



## Canadians on Radar Background

In 1940, Great Britain stood alone against the Nazi horde. Her greatest need was for trained technicians to service and maintain her rapidly expanding radar defences. She appealed to Canada and Canada responded. From December 1940, to May 1943, five thousand trained Royal Canadian Air Force Radar Officers and Airmen Radar Mechanics passed through Pier 21 on their way overseas to serve with the Royal Air Force. Dispersed in penny packets from North Africa and Malta, from Sicily and Italy to



Northwest Europe, from the Murmansk Run to Australia, from Burma to Britain and "neutral" Turkey, these Canadian radar specialists provided over one third of the RAF's expertise in this critical, war-winning area. In all, over six thousand RCAF radar specialists were sent to serve with the Commonwealth and other Allied Air Forces.

### Horace 'Red' Robinson Macaulay

Royal Canadian Air Force 1941-1971 CAN R99068 22575

### Margaret 'Peggy' Alberta Macaulay nee Coppock

Auxiliary Territorial Service - Royal Signals Corps 1941-1945 W92392

War Bride

Following is a brief biography of their lives from the war years in the United Kingdom and life in the post war air force. Peggy would recall those pioneer years in Canada, which included considerable travel and well over twenty different homes.

Red entered his last year of high school at Sussex, New Brunswick in 1938 at the age of 17 years.

Diversion from the books that coming winter involved important development training in the militia with the New Brunswick Rangers. How proud he was to be called for street lining in Saint John next spring when Their Majesties, King George VI and Queen Elizabeth, visited Canada. Military association would continue as he progressed to the rank of Sergeant in the First Pontoon Bridge Park of the Royal Canadian Army Service Corps (Regimental Number G414525), in the Non-Permanent Active Militia (NPAM), while attending fourth year industrial training in motor mechanics at the Saint John Vocational College.

Red's association with the NPAM ended after a year's employment in Saint John. He was waiting to be called up for active service as air crew in the RCAF, but not many months would pass before finding himself in residence at Mount Allison University, involved with studies for 'secret' wartime duties with what would later be called 'radar'. Great Britain had made an urgent request to the Canadian Government to train thousands of officers and airmen to install, service and maintain radar (radio direction finding -RDF equipment). The selection standards were high and demands on trainees would result in a wastage rate of 35 percent. Canada met the request with flying colours and by May 1943 over 5000 radar officers and airmen had been sent overseas.

The first University classes started in mid 1941, consisting of 2135 students attending 13 Universities across Canada. The group studying at Mt. Allison in Sackville, New Brunswick, would have been representative of those attending other Universities. They consisted of recently graduated students, university undergraduates, tradesmen, business employees, school teachers and other professional personnel. Red was one of many who continued to serve in the RCAF after the war. He is happy to say it was an enjoyable career and afforded the opportunity to continue association and meet new friends with a common service background. Many friendships made during training and wartime continued through post-war years and this fraternity expanded in the 1990's with WW II radar reunions in England and Canada. Today, a new wave of interest has surfaced as a number of ex-radar personnel have undertaken to write their memories of technical radar support to the Royal Air Force during World War II.

Following completion of University training, Red was sent to a Royal Air Force Radio School at Clinton, Ontario, for training on airborne radar equipment (Mk IV Air Interception Radar - AI, and equipment to identify radar returns from friend or foe aircraft - IFF). Graduates were now ready for overseas draft and departure from Pier 21 in Halifax, Nova Scotia. We

were packed into the Stratheden troop ship, an old round bottom vessel of the P & O Line, unfit for winter passage in the North Atlantic. Two hundred and fifty radar mechanics were stowed in an area on G deck at the bottom of the vessel, accessible only by steel vertical ladders to the last two decks. Individuals were detailed to bring food from the kitchen which was lowered on ropes in baskets and metal containers.

Anyone standing at the bottom received an extra ration of soup from the spillage on the way down.

On the second day out we became separated from the convoy and travelled the rest of the journey alone, arriving at Greenock, Scotland, after a two week miserable crossing. I believe everyone in this lot was sick and unable to move out of the confined space for a breath of fresh air. We had to secure our kit onto overhead pipes to avoid it sloshing around in a mixture of sea-water, toilet overflow and up-chucked meals. What a relief to set foot on dry land and view the beautiful scenery of England as we travelled south to Bournemouth on a troop train. The Stratheden survivors must have been a sick looking bunch to the locals viewing the new arrivals sent to help win the war.

Red would spend the next three years and eight months in the United Kingdom working on airborne radar, first with the Royal Air Force Telecommunications Flying Unit (TFU) at Hurn, Hants and Defford, Worcs., and later with Canada's number one night-fighter squadron - #406, "the Lynx Squadron".

The TFU had a number of different aircraft types that were used to air test modifications and new marks of equipment as developed by the scientists at the Royal Air Force Telecommunications Research Establishment (TRE). Radar technicians were responsible for carrying out daily inspections (DI's) to ensure the radar equipment was serviceable and to assist the 'boffins' from TRE with the installation and air testing of their new and improved systems. This provided the technicians with an early opportunity to work on the leading edge of radar development, such as equipment using the newly invented magnetron, and exposure to the development of Mk VI AI for single seat fighter aircraft. Aircraft were also fitted with a radar homing system (Mother) and a beam approach system (BABS).

By mid 1942 Red was transferred to 406 Night-Fighter Squadron. At that time the squadron was flying Beaufighter aircraft fitted with Mk VI AI - later upgraded to 10cm AI with the British Mk 8 and later the American Mk 10 AI. Beaufighter aircraft were replaced by the Mosquito in 1943/1944.

This was an interesting time as the squadron was located on the south coast of England, spending no more than six months at one location. There were no shortage of 'scrambles' to intercept enemy raiders in the areas of Plymouth, Liverpool and the Thames Estuary. These were busy months as continuous work demanded little reference to hours or days of the week. However, sporadic bombing on the south coast reduced considerably after the Allied invasion in June, 1944. The squadron was then kept busy intercepting the unmanned V1 rockets, and converting the night-fighter Mosquito aircraft to carry out ranger patrols over Europe for attacks on trains and convoys carrying supplies and troops. The rapid advancement in new radar equipment, - including electronic countermeasures, radar altimeter, navigational aid (GEE), and airborne interrogator (Rebecca) to locate ground sets (Eureka), required more work and a continuing training program for the technical personnel.

Peggy is also a veteran of World War II, serving as a cipher operator in the Royal Signals Corps of the British Army. She was working in the London underground War Offices when meeting a young Canadian member of the RCAF on leave in this war-torn city. Where better to meet than in a social room provided by Harrods Department Store to entertain service personnel. They would continue to see each other a number of times while Red was still on leave. These meetings changed his evening activities from 'pub-crawling' with the boys to more interesting activities, such as, searching out the Lyons Corner House that had spam



sandwiches on the menu: all this with wartime black bread, while an orchestra played the Warsaw Concerto.

Correspondence continued and by Christmas time Red was invited to spend the holidays at Peggy's home in Burgh Heath. Their home was on the outskirts of London, an area that certainly revealed the difficult time they lived through during the early months of the war. The Anderson shelter, half submerged in their back garden, had provided a safe haven from flying debris on many

a night. Life would continue each morning as the family emerged from their hole in the ground, only to hear of last night's casualties and witness new destruction in the area.

Peggy and Red announced their engagement during their Christmas holidays and were married on the 17<sup>th</sup> of April, 1943, at Burgh Heath That evening in London, in a lovely hotel in Russell Square, Peggy opened her suitcase only to find that her clothes were filled with confetti. The air raid sirens sounded about the same time and a member of the hotel staff entered the room to ensure the black-out curtains were drawn. She was somewhat amazed to discover the hotel had a newly wed couple in residence. However, she hastily retired with a message that she did not expect us to spend the night in an air raid shelter. This may not have been our decision. Before retiring we attempted to pick up the confetti and broken window glass from a bomb blast. As we arrived for breakfast in the morning it was quite apparent that everyone was in on the secret as they greeted us with smiles and expressions of hope that we had both slept well.

Continuing life in the military after the war was never debated as a wrong decision. However, it presented many challenges for a young English war bride. Her first home in Canada was in the Yukon, accompanying her husband who managed a telephone repeater station 100 miles from Whitehorse. This was the start of over twenty homes as transfers were frequent to various stations where Red held positions as the Technical Radar Warrant Officer, and later the Senior Technical Officer, on the Pinetree Radar Line during the Cold War era. Time was also spent at headquarters in Ottawa and a four year assignment with North Atlantic Treaty Organization forces in Germany as the Wing Telecommunications Officer at #3 Fighter Wing in Zweibrücken.

Employment at Air Force Headquarters in Ottawa included four interesting tours: development of trade specifications and training standards for telecommunications airmen; creation of a new electronics trade for an avionics technician to be employed on the Arrow aircraft and Bomarc missile; responsible for initiating electronic fitments in Maritime, Transport, and Search and Rescue aircraft; officer in charge of passive electronic countermeasures in the Directorate of Electronic Warfare; and Assistant to the Director General of Communications and Electronics Systems following integration of the Armed Forces.

Red retired from the Canadian Armed Forces in 1971 with the rank of Major, having held every rank from Aircraftman Second Class to Warrant Officer Class I prior to being commissioned in 1955. At the time of integration within the armed forces he was fully qualified as a technical telecommunications officer for employment in the fields of avionics and ground telecommunications.

He then spent twelve years in the Public Service in Ottawa as Manager of Telecommunications Planning. Upon retirement, he was presented with

the Government of Canada Commendation Medal for long and efficient service.

As Peggy travelled extensively in Canada and Europe as a military wife , she was always involved with more than her share of community responsibilities. While living in Ottawa she was an early student of Richard Robinson, a leading couturier in Canada. She also attended leadership education training at the Conference Centre in Couchiching, Ontario, and taught dress design /making with the Continuing Education Program of the Ottawa School Board.

Her skill as a dress designer/maker was always in demand, and in later years her original items of costume dolls have found happy homes in many countries. Peggy was also employed in the china department of Sears Canada for over 15 years.

Red and Peggy had three children - Peter, born in England and now living in Halifax, Nova Scotia; Jane, born in emergency married quarters at a military base in Rivers, Manitoba and now living in Toronto; and Sandra, born in the Civic Hospital in Ottawa and now living in Mississauga. Peter and Eloise Surette have a family of three - Keith, Francine and Tessa. Jane and Don Rodney have a family of two - Alexandra and Benjamin. Sandra and John Sheridan have a family of two - Anne and Mackenzie. Alexandra Rodney is the mother of our great granddaughter - Mia Jane.

Red and Peggy, now retired, live in Ottawa, CANADA.

Since retirement Red has been an active member of the Canadian Radar History Project Group in Ottawa. This group is dedicated to gather information, analyse, publish and disseminate data about the World War II experiences of the seven thousand radar technical officers and radar technical airmen. His contributions to the group included the production of a major display of World War II radar activities for the first Ottawa Radar Reunion. This display is now in the 'Secrets of Radar' Museum in London, Ontario. He has also been active as an author and producer of the following books;

- "Canadians on Radar 1940-1945" (ISBN 0-9687596-0-2).He developed the standards and prepared all computer input for the book, in addition to authoring a number of the chapters.

- "Air Interception Radar in World War II Night-Fighter Aircraft" (ISBN 0-9687323-2-5).

Authored and published.

- Floating Radars in the Channel (ISBN 0-9687323-1-3). Authored and published.

- AMES 894 - Flight Lieutenant Marshall S. Killen's Story of a Mobile Radar Convoy in North Africa. Prepared and published.

- Birth of Radar" by Rex Boys. Prepared and published a Canadian version.

- A Brief on a New Zealand pioneer family - Daniel and Sarah (McAuley) Dougherty." Based on Celia Manson's books, 'The Story of a New Zealand family' and 'Widow of Thorndon Quay.'

Prepared and published

- "Surrey Girl - not just another war bride" (ISBN 0-9687323-2-1). Co-authored and published with Margaret (Peggy) Macaulay. In addition to being a biography of a war bride, this book covers an unique look at Canadian History involving a military family in World War II and the Cold War that followed.

"SURREY GIRL - not just another war bride"

by Margaret "Peggy" Macaulay

and

Horace "Red" Macaulay

This is the story of a young resident of Surrey, England, whose destiny in life would be shaped by World War II and her arrival in Canada as a war bride in 1946. The book contains 288 pages of bibliographical references and sixty pages of photo plates covering the activities of Peggy and Red's family.

Note: A copy of the book "Surrey Girl - not just another war bride" has been donated to Pier 21.

Margaret (Peggy) Macaulay (née Coppock) was born in Surrey, England in 1922. Her youth was spent in the peaceful village of Burgh Heath, without frills or luxuries, in a working class family that struggled hard to make a living during the "hungry 30's". With the outbreak of war in 1939, this area on the outskirts of London, suffered heavy bombing during the Battle of Britain and the Blitz that followed. Peggy finished school in her late teens, then enlisted in the ATS of the British Army to be trained as a cipher operator.

While working in the underground War Offices in London, she had an encounter with a Canadian airman during an air raid in the blackout of this war-torn city. This meeting would have a major impact on her fate.

The book includes many interesting tales of the wife of a permanent force military man. Her first home in Canada was on a telephone repeater station in the Yukon. The couple's travels, during post-war and cold-war periods, resulted in more than 20 residences spread through most of the provinces, and a four-year sojourn in West Germany with NATO forces. Today, she is pleased to call Ottawa her permanent home. With her husband, Red (Horace), she raised three children and boasts seven grandchildren and one great grandchild.



Peggy Coppock Macaulay's story portrays a detailed biography of family history. Many experiences covered in the book form a descriptive narrative of living conditions in remote areas of her adoptive country. With pride she is able to proclaim, "I did my pioneering in Canada."

Horace "Red" Macaulay was born in Lower Millstream, New Brunswick, in 1921. He served in the Royal Canadian Air Force on secret radar duties during World War II. After meeting and marrying Peggy Coppock in 1943 in London, England, he returned to Canada at the end of the war. His extended military career included many postings in Canada and a stint in Germany. Following retirement from the military, he worked in government telecommunications.

In his leisure time Red pursued a number of hobbies. In the seventies he bought a farm near the St. Lawrence River - a getaway where he could work the land and collect antiques. Through the years he has honed his skills as a woodcarver, competing in local and international exhibitions with his stylized animal and bird sculptures. More recently, Mr. Macaulay has turned to writing. In the late nineties, he collaborated with Radar Veterans to compile a history of World War II radar activities, for which he authored a number of sections.

Although SURREY GIRL is composed by Red, the book is based on the couple's combined recollections. As accurately as possible, the writer has tried to capture the words, expressions and emotions of Peggy Macaulay from these reflections

Horace R. Macaulay

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