

- 1 [2013 Aerospace Medicine Association annual scientific meeting, Chicago, USA. 13-16 May 2013. Pilot color vision research and recommendations. N Milburn, T Chidester et al. Presentation as part of a panel Color Vision: The latest on testing and standards. Chairs: J Hovis and N Milburn. \(\[http://asmameeting.org/asma2013_mp/pdfs/asma2013_present_351.pdf\]\(http://asmameeting.org/asma2013_mp/pdfs/asma2013_present_351.pdf\)\).](#)
- 2 Adams AJ, Rodic R. Use of desaturated and saturated versions of the D15 in glaucoma and glaucoma suspect patients. *Doc Ophthalmol Proc Series* 1982, 33:419--424.
- 3 Adams AJ, Tague MK. Performance of air traffic control tasks by protanopic color defectives. *Am J Optom Physiol Opt.* 1985;62:744-50.
- 4 Aeronautical Commission. Medical Certificates (Section V to Annex E - Minimum qualification necessary for obtaining certificates as pilots and navigators). In: Imperial Accounts and Papers: 13 State Papers, Vol XXIII. (Convention for the Regulation of Aerial Navigation, Paris, October 13, 1919. Treaty Series 1922, No 2, Cmd 1609.). London: His Majesty's Stationery Office; 1922. p. 375-79.
- 5 *Air Force Instruction 48-123, Aerospace Medicine: Medical Examination and Standards*, Headquarters,
- 6 *Aircraft Accident Report: Collision with Trees on Final Approach, Federal Express Flight 1478, Boeing 727-232, N497FE, Tallahassee, Florida, 26 July 2002. National Transportation Safety Board, Aircraft Accident Report NTSB/AAR-04/02.* Washington DC: National Transportation Safety Board, Department of Transportation; 2004.
- 7 Allied Signal Electronics & Avionics System, Description of EGPWS Peaks Mode Display.
- 8 *Amer J Optom & Physiol Optics* 1982; 59: 346--374.
- 9 Andriessen S. *Signal Recognition Performances of Color Vision Normals and Color Defectives Related to Work at a Multicolor Screen. Doctoral Thesis.* Kiel: Christian Albrecht University; 1992.
- 10 *Army Regulation 40-501, Medical Services, Standards of Medical Fitness*, Headquarters, Department
- 11 Atchison DA, Pedersen CA, Dain SJ, Wood JM. Traffic signal color recognition is a problem for both protan and deutan color-vision deficient subjects. *Hum Factors.* 2003;45:495-503.
- 12 Austroads/National Transport Commission. *Assessing Fitness to Drive.* Sydney: Austroads Ltd; 2012.
- 13 Available at: <http://www51.honeywell.com/aero/common/documents/Peaks-ModePaper>.
- 14 Barbur J, Rodriguez-Carmona M, Evans S, Milburn N. CAA Paper 2009/4. Minimum Colour Vision Requirements for Professional Flight Crew. Civil Aviation Authority, 2009.
- 15 Barbur JL, Harlow AJ. Colour vision testing using spatiotemporal luminance masking: Psychophysical and pupillometric methods. In: Drum B, ed. *Colour Vision Deficiencies XI*, Kluwer Academic Publishers, Dordrecht, 1993; 417-26.
- 16 Barbur, JL, Connolly, DM. Effects of hypoxia on colour vision with emphasis on the mesopic range. *Expert Rev Ophthalmol* 2011. 6 (4): 409 – 420.
- 17 Bauer LH. *Aviation Medicine.* Baltimore, USA: Williams & Wilkins; 1926.
- 18 Belcher SJ, Greenshields KW, Wright WD. Colour vision survey using the Ishihara, Dvorine, Bostrom and Kugelberg, Bostrom, and American--Optical Hardy--Rand--Rittler tests. *Br J Ophthalmol* 1958; 42: 355--359.
- 19 Bergman H, Duijnhouwer F. Recognition of VDU presented colours by colour defective observers. In: *Proceedings, of the Human Factors Soc. 1980:611-16.*
- 20 Birch J, Dain SJ. Performance of red-green color deficient subjects on the Farnsworth Lantern (FALANT). *Aviat Space Environ Med.* 1999; 70(1): 62-67.
- 21 Birch J. *Diagnosis of Defective Colour Vision.* 2nd ed. Oxford, UK: Butterworth-Heinemann; 2001.
- 22 Birch J. *Diagnosis of defective colour vision.* Oxford: Butterworth--Heinemann, 1998.
- 23 Birch J. Performance of colour--deficient people on the Holmes--Wright lantern (type A):

- consistency of occupational colour vision standards in aviation. *Ophthalmic Physiol Opt.* 2008; 28: 253--8.
- 24 Birch J. Performance of red-green color deficient subjects on the Holmes-Wright lantern (Type A) in photopic viewing. *Aviat Space Environ Med.* 1999;70:897-901.
 - 25 Birch, J. Efficiency of the Ishihara test for identifying red--green colour vision deficiency. *Brit J Physiol Optics* 1997; 17: 403--408.
 - 26 Birch, J. Survey of the accuracy of new pseudoisochromatic plates. *Ophthalmic Physiol Opt* 13 (1): 35--40, 1993.
 - 27 Brettel H, Vienot F, Mollon JD. Computerized simulation of color appearance for dichromats. *J Opt Soc Am A* 1997; 14: 2647--2655.
 - 28 CASA EF08/133 "Re: John O'Brien -- Civil Aviation Safety Authority AAT Proceedings No. 2012/723 Request for Opinion in relation to John Gary O'Brien ARN 562298 Date of Birth: 9 August 1983" dated 13 August 2013, and attached 2 volumes of support documents.
 - 29 Casolin A, Katalinic P, Yuen G, Dain S. The RailCorp Lantern Test. *Occupational Medicine* 2011;61(3):7.
 - 30 CIE. Colours of Light Signals. Joint ISO/CIE Standard S 004/E--2001. Vienna; Commission Internationale de L'Eclairage: 2001
 - 31 Civil Aviation Authority (New Zealand). CAR Part 67: Medical Standards and Certification (rule 67.103(m)(5)). In: *Civil Aviation Rules*. 3 ed. ed. Wellington, New Zealand; 1992.
 - 32 Civil Aviation Authority (Pakistan). Air Navigation Order 91.0101: Manual of Flight Crew Medical Requirements. In. Karachi: Director General of the Civil Aviation Authority (Pakistan); 1999.
 - 33 Civil Aviation Authority (South Africa). SA-CATS-MR Medical Requirements (67.00.2 3.6(1)). In: *South African Civil Aviation Technical Standards, Service Issue 17 (April 2008)*. Pretoria, South Africa: South African Civil Aviation Authority; 1997.
 - 34 Civil Aviation Authority (UK). Minimum colour vision requirements for professional flight crew: Part 1 The use of colour signals and the assessment of colour vision requirements in aviation (2006); Part 2 Task analysis (2006); & Part 3 Recommendations for new colour vision standards (2009): Civil Aviation Authority; 2006-2009.
 - 35 Civil Aviation Authority of Singapore. SASP-9: Medical Requirements for the Grant or Renewal of Flight Crew Licences and Air Traffic Controller Licence (Chapter 3, Standard 3.1). In: *Singapore Air Safety Publication, NA02-2006 (11 August 2006)*. Singapore: Civil Aviation Authority of Singapore; 2006.
 - 36 CIVIL AVIATION AUTHORITY. Minimum Colour Vision requirements for Professional Flight Crew. CAA Paper 2009/04. The Stationary Office, Box 29 Norwich, NR3 1GN, (2009).
 - 37 Civil Aviation Bureau (Japan). Manual for Aviation Medical Examinations (KOKU-KU-JO-531): Japan Aeromedical Research Center, Civil Aviation Bureau, Ministry Of Land, Infrastructure And Transport; 2007.
 - 38 Civil Aviation Safety Authority (Australia). CASR Part 67 - Medical (Rule 67.150, Table 67.150, Item 1.39). In: *Civil Aviation Safety Regulations (SR 1998 No. 237), (SLI 2008 No. 275)*. Canberra: Attorney- General's Department, Australian Government; 1998.
 - 39 Civil Aviation Safety Authority (Australia). Section 2.1.15, Colour Vision, from Designated Aviation Medical Examiner's Handbook. Canberra: Australian Government; 2003.
 - 40 Civil Aviation Safety Authority EF08/133 "Re: John O'Brien -- Civil Aviation Safety Authority AAT proceedings No. 2012/723 Request for Opinion in relation to John Gary O'Brien ARN 562298 Date of Birth: 9 August 1983" dated 13 August 2013.
 - 41 Clark, BAJ, Gordon, GE. Hazards of Colour Coding in Visual Approach Slope Indicators. AR 002-324. Systems Report 25. 1981. Aeronautical Research Laboratories, Defence Science and Technology Organisation.
 - 42 [Coast Guard AERO Technical Bulletins, Attachment 5: Using AERO for Medical Examiners. ATB: Color Vision Testing, 1 January 2010;](#)

- 43 Code of Federal Regulations. Title 14: Aeronautics and Space FAR Part 25 Airworthiness Standards: Transport Category Airplanes, Subpart F-Equipment.
- 44 Cole and Lian Ka-Lee. Search for coloured objects in natural surroundings by people with abnormal colour vision. *Clin and Exp Optom*. 2006; 89, 3:144-49.
- 45 Cole B. L, Maddocks J. D. (2008). Color vision testing by Farnsworth lantern and ability to identify approach--path signal colors. *Aviat Space Environ Med*, 79, 585--590.
- 46 COLE B.L., MADDOCKS, J.D. Protans and PAPI: Recognition of a two colour code by persons with defective colour vision. Ch 60. In *Colour Vision Deficiencies XII*. Doc Ophthalmol Proceedings Volume 57, pp. 501-510. (1995).
- 47 Cole BJ, Vingrys AJ. Who fails lantern tests? *Docum Ophthalmol*. 1988;55:157-73.
- 48 Cole BL and Maddocks JD. *A Simulation of PAPI Signals for Testing the Colour Vision of Applicants for a Pilot's License*. Final Report of an Investigation undertaken for the Civil Aviation Authority, Victorian College of Optometry, University of Melbourne, Australia, November, 1993.
- 49 Cole BL, Brown B. Optimum intensity of red road-traffic signal lights for normal and protanopic observers. *J Opt Soc Amer*. 1966;56(4):516-22.
- 50 Cole BL, Harris RW. Colour blindness does not preclude fame as an artist: celebrated Australian artist Clifton Pugh was a protanope. *Clin Exp Optom*. 2009 Sep;92(5):421--8.
- 51 Cole BL, Lian KY, Lakkis C. Color vision assessment: fail rates of two versions of the Farnsworth lantern test. *Aviat Space Environ Med*. 2006;77:625-39.
- 52 Cole BL, Lian KY, Lakkis C. Can color vision defective subjects who pass the farnsworth lantern test recognize surface color codes? *Aviat Space Environ Med*. 2007; 78: 21--5.
- 53 Cole BL, Lian KY, Lakkis C. Color vision assessment by Farnsworth Lantern: Results using alternative pass-fail criteria. *Aviat Space Environ Med*. 2008;79(5):509-13.
- 54 Cole BL, Lian KY, Lakkis C. Color vision assessment: Fail rates of two versions of the Farnsworth Lantern Test. *Aviat Space Environ Med*, 2006; 77(6):624-30.
- 55 Cole BL, Lian KY, Lakkis C. The new Richmond HRR pseudoisochromatic test for colour vision is better than the Ishihara test *Clin Exp Optom* 2006; 89: 73--80.
- 56 Cole BL, Lian KY, Lakkis C. Using clinical tests of colour vision to predict the ability of colour vision deficient patients to name surface colours. *Ophthalmic Physiol Opt*. 2007; 27: 381--8.
- 57 Cole BL, Lian KY, Sharpe K, Lakkis C. Categorical color naming of surface color codes by people with abnormal color vision. *Optom Vis Sci*. 2006; 83: 879--86.
- 58 Cole BL, Lian K-Y. Search for coloured objects in natural surroundings by people with abnormal colour vision. *Clin Exp Optom*. 2006;89(3):144-9.
- 59 Cole BL, MacDonald WA. Defective colour vision can impede information acquisition from redundantly colour-coded video displays. *Ophthal Physiol Opt*. 1988;8(2):198-210.
- 60 Cole BL, Macdonald WA. Evaluating the role of colour in a flight information cockpit display. *Ergonomics*. 1988; 31: 13--37.
- 61 Cole BL, Maddocks JD, Sharpe K. Visual search and the conspicuity of coloured targets for colour vision normal and colour vision deficient observers. *Clin Exp Optom*. 2004; 87: 294--304.
- 62 Cole BL, Maddocks JD. Can clinical colour vision tests be used to predict the results of the Farnsworth Lantern Test? *Vision Research*. 1998;38:3483-85.
- 63 Cole BL, Maddocks JD. Color vision testing by Farnsworth Lantern and ability to identify approach-path signal colors. *Aviat Space Environ Med*. 2008;79(6):585-90.
- 64 Cole BL, Maddocks JD. Protans and PAPI: recognition of a two colour code by persons with defective colour vision. In Drum, B (ed), *Colour Vision Deficiencies XII*. Dordrecht: Kluwer; 1995. P 495--500.
- 65 Cole BL, Maddocks, JD. *Protans and PAPI: Recognition of a two colour code by persons with*

- defective colour vision*. Colour Vision Deficiencies XII, Kluwer Academic Publications, Dordrecht, 1995; 501-10.
- 66 Cole BL, Orenstein JM. Does the Farnsworth D15 test predict the ability to name colours?. *Clin Exp Optom*. 2003;86(4):221-9.
- 67 Cole BL, Steward JM. Some (but only a few) colour vision defectives have no difficulty with colour.
- 68 Cole BL, Vingrys AJ. A Survey and Evaluation of Lantern Tests of Color Vision. *Am J Optom & Physiol Optics*. 1982 59(4) 346-74.
- 69 Cole BL, Vingrys AJ. A survey and evaluation of lantern tests of color vision. *American Journal of Optometry & Physiological Optics*. 1982;59(4):9.
- 70 Cole BL, Vingrys AJ. *Are Standards of Colour Vision in the Transport Industries Justified?* Report to the Australian Department of Aviation. Melbourne: Victorian College of Optometry; 1985.
- 71 Cole BL, Vingrys AJ. Do protanomals have difficulty seeing red lights? Proceedings of the 20th Session of the Commission Internationale de L'Eclairage; 1983 Aug 31--Sept 8; Amsterdam. Paris: CIE; 1983. Volume 2. p E04/1--3.
- 72 Cole BL, Vingrys AJ. Who fails lantern tests?. *Documenta Ophthalmologica*. 1983;55:157-75.
- 73 Cole BL. Does defective colour vision really matter? In: Drum B, ed. *Colour Vision Deficiencies XI* Dordrecht: Kluwer, 1993. 67 – 86.
- 74 Cole BL. Misuse of the Ishihara test for colour blindness. *Brit J Physiol Optics* 1963; 20: 113--118
- 75 Cole BL. Protan colour deficiency and road accidents. *Clin Exp Optom*. 2002;85(4):246-53.
- 76 Cole BL. Protans and driving safety. *Clin Exp Optom*. 2002;85(6):401-2.
- 77 Cole BL. The handicap of abnormal colour vision. *Clin and Exp Optom* 87; 2004: 288-92; Cole BL. Does defective colour vision deficiency really matter? In: E Drum. *Colour Vision Deficiencies XI*; Dordrecht; Kluwer: 1993. 67-86.
- 78 Cole BL. The handicap of abnormal colour vision. *Clin Exp Optom*. 2004; 87: 258--75.
- 79 Cole BL. The handicap of abnormal colour vision. *Clin Exp Optom*. 2004;87(4- 5):258-75.
- 80 Cole, B. L. & Maddocks, J. D. (1995). Protans and PAPI: Recognition of a two colour code by persons with defective colour vision. In *Colour Vision Deficiencies XII*, ed. Drum, B., pp. 501--510. Kluwer Academic Publishers, Dordrecht, Netherlands.
- 81 Cole, BL and Steward, JM. *Some (but only a few) colour vision defectives have no difficulty with colour*. In: Dickinson, CM, Murray, IJ and Carden, D (eds) *John Dalton's Colour Vision Legacy*. Lond; Taylor and Francis, 1997: 235-39.
- 82 Cole, *op cit*.
- 83 Collision with trees on final approach, Federal Express Flight 1478, Boeing 727-232, N497FE. Tallahassee, Florida, 26 July 2002. US National Transport Safety Board Aircraft Accident Report NTSB/AAR-04/02 (PB2004-910402).
- 84 Commission Internationale de l'Éclairage, International Recommendations for Colour Vision Requirements for Transport CIE 143--2001, CIE Central Bureau. Wien, Austria.
- 85 Commission Internationale de l'Éclairage. Colour of signal lights. Vienna: CIE; 2001.
- 86 Commission Internationale de l'Éclairage. International Recommendations for Colour Vision Requirements for Transport. Vienna: Commission Internationale de l'Éclairage. ; 2001.
- 87 Committee on Vision, National Research Council. Procedures for testing color vision. Report of Working Group 41. Washington DC; National Academy Press: 1981, 58 –60.
- 88 Convention on International Civil Aviation (Doc 7300/9). Ninth ed. Montreal, Canada: International Civil Aviation Organization (ICAO); 2006.
- 89 Crone RA. Quantitative diagnosis of defective colour vision. A comparative evaluation of the Ishihara test, the Farnsworth dichotomous test and the Hardy-- Rand--Rittler polychromatic plates. *Amer J Ophthal* 1961; 51 298--305.
- 90 Dain SJ, King-Smith PE. Visual thresholds in dichromats and normals. *Vision Research*.

- 1981;21:8.
- 91 Dain SJ. Recognition of simulated cyabosis by colour vision normal and colour vision deficient subjects. *J Opt Soc Amer.* 2013;Submitted.
 - 92 Dain SJ. The Farnsworth Flashlight is not equivalent to the Farnsworth Lantern. *J Opt Soc Am.* 2012;29(2):A377-82.
 - 93 Davis JR, et al. *Fundamentals of Aerospace Medicine.* 4th edition. Wolters Kluwer/Lippincott Williams & Wilkins:Philadelphia; 2008.
 - 94 Department of Commerce (USA). Air Commerce Regulations, Ch4, S66; 1926.
 - 95 Dille JR, Booze CF. Accident experience of civilian pilots with static physical defects. *Can J Optom* 1980; 42: 159--162. Reprinted from Canadian Flight Magazine with permission.
 - 96 Dille JR, Booze CF. The 1976 accident experience of civilian pilots with static physical defects. *Aviat Space Environ Med.* 1980; 51: 182--4.
 - 97 Dille, R. & Booze, C. (1980). The 1976 accident experience of civilian pilots with static physical defects. *Aviation, Space and Environmental Medicine.* February. Pp182-184.
 - 98 Directorate General of Civil Aviation (India). Medical Requirements and Examination for Flight Crew Licenses and Ratings (2. Requirements for medical assessments, requirement 2.5). In: Civil Aviation Requirement (CAR) (Section 7, Flight Crew Standards, Series C, Part 1), Revision 5 (04 July 2007). New Delhi, India: Government of India, Office of Director General of Civil Aviation; 1999.
 - 99 Estvez O, Spekrijie H, van Dalen J, Verduyn LH. The OSCAR color vision test: theory and evaluation. *Am J Optom Physiol Optics* 1983; 60: 892--901.
 - 100 Excerpt from the introductory paragraph of the English language translation (abridged and based, in turn, on French language translation of the original manuscript) of *Om färgblindheten i dess förhållande till jernvägstrafiken och sjöväsendet* (On colour-blindness and its relation to rail- and sea- travel). Holmgren AF. Upsala, Sweden: Berlings boktryckeri, Boktryckeri; 1877.
 - 101 Farnsworth D, Foreman P. A brief history of lanterns for testing color sensation and description of the essential principles. Rep No 104. Med Res Lab US Submarine Naval Base, New London, CT. 1946.
 - 102 Farnsworth D. The Farnsworth--Munsell 100--Hue and Dichotomous Tests for Colour Vision. *J Opt Soc Amer* 1943; 33: 568--578.
 - 103 Federal Aviation Administration (USA). Part 67 Medical Standards and certification. In: Federal Aviation Regulations: Dept. of Transportation, Federal Aviation Administration, Washington, DC, USA.; 1996.
 - 104 Fee J. Color-Blindness, and Railway Accidents. *Transactions of the Kansas Academy of Science* (1872- 1880) 1879; Vol. 7 (1879 - 1880): 29-37.
 - 105 Fletcher, RA. The Fletcher CAM Lantern Colour Vision Test – Clinical Results and Calibration. *Optometry Today*, July 29, 2005, 24--26.
 - 106 Forsey SD, Lane JC. *A Comparison of seven tests of colour-vision.* Aviation Med Memo No. 19, Department of Civil Aviation, Commonwealth of Australia, 1956
 - 107 Freedman M, Davis PS, Staplin LK, Breton ME. *Traffic signal brightness. An examination of night-time of night-time dimming.* Federal Highway Administration, Washington DC, 1985.
 - 108 Freedman, M, Davit, PS, Staplin, LK, Breton, ME. Traffic signal brightness. An examination of nighttime dimming. Washington DC: Federal Highway Administration.
 - 109 Gegenfurtner KR, Sharpe LT. *Color Vision: From genes to perception.* Cambridge: Cambridge University Press; 1999.
 - 110 Gibson TM & Harrison MH. *Into Thin Air: A History of Aviation Medicine in the RAF.* London, UK: Robert Hale Ltd; 1984.
 - 111 Grether WF, Connell SC, Bjornstad JM. *Experimental evaluation of the New London Navy Lantern for testing color perception.* Memorandum Report MCREXD9-694-21B, Engineering Division, Air Materiel Command, March 1949.

- 112 Grether WF, Connell SC, Bjornstad JM. *Experimental Evaluation of the New London Navy Lantern for Testing Color Perception*. Memorandum Report MCREXD9-694-21B, Engineering Division, Air Materiel Command, March 1949;
- 113 [Guide for Aviation Medical Examiners, Federal Aviation Administration, Washington, DC, 16 August 2013;](http://www.faa.gov/about/office_org/headquarters/offices/avs/offices/aam/ame/guide)
[http://www.faa.gov/about/office_org/headquarters/offices/avs/offices/aam/ame/guide;](http://www.faa.gov/about/office_org/headquarters/offices/avs/offices/aam/ame/guide)
 accessed 12 September 2013.
- 114 Hardy LH. Standard illuminants in relation to color testing procedures. *Arch Ophthalmol*. 1945;34(10):278-81.
- 115 Harper, C.R., Kidera, G. J. & Cullen J. F. (1971). Study of simulation airline pilot incapacitation: Phase II. Subtle or Partial Loss of Function. *Aerospace Medicine* September, pp 946-948.
- 116 Harris, D. (2004). *Human Factors for Civil Flight Deck Design*. Aldershot, UK, Ashgate.
- 117 Harris, D. (2011). *Human Performance on the Flight Deck*. Surrey, UK, Ashgate.
- 118 Heath Gg, Schmidt I. Signal color recognition by color defective observers. *Amer J Optom Arch Amer Acad Optom* 1959; 36: 421--37.
- 119 Helmreich (eds.) *Cockpit Resource Management*. London, Academic Press.
- 120 Helmreich R.L., & Foushee, H. C. (1993). Why crew resource management? Empirical and theoretical bases of human factors *training* in aviation. In: E. Weiner, B. Kanlci, & R.
- 121 [Hollnagel, E. \(2012\). A Tale of Two Safeties. Available at: http://www.resilienthealthcare.net/A_tale_of_two_safeties.pdf.](http://www.resilienthealthcare.net/A_tale_of_two_safeties.pdf)
- 122 Holmes JG, Wright WD. A new color-perception lantern. *Color: Research and Application*. 1982;7(2):7.
- 123 Holmgren AF. Om färgblindheten i dess förhållande till jernvägstrafiken och sjöväsendet. Upsala, Sweden: Berlings boktryckeri, Boktryckeri; 1877. (On colour-blindness and its relation to rail- and sea- travel) 1878 English language translation via Smithsonian Institute, Washington DC, USA.
- 124 Hovis JK, Casson E, Delpero W. Aviation signal light gun: variations in photometric and colorimetric properties among airports. *Aviat Space Environ Med*. 2006; 77: 46--52.
- 125 Hovis JK, Lovasil JV, Cullen AP, Kothe AC. Physical characteristics and perceptual effects of "blue-blocking" lenses. *Optom Vis Sci*. 1989;66(10):682-89.
- 126 Hovis JK, Oliphant D. A lantern color vision test for the rail industry. *American Journal of Industrial Medicine* 2000;38(6):6.
- 127 Hsia Y, Graham CH. Spectral luminosity curves for protanopic, deuteranopic, and normal subjects. *Proc Nat Acad Sci USA*. 1957;43:1011-19.
- 128 http://flightsafety.org/asw/dec08/asw_p38-41.pdf?dl=1; accessed 12 September 2013.
- 129 [http://www.asma.org/getmedia/1a4c6e5b-c613-47a5-96e0-57d7cf16fe7b/july2010_news.](http://www.asma.org/getmedia/1a4c6e5b-c613-47a5-96e0-57d7cf16fe7b/july2010_news)
- 130 [http://www.dailymail.co.uk/news/article-2425447/Pakistan-International-Airlines-pilot-arrested-suspicion-drunk-charge-plane-Leeds-Bradford-airport.html.](http://www.dailymail.co.uk/news/article-2425447/Pakistan-International-Airlines-pilot-arrested-suspicion-drunk-charge-plane-Leeds-Bradford-airport.html)
- 131 [http://www.dur.ac.uk/r.a.hill/red_advantage.htm.](http://www.dur.ac.uk/r.a.hill/red_advantage.htm)
- 132 Huang, MK, Bullough, JD, Boyce, PR, Bierman, A. Detection and identification of LED traffic signals by protan observers. Paper 03--2250. Transportation Research Board 82nd Annual Meeting. Washington DC. 2003. *Transportation Record*, 2003: p 52--58.
- 133 Human photoreceptor topography. Curcio CA, Sloan KR, Kalina RE, Hendrickson AE. *J Comp Neurol*.
- 134 In: Dickinson CM, Murray IJ, Carden D, eds. *John Dalton's Colour Vision Legacy*. London: Taylor and Francis; 1997. p 235--239.
- 135 Ings S. *A Natural History of Seeing: the Art and Science of Vision*. New York: W.W. Norton & Company; 2007:27-30.
- 136 International Civil Aviation Organization (ICAO). *Manual of Civil Aviation Medicine* (Doc 8984- AN/895, Third edition). Montreal, Canada: International Civil Aviation Organization (ICAO); 2012.

- 137 International Civil Aviation Organization (ICAO). Manual of Civil Aviation Medicine (Doc 8984- AN/895, Third edition). Montreal, Canada: International Civil Aviation Organization (ICAO); 2012.
- 138 International Civil Aviation Organization (ICAO). Manual of Civil Aviation Medicine (Doc 8984- AN/895, Third edition). Montreal, Canada: International Civil Aviation Organization (ICAO); 2012.
- 139 International Civil Aviation Organization (ICAO). Annex 1 to the Convention on International Civil Aviation: International Standards and Recommended Practices - Personnel Licensing. In. Eleventh ed. Montreal, Canada: International Civil Aviation Organization (ICAO); 2011.
- 140 International Civil Aviation Organization (ICAO). Annex 1 to the Convention on International Civil Aviation: International Standards and Recommended Practices - Personnel Licensing. In. Eleventh ed. Montreal, Canada: International Civil Aviation Organization (ICAO); 2011. (Standard 1.2.4.9).
- 141 International Civil Aviation Organization (ICAO). Manual of Civil Aviation Medicine (Doc 8984- AN/895, Third edition). Montreal, Canada: International Civil Aviation Organization (ICAO); 2012. (Paragraph 11.8.29).
- 142 International Commission on Illumination (CIE) "*International Recommendations for colour vision*
- 143 International Commission on Illumination (CIE). *Review of the Official Recommendations of the CIE for the Colours of Signal Lights*. Report 107--1994. Vienna; Commission Internationale de L'Eclairage: 2001Vienna; Commission Internationale de L'Eclairage: 2001.
- 144 Ivan DJ, Gooch J, Rabin J, et al. *Retesting Color Vision in Trained USAF Aircrew*. Paper presented at the Aerospace Medical Association 77th Annual Scientific Meeting, Orlando FL, May 2006.
- 145 Jacobs RJ, Chouhan J, De Bock J. Visibility of protective helmets worn by forestry workers. *Clin Exp Optom*. 1998;81:174-80.
- 146 Jeffries BJ. *Color-Blindness: Its dangers and its detection*. Boston: Houghton, Osgood and Company; 1880. p167.
- 147 Jennings JE. *Color-Vision and Color-Blindness: A practical manual for railway surgeons*. Philadelphia: F A Davis Company; 1896.
- 148 Joint Aviation Authorities (Europe). JAR-FCL 3 (Medical) (FCL 3.225 Colour perception). In: *Joint Aviation Regulations - Flight Crew Licensing, Amendment 5 (01 December 2006)*. Neuilly Sur Seine, Cedex, France: Joint Aviation Authorities; 2006. (Subsequently replaced by EASA FCL legislation).
- 149 Karakucuk S, Oner AO, Goktas S, Siki E, Kose O. Color vision changes in young subjects acutely exposed to 3,000 m altitude. *Aviat Space Environ Med*. 2004;75:364-66.
- 150 Kinnear PR. Spectral sensitivity for observers with protanomalous, extreme protanomalous and protanopic colour vision. *Ophthal Physiol Opt*. 1986;6(7):197-200.
- 151 Kinney JAS, Paulson HM, Beare AN. The ability of color defectives to judge signal lights at sea. *J Opt Soc Amer* 1979; 69: 106--13.
- 152 Kurz C, Gooch JM, Ivan DJ. Color Vision Screening in USAF Pilot Applicants. *Aviat Space Environ Med*. 2004;75(4, Suppl):B98.
- 153 Kuyk TK, Veres JG, Lahey MA, Clark DJ. The ability of protan color defectives to perform color-dependent air traffic control tasks. *Am J Optom Physiol Opt*. 1986;63(7):582-6.
- 154 KUYK, T.K., VERES III, J.G., LAHEY, M.A. CLARK, D.J. THE ability of protan color defectives to perform color-dependent air traffic control tasks. *Am J Optom Physiol Opt*. 63, 682-686 (1986).
- 155 Lakowski R. A critical evaluation of color vision tests. *Br J Physiol Optics*. 1966;186:186-209; Paulson HM. *The Performance of the Farnsworth Lantern at the Submarine Medical Research Laboratory and in the field from 1955 to 1965*. Report No 466, Bureau of Medicine and Surgery, Research Work Unit MF022.03.03.9017.01, January 1966.

- 156 Lane JC. *A Comparison of the HRR Plates and the Farnsworth Lantern*. Paper read at the Annual Meeting of the Aviation Medical Societies of Australia and New Zealand, Lyndoch, 1977.
- 157 Lanthony P. The desaturated Panel D--15. *Doc Ophthalmol* 1987, 46: 185--189.
- 158 Lanthony, P. The History of Colour Blindness. Wayenborgh, 2013. p 35--38. xlix Dille, JR, Booze, CF. Accident experience of civilian pilots with static physical defects. *Can J Optom*, 1980, 42: 159--162.
- 159 Laxar K. Performance of the Farnsworth Lantern Test as related to type and degree of color vision defect. *Mil Med*. 1967; 132: 726-31.
- 160 Laxar KV, Wagner SL, Cotton TC. Evaluation of the Stereo Optical Co. Farnsworth lantern (FALANT) color perception test: a specification and performance comparison with the original FALANT. Groton, CT: US Naval Submarine Base Med Res Lab; 1998. Rep No. 1209.
- 161 *Letter correspondence from Acting Senior Examiner of Airmen to Director of Aviation Medicine*. Civil Aviation Authority, 4 Oct 1990.
- 162 Linhares JMM, Pinto PD, Nascimento SMC. The number of discernible colors perceived by dichromats in natural scenes and the effects of colored lenses. *Vis Neurosci*. 2008;25:493-9.
- 163 Luria SM. Environmental effects on color vision. In: Widdell H, Post D, eds. *Color in Electronic Displays*. New York: Plenum Press; 1992:178 *Ergonomics Society 24th Annual Meeting*. Santa Monica: Human Factors and Ergonomics Society; 1980:611-5.
- 164 MacDonald WA, Cole BL. Evaluating the role of colour in a flight information cockpit display. *Ergonomics*. 1988;31(1):13-37.
- 165 Mahon LE, Jacobs RJ. Electronic flight information displays and colour defective observers. *Clin Exp Optom*, 1994; 74(6):196-203.
- 166 Medical examinations of commercial drivers. National Road Transport Commission and the Federal Office of Road Safety: Canberra. 1994 and 1997.
- 167 *Memoirs of the Literary and Philosophical Society of Manchester* 5: 28-45, 1798.
- 168 Menu JP, Ivan D, Daumann F-J, Diamantopoulos I, Firth JL, Heikens M-F, LeBail B, Leger A, Walraven J, Alferdinck J, & Yates JT. Operational Colour Vision in the Modern Aviation Environment: NATO Research and Technology Organisation; 2001 March 2001. Report No.: RTO-TR-016.
- 169 Menu JP, Ivan DJ, Daumann FJ, Diamantopoulos I, Firth JL, Heikens MF, et al. *Operational Colour Vision in the Modern Aviation Environment*. RTO-TR-16 AC/323(HFM) TP/6. Neuilly-Sur-Seine, Cedex, France: NATO Research and Technology Organization; 2001.
- 170 MERTENS, H.W., MILBURN, N.J. Performance of colour-dependent tasks of air traffic control specialists as a function of type and degree of color vision deficiency. Report DOT/FAA/AM-92-28. Federal Aviation Administration, Washington DC (1992).
- 171 MERTENS, H.W., MILBURN, N.J., COLIINS W.E. Practical colour vision tests for air traffic control applicants: en route centre and terminal facility. Report DOT/FAA/AM-95-13. Federal Aviation Administration, Washington DC (1995).
- 172 Metha AB, Vingrys AJ. The C--100: a new dichotomiser of colour vision defectives. *Clin Exp Optom* 1992; 75: 114--123.
- 173 Middleton WEK, Mayo EG. The appearance of colors in twilight. *J Opt Soc Am*. 1952;42:116-21.
- 174 Milburn N, Chidester T, Peterson S, Roberts C, Perry D, Gildea K. *Pilot color vision research and recommendations*. Presented at the 84th Annual Scientific Meeting of the Aerospace Medical Association, Chicago, IL, May, 2013.
- 175 NASA Aviation Safety Reporting System. ACN 808066 (PA28 pilot inadvertently enters restricted airspace at 1000ft during a live fire exercise) of October 2008.
- 176 NASA Aviation Safety Reporting System. ACN 469122 (BE35 private pilot, Landing at TMB, was unable to distinguish TXWY D from RWY 13 until 50 FT above the threshold) of April 2000.
- 177 NASA Aviation Safety Reporting System. ACN 613230 (Relying on equip he is not physically

- able to use) of March 2004.
- 178 NASA Aviation Safety Reporting System. ACN 95854 (GA SMA unauth penetration of airspace) of October 1988.
 - 179 Nathan, J, Henry, GH, Cole, BL. Recognition of coloured road traffic light signals by normal and colour--vision--defective observers. *J Opt Soc Amer* 1964; 54: 1041--5.
 - 180 National Transportation Safety Board Washington, D.C. 20594. Safety Recommendation. A--04--46 and --47 June 10, 2004.
 - 181 National Safety Transport Board. Collision with Trees on Final Approach Federal Express 1478 Boeing 727--232, N497FE Tallahassee Florida July 26, 2002. Aircraft Accident Report NTSB/AAR--04/02.
 - 182 National Transportation Safety Board. Aircraft Accident Report NTSB/AAR--04/02 (PB2004--910402) Collision With Trees on Final Approach Federal Express Flight 1478 Boeing 727--232, N497FE Tallahassee, Florida July 26, 2002 Adopted 2004.
 - 183 Naval Safety Center Report, Event No. 31616. 5 August 1980.
 - 184 NTSB, *NTSB/AAR-04/02 Aircraft Accident Report*, 2004.
 - 185 O'Brien KA, Cole BL, Maddocks JD, Forbes AB. Color and defective color vision as factors in the conspicuity of signs and signals. *Hum Factors*. 2002; 44: 665--75.
 - 186 Observations on the Medical Examination of Aviation Candidates. Sutherland GA. *The Lancet*, 4972, December 14 1918, 803-809.
 - 187 [of the Army, Washington, DC, 14 December 2007; Rapid Action Revision \(RAR\) Issue Date: 4 August 2011; http://www.apd.army.mil/pdf/files/40_501.pdf; accessed 12 September 2013.](#)
 - 188 [Office of the Surgeon General, Department of the Air Force, Washington, DC, AFI 48-123 AFGM4, 29 January 2013; http://www.e-publishing.af.mil; accessed 12 September 2013.](#)
 - 189 Paramei GL, Bimler D, Cavonius C. Effect of luminance on color perception of protanopes. *Vis Research*. 1998;38:3397-401; Luria SM. Color-name as a function of stimulus intensity and duration. *AmerJ Psychol*. 1967;80:14-27.
 - 190 Paramei, Gv, Bimler, DL, Cavonius, CR. Effect of luminance on color perception of protanopes. *Vis Res* 1998; 38: 3397--401.
 - 191 Parkes, FJ, Nasveld, P, McLaughlin, R. Defence Force Recruiting: Colour vision Study, CMVH, 2007.
 - 192 Parkes, FJ. Review and Assessment of Policy, Standards and Testing of Colour Vision for Deck and Engineering Crew in the Australian Maritime Domestic Environment. 2009. Review conducted for New South Wales Maritime.
 - 193 Parkes, FJ. Risk Assessment of Safety Critical and Other Duties Performed by New South Wales Fire Brigades Staff Involving Colour Vision. 2009. Assessment conducted for New South Wales Fire Brigades.
 - 194 Parkes, FJ. Risk Assessment of Safety Critical Tasks for Marine Pilots Involving Colour Vision. 2007. Assessment conducted for New South Wales Maritime.
 - 195 Parkes, FJ. Risk Assessment of Safety Critical Tasks for Rail Workers Involving Colour Vision. 2007. Assessment Conducted for National Transport Commission.
 - 196 Pdf.
 - 197 Pickford RW, Cobb SR. Personality and colour vision deficiencies. *Mod Prob Ophthalmol*, 1974;13:225-30.
 - 198 Pidgeon, N. and O'Leary, M. (2000), Man-made disasters: Why technology and organisations (sometimes) fail. *Safety Science*, Vol. 34, pp. 15-30.
 - 199 Pitt FHG. *Characteristics of dichromatic vision with an Appendix on anomalous trichromatic vision*. In: Committee on the Physiology of Vision, Report No. 14, Medical Research Council, Special Report Series No. 200. His Majesty's Stationery Office: London. 1935; Hsia, *Proceedings*, 1011-19.
 - 200 Pokorny J, Smith VC, Verriest G, Pinckers AJLG. *Congenital and Acquired Color Vision Defects*. New

- 201 Pokorny J, Smith VC, Verriest G, Pinckers AJLG. *Congenital and Acquired Color Vision Defects*. New York: Grune & Stratton; 1979.
- 202 Pokorny J, Smith VC, Verriest G, Pinckers AJLG. *Congenital and Acquired Color Vision Defects*. New York: Grune & Stratton; 1979:183-241.
- 203 Post RH. Population differences in red and green color vision deficiency: a review and a query on selection relaxation *Social Biology* 1982; 29: 299 – 315.
- 204 Psychology: Red enhances human performance in contests. R A Hill and R A Barton. *Nature* 435, 293 (19 May 2005).
- 205 Pun HW, Brown B, Lui R. Tinted contact lenses slow reaction time in colour defective observers *Clin Exp Optom*. 1986;69(6):213-8.
- 206 Rabin J, Gooch J, Ivan D. Rapid quantification of color vision: the Cone Contrast Test. *Invest Ophthal Vis Sci*. 2011;52:816-20.
- 207 Rabin J. Cone-specific measures of human color vision. *Invest Ophthal Vis Sci*, 1996; 37(13): 2771-774.
- 208 Rabin J. Quantification of color vision with cone contrast sensitivity. *Vis Neurosci*. 2004; 21(3): 483-85.
- 209 *Railroad Accident Report: Head-on Collision of Two Union Pacific Railroad Freight Trains near Goodwell, Oklahoma. 24 June 2012, National Transportation Safety Board, Railroad Accident Report NTSB/RAR-13-02*. Washington DC: National Transportation Safety Board; 2013.
- 210 *Railroad Accident Report: Near Head-on Collision and Derailment of two New Jersey Transit Commuter Trains near Secaucus, New Jersey, 9 February 1996, National Transportation Safety Board, Railroad Accident Report NTSB/RAR-97/01*. Washington DC: National Transportation Safety Board; 1996.
- 211 Ramaswamy S, Hovis JK. Does dichromatic color simulation predict color identification error rates? *Optom Vis Sci*. 2011 May;88(5):621--7.
- 212 Rayman RB. *Rayman's Clinical Aviation Medicine*. 5th edition. Castle Connolly Graduate Medical Publishing LTD:New York; 2013.
- 213 Reason, J. and Hobbs, A. (2003). *Managing Maintenance Error*. Aldershot, U.K. Ashgate.
- Wickens, C. D., Ververs, P.M. and Fadden, S. (2004). Head-Up Displays. In: D. Harris (ed.) *Human Factors for Civil Flight Deck Design* (pp. 103-40). Aldershot: Ashgate.
- 214 Recommendations for new colour vision standards, CAA Paper 2009/04
- 215 Red shirt colour is associated with long-term team success in English football. M Attrill, M, K Gresty, R Hill, and R Barton. *Journal of Sports Sciences* 26 (6): 577–582. (2008).
- 216 *requirements for transport.*" Pub No 143. 2001.
- 217 Rings M. *Can computer-based color vision test results predict performance in operational environment?* Presented at the 84th Annual Scientific Meeting of the Aerospace Medical Association, Chicago, IL, May, 2013.
- 218 Rodriguez--Carmona M, O'Neill--Biba M, Barbur JL. Assessing the severity of color vision loss with implications for aviation and other occupational environments. *Aviat Space Environ Med*. 2012; 83: 19--29.
- 219 Rowland LS, Heagan FV. *Frequency of Color Deficiency among Air Corps Cadets*. Report No.1, Project 314. Randolph Field, Texas: Army Air Force School of Aviation Medicine; 1944.
- 220 Schmidt IS. Comparative Evaluation of the New London Navy Lantern for Testing Color Perception. USAF School of Aviation Medicine, Randolph Field Texas, Project Report, Project Number 21-29-009, August, 1951.
- 221 Scholz R, Andersen S, Hoffman H, Duncker G. Recognition performance of subjects with color vision deficiencies on a polychromatic sonar screen for ship navigation. *Ger J Ophthalmol*. 1995;4:103-06.
- 222 Schuster, A. Experiments with Lord Rayleigh's Colour Box. *Proc Roy Soc Lond* 1890; 48: 140--149
- 223 Schwartz SH. *Visual Perception: A clinical orientation*. 4th edition. McGraw Hill: New York;

- 2010.
- 224 Seshadri J, Christensen J, Lakshminarayanan V, Bassi CJ. Evaluation of the new web-based "Colour Assessment and Diagnosis" test. *Optom & Vis Sci*. 2005;82(10):882-85.
- 225 Sharpe LT, de Luca E, Hansen T, Jägle H, Gegenfurtner KR. Advantages and disadvantages of human dichromacy. *J Vision*. 2006;6:213-23.
- 226 Sloan LL, Habel A. Recognition of red and green point sources by color-- deficient observers. *J Opt Soc Amer* 1955; 45: 599--601.
- 227 Smith VC, Pokorny J, Swartley R. Continuous hue estimation of brief flashes by deuteranomalous observers. *Am J Psychol*. 1973;86(1):115-31.
- 228 Spalding JA. Colour blind artists: do the Vischeck transformations work? *Clin Exp Optom*. 2010; 93:188.
- 229 Spalding JAB. Doctors with inherited colour vision deficiency: their difficulties with clinical work. In: Cavonius CR, ed. *Colour Vision Deficiencies XIII*. Dordrecht: Kluwer Academic; 1997. p 483--489.
- 230 Squire TJ, Rodriguez--Carmona M, Evans AD, Barbur JL. Color vision tests for aviation: comparison of the anomaloscope and three lantern types. *Aviat Space Environ Med*. 76(5):421--9. 2005
- 231 Squire TJ, Rodriguez-Carmona M, Evans ADB, & Barbur JL. Color vision tests for aviation: Comparison of the anomaloscope and three lantern types. *Aviat Space Environ Med* 2005; 76(5): 421-29.
- 232 Squire TJ, Rodriguez--Carmona M, Evans ADB, Barbur JL. Color vision tests for aviation: comparison of the anomaloscope and three lantern types. *Aviat Space Environ Med* 2005; 76: 421--429.
- 233 STEEN J.A., LEWIS M.F. – Color defective vision and day and night recognition of aviation color signal light flashes. *FAA Technical Report; FAA-AM-71-32* (1971).
- 234 Steen JA, Collins We, Lewis MF. Color defective vision and day and night recognition of aviation color signal light flashes. *Aerospace Med* 1972; 43: 34--36.
- 235 Steward SM, Cole BL, What do colour vision defectives say about everyday tasks? *Optom Vis Sci*. 1989; 66:288-95.
- 236 Stockman A, Sharpe LT. Spectral sensitivities of the middle- and long- wavelength sensitive cones derived from measurements in observers of known genotype. *Vis Res*. 2000;40:1711-37.
- 237 Tekavcic-Pompe M. Color vision in the tritan axis predominantly affected at high altitude. *High Altitude Med & Biol*. 2008;9:38-42.; Schmidt I. *Color Vision*. In: *German Aviation Medicine: World War I*. Vol II, Chapter IX-D, Washington DC: Scholium International Inc; 1942:910-8.
- 238 The Convener is a medical expert appointed by the Minister for Transport for the sole purpose of reviewing eligible CAA medical certification decisions. The statutory basis of this role can be found in sections 27J-M of our Civil Aviation Act 1990.
- 239 The Transportation Safety Board of Canada (TSB) Aviation Investigation Report A08C0171 (Engine Power Loss and Forced Landing) of 08 August 2008.
- 240 Transport Canada. Part IV - Personnel Licensing and Training (Standard 424.02 - Physical and Mental Requirement, 1.39 Class 1 Colour Perception Requirement). In: *Canadian Aviation Regulations 2008-2*, Last amended (30 December 2007). Ottawa, Canada: Transport Canada; 2008.
- 241 *U.S. Navy Aeromedical Reference and Waiver Guide*, Navy Medical Operational Training Center, Naval Aerospace Medical Institute, Pensacola, FL, 14 January 2013; accessed 12 Sept 2013.
- 242 UK CAA Paper 2006/04 Minimum Colour Vision Requirements for Professional Flight Crew- Part 1: The use of colour signals and the assessment of colour vision requirements in aviation.
- 243 UK CAA Paper 2006/04 Minimum Colour Vision Requirements for Professional Flight Crew-

Part 2: Task Analysis.

- 244 UK CAA Paper 2009/04 Minimum Colour Vision Requirements for Professional Flight Crew: Recommendations for new colour vision standards.
- 245 Verriest G, Neubauer O, Marré M, Uvijls A. New investigations concerning the relationship between congenital colour vision defects and road traffic security. *Int Ophthalmol*. 1980;2:87-99.
- 246 VINGRYS A.J., COLE B.L. - Validation of the Holmes-Wright Lantern. *Ophthal Physiol Opt*; 3: pp.137-152. (1983).
- 247 Vingrys AJ, Cole BL. The ability of colour defective observers to recognise an optimised set of red, green and white signal lights. In: Drum B, editor. *Colour Vision Deficiencies XI*. The Netherlands: Kluwer Academic Publishers; 1993.
- 248 Vingrys AJ, Cole BL. Validation of the Holmes--Wright lantern. *Ophthal Physiol Opt* 1983; 3: 137--152.
- 249 Vingrys AJ. Protans and driving safety. *Clin Exp Optom*. 2002;85(6):400-1.
- 250 Vingrys AJ. The case against protan drivers holding professional drivers licenses. *Clin Exp Optom*. 2002;85:46-7.
- 251 VINGRYS, A.J. The case against protan drivers holding professional driving licenses. *Clin Exper Optom*. 85: 46-48 (2002).
- 252 Vingrys, AJ, Cole, BL. The ability of colour vision defective observers to recognise an optimized set of red, green and white signal lights. In: Drum B, editor. *Colour Vision Deficiencies XI*. Dordrecht: Kluwer; 1993. P 87--95.
- 253 Walraven J, Werner JS. The invariance of unique white: possible implications for normalizing cone action spectra. *Vision Res*. 1991;31:2185-93.
- 254 Washington JC. In the dark. *Aviat Week & Space Tech*. 26 August 2013:35.
- 255 Watson DB. *Aeromedical decision-making: An evidence-based risk management paradigm*. *Aviation, Space, and Environmental Medicine*, 76(1):58-62, 2005.
- 256 Watson DB. Lack of International Uniformity in Assessing Color Vision Deficiency in Professional Pilots (Manuscript ASEM2664R2). Accepted for publication in *Aviation, Space, and Environmental Medicine*, 07 September 2013.
- 257 Werfelman L. Color deficient?. *AEROSAFETYWORLD*. Flight Safety Foundation, December 2008:
- 258 Wilson G. *Researches on colour-blindness. With a supplement on the danger attending the present system of railway and marine coloured signals*. Edinburgh: Sutherland & Knox; London: Simpkin, Marshall and Co., 1855.
- 259 Wolff RJB. Protans and driving safety. *Clin Exp Optom*. 2002;85(6):399-400.
- 260 Yacavone DW, Erickson RT. Yellow lens effects upon visual acquisition performance. *Aviat Space Environ Med*. 1992;63(12):1122.
- 261 York: Grune & Stratton; 1979:183-241.
- 262 Zentner AB. A proposal for a diagnostic colour vision standard for civil airmen. *Aviat Space Environ Med*. 1988 59 770-75.