

THE VALUE OF GLIDING AND SOARING FOR TRAINING AIRLINE AND MILITARY PILOTS



Lodewijk Anthony de Lange was born at Leiden on January 5th, 1909.

On December 1929 he laid the foundation of the development of motorless flight in the Netherlands by forming the first Netherlands Gliding Club "The Flying Dutchman," and in 1935 became holder of the National endurance record of that country.

Before the war Mr. de Lange, at the Koolhoven Aircraft factory in Rotterdam, designed the F.K.43 used by the K.L.M. Royal Dutch Airlines as an air-taxi.

In 1945, at the request of Dr. A. Plesman, the late president of K.L.M. he organized the Netherlands Inland Air Traffic, and since June 1948 he has been director of "RIJKSLUCHTVAARTSCHOOL" in charge of training of airline transport pilots for K.L.M. Royal Dutch Airlines.

Mr. de Lange has been President of the "Organisation Scientifique et Technique Internationale du Vol a Voile" since July 1950, and, besides contributing numerous articles on aviation to various magazines, he is the author of two text books on aerodynamics and one entitled "The Training of Glider Pilots."

He holds both civil and military pilot licenses.

By L. A. DE LANGE

(Director of Training, K.L.M. Royal Dutch Airlines. President of the O.S.T.I.V.)

The analysis of accidents and the statistics regarding the regularity or reliability of flights carried out, show indisputably that as regards the safety of both civil and military air traffic, the personal element—the pilot—is the most important factor in piloting and navigation.

The aircraft itself is to a much smaller extent than the pilot the cause of accidents, and yet much more care is devoted to the selection and testing of the materials to be used before they are built into the aircraft than to the choice and the testing of the candidate pilots.

During the generally relatively short time spent in grading pilots it is still argued: "We believe that the candidate is suitable; should it appear that we were wrong, well, it will be noticed during the training and the candidate can always be discharged from training."

I wonder if—following this train of thought—we sufficiently realize what fatal consequences can ensue from not knowing for *sure* whether the boy is suited for the job.

A pupil who is rejected after having been under training for some considerable time, may suffer a shock which he can only get over with difficulty. I have often seen that such a boy gets an inferiority complex which—greatly to his own disadvantage and that of society—cannot be overcome at all, or only after the lapse of a very long time. And does not the unsuitability of the candidate often only come to light by the analysis of the accident he has met with?

Great expense and great risks—lost flying hours, loss of material and

human lives—are the consequences of an imperfect system of grading. No materials are used in constructing aircraft if people do not know for *sure* that they really are suitable.

The fact that the testing of materials is easier because it can be carried out objectively by measuring tests, may of course not constitute a reason to have the grading of future pilots take place according to other standards.

We should also know whether the pupil who has been admitted for training is, with a probability bordering on certainty, suited to be a pilot.

Of the three elements which determine the fitness of a man to be a pilot, namely *physical fitness*, *fitness of character* and *aptitude for flying* the first and the last are easiest to determine. Because in accordance with medical requirements laid down by the International Civil Aviation Organization and the military authorities, the candidate can be tested as to his physical condition by routine measuring tests, and in the course of a few hours of dual control instruction an experienced instructor can also fairly easily see whether the candidate has a feeling for flying.

In the first thirty years of aviation, people were in general satisfied with the reply to the question: "Is the candidate medically fit for flying and has he a good aptitude for flying?"

The rapid development of the modern aircraft with its high speeds and extensive set of instruments as well as the great progress which has been made in the improvement of ground

(Continued on Next Page)