17 H.—37.

Another important test-house work is the testing of welded specimens submitted by engineers who are desirous of being registered as approved aircraft-welders.

The summarized activities of the test-house for the year ending 31st March, 1939, are as follows:—

Aircraft instruments t			 	 	 208
 Magnaflux examination 	n of steel	parts	 	 	 496
Material tests			 	 	 38
Welded specimens			 	 	 40
New drawings prepare			 	 	 25
Tracings prepared			 	 	 40
Sets of drawings check			 	 	 14
Prints issued to operat	ors		 	 	 389

ACCIDENTS TO CIVIL AIRCRAFT.

During the period 1st April, 1938, to 31st March, 1939, five accidents occurred which caused fatal or serious injury to persons carried in civil aircraft. A further thirty-six accidents or forced landings occurred which also required notification under the Air Navigation Regulations 1933, making a total of forty-one for the period under review. Of this total, thirty-four were flying accidents.

The following is an analysis of the accidents under the various headings:

Prince should be		Fatal.	Serious but not Fatal.	Minor.
		'		
1) Regular air services	 	1.		4
2) Other flying for hire	 			2
3) Subsidized club flying	 		3	11
1) Other club flying	 	2	4.	4
o) Private	 			2
5) Exhibition flying	 		1	

Causes of Accidents,

Errors of judgment or faulty airmanship on the part of the pilot caused fifteen accidents, two of which resulted in fatal consequences to the occupants.

Engine failure accounted for one accident in which the pilot and co-pilot lost their lives. Engine failure also accounted for thirteen accidents, three of which were directly attributed to insufficient fuel for the journey.

Bad visibility was the cause of four forced landings away from an aerodrome.

A further six aircraft were damaged while in the hangar, and two more were slightly damaged while on the ground.

The circumstances in which the major or more serious accidents occurred were as follows:-

Regular Air Services.—Failure of one engine of a twin-engined aircraft during take-off caused it to crash amongst trees beyond the airport boundary and catch fire. The pilot and co-pilot were killed. The aircraft was destroyed. No passengers were carried.

Subsidized Club Flying.—(1) A stall while practising landings caused a crash which resulted in injuries to the occupants and major damage to the aircraft.

(2) A pilot engaged in night-flying tests collided with two haystacks. No injuries were sustained by the occupant, but the aircraft was severely damaged.

(3) An aeroplane engaged on relief work in a flooded area crashed while dropping food-supplies. Both occupants were injured and the aircraft wrecked.

Other Flying.—(1) Faulty airmanship on the part of the pilot caused an aircraft to stall at low altitude and spin. The resulting crash caused the death of the passenger and severe injuries to the pilot. The aeroplane was completely wrecked.

- (2) An inexperienced pilot entered a power dive whilst flying in cloud and caused structural failure of the main planes by endeavouring to effect recovery too abruptly. Both pilot and passenger were killed. The aircraft was completely wrecked.
- (3) A pilot engaged in exhibition flying too close to the ground during gusty weather caused the undercarriage to strike the ground. The aircraft was severely damaged, but the sole occupant escaped unhurt.
 - (4) Fire destroyed three aircraft which were stored in a hangar.

Private. -Fire destroyed two aircraft which were stored in a warehouse.

SECTION VII.—OPERATIONAL STATISTICS.

The tables presented in the following pages have been set out in a form which will provide an easy means of comparison between the different years.

In the case of the scheduled services a general summary of operations has been given, together with similar tables for each of the companies concerned. For comparative purposes tables are also given illustrating the activities of scheduled services to the 31st March, 1939. Non-scheduled services and the aero clubs are dealt with by means of annual summaries.

I have, &c.,
T. M. WILKES, Group Captain,
Controller of Civil Aviation.