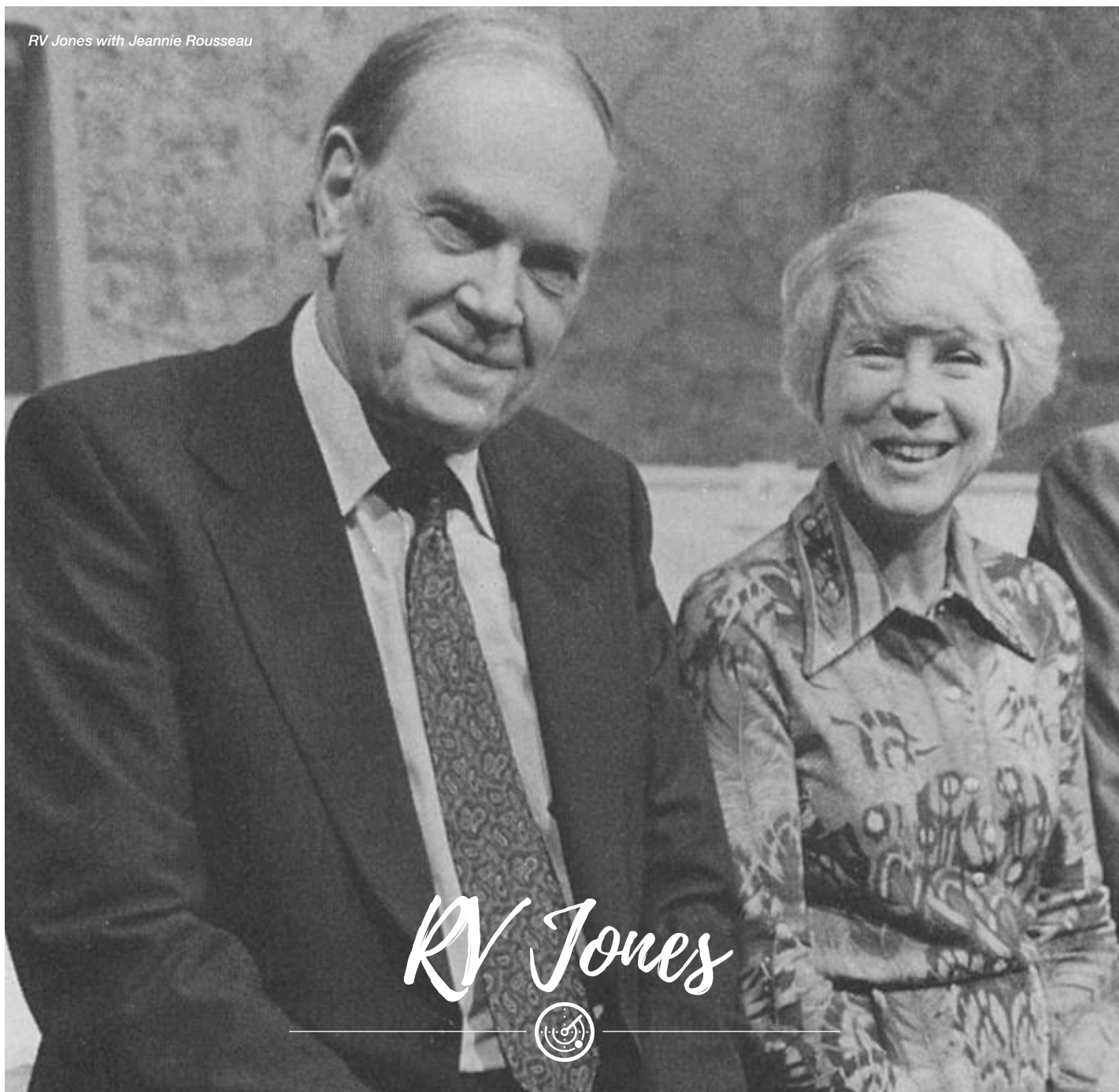


RV Jones with Jeannie Rousseau



**R**eginald Victor Jones was a physicist and a secret hero of British intelligence in WW2 whose 'genius for scientific tricks', according to the New York Times, 'baffled German bombers and saved thousands of lives'. He was born in Herne Hill on 29 September 1911. His father, Harold Victor Jones (1880–1953) was from Tooting and had been a sergeant in the Grenadier Guards, seeing action in the Boer War and in WW1 where he was very badly wounded. He later became a guard at MI5 but at the time Jones was born he was a shop assistant in a butcher's shop. His mother, Alice Margaret, née May (1890–1979) was from Brixton and had married his father the year before Jones was born. They went on to have a daughter and lived at 188 Railton Road. Jones said that his childhood was 'steeped in the Regimental tradition of discipline, precision, service, endurance and good temper'.

Jones went to St Jude's school, Herne Hill and Sussex Road elementary school, Brixton. At the age of eight he contracted diphtheria, which left him permanently

deaf in one ear. In 1922 he won a London Junior Country Scholarship to Alleyn's School. Alleyn's was for him 'a new era of discipline', e.g. pupils were

forbidden to run anywhere except the playing fields. With many masters who had seen service in the Great War, the Officers' Training Corps (OTC) was 'one of the strongest activities in the school' and Jones was a member for the seven years he was at Alleyn's. In his autobiography, written in 1978, he says 'Even now we still drink to the memory of the Old Boys who fell in the wars' (he became President of the alumni association). Of course, his father expected him to be very smartly turned out for parade. Once when he was on summer camp the OTC were inspected by a colonel of the Coldstream Guards. Jones was complimented on the smartness of his turnout but unbeknownst to the colonel, Jones had neglected to clean his brass that day.

His father was as proud of him being the smartest cadet despite missing a day's polishing, as he was annoyed by him neglecting to undertake said polishing. Jones went on to break the school record for the Cadet Commission exam.



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His headmaster at Alleyn's, R. B. Henderson, was a great influence on him. All his life Jones remembered and was guided by Henderson's counsels of duty and service, usually given during morning prayers. He was less impressed by Henderson's cricketing instructions, also dispensed at morning assembly, and said it was only when he unlearned what Henderson had taught him and tried to emulate his hero, Jack Hobbs that he began to make any runs. Henderson encouraged boys to study Classics but Jones was a scientist and in later life often told a story to illustrate how well science was taught at Alleyn's. When he was 12 his class had been set a very long homework by a new and enthusiastic physics master; it took 2 hours against an expected allocation of 45 minutes. Jones calculated the last question to 13 decimal places, a degree of precision that was both meaningless and pointless. When challenged by the

master Jones told him he was giving an answer which matched the length of homework set. He told this story to illustrate that even at that age the boys knew what degree of precision was required, a knowledge that he was to use to spectacular effect during his career. Another master wrote on Jones' last school report 'Erratic and mercurial. Seems unable to get down to solid work. Has ability'.

In 1929 he was awarded an Open Exhibition in Natural Science to Wadham College, Oxford where he graduated with first-class honours in 1932 before taking a doctorate in physics and being elected to Balliol College where he specialised in infra-red rays. In 1936 he was made a scientific officer at the Air Ministry. It was around this time that he met and married Vera Cain.

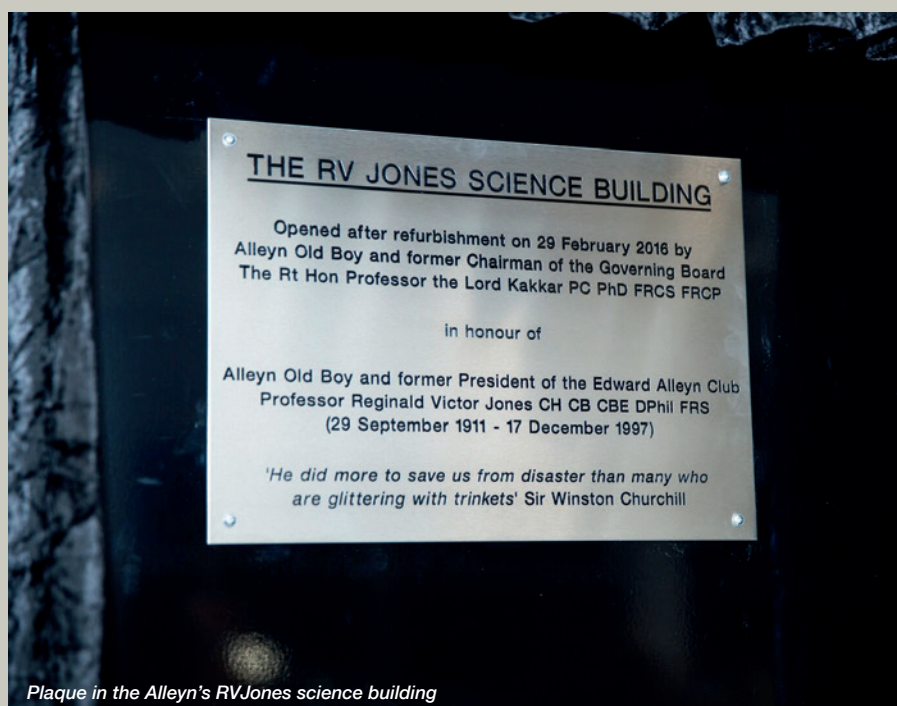
The Germans had started their war preparations much earlier than the Allies and already had a working radar system. When war broke out in 1939 Jones was one of the few British scientists with a good understanding of this new technology. He became principal scientific adviser to MI6 but kept his Air Ministry post for cover. He studied how Luftwaffe pilots navigated when they flew over England at night and came to the conclusion that they used a system of radio beams enabling them to attack targets accurately even in complete darkness. He carefully collated scraps of information, from secret tapes of German PoWs, material recovered from downed German aircraft and data from the vital Enigma code breakers at Bletchley.



*RV Jones at Buckingham Palace in 1946 with Susan, Robert and Vera.*

Jones was a consummate practical joker so when in 1940 he was summoned to the Cabinet Room, he assumed someone was getting their own back. In fact it was a meeting with Churchill and other government ministers to discuss how the Germans were guiding their bombers so accurately. Jones, aged 28 and the most junior person in the room, took twenty minutes to answer one of Churchill's questions, giving his deductions and proposed counter-measures. Churchill later said it was one of his blackest moments of the war when he realised that Jones was right about the German capabilities. He promptly gave Jones the go-ahead to solve the problem. Jones unravelled the design of Lorenz beam navigation the Germans were using and began to jam the beams, tricking the Luftwaffe into harmlessly bombing fields or lakes. Not the least remarkable thing about his whole analysis is that at the time this kind of navigation system was considered technically impossible by most experts in Britain. Jones not only worked out its design but also devised a response. R. James Woolsey Jr, a former Director of the CIA, believed that 'His contribution to the Battle of Britain was unmatched. Without the battle of the beams, it could have gone the other way. And he did it singlehandedly'. From then on he had ready access to the Prime Minister and Churchill called him 'the man who broke the bloody beam'.

In 1941 Jones was promoted to Assistant Director of Intelligence (Science) and a year later made another



*Plaque in the Alleyn's RV Jones science building*





*Jeannie Rousseau, codename Amniatrix, was RV Jones' favourite spy*

crucial contribution to the war effort when he masterminded Operation Biting, a daring and successful raid to parachute a specially trained team on to the Bruneval radar site to dismantle and bring back a particular German radar device so that Jones's team could study it. Jones was awarded a CBE for his planning of the raid.

Jones then turned his attention to destroying German air defences 'with trickery'. He helped develop Window or 'chaff', the plan to overwhelm a radar screen with false echoes. In 1943 British pilots dropped 40 tons of shredded tinfoil into the night sky and turned German radar screens into a kaleidoscope of confusion. Baffled German radar operators saw not tinfoil but 11,000 bombers on their screens.

He also spent some time at Bletchley Park and convinced German submarine operators that there was a secret infrared sensor picking up their underwater routes. It didn't exist; it was actually Allied code-breaking that was tracking them but it meant the Germans were looking in the wrong place.



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Hitler had long boasted of new secret weapons, against which the Allies would be defenceless. When Jones had joined

the intelligence services in 1939 one of the first pieces of intelligence to come across his desk was the Oslo Report. It was received with indifference by British intelligence, with the notable exception of this young physicist who argued that despite a few inaccuracies, the technical details were correct and it demanded further exploration. The Oslo Report told of so many technological advances made by the Germans Jones joked that in quieter moments of the war he used to check the report to see what was coming next. In his autobiography he said, 'It was probably the best single report received from any source during the war'. In it were described long-range weapons: the V1 and V2 rockets. By 1943 there was enough evidence of actual rockets for Jones to propose a more thorough search for them. However, the quantity and quality of intelligence reports were such that the service was awash with speculation and widely differing opinions, many of which judged such rockets to be a practical impossibility. Luckily for the Allies and for Southern England in particular, the German army was concentrating on the V1 rocket to the detriment of other devices which were readily available, cheaper and probably more effective. These devices could have posed a much more severe threat than either rocket, which only came into operation in 1944. Jones' team were able to thwart the German development of these missiles in several ways though in truth the weapons were delayed as much by mechanical difficulties as by Allied action. In 1943, thanks to magnificent intelligence work by 'une jeune fille la plus remarquable de sa generation' he deduced that the tracking systems for the rockets were being developed at Peenemünde. The young lady was Jeannie Rousseau, codenamed Amniatrix, aged only 23 and Jones' 'favourite spy'. She was passing crucial information to him on the rocket programmes and was captured twice, spending time in three concentration camps. Thanks to her information and Jones' deductions Bomber Command were able to inflict enough damage on Peenemünde to delay the rockets by a critical few months. Jones said, 'Amniatrix's reports stand brilliantly in the history of intelligence and three concentration camps, Ravensbruck, Konigsberg and Torgau could not break her'.

Once the weapons were in use Jones saw that the operational bombs, like the trial ones he had tracked from Peenemünde, tended to fall short, 'the centre of gravity being in south-east London, near Dulwich. In a flash I saw



**Jeannie Rousseau, codename Amniatrix, [was] aged only 23 and Jones' favourite spy...[her] reports stand brilliantly in the history of intelligence and three concentrations camps...could not break her.**



that we might be able to keep the bombs falling short, which would mean fewer casualties in London as a whole, and at the same time avoid arousing any suspicions regarding the genuineness of the agents'. Jones recommended a course of misinformation which would lead the Germans to continue dropping the bombs short. 'I realized well that what I was doing was trying to keep the mean point of impact in the Dulwich area, where my own parents lived and where, of course, my old school was. But I knew that neither my parents nor the school would have had it otherwise'. This course of action was rejected by Herbert Morrison, standing in for Churchill, who thought the Government was trying to keep the bombs off Belgravia 'at the expense of the proletariat in South London' but Jones put it into operation anyway, saying he had not been present at the meeting and requesting the instruction in writing. Unbeknownst to him, the Air Secretary to the War Cabinet, who had been present, had argued that the matter was so secret that the instruction should not even be put into writing! Thus Jones had time to be proved right.



*Young RV Jones*

One last war story. When their radar had been jammed by the Germans, Malta cabled London asking urgently for help. Jones told them to continue operating the radar as if nothing was wrong. After a few days the Germans got discouraged at the (apparent) ineffectiveness of their jamming equipment and switched it off. After the war General Wolfgang Martini of the Luftwaffe laughed ruefully when he discovered that there was not some secret British anti-jamming device.

After the war Jones was appointed to the chair of Natural Philosophy at the University of Aberdeen, partly thanks to Churchill's vigorous lobbying. Under his guidance the department became a world leader in the field of precision measurement and his research led to a number of important scientific contributions. Jones was a popular lecturer, using a variety of demonstrations including firing a pistol to illustrate momentum conservation and dropping dead pigeons from the ceiling as part of an illustration of Heisenberg's Uncertainty Principle. Unfortunately his later years at the University were overshadowed by various disagreements, in particular over the proposals of the Robbins Committee to expand higher education, to which he was opposed.



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On a physical level, the tall, redheaded Jones was an imposing presence but on a personal level his 'rock-hard sense of personal integrity, courage and devotion to truth' and his sense of duty were more imposing still. Away from his work, his family life was important to him. He and Vera had a son, Robert, and two daughters, Susan and Rosemary. He was a very funny man and often his speeches were reported with the words 'In an amusing speech...'. He was a skilled fly-fisher and crack shot but later came to prefer photography to shooting. He said his wife held him absolutely responsible 'for any calamity that befell the country' and that his daughter, Susan, was more

famous than he as she had been Miss Scotland. In their last year together both he and Vera suffered from ill-health and he nursed his wife of 50 years until, sadly, in 1992 she died. He also lost Susan, who fell into a diabetic coma and died within a fortnight of her mother.

He retired in 1981 but continued to write and lecture on defence and intelligence, education, the history of science and a variety of other issues such as 'The theory of practical joking and its relation to the scientific method'. Jones also carried on with his role in public life as chairman of various government committees and other bodies and he received many honours. In 1946 he was made CB and received the United States Medal of Freedom and in 1947 he was awarded the United States Medal for Merit. He was elected a fellow of the Royal Society in 1965. In the CIA particularly clever ideas were sometimes said to be 'good enough to be an R.V. Jones idea' and the CIA established the R.V. Jones Intelligence Award in his honour. It was given for "scientific acumen applied with art in the cause of freedom." and he was the first recipient. In 1994 he was made a Companion of Honour; his main regret was that his wife and mother had not lived to see it.

Jones died on 17th December 1997, aged 86. The New York Times called him 'a master practical joker, puzzle-



**His value to the war effort was such that...secret orders had been issued for him to be shot if he were about to fall into German hands.**



solver, hoaxer and harmonica player'. At his memorial service, where Jeannie Rousseau, now the Vicomtesse de Clarens, read the lesson, Woolsey, the former CIA Director, made a tribute which left listeners in no doubt as to his international stature but which came as a surprise to many who had known this modest man. His value to the war effort was such that if he had participated (as he had planned) in the August 1942 raid on Dieppe, secret orders had been issued for him to be shot if he were about to fall into German hands.

As the father of electronic warfare, "He did more to save us from disaster than many who are glittering with trinkets," said Winston Churchill. Jeannie Rousseau said simply, 'Thank you, dear unique Reg'.

**This article was written by Sharon O'Connor, parent of alumna.**



*RV Jones daughter, Rosemary Forsyth at the opening of the Alleyne's RV Jones Science Building 2016*