

JANUARY 1991

Aspects of automated ECG screening in the FAA (Wright State University School of Medicine, Dayton, OH): "The Federal Aviation Administration (FAA) has required, since August 1, 1987, that aviation medical examiners (AMEs) transmit by telephone all electrocardiograms (ECGs) necessary for airman 'Class I' medical certification. This relatively new airman certification requirement is centralized at the Civil Aeromedical Institute (CAMI) in Oklahoma City. In calendar year 1989, the FAA received 69,000 electronically transmitted electrocardiograms. CAMI uses Marquette Electronics software to interpret the ECG signals that are received from multi-channel equipment. The single-channel transmitted ECGs are hand screened at present. The FAA 'automated' screening program is unique among governmental airman medical certification programs throughout the world... We conclude that while the new FAA automated ECG screening program has satisfactorily replaced the former 'physician-intensive' manual screening process, the new system increases the AME's equipment and operation costs. These are passed on to the airman who is seeking certification."²

JANUARY 1966

The airline psychiatrist (Air France Central Medical Department, Paris): "The psychiatrist in an airline medical department has a difficult role since he must be a man of understanding and with great concern for the welfare of his patient while at the same time he is the protagonist of the airline and the flying public in the field of aviation safety. Such requirements may at times be contradictory. The psychiatrist must give a 'yes' or a 'no' answer to problems which cannot be answered so easily. The normal man, like the sick man, does not correspond to the abstract definitions of health which the legislators envisioned when setting up regulations with which aviation medical personnel must comply. In spite of these problems it is obvious the psychiatrist has an important part to play in an airline medical department. Psychiatry with its understanding of the psychic life of the person has much to offer in the field of both 'pilot-discipline' and aviation safety. It must attempt to provide the elements for helping normal man better adapt to aerospace techniques and vice versa. Increasing studies of the problems posed by the man-machine combination are indispensable as we stand on the threshold of the supersonic and astronautic era."³

JANUARY 1941

Adjuncts to the cardiovascular exam (Rush Medical College of the University of Chicago, IL): "We, as examiners of pilots, should place more emphasis on the thoroughness of our cardiovascular examinations. We are often chided about our rigid eye examination



Fig. 1. Stetho-cardiette on right, cardioscope in foreground. These are the equipment used in recording combined electrocardiograms and stethograms. The opening in the side of the cardioscope affords instantaneous visualization of the electrocardiogram.

that require pilots to be able to 'see around corners.' It is much more important that the pilot should live to see the next landing field. We must recognize the fact that we are training men who must be able to stand the heavy pressure of flight duty. We cannot expect such endurance in the presence of cardiovascular disease...

"No simpler aid to the routine physical examination, provided so economically, gives so much valuable diagnostic assistance as the combined use of electrocardiography, stethography and cardioscopy [Fig. 1]; the cardioscope for speedy diagnosis, the stethogram for accuracy of heart sound interpretation, and the electrocardiogram for the determination of myocardial integrity."¹

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