

APRIL 1996

Exposures in aviation ground personnel (Loewenstein Hospital, Raanana, Israel): “We compiled the diagnoses in 1000 consecutive visits of ground workers to the airport clinic for return-to-work examinations, and compared them to 7000 workers seen in general occupational clinics. The frequencies of the various categories of disease were similar in both type of clinics, except that low back pain was significantly more common in the ground personnel [251 (20.6%) vs. 1176 (15.2%), $p < 0.003$]. Over 80% of the diseases occurred in 10 diagnostic categories: cancer, fractures, hypertension, ischemic heart disease, knee pain, low back pain, neck pain, operations for various medical conditions, phonal trauma, and pregnancy. We conclude that, except for low back pain, the spectrum of disease seen in the airport clinic is not significantly different from that seen in general occupational medicine clinics.”³

Contact lenses in aviation (Armstrong Laboratory, Brooks AFB, TX): “Although soft contact lens (SCL) wear for aircrew with refractive errors was approved in June 1989, aircrew with certain ocular disorders, such as keratoconus, have been waived to fly with contact lenses (CL) since the 1960’s... The medical records of the 142 aircrew members followed for CL wear between 1970 and 1993 were retrospectively examined to determine the type of CL worn, crew position, and the medical reason for CL wear. The Study Group was then surveyed to ascertain whether there were any significant operational problems for aircrew wearing medically indicated CLs... HCL wearers were more likely than SCL wearers to have endured at least one FB incursion under a lens during flight ($p = 0.053$). HCL wearers were also more likely to have had a lens come off-center at least once in their careers during flight ($p = 0.035$). Both groups reported problems with CL dryness in the 5-15% relative humidity of the cockpit. Only four aircrew reported any CL-related Duties Not Involving Flying (DNIF) days during their careers.”¹

APRIL 1971

Recommendations for world airports (The International Quarantine, Airport Medical Service and Flight Sanitation Subcommittee): “Thirty-four of the world’s major civil airports were assessed by the subcommittee for the years 1968-1973 with respect to the following areas: (1) airport population, (2) airport medical facilities, (3) airport medical experiences, (4) aircraft accident victims treated in the past decade, (5) comments on certain problems in providing acute and preventive medical services at airports, (6) specific airport design features which have a bearing on medical factors, (7) selected specific human factors considerations, (8) future plans and requirements concerning jumbo jets, SST’s, air buses, air taxi aircraft, V/STOL and other types and (9) comments on criteria for an ‘Airport Medical Design Guide’...”

“Following a detailed survey of 34 of the world’s major civil airports, the International Quarantine, Airport Medical Service and Flight Sanitation Subcommittee of the Aerospace Medical Association, provides data supporting the following conclusions... Each airport should have a designated Chief Medical Officer... When the airport employees exceed 3,000, or when the

passengers per year exceed 2,000,000, an on-site airport medical service is desirable... Of the 34 airports surveyed, 32 are forecast to meet the minimum standard for establishment of an airport medical service... An ‘Airport Medical Design Guide’ which provides information on aeromedical and human factors aspects of airport operation should be assembled and promulgated.”⁴

APRIL 1946

Civil Aeronautics gets it right (Editorial comment): “We are very glad to hear that the Civil Aeronautics Administration is about to take a step in the right direction in increasing the physical standards for air-line and commercial pilots, and in endeavoring to attract physicians who are competent to make these examinations and retain the interest of present competent examiners.

“We understand that hereafter a refraction will be required on all initial examinations of these two classes and that only competent ophthalmologists will be permitted to make these refractions...”

“In order to compensate the physician more adequately for the time and effort required in the new examination, the fees for the examinations will be raised.

“It is understood that the fees for original and semi-annual physical examinations of class I pilots (including refraction) will be \$15.00. Original physical examinations of class II pilots (including refraction) will be \$15.00 and subsequent physical examinations of class II pilots (without refraction) will be \$10.00.

“This should not only keep the physical standards of these classes at a high level but also keep competent physicians interested in the work...”

“It is the first forward step the Civil Aeronautics Administration has taken in many a day in the interest of safety from the medical standpoint, and we hope it is forerunner of still further steps in the case of the lower grade pilots...”

“We have exorcised the Civil Aeronautics Administration so often recently, in this column that we are delighted to be able to indulge in compliments for a change.”²

REFERENCES

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This column is prepared each month by Walter Dalitsch III, M.D., M.P.H. Most of the articles mentioned here were printed over the years in the official journal of the Aerospace Medical Association. These and other articles are available for download from Mira LibrarySmart via <https://submissions.mirasmart.com/asmaarchive/Login.aspx>.

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