

Army; a quality which unfortunately gave him the power to undermine his health by overwork in the cause of aviation.

He was a delightful companion and a gifted raconteur. His subtle wit and imperturbable charm of manner captivated all those who came into contact with him, and his friends and admirers were legion. His scientific and engineering knowledge was remarkable for a soldier, and the Committee of Aeronautical Research owe much to his advice in the early days. He had great artistic talent and was a devoted lover of music.

Although he was a great soldier, he might well have been an even greater diplomat if Fate had led his steps into that walk of life; he was cautious in council and slow in deliberation, always manœuvring round a difficulty if it were humanly possible; but once it was clear that further consideration was useless, his action was swift, decisive and far-reaching.

Let us mourn seriously and sincerely for David Henderson; the rising generation does not promise to produce more men of his stamp and quality for the service of aviation. He has left us, but his works will live and grow and multiply; and the Air Force of the future should look back to him as their real Creator and their first Chief.

He had been an Associate Fellow of the Society since 1912, and was elected Honorary Fellow on December 14th, 1917.

SQUADRON LEADER G. H. NORMAN.

The progress of experimental aeronautics has suffered a serious loss by the death of Squadron Leader G. H. Norman, the head of the Engine Research Department of the Royal Aircraft Establishment, who died on 18th August, at the Cambridge Hospital, Aldershot. Squadron Leader Norman had been intended for the Royal Navy and educated at the Royal Naval Academy, Gosport, but afterwards studied at the Royal School of Mines and obtained an associateship. He was also an associate member of the Institution of Civil Engineers and the Institution of Mechanical Engineers and a B.Sc. (Eng.), London. In the early days of the war he served in the Artillery, but was transferred to the R.F.C., where he soon qualified as pilot, and spent thirteen months on the Western Front as Flying Officer and Flight Commander. It was whilst fighting in France that he conceived, made and used what became the standard aerial gun-sight for both the British and American forces.

This sight, which bears his name, was adopted without serious rival during the rest of war, its principal merit being provision of the absolute necessary allowances for the speed of contending aircraft, with the minimum of complications, being thus in marked contrast to other types of sight under trial at the time, most of these being far too complicated for general use in air fighting. After being wounded in action and twice mentioned in despatches, Squadron Leader G. H. Norman was posted to the Armament Station at Orfordness by the late Major Hopkinson, who, impressed by his great constructive ability and enthusiasm for work, placed him in charge of flying at the Experimental Station. From that time to the day of his last short illness his vigorous prosecution of every kind of experimental work was unceasing.

Though officially concerned only with flying at Orfordness, his advice was asked and generally taken in questions connected with almost every branch of the work of the station, and the influence of his clear thinking and great designing ability remains in many schemes and productions with which his name has been in no way connected, for his interest always lay in the work itself. He was by no means a typical inventor in the sense in which the word is popularly understood, that is to say, a man who works by brain waves without labour, his produc-

tions were always the result of careful thought and still more careful experiment. In 1918, when Major Hopkinson took over the Royal Aircraft Establishment, he placed Squadron Leader G. H. Norman in control of the Engine Research Department. As at Orfordness his interests were many and varied and were not confined entirely to engines, but it is probable he will be best remembered by his efforts to reduce the risk of fire in the air or on crash, which he maintained could be almost certainly avoided, given sufficient care in the arrangement of the aeroplane.

Perhaps Squadron Leader Norman's most striking characteristic, and one which effectively endeared him to all who worked with him and under him, was a complete disregard of personal danger, coupled with extreme care for the safety of all under his command. Some very urgent reason was required if he were not to be the first to carry out in person any dangerous experiment which he desired to make. He left behind him a supreme example of this in a flying experiment which he made a few weeks before his death.

An aeroplane had been fitted with an arrangement for spraying fire extinguishing liquid into the engine to extinguish fire in the air. So strongly did he feel the need of personal demonstration that he twice produced fire artificially round his engine in full flight and twice extinguished it.

Perhaps it is to those who fly that an act such as this will make the most intense appeal, but its significance will not end there, it will be remembered as long as the awful possibility of fire in the air remains.

Squadron Leader Norman was a valued member of the Society's Safety and Economy Committee, 1920, and was nominated to serve on the Candidates' Committee this year.

