UNITED STATES AIR FORCE
SCHOOL OF AEROSPACE MEDICINE

Publications and Presentations of the Ophthalmology Branch,
USAF School of Aerospace Medicine
1971-1980

Thomas J. Tredici

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Clinical Sciences Division
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Aerospace ophthalmology combines the practice of Clinical Ophthalmology and Aerospace Medicine in attempting to solve the visual and ophthalmological problems of the aviator and astronaut. The Ophthalmology Branch of the USAF School of Aerospace Medicine has exclusively performed this task for nearly 85 years. The visual problems and solutions proposed are documented in the publications and invited presentations of Ophthalmology Branch personnel, listed for the years 1971 through 1980. They deal primarily with applied visual and clinical topics; such as, visual standards for flying, the use of contact lenses in aviation, visual illusions and aircraft accidents, air-to-air target acquisition, management of glaucoma in flying personnel, the effect of ultra violet energy on the eye, laser energy effects on the eye, laser protective filters, color vision standards, microstrabismus in flying personnel, etc.

**Subject Terms**
- Aerospace ophthalmology
- Visual standards
- Refractive surgery
- Visual problems in aviation
- Aviators' vision
- Laser eye effects
- Color vision in aviation
<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>Publications</td>
<td>1-2</td>
</tr>
<tr>
<td>1971</td>
<td>Presentations</td>
<td>3</td>
</tr>
<tr>
<td>1972</td>
<td>Publications</td>
<td>5-6</td>
</tr>
<tr>
<td>1972</td>
<td>Presentations</td>
<td>7</td>
</tr>
<tr>
<td>1973</td>
<td>Publications</td>
<td>9</td>
</tr>
<tr>
<td>1973</td>
<td>Presentations</td>
<td>10-11</td>
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<tr>
<td>1974</td>
<td>Publications</td>
<td>13</td>
</tr>
<tr>
<td>1974</td>
<td>Presentations</td>
<td>14-15</td>
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<tr>
<td>1975</td>
<td>Publications</td>
<td>17-18</td>
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<tr>
<td>1975</td>
<td>Presentations</td>
<td>19</td>
</tr>
<tr>
<td>1976</td>
<td>Publications</td>
<td>21</td>
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<tr>
<td>1976</td>
<td>Presentations</td>
<td>22-23</td>
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<tr>
<td>1977</td>
<td>Publications</td>
<td>25</td>
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<td>1977</td>
<td>Presentations</td>
<td>26-28</td>
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<td>1978</td>
<td>Publications</td>
<td>29</td>
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<td>1978</td>
<td>Presentations</td>
<td>30-31</td>
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<td>1979</td>
<td>Publications</td>
<td>33</td>
</tr>
<tr>
<td>1979</td>
<td>Presentations</td>
<td>34-36</td>
</tr>
<tr>
<td>1980 Publications</td>
<td>37-38</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>1980 Presentations</td>
<td>39-40</td>
<td></td>
</tr>
</tbody>
</table>
1. TRANSPARENCIES USED IN MILITARY AVIATION AND THEIR EFFECTS ON VISION
   Provines, Wayne F. and B. Kislin

2. F-111 WINDSCREEN MULTIPLE IMAGE PHENOMENA
   Provines, Wayne F.
   Report to USAFSAM Commander, 1971.

3. THE EFFECTS OF AGING ON THE AMPLITUDE OF CONVERGENCE
   Provines, Wayne F.

4. GHOST IMAGERY INTENSITY AND DURABILITY OF SELECTED ANTIREFLECTANT COATINGS
   Provines, Wayne F. et al
   June 1971.

5. GLASS VERSUS PLASTIC LENSES- AN AIR FORCE REPLACEMENT AND DURABILITY COMPARISON
   Targove, Bertram D. et al
   July 1971.

6. PERCEPTUAL ASPECTS OF STABILIZED RETINAL IMAGES
   Targove, Bertram D.

7. AN OVERVIEW OF BINOCULAR COLOR MIXING
   Targove, Bertram D.

8. THE EFFECT OF PILOCARPINE ON THE ACA RATIO
   Targove, Bertram D.

9. PHARMACOLOGICAL ASPECTS OF OPTOMETRIC PRACTICE
   Targove, Bertram D.

10. PLASTIC LENS (CR-39) WARPAGE
    Kislin, Benjamin et al
1971 Publications (continued)

11. THE EFFECTS OF ULTRAVIOLET ON THE EYE
   Pitts, Donald G., T. J. Tredici

12. POSSIBLE CATARACTOGENIC EFFECTS OF RADIOFREQUENCY RADIATION
   Reider, D., D. L. Epstein and J. H. Kirk
   Aeromedical Review 3-71, USAF School of Aerospace Medicine, Brooks AFB TX, August 1971.

13. LENS AND RED CELL SULFHYDRYL MEMBRANE GROUPS
    Epstein, David L.

14. RETINAL ACTION POTENTIAL IN THE WHITE-EYED MUTANT OF THE MOSQUITO AEDES AEGYPTI L.
    Brammer, J. D.
    SAM-TR-71-17, USAF School of Aerospace Medicine, Brooks AFB TX, July 1971.

15. MICROWAVE LENTICULAR EFFECTS IN THE USAF
    Shacklett, David E. et al
    Source: USAF School of Aerospace Medicine, Brooks Air Force Base, Texas Handout – 1971.

16. OCULAR LASER THRESHOLD INVESTIGATIONS
    Vassiliadis, A., H. C. Zweng and R. G. Dedrick

17. INVESTIGATION OF LASER SKIN HAZARDS
    Williams, J. P. G.

18. ATMOSPHERIC EFFECTS UPON LASER EYE SAFETY, PART III
    Dabberdt, W. F. and W. B. Johnson

19. R&D OF AN OCULAR LASER PROTECTIVE FILTER
    Woodcock, R. F. and R. J. Hovey
OPHTHALMOLOGY BRANCH

1971 Presentations

1. OCULAR COMPLICATIONS OF DRUG THERAPY
   Tredici, T. J., L. Epstein
   Presentation at the annual meeting of the Aerospace Medical Association, 25-29 April 1971, Houston, Texas

2. THE EVALUATION OF NIGHT VISION PROBLEMS
   Chen, George D., T. J. Tredici
   Presentation at the annual meeting of the Aerospace Medical Association, 25-29 April 1971, Houston, Texas.

3. EFFECTS OF RADIANT ENERGY ON THE EYE
   Tredici, T. J.
   Presentation to members of the National Committee for Research in Ophthalmology and Blindness at their 16th Annual Luncheon Forum, 18 September 1971, International Hotel, Las Vegas, Nevada.

4. OCULAR TRAUMA – MILITARY ASPECTS
   Tredici, T. J.
   Course offered to members of the American Academy of Ophthalmology and Otolaryngology at the annual meeting, 17-24 Sep 71, Las Vegas, Nevada.

5. EYE RESEARCH AT THE USAF SCHOOL OF AEROSPACE MEDICINE
   Tredici, T. J.
   Presentation to members of the Texas Society for the Prevention of Blindness, Inc., at their annual dinner meeting, San Antonio, Texas, 7 December 1971.
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PUBLICATIONS AND PRESENTATIONS OF THE OPHTHALMOLOGY BRANCH
USAF SCHOOL OF AEROSPACE MEDICINE

OPHTHALMOLOGY BRANCH

1972 Publications

1. DRUSEN OF THE OPTIC DISC WITH VISUAL YIELD DEFECT AND MARCUS GUNN PUPILLARY PHENOMENON
   Barry, William E., T. J. Tredici

2. GLASS VERSUS PLASTIC – AN AIR FORCE REPLACEMENT DURABILITY STUDY
   Targove, Bertram D., J. W. Miller, T. J. Tredici, B. Kislin, A.J. Rahe, W.F. Provines

3. PUPILLOTONIA (ADIE’S PUPIL): DIAGNOSIS AND SIGNIFICANCE IN FLIERS
   Epstein, David L., T. J. Tredici
   Aerospace Medicine, Vol. 43, No. 5, May 1972.

4. HISTORY, RATIONALE, AND VERIFICATION OF COLOR VISION STANDARDS AND TESTING IN THE US AIR FORCE
   Tredici, Thomas J., J. L. Mims, III, J. F. Culver

5. PLASTIC LENS (CR-39) WARPAGE
   Kislin, Benjamin, B. D. Targove, J. W. Miller, T. J. Tredici

6. EVER CLOCK AN IMPACT-RESISTANT LENS?
   Kislin, Benjamin

7. USE OF THE FOUR-DIOPTER PRISM TEST IN MICROEXOTROPIA
   Epstein, David E., T. J. Tredici

8. OCULAR COMPLICATIONS OF DRUG THERAPY
   Tredici, Thomas J., D. L. Epstein
   Aerospace Medicine, Vol 43, No. 8, August 1972.

9. KERATOCONUS IN USAF FLYING PERSONNEL
   Barry, William E., T. J. Tredici
   Aerospace Medicine, Vol. 43, No. 9, Sep 1972.
10. IDIOPATHIC CENTRAL SEROUS RETINOPATHY (CHOROIDOPATHY) IN FLYING PERSONNEL
   Epstein, David L., D. E. Shacklett, T. J. Tredici, R. J. Houck
   Aerospace Medicine, Vol. 43, No. 11, November 1972.

11. FLITEFOCAL: A NEW VISUAL AID FOR THE PRESBYOPIA FLYER
   Tredici, T. J.
OPHTHALMOLOGY BRANCH

1972 Presentations

1. CENTRAL SEROUS RETINOPATHY IN FLYING PERSONNEL
   Shacklett, David E.
   Presentation at the USAF Society of Clinical Surgeon's Symposium, 17-19 April 1972, Biloxi, Miss.

2. FLITEFOCAL: A NEW VISUAL AID FOR THE PRESBYOPIC FLYER
   Tredici, Thomas J.
   Presentation at the annual meeting of the Aerospace Medical Association, 7-12 May 1972, Bal Harbour, Florida.

3. KERATOCONUS IN USAF FLYING POPULATION
   Barry, W. G., T. J. Tredici
   Presentation at the annual meeting of the Aerospace Medical Association, 7-12 May 1972, Bal Harbour, Florida.

4. AN EVALUATION OF THE LANDOLT RING RADIOACTIVE PLAQUE NIGHT VISION TESTER
   Mims, James L. III, T. J. Tredici
   Presentation at the annual meeting of the Aerospace Medical Association, 7-12 May 1972, Bal Harbour, Florida.

5. AEROSPACE OPHTHALMOLOGY
   Tredici, Thomas J.
   Presentation at the annual meeting of the American Academy of Ophthalmology and Otolaryngology, Dallas, Texas, 22-29 September 1972.

SCIENTIFIC EXHIBITS – 1972

1. ULTRAVIOLET RADIANT ENERGY AND THE EYE
   Tredici, T. J., D. E. Shacklett
   Aerospace Medical Association Annual Meeting, 7-12 May 1972, Bal Harbour, Florida.

2. ULTRAVIOLET RADIANT ENERGY AND THE EYE
   Tredici, T. J., J. G. Muckleroy
   American Medical Association Annual Meeting, 17-22 Jun 72, San Francisco CA.

3. ULTRAVIOLET RADIANT ENERGY AND THE EYE
   Tredici, T. J., J. G. Muckleroy
   79th Annual Meeting of the Association of Military Surgeons of the United States, Convention Center, San Antonio TX, 10-13 Dec 72.
PUBLICATIONS AND PRESENTATIONS OF THE OPHTHALMOLOGY BRANCH
USAF SCHOOL OF AEROSPACE MEDICINE

OPHTHALMOLOGY BRANCH

1973 Publications

1. EVALUATION OF THE LANDOLT RING PLAQUE NIGHT VISION TESTER
   Mims, James L., III, T. J. Tredici

2. GHOST IMAGERY INTENSITY AND DURABILITY OF SELECTED ANTI-
   REFLECTANT COATINGS
   Provines, Wayne F., B. D. Targove, B. Kislin

3. MANAGEMENT OF GLAUCOMA IN AN AGEING FLYING POPULATION
   Tredici, Thomas J., J. L. Mims III, J. F. Culver
   Conference Proceedings, Lecture Series/Report, Aerospace Medical Panel
   Meetings, AGARD, Pensacola FL, 14-17 May 1973.

4. MICROTROPIA (MONOFIXATION SYNDROME) IN FLYING PERSONNEL
   Epstein, David L., T. J. Tredici

5. HISTORY, RATIONALE AND VERIFICATION OF COLOR VISION
   STANDARDS AND TESTING IN THE USAF.
   Tredici T.J., J. L. Mims III, J. F. Culver

6. RETINAL BURN THRESHOLDS FOR EXPOSURE TO A FREQUENCY-
   DOUBLED NEODYMIUM LASER
   Gibbons W. D.

7. OCULAR FINDINGS IN VIETNAM RPWs 1965-1973
   Klein J. W, T. J. Tredici
OPHTHALMOLOGY BRANCH

1973 Presentations

1. COLOR VISION STANDARDS AND TESTING IN THE USAF: I. HISTORY, TESTING PROCEDURES AND RATIONALE
   Tredici, Thomas J., J. L. Mims III, J. F. Culver

2. COLOR VISION STANDARDS AND TESTING IN THE USAF: II. COLOR VISION DEFECTS IN EXPERIENCED FLYING PERSONNEL
   Mims, James L. III, T. J. Tredici

3. MICROWAVE LENTICULAR EFFECTS IN THE US AIR FORCE
   Shacklett, David E., T. J. Tredici

4. MANAGEMENT OF GLAUCOMA IN AN AGING FLYING POPULATION
   Tredici, Thomas J., James L. Mims III, J. F. Culver
   AGARD Spring Meeting, Naval Aerospace Med Center, Pensacola FL, 14-17 May 73.

5. BALLISTIC IMPACT TESTING OF SCRATCHED AND UNSCRATCHED OPHTHALMIC LENSES
   Welsh, Kenneth W.

6. CHRONIC OPEN ANGLE GLAUCOMA IN USAF PILOTS AND NAVIGATORS - PROGRESS NOTES
   Mims, James F., T. J. Tredici
   Semi-annual Clinical Conference, University of Texas Medical School, San Antonio, Texas, June 1973.

7. ORTHOKERATOLOGY – HELP OR HINDRANCE
   Tredici, Thomas J., D. E. Shacklett
   Presentation at the annual meeting of the American Academy of Ophthalmology and Otolaryngology, 14-22 Sep 73, Dallas, Texas.

8. OPHTHALMIC ASSISTANTS
   Muckleroy, Jack G.
   Lecture to San Antonio College students enrolled in the Ophthalmic Assistants course, Northeast Baptist Memorial Center, 30 Aug 73.
1973 Presentations (continued)

9. VISUAL PERFORMANCE THROUGH THE B-1 AIRCRAFT PROPOSED WINDSHIELD
   
   Provines, Wayne F.
   
   Presentation at the 1973 annual meeting of the American Academy of Optometry,
   5-12 December 1973, San Francisco CA.

10. BALLISTIC TESTING OF SUNGLASS LENSES AND PHOTOCHROMIC LENSES

   Welsh, Kenneth W.
   
   Presentation at the 1973 annual meeting of the American Academy of Optometry,
   5-12 December 1973, San Francisco CA.

11. THE EFFECTS OF HYPERBARIC PRESSURE ON KERATOMETRIC MEASUREMENTS

   Welsh, K. W.
   
   Presentation at the 1973 annual meeting of the Amer. Acad. of Optometry, 5-12
   December 1973 San Francisco, CA.

SCIENTIFIC DISPLAYS – 1973

1. VISUAL AIDS FOR THE AVIATOR

   Tredici, T. J., D. E. Shacklett
   
   Aerospace Medical Association Annual Meeting, 7-10 May 1973, Las Vegas NV.

2. VISUAL AIDS FOR THE AVIATOR

   Tredici, T. J., J. G. Muckleroy
   
   American Medical Association Annual Meeting, 22-27 June 73, New York NY.

3. VISUAL AIDS FOR THE AVIATOR

   Tredici, T. J., J. G. Muckleroy
   
   American Academy of Ophthalmology and Otolaryngology, 14-22 Sep 73, Dallas TX.
1. ORTHOKERATOLOGY – HELP OR HINDRANCE

*Tredici, Thomas J., D. E. Shacklett*


2. AEROSPACE OPHTHALMOLOGY

*Tredici, Thomas J.*


3. BALLISTIC IMPACT TESTING OF SCRATCHED AND UNSCRATCHED OPHTHALMIC LENSES

*Welsh, Kenneth W., G. Kislin, T. J. Tredici*


4. PROPOSED WINDSHIELD FOR B-1 AIRCRAFT: AN OPTICAL EVALUATION

*Provines, Wayne F., B. Kislin, T. J. Tredici*


5. ORTHOKERATOLOGY – EFFECTS ON THE VISUAL EXAMINATION FOR FLYING

*Tredici, Thomas J., D. E. Shacklett*


6. MONOCULAR DIPLOPIA IN AIRCREW MEMBERS

*Stampfer, Kenneth A., T. J. Tredici*


7. MICROSTRABISMUS IN FLYING PERSONNEL (DIAGNOSIS AND DISPOSITION)

*Tredici, Thomas J.*

AGARD-CPP-152, Conference Proceedings of AGARD meeting on Medical Requirements and Examination Procedures in Relation to the Tasks of Today’s Aircrew: Evaluation of the Special Senses for Flying Duties, 16-20 Sep 74, Pozzuoli (Naples), Italy.

8. OCULAR HYPERTENSION AND CHRONIC OPEN ANGLE GLAUCOMA IN USAF PILOTS AND NAVIGATORS

*Mims, J. L., T. J. Tredici*

1. ORTHOKERATOLOGY – ITS EFFECTS ON THE VISUAL EXAMINATION FOR FLYING
   Tredici, Thomas J., D. E. Shacklett
   Presentation at the 45th Annual Scientific Meeting of the Aerospace Medical Association, 4-10 May 1974, Wash DC.

2. MONOCULAR DIPLOPIA IN AIRCREW MEMBERS
   Stampfer, Kenneth A., T. J. Tredici
   Presentation at the 45th Annual Scientific Meeting of the Aerospace Medical Association, 4-10 May 1974, Wash DC.

3. THE STATUS OF OPTOMETRY IN THE AIR FORCE
   Kislin, Benjamin
   Presentation at the Biennial Army Optometry Seminar, 21-25 Oct 74, Fitzsimons Army Medical Center, Denver CO.

4. EYE DAMAGE FROM SPECTACLE LENS FRAGMENTATION – WITH AND WITHOUT CONTACT LENSES
   Welsh, Kenneth W.
   Presentation at the Annual Meeting of the American Academy of Optometry, 11-17 Dec 74, Miami Beach FL.

5. MICROSTRABISMUS IN FLYING PERSONNEL (DIAGNOSIS AND DISPOSITION)
   Tredici, Thomas J.
   Presented at the 31st Aerospace Medical Panel Meeting of AGARD, NATO, Academia Aeronautica, Possuoli (Naples) Italy, 16-20 Sep 74.

6. GLAUCOMA AND TONOGRAPHY
   Tredici, Thomas J.
   Lecture – Continuing Education Program of the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO) for Ophthalmic Technicians, 10 October 1974, Dallas, Texas.
1974 Presentations (continued)

SCIENTIFIC DISPLAYS – 1974

1. VISUAL AIDS FOR THE AVIATOR
   *Tredici, T. J., D. E. Shacklett*
   Aerospace Medical Association Annual Meeting, 6-9 May 1974, Wash DC.

2. VISUAL AIDS FOR THE AVIATOR
   *Col Thomas J. Tredici*
   American Medical Association Annual Meeting, 22-27 June 74, Chicago IL.

3. VISUAL AIDS FOR THE AVIATOR
   *D. I. Tasker, Mr J. W. Miller*
   American Academy of Ophthalmology and Otolaryngology, 5-10 Oct 74, Dallas TX.
THIS PAGE INTENTIONALLY LEFT BLANK
1. THE EFFECTS OF HYPERBARIC AIR PRESSURE ON KERATOMETRY
   Welsh, Kenneth W., Quentin Bennett, B. Kislin

2. AN UP-TO-DATE LOOK AT EYE SAFETY
   Welsh, Kenneth W., J. A. Kemp

3. EYE DAMAGE FROM SPECTACLE LENS FRAGMENTATION – WITH AND
   WITHOUT CONTACT LENSES
   Welsh, Kenneth W., T. J. Tredici

4. MONOCULAR DIPLOPIA IN AIRCREW MEMBERS
   Stampfer, Kenneth A., T. J. Tredici

5. THE UNITED STATES AIR FORCE SCREENING AND MANAGEMENT
   PROGRAM FOR CHRONIC OPEN-ANGLE GLAUCOMA – EVALUATION
   AFTER TEN YEARS
   Tredici, Thomas J., J. L. Mims III
   46th Annual Scientific Meeting, Aerospace Medical Association, San Francisco
   CA, 28 April – 1 May 1975.

6. THE AEROMEDICAL IMPLICATIONS OF OCULAR INJURIES – USAF
   SCHOOL OF AEROSPACE MEDICINE EXPERIENCE
   Shacklett, David E., T. J. Tredici
   46th Annual Scientific Meeting, Aerospace Medical Association, San Francisco
   CA, 28 April – 1 May 1975.

7. USE OF THE ERG AND EOG IN EVALUATING THE EFFECT OF SLEEP
   DEPRIVATION ON VISUAL FUNCTION IN FLYING PERSONNEL
   Tasker D. I, S. G. Kinel, T. J. Tredici

8. MONOCULAR DIPLOPIA IN FLYING PERSONNEL
   Stampfer K. A., T. J. Tredici
1975 Publications (continued)

9. EVALUATION OF POSSIBLE MICROWAVE INDUCED LENS CHANGES IN THE UNITED STATES AIR FORCE
   Shacklett, D. E., T. J. Tredici, D. L. Epstein

10. VISUAL PERFORMANCE THROUGH A SAMPLE WINDSHIELD SEGMENT OF THE B-1 AIRCRAFT
    Provines, W. F., B. Kislin

11. CORNEAL CURVATURE CHANGES DUE TO EXPOSURE TO A CARBON DIOXIDE LASER: A PRELIMINARY REPORT
    Gallagher, J. T.
    SAM-TR-75-44 USAF School of Aerospace Medicine, Dec 1975.

12. METHOD FOR MEASURING THE OPTICAL COMPONENTS OF THE MONKEY EYE
    Gallagher, J. T.
    SAM-TR-75-35 USAF School of Aerospace Medicine, Dec 1975.
1. ORTHOKERATOLOGY – IS IT A HELP OR HINDRANCE?
   Tredici, Thomas J.
   Paper Presentation in Houston Chapter of Contact Lens Society of America
   4 February 1975, Houston, TX.

2. OPHTHALMOLOGY AT THE USAF SCHOOL OF AEROSPACE MEDICINE
   Tredici, Thomas J.
   Paper Presentation in San Antonio Society of Ophthalmology and Otolaryngology
   Meeting, 18 March 1975, San Antonio, TX.

3. ORTHOKERATOLOGY
   Tredici, Thomas J.
   Guest Lecturer of Contact Lens Society of Texas Meeting, 18-20 April 1975,
   Austin TX.

4. THE OCULAR EFFECTS OF MICROWAVE
   Shacklett, David E.
   Paper Presentation in the First Annual Emory Grady Eye Residence Alumni
   Meeting, 3-6 Dec 75, Atlanta GA.

5. THE UNITED STATES AIR FORCE SCREENING AND MANAGEMENT
   PROGRAM FOR CHRONIC OPEN-ANGLE GLAUCOMA – EVALUATION
   AFTER 10 YEARS
   Tredici, T. J., J. L Mims III
   Lecture at Aerospace Medical Association Meeting, San Francisco CA
   28-Apr – 1 May 1975.

6. THE AEROMEDICAL IMPLICATIONS OF OCULAR INJURIES – USAF
   SCHOOL OF AEROSPACE MEDICINE EXPERIENCE
   Shacklett D. E., T. J. Tredici
   Lecture at Aerospace Medical Association Meeting, San Francisco CA
   28 Apr – 1 May 1975.

7. THE EFFECT OF SLEEP DEPRIVATION ON VISUAL FUNCTION IN US AIR
   FORCE FLYING PERSONNEL
   Tasker D., T. J. Tredici
   Lecture at Aerospace Medical Association Meeting, San Francisco CA
   28 Apr – 1 May 1975.
1. VISUAL AIDS AND EYE PROTECTION FOR THE AVIATOR
   Tredici, T. J. (editor and session organizer)
   AGARD Conf Proceeding, No 191, October 1976.

2. USAF AVIATOR GLASSES – HGU-4/P (HISTORY AND PRESENT STATE OF
   DEVELOPMENT)
   Tredici, T. J.
   AGARD-CP-191, October 1976.

3. AN ACCEPTABILITY STUDY OF PHOTOCHROMIC LENSES
   Welsh, K.W., J. W. Miller, D. E. Shacklett

4. THE EFFECT OF AGING ON THE IMPACT RESISTANCE OF HEAT
   TEMPERED LENSES
   Kislin B, J. W. Miller, J. R. Fischer

5. MIDAIR COLLISIONS: AEROMEDICAL CONSIDERATIONS
   Yoder J. E., R. Moder Jr.
   Aeromedical Review 4-76, USAF School of Aerospace Medicine, August 1976.

6. LASER-PROTECTION EYEWEAR: AN EVALUATION PROCEDURE
   Foder W. J.

7. PHOTOREACTIVE LENSES AND THE AIR FORCE FLYER
   Kislin, B. T. J. Tredici
   Life Sciences Section, Safety Officers, USAF Study Kit, October 1976.

8. USAFSAM EFFORT ON F/FB-111 WINDSHIELD OPTICAL EVALUATION
   FIELD TEST
   Provines, W. F.

9. HISTORY OF AIRCRAFT WINDSHIELD TRANSPARENCY
   Provines, W. F.
OPHTHALMOLOGY BRANCH

1976 Presentations

1. GLAUCOMA AND TONOMETRY
   Tredici, Thomas J.
   Lecture to the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO) Technician Candidates As Part of Continuing Education Program, Las Vegas NV, 5 Oct 76.

2. TONOGRAPHY
   Tredici, Thomas J., Jack G. Muckleroy
   Lecture on Continuing Education Program For JCAHPO, Las Vegas NV, 5 Oct 76.

3. CAREER DEVELOPMENT
   Kislin, Benjamin
   Lectures at “Current Trends In Military Optometry” Seminar, Fitzsimons Army Medical Center, Denver CO, 18-22 Oct 76.

4. VISUAL AIDS AND EYE PROTECTION FOR THE AVIATOR
   Tredici, Thomas J.
   Session Organizer, AGARD (NATO) Aerospace Medical Panel Specialist’s Meeting, 3-14 April 76, Copenhagen, Denmark.

5. ELECTROPHYSIOLOGY EXPERIENCE AT USAFSAM
   Burman, Mathew L.
   Paper Presentation, Society of Air Force Clinical Surgeons Symposium, 12-14 April 76, Biloxi MI.

6. MICROTROPIA IN FLYING PERSONNEL
   Tredici, Thomas J.
   Paper Presentation, Aerospace Medical Meeting, 7-14 May 76, Bal Harbour FL.

7. OPTOMETRY-OPHTHALMOLOGY TECHNICIAN TRAINING
   Tredici, Thomas J., Benjamin Kislin
   Interservice Training Review Organization (ITRO) Meeting, 21-23 September 76, Ft Sam Houston TX.
8. VISION WORKING GROUP #35
   Tredici, Thomas J.
   Host NAS Committee, 28-29 September 76, USAF School of Aerospace Medicine,
   Brooks AFB TX.

9. GLAUCOMA AND TONOMETRY
   Tredici, Thomas J.
   Lecture at Joint Commission on Allied Health Personnel in Ophthalmology,
   5 October 1976, Las Vegas NV.

10. TONOGRAPHY
    Tredici, Thomas J., Jack G. Muckeroy
    Lecture at Joint Commission on Allied Health Personnel in Ophthalmology,
    5 October 1976, Las Vegas NV.

11. CAREER DEVELOPMENT
    Kislin, Benjamin
    Lecture on Current Trends in Military Optometry Seminar, 18-22 Oct 76,
    Fitzsimons Army Medical Center, Denver CO.
1. GLAUCOMA: A REVIEW FOR THE USAF FLIGHT SURGEON
   Ryan R. P., T. J. Tredici

2. OCUSERT: A NEW METHOD OF PILOCARPINE TREATMENT OF
   GLAUCOMA IN THE AVIATOR
   Tredici, T. J.

3. RESEARCH ON THE OCULAR EFFECTS OF LASER RADIATION

4. PRIMATE-FIXATION DEVICE FOR RETINAL PHOTOGRAPHY AND
   EXPERIMENTAL HIGH LET RADIATION EXPOSURE
   Bonney, C. H, G. E. Conley, D. M. Hunter

5. PHOTOREACTIVE LENSES AND THE AIR FORCE FLYER
   Kislin B, T. J. Tredici

6. IMPACT RESISTANT LENSES
   Kislin, B.

7. IMPACT VULNERABILITY OF SCRATCHED GLASS LENSES
   Kislin, B., R. E. Swarm, J. W. Miller, J. R. Fischer

8. MULTIPLE IMAGES IN THE F/FB-111 AIRCRAFT WINDSHIELD: THEIR
   GENERATION, SPATIAL LOCALIZATION AND RECORDING
   Provines, W. F., B. Kislin, T. J. Tredici

9. OPTICAL EVALUATION OF F/FB-111 FIELD-SERVICE TEST WINDSHIELDS
   Provines, W. F., B. Kislin, T. J. Tredici
1. CONTACT LENS FITTING BY THE OPHTHALMOLOGIST
   Tredici, Thomas J.

2. ORTHOKERATOLOGY
   Tredici, Thomas J.
   Presentation at the Annual Contact Lens Society of America Meeting, Atlanta GA, 6 March 1977.

3. FACIAL NERVE AND LACRIMAL SYSTEM
   Klein, James W.
   Lecture on Basic and Clinical Science Course in Neuro-Ophthalmology, UT Health Science Center, San Antonio TX, 1-2 April 1977.

4. THE NEURO-OPTHALMOLOGIC EXAMINATION
   Tredici, Thomas J., James W. Klein

5. VISUAL AIDS FOR THE AVIATOR AND USAF AVIATORS' SPECTACLES
   HGU-4/P
   Tredici, Thomas J. (Monitor)

6. ELECTRO-OCULOGRAPHY: A RELATIVELY NEW TECHNIQUE FOR RETINAL EVALUATION
   Goodson, Richard A., Thomas J. Tredici

7. VISION WORKING GROUP #35, OCULAR EFFECTS OF MICROWAVE RADIATION
   Tredici, Thomas J.
   NAS-NRC Committee on Vision, USAF School of Aerospace Medicine, Brooks AFB TX 78235 – 30 June – 1 July 1977.
8. WORKSHOP ON TRANSPARENT MATERIALS
   Tredici, Thomas J., Wayne F. Provines
   20-21 Sept 1977, Dayton OH.

9. VISION WORKING GROUP #35, OCULAR EFFECTS OF MICROWAVE RADIATION
   Tredici, Thomas

10. OCULAR FINDINGS IN VIETNAM RPW'S, 1965-1973
    Klein, James W., Thomas J. Tredici
    Fourth Annual Joint Medical Meeting Concerning POW/MIA Matters, Ft Sam Houston TX, 4-5 Nov 1977.

11. AEROMEDICAL FACTORS OF AIR COMBAT CAPABILITIES
    Tredici, Thomas J., Benjamin Kislin
    Working Party 61 Symposium, Brooks AFB TX, 8-9 November 1977.

12. ORTHOKERATOLOGY
    Tredici, T. J.
    Presentation at Annual Contact Lens Society of America Meeting – Atlanta, GA, March 1977.

13. FACIAL NERVE AND LACRIMAL SYSTEM
    Klein, J. W.
    Lecture at Univ of Texas Health Science Center, SA TX, 1-2 April 1977.

14. THE NEURO-OPHTHALMOLOGIC EXAMINATION
    Klein, J. W., T. J. Tredici

15. OPHTHALMOLOGIC PROBLEMS AND DISEASES IN AVIATORS (A TEN-YEAR STUDY IN COURSE FOR REFERRAL TO USAFSAM)
    Heinrick W. D., T. J. Tredici, J. W. Klein
1977 Presentations (continued)

16. THE AEROMEDICAL DISPOSITION OF THE APHAKIC FLIER
   Paglin P.G., T. J. Tredici

17. ELECTRO-OCULOGRAPHY: A RELATIVELY NEW TECHNIQUE FOR RETINAL EVALUATION
   Goodson R.A., T. J. Tredici
1. TRANSMISSION AND ABSORPTION COEFFICIENTS FOR OCULAR MEDIA OF THE RHESUS MONKEY
   Mahor, E.F.

2. EVALUATION OF LASER-PROTECTION EYEWEAR

3. OPTIC NERVE VARIANT IN THE KLIPPEL-TRENAUNAY-WEBER SYNDROME
   O'Connor P.S., J. Lawton Smith

4. OPHTHALMOLOGIC PROBLEMS AND DISEASES IN USAF AVIATION
   (A TEN-YEAR STUDY IN CAUSE FOR REFERRAL TO USAFSAM)
   Tredici, T. J.

5. THE SHAPE OF 20/20 – A DISCUSSION OF ORTHOKERATOLOGY
   Tredici, T. J.
OPHTHALMOLOGY BRANCH

1978 Presentations

1. ROLE OF ORTHOKERATOLOGY: A PERSPECTIVE
   Tredici, Thomas J.
   Presentation at American Academy of Ophthalmology Meeting, Kansas City, MO.

2. OPHTHALMOLOGIC PROBLEMS AND DISEASES IN AVIATORS
   (A TEN-YEAR STUDY IN CASES FOR REFERRAL TO USAFSAM)
   Heinrick, W. D., T. J. Tredici, J. W. Klein
   Presentation at American Academy of Ophthalmology Meeting, Kansas City, MO.

3. OCUSERT- A NEW METHOD OF PILOCARPINE TREATMENT OF
   GLAUCOMA IN THE AVIATOR
   Tredici, T. J., S. I. Hand, M. R. Coffman

4. AIR FORCE OPTOMETRY-A BRIEFING
   Klein, B.
   Presented at Biomedical Science Corps Seminar Management Workshop,

5. OPTOMETRIC EDUCATION
   Provines, W. F.
   Presentation at Fourth USAF Optometry Seminar, Brooks AFB, TX 10-13 Jan
   1978.

6. USAF VISION PROBLEMS
   Tredici, T. J.
   Meeting of the Executive Council of the Nat. Research Committee on Vision at
   USAFSAM Brooks AFB, TX. March 16-17 1978.

7. ORTHOKERATOLOGY UPDATE AND CONTACT LENS QUALITY CONTROL
   Tredici, T. J.
   Lecture at New York Eye and Ear Infirmary Postgraduate Institute Program, New
   York City 12-13 April 1978.
8. AVIATION AND SPACE OPHTHALMOLOGY-PAST & PRESENT  
Tredici, T. J.  
Featured Speaker at St. Louis Ophthalmological Soc. Meeting, St. Louis, MO  
27 April 1978.

9. OCUSERT-A NEW METHOD OF PILOCARPINE TREATMENT OF GLAUCOMA IN THE AVIATOR  
Tredici, T. J.  
Presented at Aerospace Medical Association Meeting, New Orleans, LA  
7-11 May 1978.

10. THE GENERATION AND VISUAL DETECTION OF MULTIPLE IMAGES IN AIRCRAFT WINDSHIELDS  
Provines, W. F.  
Presented at Aerospace Medical Association Meeting, New Orleans, LA  
7-11 May 1978.

11. OCULAR FINDINGS IN VIETNAM RPW'S, 1965-1973  
Klein, J. W.  
Presented at Aerospace Medical Association Meeting, New Orleans, LA  
7-11 May 1978.

12. THE EFFECT OF TOPICAL MYDRIACYL AND PHENYLEPHRINE ON CARDIAC RATE AND RHYTHM  
Coffman, M. R.  
Presented at Aerospace Medical Association Meeting, New Orleans, LA  
7-11 May 1978.

13. HISTORY OF THE USAF SCHOOL OF AEROSPACE MEDICINE  
Kislin, B.  

14. THE EFFECTS OF VISUAL TRAINING ON NORMAL VISION  
Goodson, R. A  
Presentation at Amer. Academy of Optometry Congress, Boston, MA  
7-12 Dec 1978.

15. EYE FINDINGS IN RPWS  
Tredici, T. J.  
Presentation at Tri-service RPW Conference, Brooks AFB, TX Sept 1978.
1. ROLE OF ORTHOKERATOLOGY: A PERSPECTIVE
   Tredici, T. J.
2. THE UNITED STATES AIR FORCE SCREENING AND MANAGEMENT
   PROGRAM FOR GLAUCOMA-EVALUATION AFTER TEN YEARS
   Tredici, T. J.
3. CHIASMAL EPENDYMOMA
   O'Connor P.S., J. Lawton Smith
4. A SEARCH FOR A NEW AIRCREW SPECTACLE FRAME
   Kislin B, J. W. Miller, A. J. Rahe
5. ACUTE OPTIC NEURITIS: PROGRAM FOR THE DEVELOPMENT OF
   MULTIPLE SCLEROSIS
   O'Connor, P. S.
6. OCULAR FINDINGS IN VIETNAM RPWS 1965-1973
   Tredici, T. J., J. W. Klein
   5-9 Nov 1979.
7. POLYCARBONATE VERSUS CR-39 LENSES: A FIELD STUDY
   Miller, J. W., B. Kislin, T. J. Tredici, A. J. Rahe
OPHTHALMOLOGY BRANCH

1979 Presentations

1. PRESCRIPTION SUNGLASS REQUIREMENTS FOR THE ARMY, NAVY, AND AIRFORCE
   Tredici, T. J. (Chairperson)
   Tri-Service Optical Study Group Seminar, Brooks AFB TX, Jan 1979.

2. VISUAL STANDARDS FOR FLYING
   Tredici, T. J.
   Presentation at the Flying Physical Standards Meeting, Brooks AFB TX, Jan 1979.

3. BLEPHAROESPASM
   O'Connor, P. S.

4. VISUAL STANDARDS FOR ENTRY INTO PILOT TRAINING IN THE USAF-
   PHILOSOPHY AND RECOMMENDATIONS
   Tredici, T. J.
   Presentation at the Conference on Flying Physical Standards for the 1980s, Brooks AFB TX, April 1979.

5. MIGRAINE IS MORE THAN A HEADACHE
   O'Connor, P. S.

6. GLAUCOMA AND THE FLYER
   Tredici, T. J.

7. SPECIFIC REQUIREMENTS FOR TESTING COLOR VISION IN RELATION TO SEA AND AIR TRANSPORTATION SYSTEMS
   Tredici, T. J.
8. RESEARCH NEEDS RELATING TO AIRCREW VISUAL REQUIREMENTS, VISUAL AND CLINICAL CONSIDERATIONS
   Tredici, T. J.
   Presentation at the Workshop on Research Needs Relating to Aircrew Visual Stds

9. SIXTY YEARS OF AEROSPACE OPHTHALMOLOGY
   Tredici, T. J.
   Exhibit at Aerospace Medical Assn 50th Anniversary, Washington D.C.,
   13-17 May 1979.

10. NEURO-OPTHALMOLOGICAL PROBLEMS AND DISEASES IN USAF AVIATORS-A 15 YEAR STUDY IN CAUSE FOR REFERRAL
    O'Connor, P. S., E. E. Kirby, T. J. Tredici
    Presentation at the Aerospace Medical Assn 50th Anniversary Meeting,

11. THE EFFECT OF HYPERBARIC OXYGEN ON VISION
    Tredici, T. J.
    Presentation at the Aerospace Medical Assn Meeting, Washington D.C., 13-17
    May 1979.

12. THE PUPIL, C. MILLER FISHER SYNDROME
    O'Connor, P. S.
    Lecture to Staff Wilford Hall USAF Medical Center, Lackland AFB TX
    10 July 1979.

13. DOMINANT OPTIC NERVE ATROPHY
    O'Connor, P. S.
    Presentation at Univ of Texas Grand Rounds, Univ of Texas HS Center, San
    Antonio, TX July 1979.

14. SIXTY YEARS OF AEROSPACE OPHTHALMOLOGY (EXHIBIT)
    Tredici, T. J.
    Presentation at the Assn of Military Surgeons Meeting, San Diego, CA, 2-6 Oct
    1979.

15. OCULAR FINDINGS IN RPWS
    Tredici, T. J.
    Poster American Academy of Ophthalmology Meeting, San Francisco, CA, 4-9
    Nov 1979.

16. AEROSPACE OPHTHALMOLOGY, 1918-1979
    Tredici, T. J.
    Scientific Exhibit, American Academy of Ophthalmology Annual Meeting, San
    Francisco, CA, 4-9 Nov 1979.
1979 Presentations (continued)

17. GLAUCOMA AND TONOMETRY
   Tredici, T. J.
   Presentation at Continuing Education Program of the Joint Commission on Allied
   Health Personnel in Ophthalmology (JCAHPO), San Francisco, CA, 1-3 Nov
   1979.

18. AIR-TO-AIR TARGET ACQUISITION
   Goodson, R. A.

19. AIR-TO-AIR TARGET ACQUISITION
   Goodson, R. A.
   Presentation at the Tri-Service Aeromedical Research Coordinating Panel (TARP)

20. AIRCRAFT GLARE-SHIELD
   Woessner, W. M.
   Lecture to Operations Personnel, Military Personnel Center, Randolph AFB TX,
PUBLICATIONS AND PRESENTATIONS OF THE OPHTHALMOLOGY BRANCH  
USAF SCHOOL OF AEROSPACE MEDICINE  

OPHTHALMOLOGY BRANCH  

1980 Publications

1. LIGHT TRANSMISSION CHARACTERISTICS OF TINTED CONTACT LENSES OF VARYING CENTER THICKNESS  

2. CHOROIDAL OSTEOMA A NEW CLINICOPATHOLOGIC SYNDROME  
   O'Connor, P. S.  

3. VISUAL ACUITY AND AIR-TO-AIR TARGET ACQUISITION  
   Goodson, R. A.  

4. AIR-TO-AIR TARGET ACQUISITION: FACTORS AND MEANS OF IMPROVEMENT  
   Costanya, E. B., S. R. Stacey, H. L. Snyder  

5. THE EFFECT OF TOPICAL MYDRIACYL AND PHENYLEPHRINE ON CARDIAC RATE AND RHYTHM  
   Coffman M. R., J. W. Klein, T. J. Tredici  

6. MILES DEVICE: OCULAR HAZARD EVALUATION  

7. VISUAL ILLUSIONS AS A PROBABLE CAUSE OF AIRCRAFT ACCIDENTS  
   Tredici, T. J.  

8. SCREENING AND MANAGEMENT OF GLAUCOMA IN FLYING PERSONNEL  
   Tredici, T. J.  
   Military Medicine, Vol 145, No. 1, Jan 1980.
1980 Publications (continued)

9. IMPACT VULNERABILITY OF DRILLED CR-39 LENSES
   Provines, W. F., J. W. Miller, T. J. Tredici
   Optic Index, Vol 55, No. 6, June 1980.

10. VISUAL AND CLINICAL CONSIDERATIONS
    Tredici, T. J.
    Proceeding of the 1979 Symposium on Research Needs Relating to Aircrew Visual
    Requirements Naval Air Systems Command Report No. NADC 79253-60, 11
    April 1980.

11. TRAINING FOR AIR-TO-AIR TARGET ACQUISITION
    Goodson, R. A.
    Final Report Contract F33615-79-C-0615 Honeywell, Inc. USAFSAM Brooks
    AFB TX, 1980.
OPHTHALMOLOGY BRANCH

1980 Presentations

1. HISTORICAL DEVELOPMENT OF ORTHOKERATOLOGY AND SUMMARY OF PRESENT TECHNIQUES
   
   Tredici, Thomas J.
   
   National Symposium of the Contact Lens Association of Ophthalmologists, Las Vegas NV, 11-12 Jan 1980.

2. NEW CONCEPTS IN VISION CORRECTION FOR FLYERS
   
   Tredici, Thomas J.
   
   Briefing to Commandant, RAF Institute of Aviation Medicine USAF School of Aerospace Medicine, Brooks AFB TX, 16 Jan 1980.

3. NEURO-OPHTHALMOLOGY
   
   O'Connor, Patrick S
   
   Briefing, Ophthalmology Residents, University of Texas Health Science Center, San Antonio TX, Jan 1980.

4. PROJECTED OPHTHALMOLOGICAL/VISUAL PROGRAMS FOR THE IDENTIFICATION, SELECTION AND MAINTENANCE OF VISUALLY SUPERIOR PILOTS
   
   Tredici, Thomas J.
   
   Presentation, Aerospace Medicine Division, Brooks AFB TX, Feb 1980.

5. MANAGEMENT OF OPHTHALMIC CASUALTIES IN SOUTHEAST ASIA
   
   Tredici, Thomas J.
   

6. AEROSPACE OPHTHALMOLOGY, 60 YEARS
   
   Tredici, Thomas J.
   

7. VISUAL ILLUSIONS AND AIRCRAFT ACCIDENTS
   
   Tredici, Thomas J.
   
8. NEURO-OPHTHALMOLOGY
   O'Connor, Patrick S.
   Presentation, Fourth Annual Meeting of the Christian Ophthalmological Society,

9. EXTRAOCULAR MUSCLE INVOLVEMENT IN PERRY ROMBERG
   SYNDROME
   O'Connor, Patrick J.

10. BIETTI'S CRYSTALLINE DYSTROPHY OF THE RETINA: REPORT OF A
    FAMILY
    O'Connor, Patrick S.

11. ACEPHALGIC MIGRAINE—15 YEAR'S EXPERIENCE
    O'Connor, P. S. T. J. Tredici
    Presentation, Annual Meeting of the American Academy of Ophthalmology,
    Chicago IL, 2-7 Nov 1980.

12. LIGHT TRANSMISSION CHARACTERISTICS OF TINTED CONTACT
    LENSES OF VARYING CENTER THICKNESSES
    Tredici, Thomas J., T. D. Tredici
    Poster Presentation, Annual Meeting of the American Academy of Ophthalmology,
    Chicago, IL, 2-7 Nov 1980.