Startling data show aircrew do not seek medical attention (U.S. Coast Guard and Wright State University School of Medicine, Dayton, OH): "A voluntary questionnaire was used to determine the epidemiology of upper respiratory infections (URI), and whether aeromedical attention was sought. Questionnaires completed by 256 of 276 eligible flight crewmembers revealed that over half, 61.7% (158), reported having \geq 1 URI during a 6-month period, for a total of 272 URIs. No statistically significant associations, p > 0.05, were noted between the occurrence of URI and sex, age, pilot vs. enlisted, or smoking status. Subjects with children living at home with them were more likely to report having URIs than those with no children, p < 0.10. Aeromedical attention was not sought in 55.5% (151/272) of the URI episodes. An Aeromedical Concern (AMC) was determined to occur in 69.5% (105/151) of these representing 38.6% (105/272) of all URIs. The most common reason for AMC was taking self-prescribed medications. AMCs were more frequent among enlisted personnel than officers (pilots), p < 0.05... In summary, URIs are common in aircrews, as is the failure to seek aeromedical attention."3

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Aeromedical recommendations regarding drinking and flying in General Aviation (Aerospace Medical Association): "The ultimate solution to this problem of drinking and flying, as well as other problems in general aviation safety, is through education of the pilot. Although there is doubt that much can be done to educate or influence the older pilots, the younger or newer pilots who are now coming into the ranks would be amenable to suggestions, and could be made aware that alcohol and flying are not compatible.

"An aggressive educational program for general aviation airmen represents one of the major means by which a substantial reduction in the incidence of light aircraft accidents may be accomplished.

"Since each new pilot applicant takes a written FAA examination consisting of some 50 questions, at least one of these questions should be about the effects of alcohol on flying (and perhaps another question or two on aviation physiology, e.g., hypoxia). This would stimulate the pilot applicant to educate himself regarding aeromedical factors in flight...

"In addition to the methods of control now under consideration by the Agency, this Association submits the following additional suggestions for consideration in formulating regulatory controls.

"The regulations should be clarified so that there is no doubt that the use of alcohol by crewmembers 12 hours before or during flight is prohibited; that a blood or equivalent level of 0.02 to 0.04 milligrams is evidence of intoxication; and that a pilot guilty of such an infraction is automatically liable to an unappealable revocation of his license for a period of six months. When a pilot is known and proven to be under the influence of alcohol or intoxicated, the penalty should be immediate, irrevocable, and without appeal.

"Fixed base operators, flight instructors, and others who have control of flights from controlled and uncontrolled airports should have some regulatory or violation reporting power delegated to them by the FAA to curb the obvious abuses of alcohol in aviation. At present, airport operators, and FAA personnel, are powerless to prevent an obviously intoxicated pilot from taking off in his own aircraft. The pilot can later be held in violation for this, but he cannot be prevented from doing it. Airport operators generally are not anxious to take on this type of responsibility, but if all were delegated this authority, this might be a first step in controlling the problem. A further benefit might accrue from such regulatory authority, in that some low-time, inexperienced VFR pilots might be dissuaded or prevented from taking off on cross-country flights in adverse weather.

"A regulation might specifically state that evidence indicating alcohol consumption by a pilot involved in a survivable accident will automatically result in revocation or suspension of his license."¹

[Editor's note: The report "Analysis of Medical Factors in Fatal Aircraft Accidents" published in the *Texas State Journal of Medicine* in September 1965 noted that 30.3% of regional fatal general aviation mishaps in 1964 involved alcohol.]

OCTOBER 1940

Responsibility of aviation medicine practitioners to national defense (Medical Corps, U. S. Army Chief of Medical Division, Office of the Chief of the Air Corps): "[T]here is no bigger question than the medical service to an air force. The only difference between it and other services being that we have superimposed on the ordinary medical service the specialty of aviation medicine, which, after all, is a conglomeration of a great many other specialties. However, I think that we have a greater responsibility than other medical officers in the Army in that we are responsible for the selecting of all flight personnel, that is pilots, observers and also the flying personnel of the other branches of the Army.

"We are responsible that they are in such physical condition that they cannot only undergo ordinary flights, but in case of need, go to the high altitudes, take oxygen, and, in other words, work under unusual conditions.

"In ordinary walks of life we have lots of conditions of which a man can be cured, and there is no question about his health, but that same man may be unsuited to go into the air, and it is our job to rule these people out. In the selection of flying personnel, we have a great deal of responsibility, because I think we owe it to the parents to protect their sons. These boys are anxious to fly under any condition, and if permitted will fly, regardless of any physical defect. It is up to us to see that they don't fly, if they are going to be dangerous to themselves or dangerous to other people in their work. We also have the responsibility to the War Department, not only in the saving of lives, but in the saving of material, because

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AEROSPACE MEDICINE HISTORY, continued

when you crack up one of these planes, you have cracked up something costing up to half a million dollars which cannot be replaced rapidly...

"The trouble we have is not in our standards for physical examination. The trouble is in standardizing our examiners. There is a tendency of all specialists to concentrate on their specialty and forget the individual. I can't tell you how many cases – on a basis of around five or six thousand flight examinations we receive every month – how many reports we get of large tonsils needing enucleation, and when the individual is examined by another examiner the tonsils are not even mentioned. The first examiner is a throat specialist, and the second doesn't care about the throat. Well, of course, this follows in any category of medicine. You take the heart man. He listens to the man's heart and says: 'Go to bed' and 'You can't get up.' I think the tendency is not to see the

individual as a whole; and this is the principal trouble we have with our examiners. I think that you will all agree that it isn't a question of standardizing our physical requirements; it is a question of standardizing our examiners.²

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