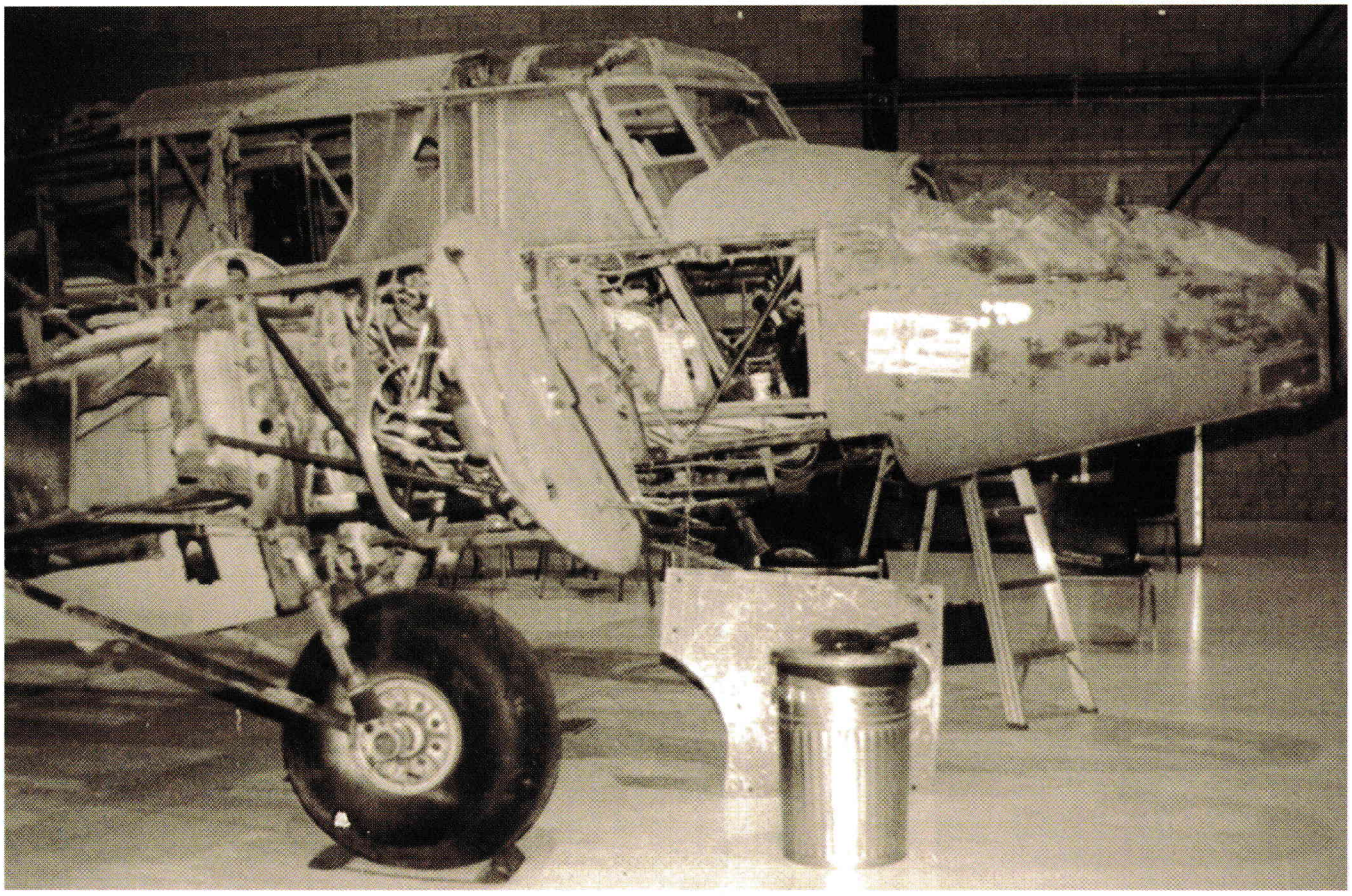
ANSON MARK II "7401" by George Ryning

STABLE, SENSIBLE AND EASY TO FLY



"Flying the Anson was like driving a bus. It was a very stable, sensible, sane aircraft and very easy to fly; it didn't do anything unexpected. But the first time you saw it, you were struck by its size." – *Student Pilot, RCAF*

The Beginning Our Mark II Anson came to the Museum from Widdifield farm at Seven Persons, Alberta in December 1984. Bill Watts was President at the time and it was through his initiative that it was acquired. As with most aircraft found abandoned on farms, its wings had been cut off outboard of the engines and the aft end of the fuselage had been severed two meters ahead of the stern post. However, other than showing the results of 39 years of weathering, the cabin and cockpit were almost complete. Actually, it was in quite good condition as one could still stand on the cockpit floor and not fall through!

Early in February, 1985, after I retired from Southern Alberta Institute of Technology (SAIT), I received a call from the Museum asking if I would lead the Anson Restoration Project. I eagerly accepted the challenge and, with a crew of five, began work on February 4, 1985. No Anson technical data was available but we quickly 'learned' our way into the intricacies of the craft. The first objective was to carefully take everything apart and repair and recondition the welded steel tube fuselage structure. I took many pictures of details as we went along and these were referred to many times in the years it has taken to recreate the craft.

Bill Watts, flying around Southern Alberta looking for Anson remains, made a particularly good find east of Claresholm. The farmer had received two Ansons from the RCAF at Claresholm before it became policy to cut off the wings (this is the wing spar mounted high on our west hangar wall). We also obtained the aft end of the fuselage which we used to repair ours. More importantly, we acquired a complete tailplane. Although deteriorated, it enabled us to make drawings from which AME Ron Jackson built a new one. The rudder was supplied by museum member Gordon Willdig who had stored it since 1946.

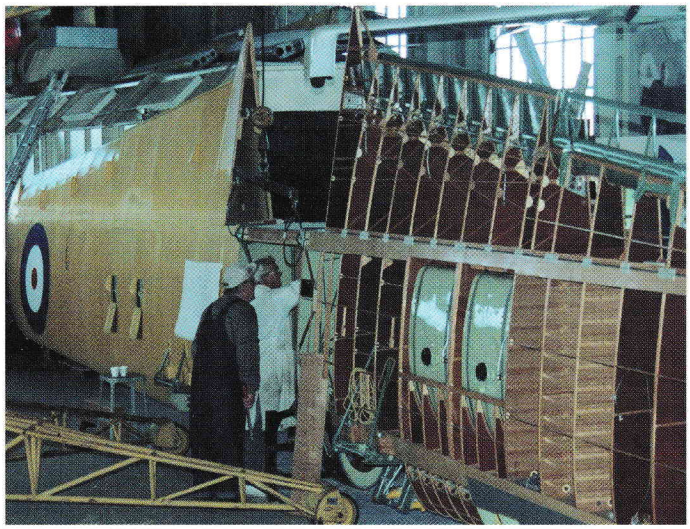
"The Anson didn't lend itself to fooling around, and the only thing that you could possibly do was low fly. And you were pretty damn careful about doing that!" ***– Student Pilot, RCAF***

Drawings & Wood Once we started, it was obvious that a great deal of woodwork was required. Off the top of my head I suggested we get 2,000 board feet of commercial grade sitka spruce. This proved a wise move as it was not only an excellent material to work with but there wasn't much left when we finished.

At the outset we wrote British Aeospace and inquired about Anson drawings. They informed us that these drawings had been lost in a fire. It wasn't until 1986, when my wife and I were traveling, that I discovered that the Royal New Zealand Air Force Museum in Christchurch was working with about fifteen original Anson drawings. We then went to the South African Air Force Museum in Pretoria and learned that they also had copies of the drawings. My request to each museum for copies was responded to freely, and free. We had made a quantum leap in information! The drawings contained basic dimensioning for the wing, the spars and, perhaps best of all, a complete table of ordinates for each of the ribs.

In 1987, Ted Dickson, Museum volunteer and excellent draftsman and woodworker, began building the wing — all 56 feet 6 inches of it! With the aid of the salvaged front spar and the drawings from New Zealand and South Africa, Ted made detailed drawings of both the front and rear spars. He then laid out the rib profiles, full size, from the table of ordinates. These were then printed on mylar and served as templates for the ribs.

Once Ted completed the templates, we started working with the wood. The construction of the wing and spars required a jig table 60 feet long which we made and leveled. As is typical of modern spars, the caps (or booms) were laminated. A band-saw at SAIT was a big help in cutting 1400 linear feet of laminating material from the sitka timbers we had previously obtained.



Both front and rear spars were made on the table with the leading edge ribs and skin assembled on the front spar. With the spars 'upside down', the lower surface was completed up to skinning it with plywood. This method saved having to turn the huge wing more than once. When 'right' side up, the top surface was finished and skinned. In all, building the wing, the largest ever made in Calgary, took a little over five years.

The idea of keeping a permanent record of the wooden parts (e.g. fuselage formers) came to us early in the project. Even after years outside, there were still original formers remaining whose shape we could copy quite accurately. In the summers of 1986 & '87 we, particularly Leo Smith, a museum member, traveled Southern Alberta checking Anson remains. In this manner (what was missing on one might be found on another) we came up with drawings for nearly all the formers. In response to a newspaper article, we received a call from a farmer near Black Diamond whose father had bought an Anson. We visited the farm and found an example of the removable wood and fabric panel that goes under the cockpit floor. It must have been the only panel left in Western Canada as, being very fragile, it would

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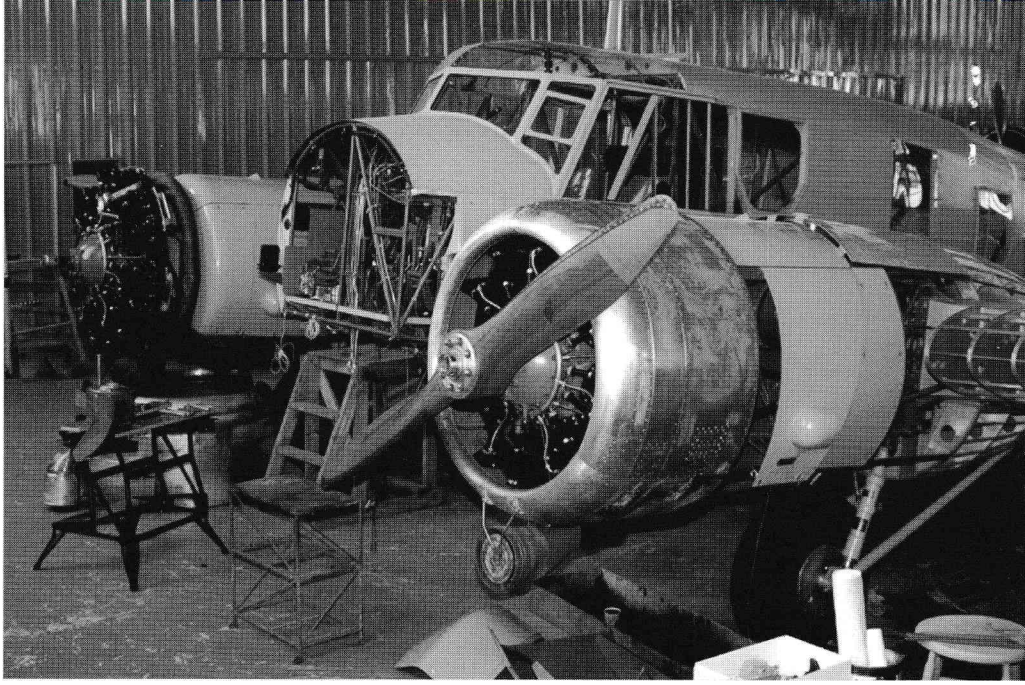
have been among the first things destroyed in a farm environment. However, the owner had stored it in an unused chicken house and the parts were still in good enough shape for us to replicate them. This particular Anson had been equipped with beams on the aft face of the rear wing spar which enabled it to carry a 200 lb. bomb within the wing-root fairings (thus the streamlined 'bump' on the fairing to clear the bomb fins).

The Serial Number We arrived at RCAF serial number "**7401**" in the following manner. Corrosion had obliterated the original manufacturer's number so there was no way of telling the original serial number. However, the front spar bore a manufacturer's placard (Boeing of Canada, Vancouver) dated March 1942. Because #19 SFTS at Vulcan, Alberta was the closest RCAF Station to Seven Persons, it seemed logical that the Anson had been surplused from there. We then checked Canadian Military Aircraft (1921 to 1969) by J.A. Griffin to find an Anson accepted by the RCAF in the early summer of 1942 and sent to #19 SFTS. We thought that it would require two or three months for the spar to be mated to a fuselage and arrive at the station. Anson Mk. II, number "**7401**", caught our eye and that was that.

Recognition Louis Tortorelli, Museum volunteer and skilled metal worker, did such an outstanding job of restoring the sheet metal panels, fairings and cowlings on the Anson that his work bears special



"Our instructors said 'If you kill yourself in an Anson, you're better off dead!' But we didn't think flying it was that easy." – *Student Pilot, RCAF*

recognition. These metal parts came from farm yards where they suffered endless abuse. Animals walked on them, heavy objects were piled on them, hail storms dented them and on and on. But, Louis wove his magic and the parts came out looking like new.

The Federal Government's New Horizons program gave us a tremendous financial boost. The purpose of the program was to give financial aid to any group of 12 or more seniors wishing to carry out a special project. We had no problem qualifying, specifying our project as the completion of the Anson and in 1993 we received $10,354. Not only were we able to purchase plywood, dope and materials, it allowed us to acquire some of the shop equipment we now have.

In Summary Parts of the Anson could be genuinely termed 'restored' (e.g.: the Jacobs engines and the fuselage) and some parts could be 'replicas' (the wing), but to me it's a re-creation. The fuselage nose, the entry door, the tail 'cone' and rudder are all original factory-made wooden parts. All other woodwork is new. Due to the semi-arid climate of Western Canada and the excellent anti-corrosion process carried out on the aircraft, the metal parts had withstood being outdoors surprisingly well. This made it possible for us to re-create our Anson, which in reality is an accumulation of parts that have never before been brought together on the same aeroplane. When I look at it, I feel that it was a very worthwhile project and I'm proud to have played a part in its creation.

In eye-catching BCATP yellow, the **only** Mark II Anson in the world, "**7401**", occupies pride-of-place in the Air Museum's hangar. ✈