This paper compares the medical wastage of trained professional aviators in military and civil flying in the United Kingdom for the years 1963–68. The term ‘medical wastage’ refers to those flight deck personnel who are prevented from revalidating their flying licence by reason of ill-health or death. The Board of Trade which issues flying licences to all civilian aircrew gave the civil medical wastage. The Statistics Branch of the Royal Air Force gave details of medical wastage and strength for military aircrew.

Medical wastage rates were calculated in the four age groups, under 30 years, 30 to 39, 40 to 49 and over 50 years of age. For each of these epochs the number of aircrew, who were ‘grounded’ was divided by the number of aviators at risk in that age group. This gives the results expressed as rates per thousand aircrew. The total wastage for the six years 1963 to 1968 was divided by six to give the wastage rate per thousand aircrew per annum.

The total medical wastage rates in military aviators and in one section of civilian flying in United Kingdom have been found to be roughly equal, at approximately one per cent per annum. Three quarters of this one per cent were due to cardiovascular disease, flying accidents and psychiatric illness. The relative proportions of the three conditions differed considerably between military and civilian aircrews, although in both cases the sum was the same (i.e., ¾ of 1% per annum). The object of this paper is to examine at greater length the different incidences of medical disabilities in military and civil commercial flying in the United Kingdom.

Figure 1 gives the age profiles for the military and civil aircrews. Almost exactly a third of military and civil aircrew are less than 30 years of age. There are fewer civilian aircrew aged 30 to 39 and more in the age group over 50 years. This is because a military aviator is rarely given a flying assignment over 47 years of age and relatively few fly regularly over the age of 43, whereas his civilian counterpart will in general fly to 55 years of age.

The following figures compare the causes of medical wastage in civil and military aircrew at comparable ages. As shown in Figure 2, cardiovascular disease is the main cause of wastage in civil flying. The annual rate of loss of licence due to cardiovascular disease is slightly higher in civil than military aircrew in the lower age groups, but above the age of 40 the preponderance of this complaint in civilian aircrew increases. Over the age of 40, civilian aircrew in general fly many more hours each year than do
Fig. 1. Age profiles for military and civil aircrews.

Fig. 2. Loss of licence due to cardiovascular disease; incidence per 1000 aircrew in each age group.