



DEBRIEFING

Flight Safety is Everybody's Business

Statistical Analysis

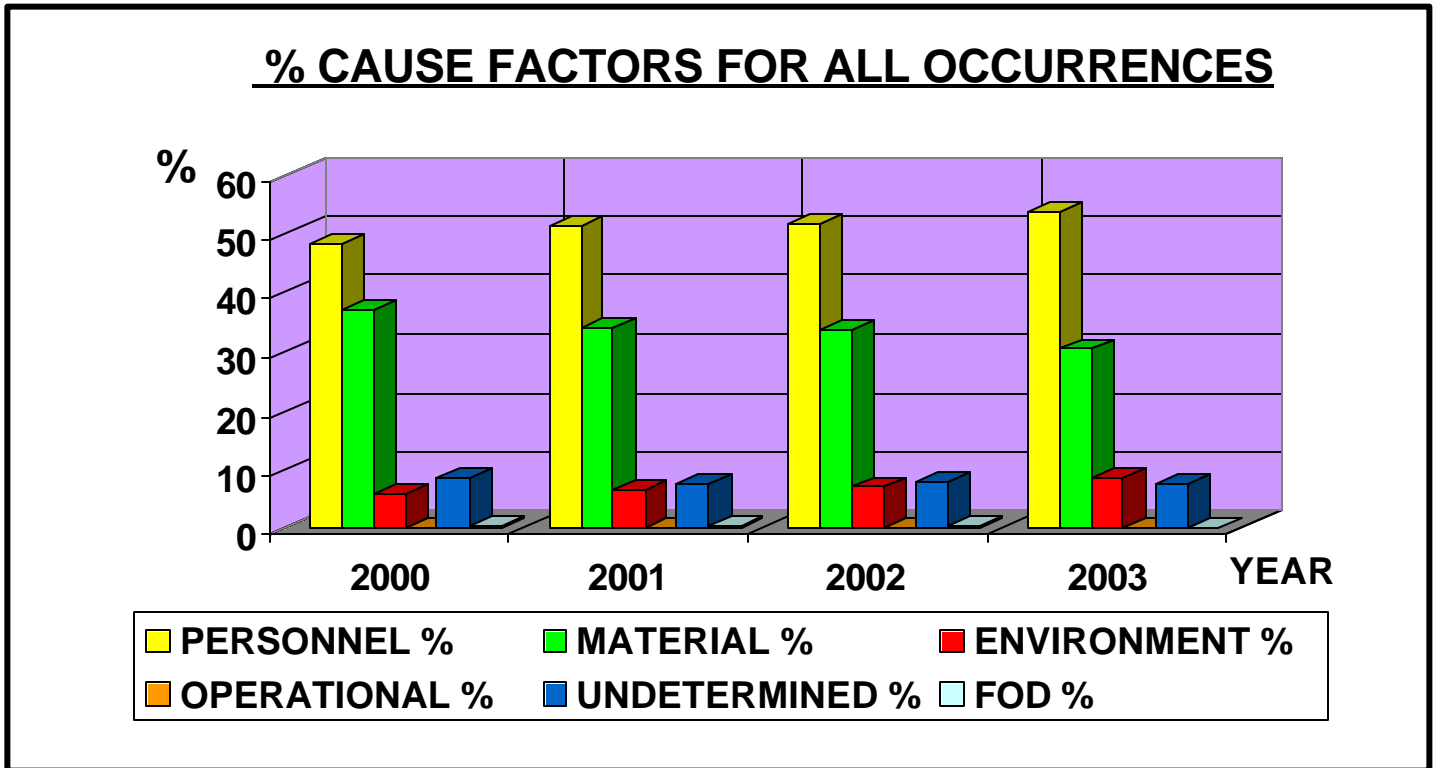


Figure 1

Those familiar with statistics know there are multiple ways to interpret statistical data. In this issue of *Debriefing*, we will stay away from reaching definite conclusions or doing detailed analysis of the stats presented. Our intent is to have these figures generate some reflection on your part on how you could enhance flight safety. The graphs presented will give you a snapshot by year, since 2000, of the breakdown of all occurrences cause factors found in the Flight Safety Information System (FSIS) and detail the rate of aircraft accidents and occurrences.

Figure 1 above provides the breakdown of all air and ground occurrences as found in FSIS by DFS 3-2-2, Ms Gail Bull. The graph shows a slow but steady increase in PERSONNEL cause factors from 48% in 2000 to 54% in 2003 with a steady decrease of MATERIAL cause factors from 37% to 30%. The ENVIRONMENT cause factors, consisting primarily of bird strikes has almost double from 6% to 10%. The good news is that the UNDETERMINED occurrences were down to 7% from 9% at the beginning of the millennium.

RATE COMPARISON AIR/GROUND ACCIDENTS (PER 10000 HRS) VS OCCURRENCES (PER 10 HRS) (UAV EXCLUDED)

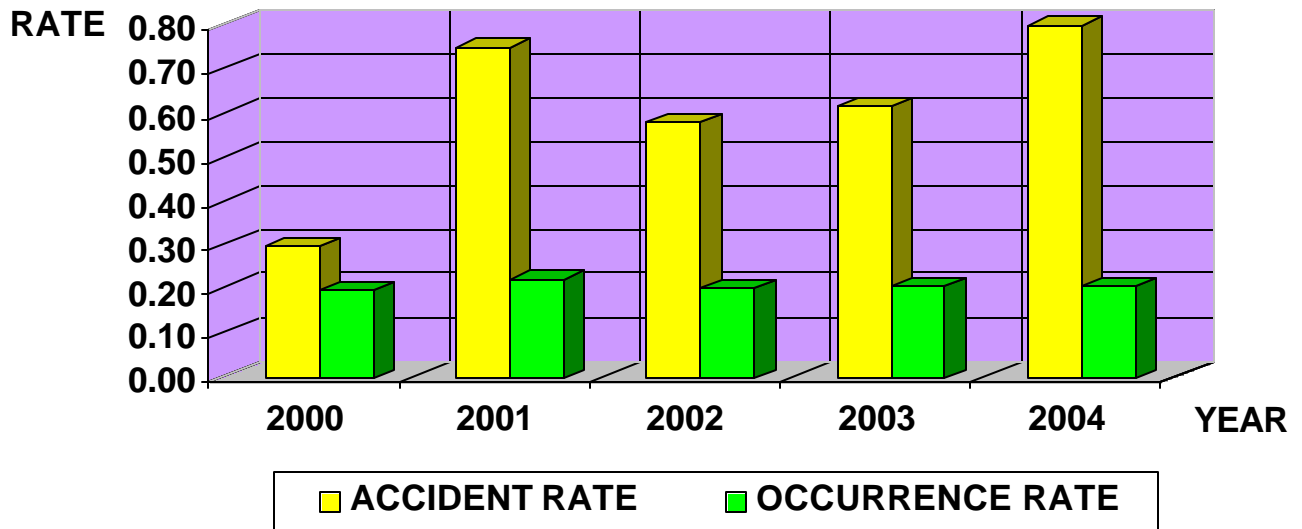


Figure 2

Our flight safety (FS) prevention program is based on thorough reporting of all occurrences, proper identification of cause factors and corrective measures, and correction of the identified deficiencies with the implementation of preventive measures. Figure 2 provides the yearly accident rate (per 10,000 hours) and the occurrence rate (per 10 hours so the graph can show the relative value of both rates) of all air and ground accidents with the exclusion of unmanned aerial vehicles (UAVs). You will note the accident rate climbed steeply from 0.29 in 2000 to 0.61 in 2003. It is currently averaging 0.80 for 2004. If the principles described above are followed and are effective, our rate of accident by fleet should at least be comparable to our closest Allies. In recent years, it has not been the case. If this current accident rate is maintained, 2004 will be our worst year since 1977.

In terms of reporting, we have been consistent over the last five years averaging close to 2775 occurrences reported for each 134,580 hrs flown per year (In 2000 we flew close to 139,000 hrs and

in 2003 we flew some 130, 500 hrs). Therefore,

Canadian Forces personnel reported an air or ground occurrence every 50 hours as shown by the rate of 0.2 per 10 hrs as shown in the graph. The question we can ask ourselves is: "Are we reporting all the occurrences?" Obviously, if all occurrences are not reported, the first step in our FS process as described above is missed, the other steps cannot be taken and the proper actions cannot be implemented to reverse a negative trend. Some will argue that it is useless to report all occurrences given not all of them will lead to valuable implementation of preventive measures. In the short term, this may be true but in the long term the reporting of these occurrences could point to a definite trend, which upon thorough review could lead to effective preventive measures. So it is critically important to report.

Each and every one of us must ask ourselves what can be done to prevent the next accident. The little steps taken at every level can definitely break the chain of events that lead to an accident.