

The number of accidents per 1,000 hours flown decreased steadily from 1.363 in 1940-41 to 0.523 in 1944-45, while the number of hours flown per accident rose from 733 to 1,908, an increase of over 150 p.c. The fatal accident rate per 1,000 hours flown declined from 0.089 to 0.044 during the same period, while hours flown per fatal accident were doubled, from 11,156 to 22,388.

Statistics reveal several interesting points. Landing and taxiing accidents constituted, in each year except 1940, more than one-half the total number of accidents. Accidents in flight varied from 56.9 p.c. (1940) to 24.2 p.c. (1943). Trained pilots were involved in more than one-half of the flying accidents.

O.T.U. showed the highest ratio of accidents per 1,000 hours flown, with S.F.T.S. second, and E.F.T.S. the lowest. This was true of fatal as well as of all types of accident.

Concluding Note.—One unpremeditated result of the Plan was the promotion of better understanding between the peoples of Canada and the other Commonwealth partners and United Nations whose personnel trained in Canada. Indicative of this understanding is the fact that over 3,750 Canadian girls married men of the R.A.F., R.A.A.F., R.N.Z.A.F. or other air forces stationed in the Dominion.

During the European phase of the War of 1939-45, four members of the R.C.A.F. won the George Cross for heroism and gallantry of the highest order. Two were trainees under instruction at B.C.A.T.P. schools in Canada. LAC Karl M. Gravell, a student W.O.A.G., despite burns and injuries to which he subsequently succumbed, courageously endeavoured to rescue his pilot instructor from the blazing wreckage of their crashed aircraft. LAC Kenneth G. Spooner, a student navigator, sacrificed his own life in order that other members of the crew might leave the aircraft by parachute as it fell out of control. It was the spirit of self-sacrifice and devotion to duty, so fully exemplified by these men, that brought the British Commonwealth Air Training Plan to a success far surpassing the dreams of its original planners and enabled it to play so vital a part in the defeat of Germany and Italy.

Section 4.—The Director General of Defence Research

More than any other factor, the War of 1939-45 demonstrated the decisive importance of the technical initiative. The evolution of new weapons and counter weapons was so rapid as constantly to affect strategy. This new factor of total war demanded a full mobilization of the scientific and industrial resources of the nation and resulted in Canada making a substantial contribution to the Allied cause in research, development and production of weapons as well as in manpower and ordinary economic factors. It became apparent that research and development of new weapons should be one of the fundamental principles of future defence policy to ensure optimum economy and co-operative effort between the research activities of industry and of the Armed Services.

To provide for this principle, the Government appointed, in December, 1945, a Director General of Defence Research whose primary function is to co-ordinate the research and development activities of the Navy, Army and Air Force and to provide a link between the Armed Services and the whole scientific community in Canada. A secondary but important object is to apply for the peaceful economic and industrial benefit of Canada the many technical achievements of wartime and future developments in defence science.