"To set history aside because it is controversial, unpleasant or even immoral would condemn us to a self-inflicted infantilism. History is an adult entertainment, and no one unprepared for complexity, confusion and controversy should confront it."

Desmond Morton, Canadian military historian.

Canada's Air War

If Canada's Military History has one unifying theme, it is that it is forgotten. It is not that our country counts for so little in the wars of our world, but as a country that has never made war on any nation by itself, but always as part of a group, we tend not to glorify it. "It's a job, it was done, it's over" seems to be our national feeling to our wars.

As well it should be recalled that for much of our past we have been commanded by or allied with either France, England or the USA, and neither France, England or the USA has the task of speaking up for Canada.

So if we don't speak up, we tend to be forgotten beyond our borders. Until we are needed again.

This project is intended to at least record Canada's effort in one part of one of it's wars, the air battles of the Second World War.

This project is a chronology of the events that led up to the Second World War, and the War itself, from the point of view of Canada and it's Air Force. It is meant as a source of primary research, to provide a base of known facts derived from many sources for others to build upon.

For many this information, and a name on a memorial, is all that remains. An aircraft that crashes usually leaves very little behind, even on land. A pit, a few pieces of twisted metal, some broken trees that soon grow back. Aircraft lost over the sea leave even less, and on the coasts the sea soon reduces whatever is left to small pieces. Only in remote places on land, or the deeps of the seas, do the remains of lost aircraft remain largely untouched. The point is aircraft leave no battlefields, just the ruins of their targets and the remains of the bases used to train and operate from.

This chronology has been built on the hard work of research by others. All I have done is combined it in a different order and context. Any errors contained in it are my own, and I would appreciate hearing about them.

<u>Aircraft</u>

In general aircraft are often misunderstood. The public generally tends to interpret aircraft as better built cars or trucks. In fact, road vehicles are much tougher than aircraft. The reason is weight.

An aircraft in level flight is effected by 4 forces, it's weight, the dynamic lift it

produces to lift that weight, the thrust that moves it forward and produces the dynamic lift over it's wings, and the drag of it's shape that detracts from the thrust. Weight, Lift, Thrust and Drag. To improve it's performance these factors must be altered.

Weight is an obvious factor. Reduce the weight and you increase the lift. There is a limit as to how much any aircraft design can lift. Any reduction in the weight of the aircraft can lead to a measurable increase in the efficiency of the design.

In terms of the airframe (the physical structure of the aircraft) this means that it has to be strong enough to handle the forces it is expected to encounter, but any extra strength comes at the cost of weight. Thus aircraft, compared to cars, are light weight structures that are built only as strong as they have to be.

During the period of the Second World War airframes evolved from fabric covered metal and wood structures to all metal stressed skin types, although other construction techniques were also used, such as wood, and mixed wood and metal. The power of the engines used roughly doubled during the war, from 1,000 hp to 2,000 hp. And then came the jets.

Propellor aircraft in this period faced several hurdles. The first was the weight of the engine. There were many attempts to produce engines that gave more horsepower for less weight, but there are limits to what could be done. And all propellor aircraft face the same limitation; a propellor is the most efficient when standing still. The faster a propellor aircraft goes the less efficient the propellor becomes, until it can go no faster.

The jet engine, developed in several countries during the war, reversed this completely. It was capable of producing more thrust than it's weight, and the faster a jet engine goes the more air it takes in, and the more thrust it produces. This is why today we can build very large aircraft with engines that weigh less, and which occupy a small volume, compared the thrust they produce.

The Other Sciences

Other developments between the wars were being made which directly affected aviation. Electronics was just beginning to enter a phase of expansion when the war began. The ability to detect aircraft by energy pulses, called RDF or Radar, was just emerging. Radios which allowed good, clear communication over longer distances by voice or morse code were developed. By the wars end electronic computers were being developed and were in use in England and the USA.

Other developments were made in rockets and robotics, resulting in devices such as the V-1 (essentially a cruise missile), V-2 ballistic missile, and ME-163 rocket propelled fighter.

And there were breakthroughs in Physics, that led to the development of

the atomic bomb.

The lead up to War

In the period between the wars Aviation was seen as a cutting edge technology, as aircraft became larger, faster, and more reliable. Transportation of mail, freight and passengers grew in leaps, paralleled by development of military aircraft. It was considered adventurous, and romanticized in popular culture, especially after Lindbergh flew solo from New York to Paris in 1927. Aviation was seen as the future, much as computers are seen today.

Most theories of the use of aircraft in war had developed from the experience of the First World War, with aircraft of limited abilities, but which showed great promise. Various theorists of the use of aircraft (Mitchell in the USA, Douhet in Italy, Wever in Germany and Trenchard in England) predicted that war involving the major powers would begin with massive bomber attacks on the others military and cities, possibly using chemical warfare. For examples of this see the film *Things to Come (1936)* starring Raymond Massey, or read Nevil Shutes book *What Happened to the Corbetts* (pub. 1939). As commercial transportation aircraft improved their advances were applied to military bombers, which for a period in the 1930's were faster than fighter aircraft, a situation which seemed to confirm the adage that "The bomber will always get through".

But there were other developments that would change that, and the predictions of what a second global war would look like were found to be inaccurate. How that changed in Aviation is covered in the notes in the Chronology.

Files of the Chronology

This database includes the following files:

Canada's Air War - Preface

Canada's Air War - Ranks and Abbreviations

Canada's Air War - References

Canada's Air War - Locations Referenced in Canada

Canada's Air War - Fatalities by Date

Canada's Air War - Fatalities by Home Town

Canada's Air War - Casualties by Unit

Canada's Air War - 1929-38

Canada's Air War - 1939

Canada's Air War - 1940

Canada's Air War - 1941

- Canada's Air War 1942
- Canada's Air War 1943

Canada's Air War - 1944 Canada's Air War - 1945 Canada's Air War - Proposals for Projects Canada's Air War - Commonwealth Losses in Canada by Date Canada's Air War - Unidentified PoWs

Using the Chronology

This is a chronology, a listing of events ordered by date. The focus of this work is, by order, the Second World War, what Canada did in the war, and in particular the role of Canadian airmen in the war, and finally what it cost us in terms of those lost or injured. It begins in 1929 due to what was called the 'Ten Year Rule'. It ends in 1947, the year that the RCAF stood down from a war posture and the *Commonwealth War Graves Commission* ended it's registry.

It is not intended that this provide a complete history of the War as many of the campaigns, such as most of the fighting in Russia, China and the Pacific, did not involve many Canadians, but these are referenced in a broad manner to place these campaigns in the context of the Chronology and to make the point that this was, indeed, a World War.

Prior to September 1939, and after 1945, daily events are in plain text while those that directly affect the RCAF are in **bold**, but after the war begins this is reversed, **daily events are in bold** and those that affect Canadian and Newfoundland airmen are in plain text. Airmen of other countries are identified by the Air Force they served but where known, **Canadians**, **Newfoundlanders**, and members of the RCAF are highlighted in red (those whose affiliations are unknown or might be RCAF members but are not yet confirmed have no national designation pending further information).

Dates are recorded by calendar day, but given the nature of the War events that occurred at night are noted under both dates (for example, the notation 5-6 would indicate an event happening on the night of the 5th and 6th of a given month). In the listing of fatalities by date, however, these are as they appear in the book *They Shall Grow Not Old*, which is in turn based on the records of the *Commonwealth War Graves Commission*, which gives only a single date. Where there is any discrepancy in the given date the *Commission* is used as the primary source and this is noted in the text.

Note that the names given are usually initials and surnames. Further information (given names, serial numbers, etc.) can be found in *They Shall*

Grow Not Old or at the Commonwealth War Graves Commission website.

Here it is worth noting the value of the *Commonwealth War Graves Commission*, whose mission from the end of the First World War was to identify and honourably inter as many of those who died in these wars, or create memorials to those who were missing, and maintain these memorials, cemeteries and single isolated graves so that those who fell would not be forgotten. That Canada is part of such a dedicated organization means that a project such as this one can be created and give a name to those who fell. For an example of how useful this is an attempt to remember those Canadians who served in the US air forces in this record is not nearly complete as there does not exist a comparable database of those who were killed or missing from their forces.

If an event recorded in this database had impact on another, later event, or a person was involved in other events, a reference to that later event can be found at the end of the first entry.

Events of significance and those that unfolded over a period of time have the key words <u>underlined</u> so they can be recognized and/or searched in the file to give a coherent unfolding of the event (for example the searching the term <u>Spanish Civil War</u> would give a short but useful account of that war and it's impact on the events in Europe that led to the Second World War).

Non-military events of the period, such as the introduction of common commercial products, the birth of famous people, or the openings of well known movies, are included to give readers points of reference in their own lives to the period of the Chronology. Other events such as tornados, floods and earthquakes, and local events like fires and train crashes, are included to remind us that even during the War the other events of the world did not end, and that the people of that time were much like us in not knowing what would happen to them or change their lives on a day to day basis. Modern events that are related or influenced by the historical events of these times are also mentioned, again to give the modern reader a reference point in their own memories to these past events and to remind them that this war was not a novel or a movie, that these events did occur, and that the lives we lead today are a direct result of the decisions and actions of our fore-bearers.

Whenever possible serial numbers of aircraft involved in the events are included to assist those seeking more information, especially with web searches, where a search for "F/O Smith AB123" would give better data than simply searching the name. Another source of useful identifiable

numbers would be an airmen's personal serial number, but for those who died these can be easily found on the *Commonwealth War Grave Commissions* online database or the book *They Shall Grow Not Old* so are not included in this work to eliminate errors in transcription. However <u>if you</u> are requesting information from other researchers and can provide a persons serial number to them, please do so, it will save time and improve the results you get.

The world of the Second World War was very different from the world of today, especially in terms of the technology and societal relations. If you find an abbreviation or reference in these files you don't understand check the file <u>Ranks and Abbreviations</u> first. It might explain it quickly. If still puzzled by an event or reference, try the Internet. If you still don't have an answer, visit or contact a Museum, or ask a veteran. It's a vast difference between, for example, an AC (Aircraftsman) and an A/C (Air Commodore), but simple errors are easy to avoid with a little effort.

All the words used in these files are my own, except where quotations are noted and cited. But the information came from many hundreds of sources, all of whom deserve credit for the work they did. Beyond the primary sources (mentioned below) any further information is cited in the entry and are detailed in the References file, and <u>I would ask that anyone researching</u> an event with this Chronology to give credit to those researchers without whose work this database could not have been created. Better yet, go and get their books or open their websites, and read their words for yourself. You will not regret it.

For those writing essays merely cutting and pasting the information written here and passing it off as your own work will not teach you anything useful. At least do some simple research on, say, the location, squadron or aircraft type in a reference, and then write it up in your own words so you can answer a simple question about the matter if asked.

While I do not mind my words being copied (if credited), those who create 'click-bait' on the internet by copying whole files of other peoples work and passing it off as their own are below contempt, and if any reader finds this has occurred please make it publicly known on whatever sites you have access to.

This project began as a simple cross-referencing of names and events for a Remembrance Day project for my Wolf Cub Pack in Yellowknife in 1994, but then turned into a written Chronology after reading the book, *Airmen Died in the Great War 1914-1918*, by C. Hobson (1995). The primary

sources used to build this Chronology came from the book *They Shall Grow Not Old*, published by the Commonwealth Air Training Museum in Brandon in 1992. This was enhanced by the monumental 9 volume *Bomber Command Losses* work by W.R. Chorley, *Coastal Command Losses Vol.1* by R. McNeil, *Bomber Command Losses in the Middle East & Mediterranean Vol. 1* by Gunby and Temple, *Ocean Bridge* by C.A. Christie, *RCAF Personnel - Honours And Awards - 1939-1949*, the *Chronology of Canadian Military Aviation* and the many other works by the dedicated Canadian military aviation historian H.A. Halliday, *Bomber Command War Diaries* by Middlebrook and Everitt, the multivolume work *RAAF World War 2 Fatalities by Categories* by A. Storr, and *Fighter Command Losses* (use with caution) by N.L.R. Franks.

I wish to thank the Bomber Command Museum of Nanton, Alberta, for making this material available on it's website.

Any errors in this work are my own.

I can be contacted by those interested in this material at rcafventura@hotmail.com.

Paul Squires Wetaskiwin, Alberta

Ventura Memorial Flight Association, Purposes and Donations

If you found this Chronology useful please consider making a donation to the Ventura Memorial Flight Assocoation. All donations receive a Canadian Tax Receipt. Donations can be made to:

Ventura Memorial Flight Association 14210-24A St. Edmonton, Alberta T5Y 1L7

Purpose of the VMFA

The <u>Ventura Memorial Flight Association</u> was formed in 1987 with the purpose of recovering a crashed Lockheed Ventura GR.V aircraft from a site 50 miles from Yellowknife, NWT, and return it to flying condition.

The Lockheed Ventura was a development of the Lockheed 18 Lodestar

and was designed as a fast daylight bomber for an RAF Specification. An order for 675 aircraft was placed in the spring of 1941, but that order was cancelled in favour of De Havilland Mosquito.

This left Lockheed with only one customer for the Ventura, the RCAF, who saw the Ventura as a replacement for the Lockheed Hudson. Although the Hudson saw wide use as a maritime patrol bomber in Canada we had a problem of large uninhabited coasts to patrol with few airfields. As the Ventura was much faster than the Hudson it could cover more area on a patrol.

This kept the program going until December 1941 when the USA suddenly found itself at war. The Ventura Mk I and II aircraft were then used by the RAF as bombers while the USAAF and the US Navy both ordered the aircraft as anti-submarine aircraft. This built on the design already started for the RCAF and emerged for the US Navy as the PV-1, and in Commonwealth Air Forces as the Ventura GR.V. Thus the Ventura was the only combat aircraft of the Second World War that was designed to meet a Canadian specification.

Although it's use in Europe was coloured by heavy losses on the attack on the Phillips Factory at Eindhoven and one disastrous operation the aircraft saw wide spread success as an anti-submarine aircraft in the Atlantic and Pacific and as a bomber in the Pacific. It was also the basis of the first successful US Night Fighter, built for the US Marine Corps, using a British radar. It was selected for this role as it's performance was similar to the Bristol Beaufighter. Indeed as a bomber it was faster than many Japanese fighters that opposed it in the Pacific theatre.

In the RCAF the early Ventura bombers, including the prototypes, were used as trainers at #34 OTU in New Brunswick, while the GR.V aircraft were the main inshore anti-submarine aircraft for the last half of the War.

Our aircraft, RCAF #2195, was built in 1943 in the middle of the production run and purchased by the RCAF. It was assigned to #149 (BR) Squadron at Annette Island, Alaska, then to Terrace, BC, where it served as the COs personal aircraft. At the end of the war it was briefly stored at Vulcan, Alberta, before being selected for use as a gunnery trainer. It was part of the first contract of work undertaken by the new Avro Canada at Malton and was flown on training from Trenton until 1952 when it was declared surplus and sold to Spartan Aerial Surveys of Ottawa. There it received a minimal change in equipment and flew as an initial mapping aircraft and transport before force landing near Yellowknife in 1953.

The landing did minimal damage to the airframe which was left sitting on large overload fuel tanks that had been installed in the bomb bay. Thus returning the aircraft to flight is a matter of repair, not restoration. We have collected all the necessary parts, manuals and drawings for this work, and special and secret equipment used during the war, including a working WWII radar set. If we had the funding this aircraft could be re-built to fly in 18 months. It would be the only complete flying Ventura in the world.