

NEVER TURN BACK

by Alan Fraser

When I was learning to fly, at the end of the biplane era, the message most frequently and emphatically imparted to a pupil pilot by his instructor was that if the engine failed at low level on take-off, he was to land straight ahead. Under no circumstances was he to turn and land back on the aerodrome. The reason for this was that turning down-wind at low level without power would almost inevitably lead to a stall from loss of flying speed in the turn, followed by a spin with insufficient time or height to recover, and a serious crash. Such a crash was officially assessed as likely to be more severe than that which might result from landing straight ahead and perhaps running into a fence or a tree or a building or whatever.

The above was fundamental doctrine then and I believe it still is nearly fifty years later and was twenty-five years earlier. It was with some surprise, therefore, that I read in an Australian War Memorial file [1] the following crash report and comment.

The report was rendered by trainee Second Lieutenant S.H. Deamer to Major R.S. Brown, Officer Commanding No. 5 (Training) Squadron, Australian Flying Corps, Minchinhampton, Gloucestershire, England, and dated 3 June 1918. It read as follows:-

I have to report that at 12 noon on Sunday June 2nd I crashed a Sopwith Camel No.C101 on the Aerodrome. I had taken the machine off and climbed to about 50 feet when the engine cut out. I tried to recover the engine but failed and then endeavoured to land straight ahead behind the hangars. The space available as very small and I landed on the wheels with the result that the machine turned over on her nose.

The propeller, the leading edge of the lower right main plane, and the undercarriage were damaged.

This drew the following comment from Major Brown under the heading 'Squadron Commander's remarks':-

This officer showed lack of presence of mind, and should not have crashed the machine.

His engine stopped about 80 ft. over the centre of the Aerodrome, and he could have turned and landed easily on the Aerodrome itself.

I have recommended him for two-seaters.

There are no other details on the file - no other reports, no sketch of the aerodrome showing the take-off path, the hangars, the wind direction, the crash site, etc., and for that reason the discussion in this paper must be speculative. The point inviting consideration is, of course, why the OC should appear to go against doctrine and penalize the trainee for doing just what he would have been instructed to do in the emergency situation he was faced with.

Before considering the options open to Deamer in the emergency, it will be useful to outline his experience.

Sydney Harold Deamer was born in England in 1892 and joined the AIF in Australia shortly after the outbreak of war. He served in Gallipoli and France and was a sergeant at AIF Administrative Headquarters when he transferred to the Australian Flying Corps in October 1917. After completing the course at No. 1 School of Military Aeronautics, Reading, Cadet Deamer arrived at No. 5 (Training) Squadron, AFC, then at Shawbury (and from 2 April at Minchinhampton), on 23 January 1918 to undergo flying training. He received his initial training on Monosoupape Avros and intermediate training on Sopwith Pups before proceeding to advanced training on Sopwith Camels.

During the quite early stage, Deamer wrecked Mono Avro D.143 on 8 April when he struck a tree while practicing engine control procedures but was unhurt. At the time, he had 12.20 hours dual and 2.55 solo, all on Avros. the records show no adverse reaction to this accident from his flight commander, Captain A.T. Cole, MC, or the Wing Examining Officer, Captain G.C. Matthews, who reported jointly on the matter.

The Staff Officer for Aviation at AIF Headquarters in London appears to have kept an eye on progress at the AFC training squadrons. Early in May 1918 he asked 5 (T) Squadron, through Wing, why six cadets, including Deamer, had been with the squadron without graduating, and requested a report be submitted on each one. On 3 May, Cole, OC B Flight, responded as follows in respect to Deamer :-

Cadet Deamer joined this Flight on 24.1.18, 2 days before I left to do the Gosport course. Later he became sick and was not available for flying for a week - during the last week the extremely rough weather has prevented his flying a Sopwith Pup and therefore held up his graduation.

He has had 17 hours dual and 17 hours solo on all types being very slow to learn to fly.

He finally graduated yesterday and goes on graduation leave today.

The reply to the SO (A) through Wing was that Deamer had graduated on 2 May. No explanation was offered for the delay in Deamer's case but there was a general observation that "the shortage of Instructors necessitates pupils staying many weeks in the Pool in some instances before they commence dual instruction, and that for a considerable time there were not enough Avros to meet requirements". It was mentioned that Cadet S.P. Keay had been in the Pool for nine weeks awaiting a vacancy in a Flight, due to "no Instructors"

No information is available about Deamer's experience at the time he crashed Camel C.101 a month later; for instance, whether he had already flown a Camel and whether he had practical experience in operation of the Camel's Clerget rotary engine. Experience in managing Monosoupape or Gnome engines, as fitted to Avros at the time, was officially not considered sufficient to pass a pupil onto Le Rhones or Clergets but Deamer had flown the Le Rhone Pup and no doubt would have received instruction on the peculiarities of the Clerget, running one in a machine or perhaps controlling a bench-mounted engine.

At first, pupil pilots found rotaries not easy to manage and careful preliminary instruction in their operation was required. During the previous year, the incidence of crashes due to engine mismanagement was such that on 15 August 1917 the then General Officer Commanding the Training Brigade, RFC (Major General J.M. Salmond) distributed the following note on his return from a visit to the Expeditionary Force in France :-

I received many complaints that Pilots of machines with Clerget engines were crashing them, for the reason that they could not work the fine adjustment correctly. Colonel Scott, who has very large experience with this particular type of engine, told me that this was due to the following cause. As the pilot taxis out with his machine he does not keep the hand pump going, consequently the pressure has dropped by the time he is ready to start off. As soon as he is in the air, the engine begins to spit. The pupil then opens the throttle and turns the fine adjustment. This floods the engine, the wind pump begins to work, and the engine chokes, and the machine crashes. In order to prevent this in future, Squadron Commanders must be impressed that they must insist on pupils paying attention to their pressure on taxi-ing out. Where possible, a Clerget engine must be fixed to a bench and pupils instructed in the running of it. It is not to be run for more than 10 minutes at a time. (3)

Later, on 22 December 1917, HQ Training Division, RFC, issued a definite order that spare engines of the types required should be fitted to benches with suitable cooling apparatus, so that the pupil may be instructed in running the engine full out for a longer period than was possible when the engine is in the machine. The pupil was to be provided with a seat on the bench resembling a pilot's cockpit, with engine controls covered so that the pupil had to manipulate them by touch rather than by sight. Arrangements were also made to enable the instructor to alter the petrol supply by

means of independent controls, with the pupil having to rectify the consequent choking or starving by ear and touch.[4] It is not known if this facility was available at Minchinhampton during Deamer's time there as a trainee.

Deamer was converting to the Camel, the type of aeroplane he had been selected to fly on active service, and it is likely that by then his flying experience would have exceeded 30 hours solo, all on rotary-engined Avros and Pups. Earlier he had presumably been assessed from his flying ability and temperament as suitable for training on the Camel, a fighting scout widely acknowledged to be difficult to master. This selection seems at odds with Cole's comment at the time that he was very slow to learn to fly.

Returning to Deamer's crash, it is strange, if he was over the centre of the aerodrome, as Brown stated, that he should be required to turn back. Presumably he was taking off into wind and should therefore be better off landing straight ahead onto the remaining half of the aerodrome than attempting a landing downwind onto the other half after a risky turn. Turning does not make sense unless the hangars were in the way, but even then it would be contrary to the doctrine.

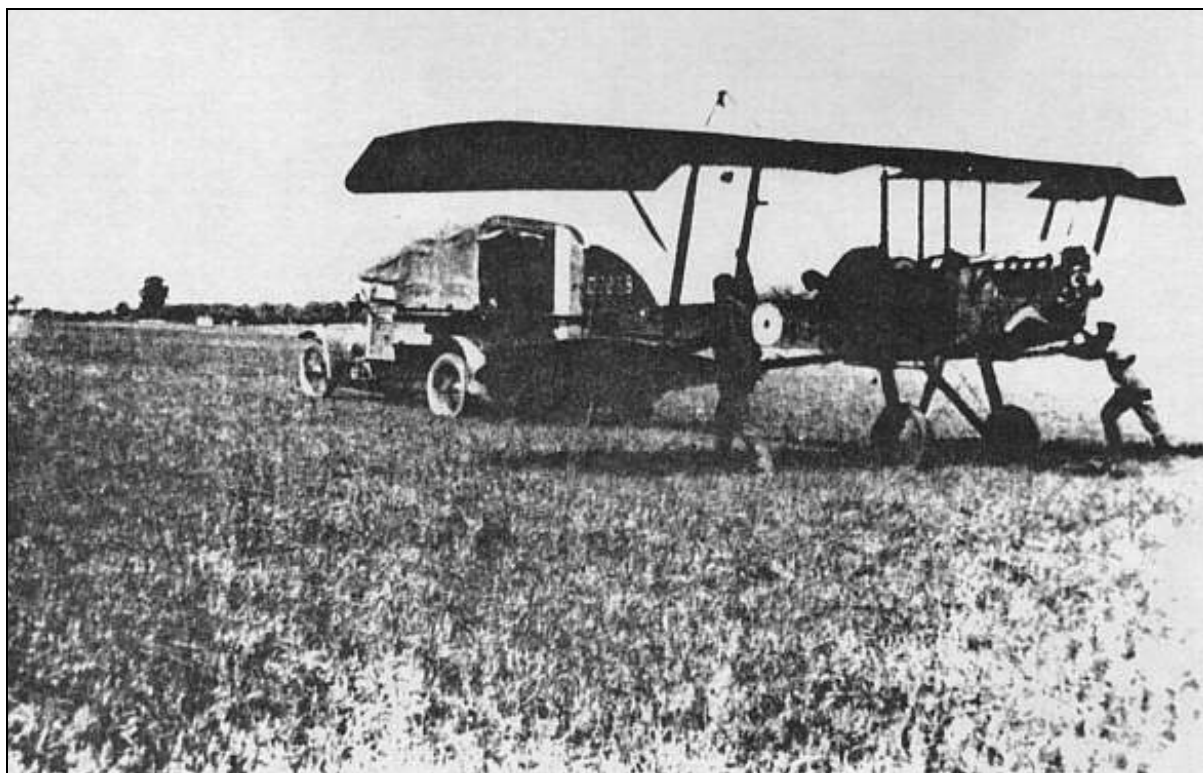
Power failure on take-off at the low altitude of 50 feet (or 80 feet in Major Brown's assessment) could be difficult to correct. Deamer's immediate reaction would be to put the nose of the machine down to assume a safe gliding angle and prevent a stall, but what action he took after that would depend upon his knowledge and experience in engine control and, perhaps, his 'presence of mind'.

Deamer's report states that he tried to recover the engine, but not how he went about it. As the engine did not spit or splutter before stopping, pumping up pressure or manipulation of the fine adjustment, to remedy, starving or choking, would have helped. Switching over to the gravity-fed petrol tank could be tried but some seconds would elapse before the engine could restart. The sink rate of a lightly laden training Camel is not known to me but other reports by experienced pilots of engine trouble at low level in Camels indicate that from 80 feet it is unlikely that this action could succeed before a landing would have to be made.

However, both Deamer's and Brown's reports indicate that the engine cut right out, pointing to ignition failure rather than petrol trouble and if that were so, no amount of fiddling with petrol supply would be effective. It is possible that this was the foundation of Major Brown's attitude; that is, Deamer, over the centre of the aerodrome, should have recognized the trouble as irremediable, put his Camel into a glide, switched off as a precaution and concentrated his attention wholly to placing his machine into a landing path clear enough and long enough to ensure a safe arrival, even if to do so meant making some sort of turn, but not 180 degrees down-wind, to avoid obstructions. Perhaps that is the answer to the matter, but the available papers provide no further information to guide the guessing. It is of interest to note that Camel C.101, repaired and back in service, was again crashed on take-off on 2 August



This RE8, No. E125, photographed at Leighterton in 1918, later collapsed in the air and was destroyed by fire in the ensuing crash. The pilot and mechanic were killed. Note the boomerang markings on nose and side of fuselage. (David Packer via Alan Fraser)



BE2e C7039 of No.7 (Training) Squadron, AFC, Leighterton, being towed off the aerodrome after an accident. Date and pilot are not known. Note the boomerang marking on the nose. (David Packer via Alan Fraser)



Serious accidents were not uncommon at training units. This crash of an RE8 at No.7 (Training) Squadron, AFC, Leighterton, on 24 August 1918, took the life of Cadet R.N. Pillow. Note the boomerang marking on the fuselage. (David Packer via Alan Fraser)



RE8 C2627 of No.7 (Training) Squadron, AFC, Leighterton is understood to have been crashed by Cadet R.N. Pillow, who was unhurt. The date is not known. Note the boomerang marking on the fuselage. (David Packer via Alan Fraser)

by pupil Second Lieutenant A.J.W. Crawford. Taking off over the sheds, his engine cut out at 20 feet "through choking" and in landing he collided with a Sopwith Pup. Brown was displeased about that, too, remarking that the crash was the result of carelessness. "There was no need to take off over the sheds", he wrote, "as there was practically no wind at the time." There was no mention of any follow-up action, as there was with Deamer. [5]

It would seem that, in Brown's opinion Deamer was slow and incorrect in his response to the situation and having regard to that and his slow progress in flying, decided that he was unsuited to flying scouts and diverted him into the relatively slow and unhandy two-seater reconnaissance machines. Little time was wasted and on 5 June, two days later, Deamer reported to No.7 (Training) Squadron, AFC at Leighterton, to fly RE8s. What Deamer thought of his relegation, as no doubt he would have seen it, is not recorded.

Brown is not well known to the students of the AFC. His name does not appear at all in the official history [6] and in Keith Isaacs' book [7] he merely rates a mention in Appendix as commanding No. 5 (Training) Squadron from 28 April 1918 to May 1919.

Rolf Sanger Brown was born at Sydney on 29 September 1894 and joined the Permanent Military Forces in 1913, being commissioned into the Royal Australian Garrison Artillery on 1 August. He was one of the seven permanent force officers selected in January 1916 to go overseas as "observers" with the 1st Squadron, Australian Flying Corps. He had gathered some limited flying experience by the time 1st AFC left for Egypt in March 1916, but, soon after the squadron's arrival was with others sent off to England for training in aviation with the Royal Flying Corps.

Graduating as a pilot in August 1916, it was intended that he should join the newly forming 2nd Squadron, AFC when it arrived in England and meanwhile serve in RFC units. Upon the squadron's arrival, Brown was appointed to command C Flight. Soon after, the squadron's title was changed to No.69 (Australian) Squadron, Royal Flying Corps (and eventually, in January 1918, after other changes, to the 3rd Squadron, AFC). Meanwhile, the squadron operated as a training unit, mainly with BE two-seater aeroplanes, and it was not until June 1917 that it was finally decided that it should go onto active service in France as a corps reconnaissance squadron equipped with RE8 two-seaters.

With others of the squadron, Brown spent three weeks in France in July/August 1917 to gain practical experience of the duties of a corps squadron in the field. He accompanied the squadron to France in September and remained until 1918 when he returned to England to command No. 5 (Training) Squadron, with the rank of major, succeeding Major H.A. Petre, DSO, MC, who had resigned from the AFC and joined the newly-formed Royal Air Force. Brown remained with 5 (T) Squadron until May

1919 when he returned to Australia. On 31 July 1919 his AIF commission was terminated.

Brown's service with 3rd AFC seems from the records to have been relatively undistinguished. He may have been unlucky not to have received an award for his time with the squadron. All the other pilots with long service as flight commanders in 3rd AFC received the MC or DFC. However, presumably for his service with the training organization, Brown was awarded the Air Force Cross in the King's Birthday honours in June 1919. [8]

Thus at the time he diverted Deamer to the Corps reconnaissance stream, Brown was an experienced operational pilot familiar with the qualities needed to become an efficient RE 8 pilot. Presumably he considered Deamer to be suitable, although his decision to take him off Camels seems to have related more to his unsuitability as a fighter pilot.

From 7 (T) Squadron Deamer was posted to the Corps School at Winchester on 8 August 1918 and on 31st was in France at No.2 Aeroplane Supply Depot, Berck-sur-Mer awaiting posting to a squadron. He joined 3rd AFC, then at Villers Bocage, on 3 September. The squadron was operating with the Australian Corps and only two days after his arrival Deamer was flying reconnaissance missions in support of the advance to the Hindenburg Line. The attack on the Hindenburg Line itself commenced on 29 September and was the last major battle in which the Australian Corps was engaged. 3rd AFC crews were active on contact patrol work during the advance and were subjected to heavy fire from the ground. As recorded in the official history [9] and also in Wrigley's history of the squadron [10] Deamer, flying with Lieutenant P.R. Fullerton as observer, met heavy machine-gun fire from a strong German defence position north of Bellicourt and was shot in the leg. This marked the end of his active service, begun at Gallipoli over three years before. He had survived the air war and perhaps Major Brown had done him a favour.

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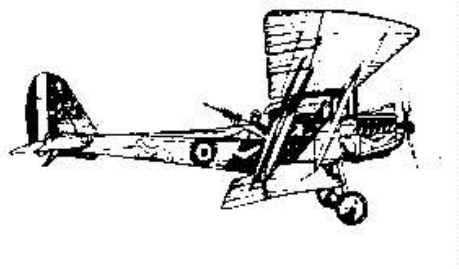
On his return to Australia, Brown resumed his regular army career with an appointment to the Staff Corps but in 1919, with Lieutenant A.R. McComb, surveyed for the Department of Defence the Charleville to Melbourne section of the air route across Australia to be used by the competitors in the England-Australia air race. He was seconded to the Australian Air Corps in 1920 and to the Royal Australian Air Force in 1921, transferring to that service with the rank of squadron leader in the General Duties Branch. He occupied posts in the United Kingdom and Australia, including command of No. 1 Flying School, Point Cook in 1929/30, where he had begun his aviation career in 1916. In 1930 Brown transferred to the Reserve, from which he resumed full time duty with the RAAF during the 1939-45 war in the Administrative and Special Duties Branch. From 1941 to 1944 he again commanded the station at Point Cook. (11)

Deamer was described as a reporter on enlistment in the AIF and resumed his career in journalism after the war, occupying a number of important positions including editor of the Adelaide Register, the Melbourne Herald, the Sydney Daily Telegraph and, during the 1939-45 war, the ABC Weekly and subsequently became Controller of Public Relations of the Australian Broadcasting Commission. In the 1920s he had served as General President of the Journalists' Association. He might be best remembered as 'Granny' of the Sydney Morning Herald. (12) Syd Deamer died following a stroke during a visit to England in 1962, aged 70.

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Author's note

Since I was a war too late for Camels and rotary engines I would be glad to have the comments of more knowledgeable or more perceptive people on the speculative aspects of this article.



Notes

- [1] Australian War Memorial, AWM 25, Written records 1914-18 war, File 81/29, AFC Forced landings from formation to 30 September 1918.
- [2] Ibid.
- [3] AWM 25, File 943/3, Training in the United Kingdom, AFC, 1917.
- [4] Ibid.
- [5] AWM 25, File 81/29.
- [6] F.M. Cutlack, The Australian Flying Corps, Sydney, 1941.

- [7] Keith Isaacs, Military Aircraft of Australia 1909-1918, Canberra, 1971.
- [8] London Gazette, 3 June 1919.
- [9] Cutlack, p.332.
- [10] H.N. Wrigley, The Battle Below, Sydney 1935, p.133
- [11] RAAF List of Officers.
- [12] Who's Who in Australia 1962.

