# TRANSACTIONS OF SOCIETY OF ACTUARIES 1950 VOL. 2 NO. 4

# **REPORT OF THE COMMITTEE ON AVIATION**

# AVIATION STATISTICS

This report is supplementary to the comprehensive report made by the Committee on Aviation of the Actuarial Society of America in May 1940 in TASA XLI, the supplementary reports of that committee in TASA XLII, XLIII, XLV, XLVII, XLVIII, XLIX and L, and the supplementary report made by this Committee in TSA I.

### INTERCOMPANY EXPERIENCE-PILOTS

Twenty-nine companies have contributed their experience on certain classes of pilots for issues since January 1, 1946 observed in the case of some companies through December 31, 1949 and in the case of others through June 30, 1950. The addition of a year's exposure, and the experience of a few more companies, to the data tabulated in TSA I, 628-629, has increased the exposure substantially, and doubled it in some classes. None of the death rates, however, has been significantly changed.

The experience on pilots employed by scheduled airlines was added this year; for those insured with extra premium there were 5,250 years of exposure with 13 deaths, a rate of 2.5 per 1,000.

## SCHEDULED FLYING

The safety record of United States scheduled airlines was slightly more favorable in 1949 than in years just preceding. The death rate of crew members other than pilots in 1946–1949 was 3.1 per 1,000, not significantly different from that of 2.8 for pilots and co-pilots.

## NON-SCHEDULED FLYING

The fatality rates of first pilots per 1,000 airplane hours by kind of non-scheduled flying, derived as described in TASA L, 98, were not significantly different in 1948 from those of 1947, except that the rate for commercial and miscellaneous flying rose from .07 to .11.

The most recent index to the safety of United States non-scheduled airlines is the passenger death rate of 18.2 per 100,000,000 passenger miles in 1949 furnished by the Civil Aeronautics Board, which compares with a rate of 1.0 for scheduled airlines.

### MILITARY AVIATION

### United States Navy

The following fatality rates have been supplied by the Department of the Navy. In connection with the figures for student naval aviators, it may be said that the average period of basic training is eight months and that of advanced training four months.

#### COMMITTEE ON AVIATION

### TABLE 1

#### NAVAL AVIATORS (EXCLUDING STUDENTS) 1947–1949 (Includes Marine Corps 1948–1949)

Age Group	Aviation Fatality Rate per 1,000 per Annum	
Under 25	15.0	
25–29	6.8	
30–34	3.8	
35 and over	2.2	
Student Naval Aviators 1946–1949 (Includes Marine Corps)		
Stage of Training	Aviation Fatality Rate per 1,000 per Annum	
BasicAdvanced	4.7 25.7	

### Assignment of Service Academy Graduates to Aviation

One-fourth of the 1950 graduating classes of each of the United States Military and Naval Academies were commissioned in the United States Air Force upon graduation. It was announced that approximately 85%would enter flying training. In addition, 13% of the Naval Academy graduates were assigned to flight training after being commissioned in the Navy, and 17% were put on a waiting list with future orders for flight training in the Navy.

#### ROYAL CANADIAN AIR FORCE

Fatality rates furnished by the Canadian Department of National Defence for pilots of the Royal Canadian Air Force do not show the marked variation by age observed in the United States services.

#### TABLE 2

#### ROYAL CANADIAN AIR FORCE PILOTS 1946-1949

Age Group	Aviation Fatality Rate per 1,000 per Annum
Under 25	6.2
25–29	6.9
30–39	7.0
40 and over	0
All	6.5