

**CANADIAN WAR MUSEUM**

**ORAL HISTORY PROJECT**

**INTERVIEW TRANSCRIPT**

**INTERVIEW CONTROL NUMBER: 31D 4 ROWBOTTOM**

**INTERVIEWEE: Brigadier General (Retired) Leslie T. Rowbottom**

**INTERVIEWER: J.R. Digger MacDougall**

**DATE OF INTERVIEW: 15 December 2003**

**LOCATION OF INTERVIEW: Ottawa, Ontario**

**TRANSCRIBED BY: P. Vellan**

**Transcription of Interview Number 31D 4 ROWBOTTOM**

**Brigadier General (Retired) Leslie T. Rowbottom**

**Interviewed 15 December 2003**

**By J.R. Digger MacDougall**

INTERVIEWER: Canadian War Museum Oral History Program Interview with Brigadier General [Retired] Leslie T. Rowbottom, on 15 December 2003, in Ottawa. Interviewed by J.R. Digger MacDougall. Tape 1, Side 1.

ROWBOTTOM: My name is Leslie Thomas Rowbottom--R-O-W-B-O-T-T-O-M. I was born in the U.K. in January 1933; came to Canada in 1956. I could give you a brief outline of my military life. I started my service as an Army cadet, at the school battalion of the Worcester Regiment. [I] became a Corporal in that battalion, and was pleased to say that it was the same regiment in which my father had served, in the First World War.

Like so many others, I, in youth, was conscripted in the British Army, in 1951, during the period of National Service. I joined the Royal Artillery in March of 1951, went for Officer selection, and started Officer cadetship, and was, in fact, commissioned in the Royal Army Service Corps in October of 1951. I served in a battalion in Aldershot from '51 to '52, and then went down to a training battalion in Yeovil, in the southwest of England, to complete my two years of mandatory service as a Second Lieutenant. I was obliged to serve thereafter, a period in the Territorial Army Volunteer Reserve, and served for the next five years in that organization. And, in fact, that was in 265 General Transport Company.

I mention that because I did decide, with my spouse, to migrate to Canada. We were, in fact - I was -- on board a ship, en route from Liverpool to Montreal, at the time that the so-called Suez Crisis broke out. And I was in the embarrassing position of being in mid-Atlantic, when I heard that 265 General Transport Company, and all of my colleagues, had been mobilized, and were on their way to Suez. And so, what it's worth, I did go see the purser, and get a telegram off to the War Office, to say that I was not willfully absent, without leave.

Not long after I came to Canada--my wife and I were living in Toronto at that time--I got interested, again in the militia in Toronto and then decided that I would like to come into the Canadian Forces. So, I joined the Canadian Army in March of '58, and was commissioned on direct entry, with the seniority that I'd had in the United Kingdom, and joined the Royal Canadian Army Service Corps. We first went to Calgary, to 13 Company Calgary, where I served as a Transport Officer and a Supply Officer in what was essentially a static operation supporting both the garrison in Calgary and also, the Air Force installations north and south of us-- Claresholm, Penhold, that kind of thing.

It was whilst I was serving in 13 Company Calgary that I well recall my Commanding Officer calling me in, and saying, "Would you like to volunteer for pilot training?" He pointed out that he didn't expect anything would come of it if I did volunteer, but he thought it was not a bad idea to show willing to do these kinds of things. I had never, at all, in my life, contemplated being anywhere near aircraft, same as I didn't join to see them.

Anyway, I -- again, in the Royal Canadian Army Service Corps, as in the Royal Army Service Corps, we had a wide span of interest, in the kind of career fields we could follow. And, in the Canadian Army of those days, the Food Service Officers came from the Royal Canadian Army Service Corps. So I had, as I say, applied to go to see if I was fit to fly but in the meantime, started off on a Food Services Officers' Course, down in Camp Borden. I went through that and thoroughly enjoyed it.

[I] came back to the garrison in Calgary only to hear that I was going to be tested, at least, to see if I could fly aircraft. Again, my approach was, as a career soldier, if flying it is, so be it; if flying it isn't, that's fine too. Soldiering is soldiering. To be brief, it wasn't too long after the tests were completed that I heard that I would be going -- doing pilot training. In fact, I went down to Centralia.

INTERVIEWER: That's an excellent background. Absolutely excellent.

ROWBOTTOM: Twisted—yes. It's full of... I'm just trying to see. ....

INTERVIEWER: Now, did you do training at Centralia, or did you do selection at Centralia?

ROWBOTTOM: I did selection.

INTERVIEWER: You went through the Aircrew Selection Centre at Centralia?

ROWBOTTOM: Yes. And then, went back to Centralia for flying training.

INTERVIEWER: OK. So, please mention that.

ROWBOTTOM: So, I went to the Primary Training School—RCAF Flying Training School -- at Centralia in November of 1960. I had been there earlier for selection process. But anyway, began flying in November 1960. That was on the Chipmunk—the De Havilland 1 Chipmunk—a delightful aircraft. And I must say that it didn't take me long to realize that whilst I had never had any particular interest in flying, it became immediately, a great fascination and a great interest. I graduated from Centralia with the thirty hours of flying training, I think it was, that we were getting in those days, and then went to Rivers, Manitoba, to continue my flying training.

INTERVIEWER: That's interesting, because I did a hundred and twenty five hours on Chipmunk. So, you only did that basic flying training. What happened after that?

ROWBOTTOM: I'm just looking here at the logbook, and in fact; it shows that we did the best part of sixty hours. I was wrong there. It was fifty hours to dual, and about twenty hours of solo, day and night, in one form or another. But the whole idea was that we would go, then, to the Light Aircraft School at Rivers, Manitoba. We had done enough in primary flying on the Chipmunk and now would become more interested in the soldiers' approach to flying, which really we met at the Light Aircraft School. So, I started at the Light Aircraft School in February of 1961 and flew there, as a student, with a mixed bag. In fact, we were a class of five at the Light Aircraft School—School Pilot Course number 30. And we graduated from the Light Aircraft School in May of 1961.

INTERVIEWER: What kind of aircraft and how many hours training did you do there?

ROWBOTTOM: That was the Cessna L-19, and we were using the Cessna—the L-19A model and the D model. The sophistication between the two was not that great, and as I recall it, the electrically operated flaps were quite a wonderful thing, in the D model. Mind you, there really wasn't a great deal of difference in the flying of them.

By the time I was through Course 30, at the Light Aircraft School, I had something like a hundred and twenty seven, or eight, hours of dual instruction, and something like seventy hours of solo flying. At that point in time, we all moved into what really was a holding status at the Light Aircraft School. The objective of our next period of training was to get something up in the region of five hundred hours of flying experience, by which time one was expected to be competent, to do those kinds of Army support activities that we were expected to do.

INTERVIEWER: What kind of duties did you do during that holding period?

ROWBOTTOM: They'd be essentially liaison and communications duties. In other words, from Rivers, Manitoba, there was always someone who either wanted to be picked up in Winnipeg, or taken to Winnipeg, or taken elsewhere. We spent a fair bit of time over at Shilo, with the Royal Canadian Artillery, either practicing shoots, and those kinds of things. Or, indeed, deploying out to Wainwright at the frequent concentrations where we'd meet for a week or two, or three, or four, at a time, and really giving support in various ways, from Rivers.

INTERVIEWER: So, notwithstanding that you were at a training school, per se, you were already being employed as an active pilot in the Army?

ROWBOTTOM: Yes. In fact, when we completed our graduation of Light Aircraft School, we were awarded the Army Flying Badge. But by that stage of our careers, we were all common in terms of our aviation experience and aviation support activity. And the fact that my background was in supplies and transport, although I had started life as a gunner, wasn't really to distinguish us from our friends in the Armoured Corps, our friends in Signals, and our friends in the Royal Canadian Artillery.

INTERVIEWER: General Les, how about telling us about the L-19? You mentioned some difference between the L-19D and the L-19A. What kind of an aircraft was it, and what was it like to fly?

ROWBOTTOM: The L-19 series were essentially a derivation of; I think it was, a Cessna 120. It was a robust aircraft, as far as its gear was concerned. It was a powerful aircraft in terms of its Lycoming engine, and, if I compare the Lycoming in the L-19 of the 1960s, significantly more powerful than anything you'd find in a Cessna 172 of today's era. So, we were, as I say, well-powered in flight.

That was necessary, of course, because we were using the aircraft for a considerable amount of low level and short field activity where the ability to deploy, as I recall, at sixty degrees of flap -- sixty degrees of flap was such that you really were almost powering your way down to

the ground for landings. Similarly, we spent a great deal of time doing short field landings over barriers which was an exciting exercise. But there, too, it was so necessary to have that excellent power, and also the good flap capability.

Our mission in those days obliged us to endeavor to fly low, as well as slow, and we all had what I would call a very exciting time out in the training area south of Rivers getting into and out of small airstrips — really skewing our way around the terrain, so as not to present a picture, visible for anybody else to see.

INTERVIEWER: Does any particular incident come to mind when you think of those short fields?

ROWBOTTOM: Fortunately, in that short field series, I managed—and I touch wood, now—to get through that with quite an amount of enjoyment—fair amount of panic, on occasion. But I must say, I did have one glitch. And that would have been in the—I guess, well, there was snow on the ground in Rivers, and I do recall doing one solo flight, and [I] was doing touch and go's. It was on the narrow runway at Rivers that -- as I rolled out, the aircraft was obviously not going where I wanted it to go. I applied max power but the wheels tripped over a snow bank, and there was I inverted--pleased to find that I was nothing other than inverted. I did hit the seat belt, and then realized, as I fell on my head, that that wasn't terribly smart. There was no significant — bruised feelings, but that was about it. I was back flying very shortly thereafter, and doing a little more dual, as far as these landings in the snow were concerned.

INTERVIEWER: So, what was the attitude of the Army toward an incident like that, with respect to flight safety and discipline?

ROWBOTTOM: Formally, I would say, the attitude was the same as it would have been in the Royal Canadian Navy, or the Royal Canadian Air Force. In fact, I think back to those years, that those of us who were Army pilots perhaps took the view that our role was entirely in support of the Army. And, I think, we probably were tempted to take risks that we learned in later years not to take. So, if I can say it as clearly as I can, I think the best thing that ever happened to Canadian Army aviation was that it became kin and part of Canadian Forces Aviation. And, in fact, was obliged to adopt the standards of professionalism, and the standards of flight safety, that the Royal Canadian Air Force had had. I don't want to always say that, but I think, on balance, that was a difference.

I could, then, move forward to modern times, and say that, in the last five or six years, I've been privileged to see many squadrons of Canadian Forces' helicopters, in Kosovo and Bosnia, and in the field elsewhere, in Gagetown or in Wainwright. And [I] can say that standards of awareness of the nature of the land battle, and the standards of professionalism, certainly in helicopter flying, in today's Canadian Forces, is significantly better and significantly more professional than that system through which we came.

INTERVIEWER: Now, when did you get onto rotary wing flying? Was it during this period that you were at Rivers, trying to amass hours?

ROWBOTTOM: Yes, it was, indeed. The crude eligibility for rotary wing flying training, then, was to have reached that five hundred hour mark, or to be past it. And I should observe

here that I think there was a fair bit of evidence that five hundred hours was a critical period in flying experience. That great caution with which you approach flying training tends to disappear as you become confident of your ability and it's that sort of period, up to five hundred hours--something like that--that people tend to forget the kind of preliminary or early discipline with which you come to flying.

INTERVIEWER: Did you find difficulty in making a transition from fixed to rotary wing?

ROWBOTTOM: No, in as much as I was virtually totally ignorant of what I was going to find in terms of tactile, feelings, aptitude to rotary wing flying. Thinking back, of course, I was extremely thrilled that I had even gotten that far—that this person who had never expected to go flying was now flying light aircraft. Perhaps the gods were going to be favourable, too, and we'd see what the helicopter world was like. At the Light Aircraft School at Rivers our instructors were largely Royal Canadian Air Force in that period and, indeed, the school was a joint school for Primary Helicopter Flight Training.

We flew there the CH-112, [short gap on tape] and we were flying the Hiller 12E at that stage, which was a new aircraft. It seems to me that the Light Aircraft School, up to that time, had been using the Sikorsky H-3 which was at least one or two technology generations earlier than the Hiller 12E. And we were given demonstration flights in the venerable H-5. But I do recall that I was convinced that, if that was the vehicle we were going to be operating, my time as a rotary wing aviator would be quite brief.

So, anyway, we did our Rotary Wing Training Course. I'm just trying to see how many hours we would have spent at that school, doing the initial Hiller exercises. It seems to me it was something like sixty hours was the scope of that flight training.

INTERVIEWER: What was the Hiller like to fly?

ROWBOTTOM: Slow. Competent. You know, a good piece of equipment. New, as we've said. Being—it seemed to me that about eighty-five knots was as much as we could get out of it, or maybe ninety, if we pushed it. And certainly, it was possible, on the Prairies, to be overtaken on the Trans-Canada Highway by a well-operated vehicle, on the road. Again, looking back—those were the years when we removed doors from the helicopter during the summer period. And it was only occasionally that you would look out of the side windows--where the windows would have been, had the doors been left on--and realize that it was a funny kind of world to be in, at two or three thousand feet, chugging along, at eighty-five, ninety knots, with not even a piece of plexiglass between yourself. But generally speaking, not a fast aircraft, but really very good for what we used it for, which was for liaison duties, and those kinds of things.

I should say that, retrospectively, there was only one area in which you can let yourself down, and only one area in which, in that series, I did let myself down. There was a weight which was added to the rear of the fuselage, just beside the tail rotor, and this was for weight and balance purposes. With three persons in the forward part of the aircraft it was necessary to have a countervailing weight. And yes, the aircraft captain dutifully went aft, before starting up, and putting the weight on, if you've got three persons on board, and taking the weight off, if you didn't have.

INTERVIEWER: That was mounted on the tail boom, was it?

ROWBOTTOM: On the tail boom—yes. And I mention this because in the enthusiasm for getting the job done, I recall, so well, out at Camp Wainwright during a time on exercise. Suffice to say, I was all set, and had just picked up the General, who was, at that time, commanding Mobile Command, who was out in the field with us, and was about to carry him from one location to another. And he taps me on the shoulder and says, “You still have the weight on.” And, of course, he was so right, so I shut down the aircraft, and removed the weight from the tail boom.

The lesson, of course, was that the people we normally flew in the liaison and command and control duties got to be very much a part of the whole crew. There was a whole total system. Clearly, the general in the aircraft would be operating two nets—the command net, and our tactical air net. But clearly, those persons who flew with us—those officers who flew with us—had a fair knowledge of just how the operations went. And that, of course, was very important to the things we were doing.

INTERVIEWER: So, were you still at the Light Aircraft School, when you were going through all this rotary wing flying and training?

ROWBOTTOM: Yes, we were still part of that organization. And to us, [as] we were gaining time on rotary wing aircraft; we were still staying current on fixed wing aircraft. So, very often, we would—for example, one of us might ferry a helicopter out to Wainwright, from Rivers, and then, another of us would ferry back a light aircraft, that had carried, yet another pilot out. But to come back to the point, it really was as a cadre of the Light Aircraft School, that we got this experience in the field, at Wainwright, Gagetown or Shilo or wherever.

INTERVIEWER: So, what was the next, sort of, area that you went into, in flying?

ROWBOTTOM: Being in the Royal Canadian Army Service Corps, transport was our business. As a consequence, we were all slated to go to a transport helicopter conversion. My predecessors had largely done their transport helicopter, or larger helicopter, experience in the United States. But I was with the community that went down to Trenton, to the Royal Canadian Air Force activity, where we did our helicopter flying down there. And that was in the...

INTERVIEWER: So, you went onto your role, then, as a heavy transport helicopter pilot but through this training that you did at Trenton?

ROWBOTTOM: Yes, in fact, the aircraft—heavy, I suppose, depends on the time and place—but certainly the Vertol H-21—the Boeing Vertol H-21 or Piasecki Vertol H-21-- was a transport helicopter. And I, and my contemporaries, did our conversion there at the Royal Canadian Air Force station in Trenton. There were, in fact, H-34s, I think, and H-21s down there, but we spent our time flying what looked in those days like a flying banana—the single engine H-21. Again, very good experience. The principal thing, I suppose, we learned, was just the great difference in flying a heavy-laden transport helicopter from the comparatively lightweight Hiller that we had been operating.

INTERVIEWER: And what was that difference?

ROWBOTTOM: I suppose the main thing, depending upon load; you must anticipate the use of power and the power available, the speed with which you approach—either a landing or a takeoff. And, whilst we all recognize the tremendous value of a cushion of ground effect in the light helicopter, it became so much more important with a transport helicopter with a good load.

INTERVIEWER: Did you actually carry slung loads at that time?

ROWBOTTOM: Yes, we did, indeed. Yes, we did. Slinging training—yes. Again, you learned the magic of getting into ground effect, such that you could build a decent mushroom of concentrated air, in which you could hover around, and do your job.

INTERVIEWER: So, you completed your training in heavy helicopters at Trenton. What went on in your career after that?

ROWBOTTOM: Really, it was further enrichment, if I can call it that. We went back to duties in light aircraft, and duties in light helicopters, in command and liaison flying—support of artillery shoots. Then, going and doing reces, to see where the fires we'd started on the shoots needed to be put out. So, we played a general utility role, I suppose you could say, and did deploy for several exercises out at Wainwright, or out in Suffield, in liaison duties.

INTERVIEWER: So, you were actually performing the same duties as any other pilot, whether he was Artillery or Armoured?

ROWBOTTOM: Yes, indeed, because we were not, at that stage -- save for the Royal Canadian Artillery, which had its own Air OP troops -- we, in aviation at large, if I can call it that, were all trained to the same range of standards. As to whether you're an Armoured Corps officer, doing a reconnaissance in a helicopter, or a Royal Canadian Army Service Corps Officer, or a Signals Corps Officer—it frankly didn't matter. We were teaching to the same standards. And we've got to bear in mind that this was the period before we had really formed—save for the Royal Canadian Artillery—before we'd really formed a Canadian Army Aviation unit. That was really the next big thing to come along, but at this time we were really all in a pool of pilots.

INTERVIEWER: So, at this stage of your career, General Les, how many hours did you have, and what was the next step in your flying career?

ROWBOTTOM: I've got about, by this time, between nine hundred—about nine hundred--hours of flying the various kinds of helicopters and light aircraft. And this has taken about eighteen months to build--eighteen months of active flying. At this point in time, I was fortunate to go down to Fort Rucker, Alabama, to the United States Army Transportation Aircraft Test Support activity. We, in the Royal Canadian Army Service Corp had had pilots going down to Fort Rucker, into test positions, for some years. And we were very privileged to have that opportunity.



I should say, in the same time, we also knew of other Canadian Army people who were down in Fort Rucker who had gone into the United States Army's flying training system. And so, in fact, for a certain period, there was a concurrently running access, certainly to rotary wing flying training, through Canadian Army exchange positions in the U.S. Army.

INTERVIEWER: What were some of the differences you noticed in flying, let's say, from an American base, versus flying in the Canadian? What would you describe as the major difference in moving to the American flying base at Fort Rucker?

ROWBOTTOM: The first thing I would say is that, as I'd learned in moving from the British Army to the Canadian Army, that soldiers really are largely the same the world over. So, you could feel instantly at home with people from the United States Army, in my experience, and in my family's experience. There was, however, a magnitude change as you go to look at Army Aviation in Fort Rucker, Alabama, in that period, in 1962. We would see aircraft in the hundreds, as opposed to aircraft in quantities of less than ten in an organization in Canada. But that said, the flying discipline was obviously very similar. But everything, as I say, was on a significantly greater scale.

The job that I went to at Fort Rucker was a test activity. As a consequence, we flew a wide variety of aircraft. Fortunately, the entrée, or the first calling card, you might say, was the L-19, that we both still operated, in the Canadian Army and the United States Army. So, that got us off on the right foot. And these were the early years of the UH-1 series of helicopters—the Bell Hueys. And I was very privileged to start flying on the A models, and then, the B and D models of those aircraft. But in the test activity we did, as I say, fly several fixed wing aircraft, as well as helicopters.

Here, I should observe that going to that kind of test facility, the mission was to get a test done rather than anything else. And I was amazed at the ease, or comparative ease, with which we would learn to operate two, four, six, eight types of aircraft, and maybe fly two or three types of aircraft—fixed or rotary wing—in one day. And so, what one started to see there was that the commonality in how you operate an air vehicle far exceeds the differentiation of the thing.

So, very often, I can see in the logbook that I would spend perhaps a day as a copilot with someone flying a light twin aircraft, going somewhere, and then the following day, I'm an aircraft captain, in a helicopter, coming back on another mission. So really, there was a great variety of aircraft operating, and a great variety of missions being done. There, there was--how shall I put it--one could be doing twenty, thirty hours a month of flying and thoroughly enjoying it, in extremely good surroundings.

INTERVIEWER: Were you more or less self-taught on these various types of aircraft you flew, or did you get checked?

ROWBOTTOM: No, you had a basic checkout on the aircraft. But, as I say, you were expected to be able to do some transpositions, if I could call it that, from light classes of aircraft, and those kinds of things. Again, there were administrative activities taking place, and we flew a fair bit, out and beyond our normal test facilities. One of the interesting tasks at Fort Rucker was to build time on new aircraft so that the United States Army could have some maintenance experience, and some validation of just what it was that the manufacture

and design had been worked towards. And in those times, then, we were using UH-1 As, Bs and Ds, and trying to amass significant numbers of hours.

This would be done by starting flying early in the morning. You could do a three-hour shift, beginning at six in the morning and, with a half an hour rest, you could do another three-hour shift. And it was not impossible to be doing as much as six hours a day, if all went well. And, of course, southern Alabama, at six o'clock in the morning in the summer, is very pleasant—could be, depending on the weather, by afternoon, you know, a fair amount of thunderstorm activity and those kinds of things. But it was a perfect place in which to get excellent flying experience.

INTERVIEWER: Did you do any night flying?

ROWBOTTOM: Yes. Yes, indeed.

INTERVIEWER: What types of missions would you have flown at night, there?

ROWBOTTOM: Well, again, a fair amount of the night flying would be to test night lighting devices, either on the ground or, indeed, to look at lighting inside aircraft cockpits. I do recall we spent a great deal of time looking—when I say looking, I mean test and evaluation looking—at just how effective red light was at night. There had been this, sort of, common perception that red cockpit lighting must be the best. Well, I think, while flying that the truth of the matter was that it wasn't the best lighting, and those kinds of things. So, there would be many kinds of tests. As I say, those either for deployed landing facilities that the troops would put out at night, and just how effective they were, and as I say, the lighting tests, and those kinds of things.

INTERVIEWER: It must have been a great position to be in, to have all the flying time you wanted, for a pilot in those days.

ROWBOTTOM: It was heaven sent, you know. There was increasingly to be seen the buildup for Viet Nam. And we were in Fort Rucker, both at the period of the assassination of John Kennedy, and the period of the so-called—and the very serious—Cuban Missile Crisis, and, as I say, the buildup, of course, is for deployments to Viet Nam. So, there was a very real sense of real time operational urgency. As one looks at the speed with which the Cuban Missile Crisis developed, it was possible to go from being the visitor from Canada, privileged to fly with the United States Army, to confirming that you had authority to go and deploy with the United States Army as it moved to a forward base, in Hialeah Racetrack preparatory to what appeared to be a forthcoming assault in Cuba. So these, as I say, were real time activities. And the same, obviously, was true with the kind of tension that there was with the assassination of John Kennedy. Not, of course, to underestimate the tremendous significance of the buildup in Viet Nam and the activities there.

And I should say, then, that whilst we had been in Fort Rucker to see the development of the new light observation helicopter competition, and we had seen the three major candidates there—the then new Hiller, the then Bell -- what became the Bell 206 -- and also, the Hughes aircraft. It was, as I say, a fascinating time to be involved. We, of course, in Canada, in later years, have spent much time in the Bell 206. But there's no doubt, at the time, we were all tremendously impressed with the Hughes aircraft—with the Hughes helicopter that really was

the competition winner. And paradoxically, the Hillers, which we had flown in Rivers, Manitoba—the Hiller competitor in the light observation helicopter competition—in the early 1960s, as I recall, it came third.

INTERVIEWER: Was there any involvement of Canadian pilots in the actual selection of what aircraft we got—Canada got—during that period of time?

ROWBOTTOM: Well, we got to use—a case in point—when the time the Chinook helicopters—the CH-47 Chinooks—came into vision, and they came into vision for us in the test activity, because we were going to be getting the first tail numbers to do this massive amount of testing of the aircraft in flight. And our object, as I said, was to lead the fleet—to be out front, in terms of saying, “Here’s the kind of maintenance experience you can expect.” That said, whilst we were ferrying Chinook helicopters from Morton, Pennsylvania, to Fort Rucker, Alabama, we were surprised to see a cadre of Canadians, sitting down in the Boeing Vertol plant, as it was there. And they were waiting to receive what became the Voyageurs and Labradors of Canadian Forces’ experience.

But again, we’re back to this magnitude thing. I know it first hand when we went to pick up Chinooks for the United States Army. The United States Marine Corps had some hundreds--I think it’s sure to say, hundreds--of the equivalent of our Vertol Voyageur and Labrador. But my then American bosses pointed out to me that the Canadian contingent, devoted to buying eighteen aircraft, was as large as the United States Army contingent for buying three hundred and fifty aircraft. Then we get this scale thing. It’s not to belittle either side, but certainly you get a different aptitude, as to magnitude, in the forces to be employed. I suppose we were small then, and that was just a fact of life. I don’t know whether I’ve answered your question in terms of...

INTERVIEWER: No, you have, and very well, thank you. You had said that your job was to amass hours on aircraft. What was that all about?

ROWBOTTOM: We sat between the designers and the builders, and the end users of the aircraft. And so, our facility at Fort Rucker—its job was to get thousands of hours on airframes and components in anticipation of logistic needs, and maintenance needs, and those kinds of things. It was, then, a true test activity where we led the fleet. Several of the things that we saw happening with new aircraft—some not very good, in fact -- were great learning experiences. But at least you learned in test programs rather than see these things come awry elsewhere.

INTERVIEWER: How many pilots, and where did they come from, would have been involved in this test activity?

ROWBOTTOM: Well, in the test facility in which I was working, at that time, there would be, if I said a hundred and fifty—something of that nature. Now, many would be in staff jobs, but would be coming, working, with us. They’d be staying current in various aircraft. Let me only add, then, that I was fortunate enough later on in my career to spend some time over in Westland Augusta’s facility in Italy, and also the Westland facility, in the U.K.

INTERVIEWER: Would you spell that, please?

ROWBOTTOM: Westland—W-E-S-T-L-A-N-D. Augusta—A-U-G-U-S-T-A. The Westland Augusta facility in the north of Italy, as well as the Westland facility in Yeovil, in the United Kingdom. And I was quite fascinated to see that nowadays—and here I'm talking the year 2000—those tests that we did in the air, are largely now conducted in test rigs on the ground. So, you'll do shape testing to disaster now. We did testing to see how many thousands of hours you could go. So, I was quite bemused—amused -- to see that we, in fact, did our—a large part of the kinds of testing we were doing—is now done electronically, or is now done in other forms.

INTERVIEWER: What was the significance of the Cuban Missile Crisis with respect to your employment in Rucker?

ROWBOTTOM: Well, Fort Rucker became—well, shall I say—the doorway to the proposal to use Hialeah Racetrack as a launching off point for airborne forces to go to Cuba. So, ours, as a test facility, moved from the status of non-combatative status to a combat ready status almost over night. And so our mission, instead of being an engineering test flight mission, suddenly became, the support of active forces, in their deployment.

INTERVIEWER: Were you actually armed during that period of time?

ROWBOTTOM: We all—weapons were issued during that time. Yes—weapons were issued—full arms were issued to us at that time. But, anyway, I suppose the important thing for me was the recognition that armies can change from being comparatively steady peacetime operations to being combat ready overnight, as the need arises.

INTERVIEWER: Interview with Brigadier General [Retired] Rowbottom. End of Side 1.

INTERVIEWER: Canadian War Museum Oral History Program Interview with Brigadier General [Retired] Les Rowbottom. Tape 1, Side 2.

INTERVIEWER: General Les, there must have been a lot going on at that time. What, in fact, was happening with respect to the Chinook flying? You mentioned the Chinooks. Were you, sort of, the first to fly the Chinook? Was this just introduced at the time?

ROWBOTTOM: Indeed, the Chinook was just coming into service. History shows that the air assault concept, in the 11<sup>th</sup> Air Assault Division, was forming up in Fort Bragg, but we, down in Fort Rucker, had the first two or three Chinooks for this test activity of ours. And as I look at my logbook, I see the tail number 450 on the pictures of Chinook in my logbook, and that is the first Chinook registered to the United States Army. We, as I say, had two or three of them in test mode and they were the A models.

I must say, in retrospect, that the Chinook, being as new as it was, spent a fair bit of time in snag recovery and that kind of thing. It was some concern amongst several people as to just how far and how fast we could move with a Chinook program--with the Chinook test and evaluation program--for there was a tremendous pressure to get things moving. And indeed, I do recall that the same Boeing Vertol tech reps who flew with us in the early models, deployed out to Viet Nam with the first aircraft. They flew with technical representatives in the first operations of the Chinook.

The A model that we were flying—again, all the experience was new as it occurred, and there were several occasions that we would be out in a field, for a while, as we would land, and shut down, and find causes of hydraulic leaks, and things like that. So, it was perhaps typical for a new aircraft, but there was no great lineup, no great rush, to come and be part of the Chinook test program, as I recall it at that time. Indeed, we were pleased to be part of the leading edge there. But it took some time for the Chinook to, I think, build a level of confidence amongst its users. I must say then, that the later models of Chinooks such as the ones that we in the Canadian Forces purchased, had moved a long way from those early models that we saw in the first Viet Nam period.

My time in Fort Rucker came to an end in 1964—in August of 1964—and I do recall that, in our large flying Flight Planning Centre down in Fort Rucker, Alabama, as is the American way, north of the Canadian border the map is devoid of features. And it's only south of the parallel that much is shown. When I explained to the people in Fort Rucker that I was going back up to Rivers, Manitoba, I was asked quite frequently, "Well, where is Rivers, Manitoba?" Well, of course, it's in that grey area that's really in the back of beyond. No one could understand why, having come from Rivers, Manitoba, you'd be going back to Rivers, Manitoba.

I would add here just a social observation. This was a period of great concern and turmoil in the southern States. If you remember, the Civil Rights movement was very active at that time. We, being associated with the United States Army at that time, were very well aware that the United States Army was ahead of the community at large, I suppose, in recognizing the great social changes that there were taking place in the south at that period.

One anecdote—I did go over to Fort Sill, Oklahoma, to get my instrument qualification and was there for several weeks, flying with a contract operation—Paige Aviation—to become a qualified instrument pilot. My wife and children joined me there at the latter part of the period. And as we were preparing to drive back to Fort Rucker, we drove down to San Antonio, Texas for a few days, prior to trekking back to Fort Rucker. I do recall having then, four small daughters. We got out of our station wagon at San Antonio, and the first of several rocks hit the top of my car. I was quite concerned. What I hadn't realized, that having Alabama license plates was not a totally innocent experience. For good or real, we were presumed to be whites involved from somewhere in Alabama, at that particular time.

I only mention it in passing because one tends to forget that just by being in an area you can be part of a situation, regardless of your own interest. I did drive back up to, with the family, Rivers, Manitoba. It really was quite interesting to see, I mean, the northern states at that particular period in time. It really wasn't a good thing up there to be carrying Alabama license plates. I'll just mention that in passing.

Back at Rivers, a new era was well underway and the Voyageurs and Labradors, whose purchasing organization I had seen down in Morton, Pennsylvania just a little while earlier, those vehicles were now—or at least twelve of them—were just beginning to arrive in 1 Transport Helicopter Platoon, in Rivers, Manitoba. In fact, it seems to me that 1 Transport Helicopter Platoon was officially organized in the December of 1964 and, as I recall it, I went up to that unit early in 1965.

INTERVIEWER: General Les, when you arrived at 1 Transport Helicopter Platoon in Rivers, what equipment did you have and what were the characteristics of that equipment?

ROWBOTTOM: In December '64, when I arrived in Rivers, the CH-46 aircraft, which was the United States Marine Corps' Sea Knight, was our Canadian Forces' CH-113A—the Voyageur. This was the self same airframe that the Royal Canadian Air Force had just begun to operate as the CH-113A Labrador. Both of those aircraft are, of course, familiar even today insofar as the CH-113 Labradors, and some of the converted Voyageurs, are still operating here in this day and age in the search and rescue mission. The Sea Knight—the CH-46s familiar to most Canadians, who have watched any of the Gulf War activities—Gulf War I and II—because the United States Marine Corps is still using that aircraft, day in and day out, as a workhorse in its activities.

Generally speaking, I'd say it would carry for us twenty-five troops, or a section or so, of infantry, complete with their winter gear, sleds, and all the rest of that. And our 1 Transport Helicopter Platoon was organized with its twelve Voyageurs to, obviously, a transport job for both equipment and supplies and people. And so, we were engaged in many roles, both in the field, for the soldiers, but we were also heavily involved in such activities as forest fire fighting, flood disaster support and indeed, very often, delivering cattle supplies and things like that, for stranded cattle in the winter. So, it was fascinating to see that this mini-Greyhound bus which we had -- this mini-Greyhound bus, this school bus par excellence -- had multiple uses in the back end.

Without, again, being too cynical about it, we really didn't mind terribly much who or what was in the back end. We did ask the soldiers to be particularly careful not to drive their skis and ski poles, through the very light, thin, interior shell of the aircraft. But, by and large, as to whether you had evacuees from a flood, or moving fire fighters into a forest fire area, or soldiers up to Tuktoyaktuk, really to the Squadron, to the unit, it didn't matter overly much. That was 1 Transport Helicopter Platoon of the Royal Canadian Army Service Corps and it was organized with a field equipment table such that we had adequate ground transport and adequate tools, and equipment to do a military job in the field.

INTERVIEWER: Do you recall your establishment and vehicles and personnel, at that time?

ROWBOTTOM: I would need a little time to dig that out, but I do have somewhere charts showing just what we had in the way of deuce and a halves, in the way of three-quarter tons—the whole organization and structure of the two elements, plus our maintenance element.

INTERVIEWER: How many pilots per aircraft?

ROWBOTTOM: There were two pilots per aircraft. One crew chief—loadmaster—and essentially it was—yes--a three-person operation. If we deployed anywhere, over any distance, of course, we'd take technical crewmen along with us as well.

INTERVIEWER: Did you only have the heavy helicopters in the platoon?

ROWBOTTOM: No, we were very fortunate to have a number of reconnaissance vehicles. Certainly, the CO had a jeep, and that would be our 'close in' recce vehicle. But we were

also greatly privileged to have a CH-112—a Hiller helicopter -- as a reconnaissance vehicle. The CO's jeep, if you like—the CO's jeep of the air. And of course, we stayed current, both in the Hiller, and in the CH-46—in the Voyager. But I do recall that my colleagues and I would, very frequently go ask the boss, “Dad, can we borrow the truck tonight?” And so, we would go do our thing, either visiting units, as I say, but all on good reconnaissance missions, as you can probably imagine. [garbled] and a recognition that this was in the time that the Canadian Army was really only just becoming accustomed with rotary wing aircraft.

We would spend many hours in places like Rivers or Suffield or in Gagetown doing reconnaissance with Army officers—generally COs of units who had to make the move the following morning. But invariably, we'd fly them on the reconnaissance, at low level, marking maps with them and doing all these things together. But not infrequently--I should say, almost invariably--we'd land, and they'd say, “Now, I've got to go do the ground reconnaissance.” And it absolutely killed us that we'd spent many, many hours doing reconnaissance, low level from the air but, really, their trust was only in driving over and walking the ground. As time goes on, you kind of begin to understand that the vision from standing up in a jeep, or the vision from standing up in an APC, is so significantly different from that of fifty field feet in a rotary wing aircraft, moving at eighty-five nautical miles per hour that there really was some merit in saying, “Yes. Now, I'm going to have to do it on the ground.”

INTERVIEWER: One thing that I recall about what you've just described is the transition of the senior officers doing the reconnaissances, from three miles an hour, per se, to a hundred miles an hour. Could you comment on that?

ROWBOTTOM: Yes. Well, it was so apparent. And we're now, again, talking masses of scale. We also, ourselves, found that at five hundred feet you're moving at a hundred miles an hour. When you do drop down to twenty, twenty-five feet, your ability to map read; your ability to read the sloughs, if I can use that expression, to know the difference which slough is which as you proceed across the barren, became tremendously important. As we know, depending on where you are in parts of northern Canada, what might have been a track one year or might even be on a map for several years, may or may not exist by the time you come to go over.

And again, could I say, that to a soldier and to a Royal Canadian Army Service Corps soldier, who spent a great deal of time trucking, and that kind of thing, the very going, over which you were going to be moving your wheels, was tremendously important. And you really couldn't test the going from a helicopter. You could, if you were asked. You could land the heavy helicopter and rock it on its skids to see just how stable the ground was. But that, in itself, is not a terribly smart activity because there's certain places up in the north where, in muskeg, you'll find very quickly just how weak the footings are. And then you'll be a little more concerned as to just whether you're going to get out of the goo. So, whilst we used to be quite critical—jokingly critical—of our groundpounder friends, the simple fact of the matter is, that you really did need, very often, as I say, the track proven [muffled].

INTERVIEWER: At this stage of your career, you have significant experience, now, in flying a variety of equipments. I'd be interested, now, in hearing about tactics that you learned, and tactics that you utilized, in your role as an Army pilot.

ROWBOTTOM: The first question always was, “Where is the forward edge of the battle area, and to what extent, should we—could we—be employed forward of that?” And that, of course, would depend upon the phase of operations in which the unit was engaged. We’re talking here of an atmosphere in which we flew in which other things flew--fixed wing aircraft at low level, T-33, F-5s, and then later, of course, F-18s -- and then, a tremendous capacity for our artillery projectiles to be sharing that same airspace with it. And so the whole necessity for understanding what a Fire Support Coordination Centre was, and the role of us, as aircraft operators, in this commanding office(?), in due course, became tremendously important—that we knew just what there was in the area, just to what phases of battle we were in, and that a moving battle, as opposed to a defensive position, or a re-supply activity--called for significantly different thinking.

It was necessary, and my friends frequently remind me of this -- because in many respects, fixed wing Air Force people don’t think of it--before you know the air battle, you really need to know what’s the land battle. If we’re in the air units in support of the land battle, that intimate knowledge of what phase of operations—just what they’re expecting—is tremendously important. Then to answer your question more directly, if the conditions are right, tactically and operationally, then, yes, you may well go forward, over into the battle area, to move troops in, bring troops out, do casualty evacuation work, and those kinds of things. But it’s a reasonably complex situation that you’re looking at.

Here now, in 2003, I can tell you that right now, in December 2003, there’s a great deal of re-thinking of the safety, of the vulnerability of helicopters, forward into the battle area. Experiences in the war in Iraq in this last eight to ten months have sharpened that focus again. So, the helicopter is not the answer to all aviation problems. Correctly used, it’s a tremendous instrument, but it also is fragile as an eggshell when in the air.

INTERVIEWER: You’ve been doing a lot of flying up until this stage in your career. I understand that your career now takes an interesting twist. Talk about that, please.

ROWBOTTOM: Well, I went back to Rivers, quite happy to be staying with 1 Transport Helicopter Platoon, which we all heard was going to be deployed to Germany. And I can well remember that, in the winter evenings in Rivers, [my] family started attending German classes in anticipation of this wonderful move to Deutschland with the whole of 1 Transport Helicopter Platoon. On several grounds, the reality wasn’t quite as exciting as the tale. I’m not sure how far the German language classes went. I know that we never did deploy to Germany and, in fact, the Platoon was eventually split—a part going to Edmonton, and a part going to St. Hubert.

From my own part, this was a period in my career when career advisors came and said, “Les, there’s a chance that you can go to Staff College. But before you could go to Staff College, you’ll need some real operational experience. And so, we’re going to post you to 56 Canadian Transport Company, in Camp Rafah, Egypt, where you’ll be serving a year, as second in command of the Company.” And so, that was digested, if I can call it that, and I did spend, indeed, a year in the Sinai, in Rafah. But during that period I was privileged to be on continuation flying.

INTERVIEWER: Ah, so you did do some continuation – continuing flying training -- at that time?



ROWBOTTOM: Yes, indeed--two counts. We were good friends with our buddies down at the RCAF unit in El Erish, and I did take one or two flights in an Otter with them, down in the Sinai, down to Mount Sinai and back, in the Sharm el-Sheikh area. And also, as I say, I was privileged to be authorized to do continuation flying in Beirut. That was interesting in itself. We, in the transport business, used to run convoys up through Israel from the Gaza Strip, up through Israel into Lebanon quite regularly. And it was a privilege of the officers of 56 Canadian Transport Company that they got to do this duty. It did get you out of the Sinai for a period.

But to come, then, to the flying itself, once authorized I went to the Beirut Flying Club and was given a checkout in a Cessna 152. However, the security situation there was such that I was obliged to fly with a Beirut Flying Club member at all periods. Nonetheless, we would fly north up to Tripoli, and south, almost to Surasaida(?) and get a very good view of the situation in the air at that time. We were tremendously sensitive to the fact that the Israel Defence Forces were obviously of a superior capability to that of our colleagues down in the Sinai Desert, or up in and around the Beirut area. So, it was excellent, interesting flying, but one was well aware of the security implications in so doing it. It did keep us current, and it was a very great privilege to fly.

The only other thing I would mention is that, clearly, service with 56 Canadian Transport Company in Egypt was, again, one of these real-time experiences. Our Transport Company, at that period, was giving support to a Canadian Army reconnaissance squadron which did a considerable amount of work in the desert. And whilst we got along very well with the recce squadron, because we were all pulling the same way, it was with the recce squadron that I toured a fair bit into the desert and saw my first real, active minefields. And I suppose the thing that depressed me there was, one day you could drive into the desert and see nothing. There would be a wind change, the sand would blow away, and you'd see a minefield, clear as all get out.

Anyway, they were very good soldiering times and we had opportunity in the Transport Company to visit various Bedouin camps down in the desert, which were important elements in the recce squadron's ongoing patrol picture. It was a year that went comparatively quickly. There is something different about singing Christmas carols in the Sinai Desert, but let's put it this way—a most interesting experience and yes, I was, I suppose, rewarded because I was selected to go to Staff College the following year.

INTERVIEWER: I understand that your next posting was to the Canadian Army Staff College. Was there any mention of Army Aviation as an item of curriculum, there?

ROWBOTTOM: Not to any great extent. The soldiers' view—and we're speaking, now, of Centennial year, still in that 1967 period -- was that the land battle was difficult enough on its own account. And air support to that battle, really, was a comparatively simple exercise, as compared to the intricacy of the orchestration of the land battle. And so, those of us who were Army pilots—were Army aviators—were rarely called upon to make any comments as to how you would use Army air in a particular situation. Really, the soldiers were more concerned to say, "Yes. Just what is in the advance to contact? How shall you form it, you know, and how shall you proceed through the various phases of war?" We were always

presumed to be the cheats who would over fly the battle and spoil the whole bloody plan, anyway.

So, let me say that, tactically, there was no great attention given. And I put that down, in retrospect, to the fact that we really had no godfather of Army Aviation. Army Aviation was really the bastard child of a bunch of Staff Officers in the Directorate of Land/Air Warfare. And whilst we did have several General Officers, who, thanks to my good friend Lorne RodenBush and others, several General Officers who did a certain amount of flying of light aircraft, it really was a familiarization level of awareness. And there was no way that the kinds of changes -- that could come into the land battle from Army Aviation -- were never allowed to come because, as I say, we never had a patron.

I can recall speaking on one or two occasions with the Director of Armour, of the day--who would have many of his officers involved in Tactical Aviation flying activity--and would ask him, "Will you become the godparent? Will you become the Grandfather of Army Aviation?" None of the General Officers in the Army really wanted—if I might say, really wanted—to do it. And so, forgive me for saying it, but we languished, in terms of doctrine and development, notwithstanding our close relationship with the United States Army.

It was only really after the integration and unification of the Canadian Forces that the new Air Force—the new Commander of Air Command—took an interest in a total system look at aviation. So, Tactical Aviation, as we came to call it, within 10 Tactical Air Group, for me started the development of a clear idea of Canadian Forces' doctrine, to the use of Tactical Aviation, in the field.

INTERVIEWER: General Les, you did a year and a half at Canadian Forces Headquarters in Ottawa, and outside of Army Aviation, what happened next in your career?

ROWBOTTOM: Having finished at Staff College, in the National Headquarters--National Defence Headquarters, as we might call it now—I was assigned to the Programs and Development Integrated Logistics System, the idea of which was to tie together Army logistics, Naval logistics and Air Force logistics and build a common system. I stayed at that for about a year and a half but, significantly, there was no aviation activity, at all. However, I left that in August of 1969 to go back to aviation, and I went to Edmonton to command 450 Squadron West—a detachment of helicopters, which were located in Namao.

INTERVIEWER: So, describe your experience, as Commanding Officer of 450 Helicopter Squadron, in the west.

ROWBOTTOM: The original twelve helicopters of 1 Transport Helicopter Platoon had been split, as I think I mentioned earlier. We, in the western detachment, when I took over, had four of our Voyageurs. We, essentially, we thought, looked after the Army of the West, in respect of field activity. Of course, a large amount of our support of the Brigade Group in Calgary took place in Wainwright. And we were frequently out to Wainwright, at all times of the year, for considerable periods of time. We also spent a fair amount of time down in Suffield. And since we had a Canadian Airborne Regiment sharing the base with us in Edmonton, we deployed quite frequently with the Airborne Regiment -- out to the coast—Tofino, and places like that.

The Airborne Regiment was, not infrequently, up in the North Country, and our times up in Tuktoyaktuk saw us out there supporting the Airborne Regiment in the field. Typically, too, this was a time when we would cover the same kind of radius of flying activity, when there might be forest fires, or, you know, climatological problems—big snowfalls, floods, and that kind of thing. So we really were on the go quite frequently. We didn't fly east on too many occasions--by east, I mean east of Winnipeg--on too many occasions. However, from time to time, we would join with our colleagues from the eastern, bigger half of the squadron, and serve down in Gagetown.

And so, it was a pretty steady series of following the training cycle of the Canadian Army such as we were all familiar with and, if you wish, there were those other domestic activities. We were, for example, at that particular time, constantly on search and rescue standby, and spent a fair bit of time going into and out of the Rockies, both in search and rescue activities, as well as up in northern Manitoba and up into the Northwest Territories. Most interesting flying experience. If we had a criticism it was that, in fact, the Army didn't use our helicopters as much as we would like to have seen. But the soldiers' perennial observation, was, "It's easy to get into and out of an aircraft. It isn't always easy to get into and out of an armoured vehicle or a recce vehicle when people are trying to give you a hard time."

So, really, a busy period of time, all the way round; one, however, in which we never did feel that we were being employed by the Army as much as we might have been. And, as I may have said, we frequently would ask senior Generals of the army if they wouldn't use our aircraft more frequently. We really would have very much liked to consider that one part of the army, at least, took Army Aviation under its wing, but it never appeared to be. And, as I think I've said, we never really went further, than having officers in the Directorate of Land/Air Warfare who had any doctrinal interest in what we were doing.

INTERVIEWER: You mentioned several trips north, into the Arctic, I guess. How did you manage that? How did you do that?

ROWBOTTOM: Well, with a great deal of care, and I don't say that facetiously. Just to use a case in point--let's say, we were going up to Inuvik or Tuktoyaktuk. The Voyageur, in the period we were operating it, did not have long-range tanks and we had a comparatively limited fuel range. It seems to me we were about 2.5 hours to safe distance, and beyond that, in considerable difficulty. Flying up into the Northwest Territories, and up to the Arctic Circle, depending on the time of the year, we had significant concerns as to just how good the aviation weather would be. And given that, as you went north in those days there was a lesser quality of weather information. You got good climatological, but not a heck of a lot of good weather information. And as we know, even today, there's a great deal of lore of local flying, into Canada's North Country.

As a consequence, then, to deploy up to Tuktoyaktuk, as I said, you really needed to know that, when you were on your leg, there was a decision point, at which you either had to come back and refuel and start again another day, or have to decide to keep going. And it was one of those situations where, very rarely on that route, did we have any knowledge of fuel caches. So, there really were critical points along the route where you had to make a decision whether to turn back or not. I'll always remember, quite clearly, going up on one particular occasion and hoping to get aviation weather as to just what was going on.

Well, the best place to get that was from Norman Wells. And you had to be in Norman Wells, pretty well, to get it, because they received their aviation weather from a passing commercial aircraft that stopped off to drop off passengers and delivered the latest general forecast and area forecast from Edmonton. So, we really did have significant concerns and significant difficulties in that period. Again, once out in the field, it was very much a squadron decision to decide just how efficiently we could, or could not, operate. As you'll recall, we had our Artillery friends, who had a met-tech -- technician's -- capability.

But we, by and large, had to deal with pilot reports, such modest ones as there might be, up in the Northwest. Or make our own decisions, from public forecasts, and those kind of things. We're living in a world here where quite frequently the helicopter squadron would be authorized, for its exercise operations, to fly at two hundred feet and half a mile visibility. Well, that's way below any capacity that you would expect to see in developed Canada. I must confess, on very rare occasions we would be authorized to fly at one hundred feet with a quarter of a mile visibility. Well, if you're flying at a hundred feet and a quarter mile visibility, those conditions are such that they can be zero in no time. And so, as I say, a great deal of concern, a great deal of our command time, or command and control time worry, was just about where we going and what we had to do.

INTERVIEWER: Zero zero—does that mean ceiling zero; visibility zero?

ROWBOTTOM: Zero—ceiling zero; visibility zero. You're really in the fog, you might say. The pressures, however, would sometimes be very difficult to resist. And I'll give you a case in point. I can recall my then Ops Officer, Captain Al Shultz, coming to me one day up in Tuktoyaktuk, and saying, "On the basis of the weather forecast from the Pacific Western flight that's just come in, Boss, we ain't doing nothing today. Can I stand them all down?" It was by now two, two-thirty in the afternoon. "Yes." I'd read the scene with him. It looked miserable outside the tents. "Close her down." And those who were not obliged to do anything else—we wouldn't be flying until tomorrow morning—so, yes, you're allowed to be out."

Well, the afternoon wears on, and it's a dark night, anyway because we're up in the North Country in late fall, I think it was. And we have no sooner got the lights on and the heaters all running that a call comes in to say, that a skidoo has overturned—some ... twenty to thirty kilometers north of where we were. And the Canadian Airborne Regiment were deployed at that time and there are two people in serious condition. Magically, when you looked out of the tent door, you could find that the two thirty, three o'clock, restrictions in visibility had cleared and, by God, you can see quite a distance, in the dark. But by this time, we had told everybody to stand down.

All I will say -- the fact of it is, at this late juncture the Commanding Officer and the Operations Officer took the trip to go and recover those people. If anything had gone wrong, at least we brought the boss and the Ops Officer who had screwed up. Or had they—who had screwed up in doing this? So, those were the kinds of things and, fortunately, there were not too many of them but those were the kinds of things that kept us challenged.

I'm pleased to say that, not too long thereafter, that the long-range extension system was brought into the Voyageur helicopter. Of course, the Labrador helicopters had larger in-built fuel tanks, so we got around that. But certainly, in the late 1960s—early 1970s—those were

the kinds of challenges. There would be similar challenges on the West coast. And I can recall going over to Tofino, and then, turning right to Iqaluit?—turn right to go north to Iqaluit--and to be in sea fog in an instant. But not to overstate it, it was a very challenging experience, not the least to consider flights through the Rockies from Edmonton out to the West Coast.

INTERVIEWER: General Les, would you take us through the rest of your command, and what transpired later in your life?

ROWBOTTOM: At the end of my tour at 450 Squadron in Edmonton, I was privileged to go to do a year at the University of Alberta to finish a degree, and then served as a Lieutenant Colonel on the directing staff, and on the planning staff, of the Canadian Forces Command and Staff College, in Toronto. There I wasn't directly involved in Tactical Aviation matters, but did a role as a DS—as they say—and as a Planner. I left the fulltime service, and almost immediately thereafter became involved in the Air Reserves. And after having spent some time active in Air Reserve Staff training activities, I became current again, flying helicopters in Toronto with 2 Wing. [I] was appointed to command 2 Wing in Toronto which was comprised of 411 and 410 Squadron, as well as its supporting activities, and was very privileged to do a fair amount of Kiowa flying from there.

We were, at that time, running an Air Reserve Group Headquarters out of Winnipeg, and I subsequently took command of the Air Reserve Group in Winnipeg, and continued to fly with our units, but particularly, with our unit down in Toronto, with 2 Wing. At that time, 1 Wing in St. Hubert, was an entirely Air Reserve unit. And we also had, as I say, 2 Wing in Toronto, as well as Squadrons on the East coast, and also in Winnipeg. So, we had a fair Air Reserve representation.

It was during this period that I started to see what I will call the impact of the new Air Force on what I had known as Army Aviation. One of the greatest enjoyments I have seen has been to see that the metamorphosis of old Army Aviation into the Tactical Aviation that grew up in 10 Tactical Air Group -- moved ahead, by light years, in its technical and professional competence. And whilst I won't go into any great detail in those Air Reserve years, permit me to just refer to my more recent look. And that's to say, in the last five years I have been privileged to serve as Honorary Colonel of 1 Wing in Kingston. That's to say old Tactical Aviation as was--that's a successor to 10 Tactical Air Group.

And I've been privileged to see airmen and airwomen in Tactical Aviation flying their helicopters, both in Canada and deployed in Kosovo, and deployed in Bosnia, on frequent occasions. And I can tell you that the men and women who are flying those helicopters today in active fields of operation are doing an infinitely better job than I could have ever hoped to see. Canada's Air Force, today, is infinitely better: in its support of the Army; in its knowledge of the land battle; in its knowledge of what takes place around the land battle; [and it] has a greater sensitivity to what a landmine is, and how well to avoid it, than ever the kind of group of people who were in those squadrons, in which I grew up.

We in Army Aviation, then, I'm obliged to say, owe a great debt to those who formed the new Air Command which did truly integrate the interests of Naval Aviation, Army Aviation, and the Royal Canadian Air Force. And so, I couldn't say it more simply. We had so little idea of how little we knew, as compared to the quality of the flying, the quality of

maintenance support, the quality of all ranks support that I see--men and women deployed in the field. And so, it is a paradox that Army Aviation in Canada, is much better off today, as a tactical component part of Canada's Air Force, than ever it was when I started in the Canadian Army, in 1956.

INTERVIEWER: General Les, picture someone listening to this tape, two hundred years hence. What message would you like to leave them with?

ROWBOTTOM: I suppose the first message is that, as I look back on fifty years or more of military service, how little the fundamentals of the Profession of Arms do change. Equipments change. Tactics change. Empires come and go. But the soldier and the soldiering métiers change very little. And so, I'm able to look back and concentrate upon Army Aviation—a new vehicle. But even as I do that, I'm still sensitive to the fact that whether we use boats, whether we use trucks, whether we use aircraft, whether we use ships or barges, whether we use mules, whether we use horses, the nature of the game we're in doesn't alter a little bit. The magnificence of the people who are in soldiering, in this self-teaching institution of ours, of the Profession of Arms, where failure is death, still continues to encourage me, as I go on, and I'm sure it....

[Canadian Aviation War Museum Oral History Program Interview with Brigadier General (Retired) Les Rowbottom. Interview ends.]

**TRANSCRIPT ENDS**