: 1970-1971
    - o General: 1969-1971
- Group 31
  - Collision Avoidance Devices
    - Background Materials
      - FAA Anti-collision Light Project: 1969
      - General: 1968-1969. 1971
      - Meetings: 1969-1971
      - o Membership: 1968-1969
      - Reports

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- Progress Rowland & Company to FM: 1968-1969
- General: 1967-1972
- Group 30
  - Visibility Problems of Electro-optically Guided Missiles
    - Background Materials: 1966-1968
    - Meetings: 1968
    - Reports Final: 1968
      - General: 1968-1969
    - o General: 1967-1969
- Group 29
  - Tracer Visibility: 1966-1969
- Group 28
  - Apollo Helmet Visors
    - Membership: 1966
      - General: 1965-1969
- Group 27
  - Underwater Visibility: 1967-1968
- Group 26

- Grading of Visual Functions: 1964-1968
- Group 25
  - Safety Standards in Use of Lasers

- Membership: 1965-1969
- Reports Final: 1968
- o General: 1964-1969
- Group 24
  - Contact Lenses
    - Membership: 1965-1967
    - o General: 1966-1968, 1970-1971
- Group 23
  - Space Simulation (Visual Problems of Space Flight)
    - Review of NASA Research Proposals
      - Beischer DE Naval Aerospace Medical Institute Influence of Low Magnetic Fields on Critical Fusion Frequency: 1967-1968
      - Fenning L M Stress Induced Eye Muscular Disorder Observed with Pilots & Astronauts: 1968
      - Indiana U
        - Investigation & Evaluation of Effect of Cyclorotatory Eye Movements on Perception of Stereoscopic Depth - Its Influence on Performance in Space Flight: 1968
        - Investigation of Amblyopia with Particular Reference to Static & Dynamic Visual Factors in Space Flight - Predictability of Performance: 1968
        - Time Factors in Stereoscopic Perception of Amblyopic & Normal Subjects: 1968
      - U of Texas Development of Binocular Visual Performance in Rhesus Primate as an Indicator of Space Cabin Contaminants: 1969
    - o General: 1963-1971
- Group 22
  - Visual Factors in Evaluation of Aids to Night Vision
    - o Reports: 1965-1966
    - Symposiums Joint with Institute of Defense Analyses Office of Director of Defense Research & Engineering: 1966
    - o General: 1964-1966
- Group 21
  - Enhancement of Unaided Vision: 1965-1966
- Group 20
  - Visual Requirements for Flying
    - Reports
      - Final: 1964
      - Update Proposed 1968
- Group 15
  - Awards: 1963
  - Group 6
    - Visual Displays

- Meetings: 1963
- Membership: 1963-1966
  - Reports
    - Final: 1965
- General: 1963-1967
- Group 5
  - Visual Problems of Space Travel
    - o Reports
      - Update Proposed: 1968
    - Symposiums
      - Visual Tasks in Space Flight: Aug 1964
- o General: 1963-1973

#### FINANCE & ACCOUNTING

#### CONTRACTS

- Nonr-2300(05)
  - Division of Anthropology & Psychology Committee on Vision
    - Office of Naval Research (ONR) 1957-1959
- N7onr-29163
  - Division of Anthropology & Psychology Committee on Vision
    - Office of Naval Research (ONR) 1956-1958

## GOVERNMENT

## AGENCIES & DEPARTMENTS

- Air Force
  - Aerospace Medical Laboratory
    - WADC (Wright Air Development Center) Technical Report 59-436 Phototropy
      - Literature Review: 1959
- Army
  - Corps of Engineers
    - Engineering & Development Laboratories
      - Symposiums
        - Image Intensifier: 1958
        - Tulane Symposium on Flicker: 1957-1958
  - Signal Corps
    - Project MICHIGAN
      - Symposiums
        - Pattern Recognition: 1957