CANADIAN WAR MUSEUM

ORAL HISTORY PROGRAM

INTERVIEW TRANSCRIPT

INTERVIEW CONTROL NUMBER: 31 D 2 ANDERSON

INTERVIEWEE: John R. Anderson

INTERVIEWER: A.E. Delamere

DATE OF INTERVIEW: 27 November 2001

LOCATION OF INTERVIEW: Victoria, BC

TRANSCRIBED BY: John P. Maclean

Transcription of Interview Number 31 D 2

Admiral (Ret'd) John R. Anderson

Interviewed 27 November 2001

By A.E. Delamere

INTERVIEWER: This is the Canadian War Museum Oral History Program, interview with John Anderson, recorded on the 27th of November, 2001, at Victoria. The interview is conducted by Tony Delamere, and this is Tape 1, Side 1.

John Anderson served in the Royal Canadian Navy and the Canadian Forces for 35 years. Between 1968 and 1970 he was the AIO officer, the Action Information Officer, in HMCS BONAVENTURE. He joins me today to discuss how things were done, as a member of the Ops department in the post-war Canadian carrier.

And, John, perhaps we can begin with you telling us as to where you were born, raised, educated, and how and why you joined the RCN?

ANDERSON: Okay, I was born in Trail, BC, spent almost the first eight years of my life there, and then moved with my parents to Oliver, in the Okanogan Valley, the town I really call home. Finished my high school there and joined the Navy directly from high school, as a Regular Officer Training Plan cadet, and went to the University of British Columbia.

I did a Bachelor of Science in Maths and Physics there and was at university from September '59 until May of '63, when I graduated, and was then commissioned as a sub-lieutenant in the RCN.

INTERVIEWER: And what made you join the RCN?

ANDERSON: Well, I've been asked that many times, and I don't really know for sure where the seeds of joining the Navy began, but I used to go to Vancouver as a child with my parents, and we would often go down to the waterfront, around the old Pier B and C of the CPR, where the PanPacific Hotel, and the big jetty is there now. I was always fascinated by ships, I think. I also once recall visiting here in Victoria attending an Open House at the Dockyard, and going aboard a ship. I guess it was a destroyer, I don't really remember what it was, and I think I found that quite impressive as well.

And so, from about the time I was in Grade X in school, I knew I was going to join the Navy. But I wasn't quite sure how, or what I would do, and through pressure from my parents, who were pretty keen for me to go to university, and then, somehow, some help from the high school counselor, who directed me towards the ROTP program. And so in the spring of the year I joined. I got involved with the local recruiting visit, and that

eventually led to me being processed through the ROTP candidate stream, and eventually being accepted. I was actually standing up on a ladder picking peaches when my mother called out, "The telegram's here!"

INTERVIEWER: Now, can you tell us what basic and advanced training that you took prior to --after you joined the RCN, and prior to getting to the carrier.

ANDERSON: Of course, I was subject to the same sort of summer training program that every ROTP cadet was. I served in the frigate NEW GLASGOW for two summers, and then the destroyer FRASER, prior to her conversion as a DDH.

On graduation in '63 I went to STADACONA, Halifax, and did the six months pre-fleet training. I was in pre-fleet course Lima. And then I was off to sea, in early 1964. I came back out here for the west coast, served in SASKATCHEWAN for about 11 months, probably one of the best ships I ever served in, and then got 'cycled'. If you remember, in the fall of 64, the great cyclic system arrived, and I ended up going to HMCS ST CROIX. And I spent the rest of my, what was effectively my first sea phase, under the generalist training in ST CROIX, got my watch-keeping ticket there, and in that ship I served as the communications officer, and also got my first experience at Air Control.

In'66 I was selected for the 5th Long Operations course, and that, of course, took me through the rest of '66 through 1967. I was, I think, the youngest officer on that course. There were others who were not really old, but three or four or five years older than I was at the time. Consequently, it was clear that someone like myself could go to the carrier as AIO officer, and not "suffer" from a career point of view, whereas others clearly needed to get head-of-department experience in a destroyer immediately on finishing the course. I suspect that's the reason why I was selected to go to the carrier. There was another officer on my Long course also chosen, posted there, but unfortunately he failed the course, and consequently his posting was cancelled.

So I was posted to the carrier in 1968. But for my sins I had to go to Toronto and do the Staff School course, which was then 14 weeks long, prior to joining the carrier. So, from the end of my long Ops course, I went immediately to Toronto and did 14 weeks of staff training, and then in April of '68, actually joined the carrier just after it had come back from the Spring deployment to the Caribbean.

INTERVIEWER: And was the posting to the carrier in those days considered to be, shall we say, prestigious? Were you thrilled about getting this posting to, shall I say, an unusual ship, where all of your contemporaries had gone off to destroyers?

ANDERSON: I was actually quite nervous about going to the ship. First of all, it was a "big ship" and also it was my first east coast ship. All the stories about the differences between west and east coast sailors and so on, most of them myths, caused me some concern. So it was with a bit of trepidation that I appeared on the jetty in April and walked up the after prow to report myself on board ------this monster of a ship.

So I was pretty uncomfortable actually. And of course it was a very strange environment, as a carrier, when you were used to a destroyer, and the pace of life, and all of your training during the last X months on the Long Ops course had been focused on working and operating a destroyer, and fighting a destroyer, not an aircraft carrier. So there was a fair amount of trepidation on my part in terms of joining the ship.

INTERVIEWER: Now to start things off, could you describe for us how the Ops department was organized in BONAVENTURE?

ANDERSON: Yes, Starting at the top, under the Captain and the ExO, you had Commander (Air) who was a ship's officer but an experienced pilot who had certainly commanded a squadron of aircraft at some stage in his own career.

Under him there was Lieutenant Commander (Ops), as opposed to Lieutenant Commander (Flying). Lieutenant Commander (Ops) was effectively the Operations Officer for the ship, but he had quite a large department. Under him, he had the Communications Officer, who had the complete Com. Department -- Visual, Radio, and Electronic Warfare.

The Weapons Officer who is in some ways a 'bit' player in the carrier, but he had two three-inch .50s, I think, Port and Starboard after mountings, after the refit, and had a small weapons department.

You had a Maintenance Officer who was a Lieutenant Commander, and this is really the forerunner of the combat systems engineer, although in those days we didn't have any officers qualified, so you had people like Pat Barnhouse who came. I think he was an electrical officer background, who was responsible for maintenance of all of the Operations equipment in the ship, from the radars, the radios, the displays, the plot tables.

There was a small Air Operations department with a Lieutenant Commander (a Flyer), who headed up the ship activity, which was involved with the briefing and debriefing process for running the Air Ops side of it.

And then under the position or individual then called the Direction Officer, who was a qualified D, in those days, you found the people and the organization that really ran the Operations Center, and dealt with the airplanes in the air from the point where they left the Approach and Departure aspects of the airfield of the carrier and became a tactical vehicle. So under the Direction Officer, you then had the position that I held which was the Action Information Organization Officer.

You also had another small cell of -- in fact they were air force people -- who were qualified in running the Approach, precision Approach radar, the carrier-controlled Approach radar, that was used in Instrument Flying conditions to bring the aircraft back onto deck. He also worked for the Direction Officer.

So therefore under the D, and under my position as the Action Information Organization Officer, we had the Operations Center itself, staffed by about 70 radar plotters, in round numbers, and the grouping of the Air Control Officers, both fixed wing and rotary wing, or Helicopter Control Officers. There was, ideally, three of each, so you would have six air controllers as well.
So you looking at a department of just under, or a grouping if you wish, of just under 80 people -- about 10% of the ship's company, if you wish, working in that area.

INTERVIEWER: Now can you tell us what the responsibilities were of Commander (Air), and the Direction Officer.

ANDERSON: Commander (Air) is a head of department in the ship serving under the CO and the ExO. [He] had effectively total responsibility for all aspects of the operation of the aircraft.

I think when you think of a carrier, you have to separate in your mind its functions into what I call an airport function -- happened to be a moving airport, but very, very similar -- and then as an operational tactical unit where principally its weapons, and its weapons systems, were the aircraft.

And Commander (Air) owned both of those functions. For the airport side of it, he had a Lieutenant Commander called Lieutenant Commander (Flying), who was his alter ego, in some ways. But Lieutenant Commander (Flying) and Commander (Air), one of them was always in Flyco -- flying control position -- which was in the Port After corner of the, I guess it would be Zero 2 Deck, in the island, overlooking the flight deck.

So whenever flying operations were happening, one of those two were always there, because they were the overseer of the whole thing, if you wish. They listened to the radios, they watched what was going on on the flight deck, they watched what was going on in the air.

So, within five miles of the carrier, that was the carrier's control zone and, effectively, that was its airport function, unless you had some tactical reason to be operating inside that, with respect to, say, anti-submarine warfare.

You then move outside the control zone, into the outer air space, so to speak. That is where Lieutenant Commander (Ops) and his team entered the picture. Because all of the tactical control of the aircraft -- whether it was being exercised directly by the carrier, and its air controllers, or the aircraft were being handed over to another ship for control, or to another aircraft -- the responsibility for that and its smooth functioning, and its management of the air picture, and the management of its air assets, fell under Lieutenant Commander (Ops).

And under him, he had then the team of the Air Ops cell, and the Direction Officer to effectively manage all of that, and provide the control. And, of course, as is always with a warship, you are trying to develop a picture of what's going on out there, in this case, in

three-dimension ---air, surface and sub-surface--- and the management of all that information flowing back through your radars, through your radios, through reports from other units, and through your aircraft reporting, came into the Ops Center itself. And the Direction Officer was responsible for the management of that. But the Direction Officer had another special and very unique responsibility and that is the control of aircraft in Instrument Flying Rules conditions where, once the tactical employment of the aircraft had ended -- for instance, for one that was due to come back for recovery -- the Direction Officer and some of the air controllers had specific duties to manage the flow of their planes, safely back, in terms of altitude, separation, time separation, get them to the right point in the control zone, at the right time to be on the deck at recovery time.

And the D, under our old style of training, was qualified in that sort of thing. He was also, of course, an air intercept controller, in terms of managing fighter aircraft. But we had no-- in the post-'67 refit of BONAVENTURE, we had no capacity to do fighter air control, other than in two dimensions, because we had no height-finding radar.

So the Direction Officer not only was responsible for the work that I did, which was the larger tactical plot ---picture of what was going on around the Task Group--- but also he had this very unique responsibility, both when you launched in IFR conditions, and when you recovered in IFR conditions. Then he and some of the air controllers managed that very carefully, and got the airplanes back in a recovery sense, to where they were intercepted by the CCA operator -- the Carrier Control Approach operator -- with his very precise three-dimensional radars, where he then 'talked them down' the glide slope onto the back end of the carrier, so that they could land.

So it was a very, very clockwork, a very precise type of activity.

So, that's in a broad sense how Commander (Air) owns those two elements of the carrier operation.

INTERVIEWER: Now, you talked a lot about bringing the aircraft back, and compiling pictures, and doing all those functions that these people were responsible for and, indeed, you had to do all that. You had to have obviously a very sophisticated Operations Room. Can you describe, as best as possible, the layout of the Ops Room "…"

ANDERSON: Well, I'll try from -- my memory's a bit shaky -- but if you could think a picture of the island of the carrier, and the first deck above the flight deck, which was Zero 1, deck level, was where the Ops Centre was located. And the Bridge was on Zero 2 Level. So if you can think of the, sort of the oval shape of that island, and in the forward half of Zero 1 Deck, were located three plot tables. These were old ARL plot tables, I think -- at least the one was, and the other two were the more modern ones, and I've forgotten the nomenclature for them.

The forward-most table was the helicopter plot. And beside it was a SPA 8 where the helicopter control officer sat, so that the two --- a normal launch in the carrier was four Trackers and two Sea Kings. And you always ranged five Trackers, in case one went

unserviceable, so you could get four off. And, so once they were airborne --- just to stick with the helicopters for a moment -- once the helicopters were airborne, then they would take their departure from the carrier. At a certain point [they] would be switched on radio from the control of the flyco side of the house over to the helicopter controller, who then had responsibility for the full operational deployment of the -- usually three, three and a half hour cycle here, we're talking about here for the Sea Kings.

So you would have an officer as the helicopter controller, assisted by a radar plotter, an assistant controller, and then probably one or two other plotters who then kept track of where the helicopter was and, then, depending on what it was doing -- and particularly if it was tracking a submarine -- then you effectively had your submarine plot running on that forward table.

Coming aft, not very many inches, because it was quite tightly spaced in the ship, was what we called the Local Operations Plot which, for most Canadian sailors of a certain vintage, would recognize as two miles to the inch type of plot that we would run, that not only provided the ship with its own Local Operations Plot, but it also allowed input from both the helicopter controller, who was just forward of that plot table, or the fixed wing air controller who was just aft of that table, to provide plot information, tracking information on ships' identities, often location of your own forces, you kept track of it on there. 'Cause, remember this is -- we did not yet have data links, and things here. We had link 14 you could receive if you had a transmitting ship around but that was all in those days.

And then I think somewhere in there was another radar display which was your normal radar guard that any ship in the fleet kept with an RP on there. I think there's another plot, another SPA 4 in here somewhere, probably.

Moving aft from that, you then came to the general operations plot which would be running at maybe 10 miles to the inch. And it was here that a lot of the aircraft information, and the larger wider area picture was built up, to serve not only the air tasking for the Trackers, but also to serve the requirements of the CANCOMFLT and his staff, who were embarked generally in the carrier when it was performing a Task Group role.

There was also an Air Plot, a vertical air plot, which allowed us for air defence requirements to keep track of that information.

Just a little over halfway back there was a ladder and a hatch up to the Bridge, so that if you had to get up to the Bridge to talk to the captain or if the captain had to come down into the Ops room, he could do it very quickly.

I might say, it was very rare for the captain of BONAVENTURE to be in the Ops Room. His principal interest was the ship and its overall activity, and he relied heavily on Lieutenant Commander (Ops), and the Direction Officer, and those of us running the Ops Centre, to actually manage the tactical situation.

And there was then a desk for the Ops Centre officer to sit at, and you had there a lot of inter-communications capabilities down to the flight deck, to various radio rooms, the radar rooms, up to the Bridge.

Then, moving aft, there was a space for the Air Ops side. These were the people who did all of the planning for the launches. So they were a very intricate part of keeping track about what was happening, on an hourly basis, but also in developing the planning for the next launch, and even the launch after that, in terms of the tactical assignments, the employment to the Trackers, and the helicopters. Preparing the briefings, actually giving the briefings. I've actually got a bit of detail, we could go into the briefing cycle, if you wish, out of my journal.

And there was a very close working relationship between the ORO on watch, or the Ops Centre officer on watch, and the Air officer, who tended to stand watch on, watch on, as well. So you formed quite a nice little team.

Then, at the after end of the Ops Room was effectively what I call the Air Control Centre. This is where the Direction Officer and his controllers would work when you were doing IFR activity. Just to illustrate, the fixed wing controller always had an RP as his assistant, who was also quite skilled at air controlling. And if you were going to do an instrument flight recovery -- an IFR recovery -- there would be, imagine, outside maybe five or seven or 10 miles -- I've forgotten the exact distance, from the carrier -- you would establish sort of like rendezvous points or an entry point where, when an aircraft got to that point, it had been assigned a certain altitude, and a certain heading, and so one of the controllers, in a tactical sense, would get that airplane to that point. Once it had reached that point, it was then handed over to the D, and one of the two controllers, the RP, or the officer, had moved from the position of being a tactical controller to going back and doing approach control. Remember that there was also another one back there who was come on for the next watch, who was going to do the departure, in an IFR condition.

And you always flew your first launch off before you recovered the previous launch. That way you had a clear flight deck.

So, if it was really difficult flying conditions, the D would be there supervising his controllers who were, on the one hand, taking aircraft who were departing safely out into their tactical employment, with time separation and height separation. Remember the time separation was established at a two minute squirt off the forward end of the ship, off the catapult.

And, so that's the activity, I call it IFR control, for the lack of a better term, that would take place there. And they also had access to a direction finder for doing radio DF on aircraft transmissions, as well, in case they had problems sorting out IFF and that sort of stuff.

And then right at the after end -- BONAVENTURE had an airborne early warning reception capability. And if we were working, for instance, with American carriers and they had one of their Hawkeye aircraft airborne, and were transmitting radar pictures back, BONAVENTURE could actually receive those and display them. And we would do that from time to time and consequently get a very long range air picture from a friendly source.

And that activity was back here, there was a couple of SPA 8s and it was a very tricky arrangement where you had to track an airplane with one. But then once you had the airplane tracked properly, you could receive its radar displayed on the other. And from time to time we did that back here as well.

So that's kind of a basic outline of some of the activities of how we did it. So in a normal watch you would have a lieutenant, Long Ops qualified, as the Ops Centre officer, myself or Rick Archer in the case of the time I was there.

You would have two officers, one controlling helicopters, one controlling fixed wing, both supported by radar plotters. You would be running three surface plots. Potentially if you were in an air threat, you were also running a vertical air plot. And then, of course, on the starboard outside of that island there were all sorts of state boards, you know, of radio frequencies, and aircraft, who was up and who was going up, all that sort of stuff.

And that system worked like clockwork when it was working well. And then, of course, you were in constant contact with Flyco in terms of launches and recoveries. You were in constant contact with the flight deck crew who were in an office just at the flight deck level, who were of course managing the air field, in terms of parking airplanes, ranging them, arming them, fuelling them, getting them already to go. But always needing to know any last-minute changes.

And the other hidden part of this operation, of course, were the radios. We had 28 UHF sets on BONAVENTURE. 27 of them were controlled in a radio room one deck below --- I think it was radio 3.

We had an ARC 552 up in the Ops Centre itself which we could manage and use ourselves. So just the simple management of radio frequencies, unserviceable radios, prioritization when you lost --you know, if you were in a launch or recovery, and you started to lose your land launch frequencies, or things, I mean.

And the ORO in the Ops Centre had to stick-handle all of that stuff, as well as keeping the plots going, keeping the Bridge informed about what was going on, and therefore where we needed to be going next if it wasn't for flying.

And, of course, when you were serving the Commodore, and his requirements, then you also had a fleet responsibility, in terms of positions of ships, the stationing of ships.

We were in the early days of DDH operations, and so we had more than one carrier out there. There were some very interesting situations where BONAVENTURE and another ship, I remember one day, being on a collision course, both on flying stations! Who was going to move?

The destroyer's captain appeared the next afternoon, in swords and medals! BONAVENTURE! I shall not tell you who it is but (…) !

Anyway.

INTERVIEWER: Now, can you describe how information would be received in the ship, and also disseminated in the Ops department, such information as you needed in order to carry out the ship's mission, and the mission in your department as well?

ANDERSON: Well, to start with, I guess BONAVENTURE would be like any other ship. Let's just imagine we're going to participate in some sort of Maritime Command exercise, say, off Bermuda.

The Operations Order for such an exercise would have been prepared by the shore authorities, either the Maritime Warfare School, or the Admiral's staff. So, certainly at the planning stages, Commander Ops or Lieutenant Commander (Ops) would have been ashore participating in some of the planning meetings.

But at some stage you get an operations order on board the ship. And at that stage I would set to work along with the air Ops fellows, to kind of a digest the exercise, and start to understand the scope of the whole exercise. Where was it going to take place? How many ships would be involved? How many aircraft? Although in that case, it wouldn't be so much our own aircraft as, say, how many Maritime Patrol aircraft from the shore bases would be deployed to actually participate? Were there any other units from foreign navies participating, that sort of thing. So it was sort of a top-down broad-approach.

From there we would then start to look in more detail, what actually was it that BONAVENTURE was going to have to do in this exercise?

I should say that part of the planning team would have been the navigator of the ship who was very much responsible for its safe passage, and for its handling, both in terms of entering and leaving harbour, but also in terms of maneuvering the ship for flying operations. As an example, if you were trying to go South but you had to turn North every time you wanted to launch airplanes to get a good cross-deck wind, then you were creating a problem of speed-of-advance for the ship. So the navigator was a very key element to this whole planning team.

And we would then start to analyze the requirements, and we would develop all of our communications plans. You would examine that. On BONAVENTURE and on the coast itself there was a standing Canadian communications plan, which gave fixed frequencies

for certain activities. But we might actually have to manage our ship's radios within a larger context of a communications plan for a big exercise, that might be integrating say an American carrier or American units who had different frequencies. So, one of the big things was: what is the com-plan, and is it going to work? Is there areas of interference? So you would then also have the communications officer involved in looking at this whole thing.

With a standard deployment of six Sea Kings, and 12 Trackers on board, BONAVENTURE would then start to look at, within the exercise framework, how many aircraft are we committed to operating in support of the exercise through a 24-hour cycle and for how many days? And from that you could start to get a sense of what kind of a launch cycle you were going to have to operate. Did you only have to operate from dawn to dusk? Did you have to operate 24 hours a day? Or did things stop at midnight? And you could not launch until six the next morning again? And, so, you would start to develop what is called the Deck Cycle Planning for all of this.

And that would be at the broadest -- and still back alongside, if you wish -- aspects of it.

Then you would deploy, and you would obviously be in far more detail at this stage. I mean, you would have briefed your Ops teams, and if there was any prior training required in terms of extra things that were being done for an exercise. Say, if we were working with the SOSUS stations and we were going to be getting reports from shore, did you have all of your drills laid out, and all that sort of thing. Air controllers would be, perhaps, doing some fine-tuning of their own skills. It would depend very much on the training cycle as to where everybody was in terms of their own personal development.

That was one of the side duties of my job. You were the training officer for the 70 RPs and the five or six other officers within the department, in terms of making sure that they were current in all the normal training that had to happen.

Then, once you got to sea, you would just move into a cycle. Again, BONAVENTURE's whole life was driven around the flight deck. How many airplanes had to be where, when? And you get into the whole process of briefings, and launches, and recoveries, and debriefings, in support of this exercise. And the flight tempo would be very much driven by two factors: one, when the squadrons embarked they always had a need to train their pilots at the next step. So that if you had a copilot who was working towards becoming a captain of a crew, then there were certain things he had to do. You always had brand-new pilots who had no deck qualifications. And so you had to build into your flying cycle, often, some deck qualification times where they could do touches-and-goes. And, starting with daytime, and then if you had people who were fully qualified for day-launching and recovery, but now needed to get into night launches, and recoveries, then you had to also had to build into your own training plan, your own deck cycle, the requirements to train the air crews to launch-and-recovery at night.

Same with the helicopters.

So we integrated into the operations, exercise requirement of the numbers of airplanes. You also had this ship requirement for training pilots and air crew and flight deck crews, on handling and fuelling and arming and all these things that you would normally go through. And you would build, therefore, a complete cycle, over the period of the exercise, one or two weeks or whatever, to satisfy all those requirements.

INTERVIEWER: I'd like to get into the actual activities within the Ops Room. Could you describe to us, for example, what happened during a Deck Cycle?

ANDERSON: Well, a complete launch and recovery cycle would start about two hours before the launch was actually scheduled. And of course the schedule was determined at a five o'clock meeting the day before. And then the next day's flying schedule is established, based on a number of the requirements that I've spoken about in the past. The operational requirement, the need to supply aircraft, the other users, the training requirements of the squadrons themselves, and where the ship needed to be ---when, over the next 24 hours. And all of that was published late in the day, and that was the flying program for the next 24 hours.

So when you were about two hours before scheduled launch time, the Trackers were lined up astern of the catapult, in the order in which they were to take off. The Sea Kings were then spotted either fore or aft of the Trackers, depending on how many were to be launched. There were spots forward -- remember there's the catapult, and the angled flight deck, I can't quite remember, but there was enough room to spot a couple of Sea Kings, and if you had more than two, then sometimes maybe a third one might be forward as well. And these would all have been ranged an hour or so beforehand by the flight deck crews.

There's normally five Trackers and two Sea Kings, which was the normal launch. The fifth Tracker was a spare, so in case one of the other four went unserviceable, the crew could quickly jump out of one airplane and into the other, or… In fact, I'm sorry, that's not correct. There were five crews, and the unserviceable aircraft would be pulled out of the line and that crew just wouldn't go anywhere, for that launch at least.

About an hour and a quarter prior to the launch, the crews were briefed on the weather and the employment for their launch. And that's the Air Ops team that's done that. So the Air Ops would have spent a couple of hours prior to launch time preparing the briefing for this particular launch: radio frequencies; which airplanes were being assigned to what, in terms of either sectors, and controlled by BONAVENTURE or being sent off to join a ship or ship-air cooperation; whatever. So that was an hour and a quarter beforehand.

And they would also get weather. Recall that we had a very good met' capability on board as well. There were actually two officers who were seconded from the Department of the Environment, but from the Canadian Weather Service, who were on Short Service commissions, one was a Lieutenant Commander , the other was a Lieutenant, fully qualified meteorological officers, and some support for them in terms of non-commissioned people as well. So they got good weather briefings.

Okay. A half hour prior to launch, the aircraft were manned and 15 minutes before launch they were then started and all 'run up' and had all of their checks done. And then all aircraft had to be ready for launch, on the exact minute that they were scheduled to be launched on.

And so you got to that launch point and the aircraft would then be launched, and would depart for their assigned areas and tasks.

Their employment might keep them close to the ship, under the ship's control, under BONAVENTURE's control or, they might be upwards of 100 miles away over the horizon working with other units, or working against a submarine, on their own. But still, of course, in contact with BONAVENTURE.

And then they would be required to manage their own flight times, in accordance with the recovery time, along with the air controller, in the ship, to make sure that they were back in time for the precise moment of their recovery.

Communications, I think I've said, was maintained with the ship at all times.

So that was sort of a background of getting the aircraft into the air. And I think I've already covered their kind of employment, if that's enough on that one.

What was the other part of your question?

INTERVIEWER: Well, the -- now bringing them back down.

ANDERSON: Right. So what I've described we can say was just the first launch of the day. Now we're getting to the second launch. The same sort of process would have happened for the second launch. Air Ops would have been following the current launch. He would be looking at the commitments for the next launch, making any adjustments if necessary. Briefings. And, of course, with a small flight deck that BONAVENTURE had, you always launched first, and recovered second, so you got space. (Laugh)

So if you think of it, if you're launching four, you got four in the air, and these are Trackers, so you got eight of your 12 Trackers are in the air, and you got at least four of your six Sea Kings in the air. So the launch and recovery period is quite a tense time, in some ways.

And so you would then go through the launch cycle, for the second launch of the day. And once it was completed, you would then bring the first launch down. And when you launch, you always launched the Sea Kings first, the Trackers second. But you recover the Trackers first and the Sea Kings second.

And you asked about the whole business of the flying course. The navigator on the Bridge would be responsible for determining that, and then that would be passed down to

the Ops Room. And the air controllers would then factor that in. First of all they would tell the airplanes, you know the flying course for recovery IS, whatever it is, because if you think of an airport now, and the airport's turned, and is moving in a certain direction, you've got an intercept problem to solve, with respect to bringing the airplanes back to the right point in space, in order to join up. If it was a Visual Flight Rule, before the Trackers would join up, and would fly in a pattern at a certain height above the ship, until they were ordered to break away, to recover. They would then time, if they had a pattern of four, the first one would break off to come back down to recover, the second one would break about a minute later or… Depends on whether you're running a minute, or a minute and a half, or two minute recovery cycle.

And when the ship was really well worked up, and the aircraft teams, the crews were really well worked up, you could get down to almost a minute between airplanes for recovery, in a Visual Flight Rules, nice clear sunny day. It's quite a neat thing to watch.

If it was Instrument Flight Rules, of course, then they were stacked and controlled and they were lowered down. Think of four doughnuts stacked above each other, and you'd bring one out and you'd bring it into the carrier-controlled approach. Here you'd be looking at a deliberate two-minute interval between airplanes. And then the stack would be lowered down. This is where the Direction Officer and his approach controllers now, are having departed the first lot, getting the second lot down.

Okay, so you would be flying into wind all of that time, and then once the recovery was completed, the ship would turn and head off in whatever direction it needed to do to maintain its speed of advance.

INTERVIEWER: John, We're talked a lot about aircraft flying, and other contacts that are, have to be kept track of, let us say, in the Ops Room. How did you manage to use radar, or visual means, etcetera, in order to identify or keep track of all these contacts? What means did you use?

ANDERSON: Well, a lot of the traditional ones, in terms of radar. But I think the important thing to remember about a carrier is that its weapons systems were its aircraft and, consequently, if you had a need to visually identify or find out what something was over the horizon, you sent an aircraft. You tasked an airplane and, depending on whether you were in a circumstance where that aircraft might be shot at or not -- and again I'm speaking in an exercise sense -- then you had to do some fairly stealthy techniques in terms of low approaches, or standoff attempts. Because, remember that the aircraft itself had a good radar, so it could extend your range, even. You could often find out things away off the horizon that the ship's radars could not pick up, by using your airplanes.

So, the simple answer is: use an airplane. Four sets of eyeballs, binoculars, and 100 knots.

INTERVIEWER: We're listening to an interview with John Anderson, and this is the end of Side 1.

INTERVIEWER: This is the Canadian War Museum Oral History Program, interview with John Anderson, and this is Tape 1, Side 2.

Now I'm wondering now, John , if we can talk about the officer in tactical command, the OTC, as to how he used the Ops Room to ensure that he had the latest tactical picture in order to fight the battle?

ANDERSON: When the OTC was embarked, it was the Commander of the Canadian Fleet, CANCOMFLT, one star, and he had a staff, and that staff were watch keepers when we were at sea.

Generally, 24 hours a day, there was somebody on watch, and one of the responsibilities we had in the Ops Room was to keep a picture as best we could of quite a wide disposition of forces.

If you were in a very complex exercise, for instance -- where for instance I can recall in Silver Tower in 1968 -- we were one of three carriers operating in the North Norwegian Sea. Carrier operations with more than one in the area, can become quite complex from an air space management point of view. And, consequently, where were those carriers? and what were they doing? was always of utmost importance for our Commodore to know, because he had responsibilities in the broader context of the exercise -- a big NATO exercise where he might have been responsible for, say, an area, for surveillance and control, or he might have been responsible for maneuvering a Canadian task group around. Whatever.

We had to satisfy his information requirements.

And, again, we used everything at our disposal, in terms of radio contacts. We were often in HF contact -- High Frequency radio contact -- with some of these other major units, where there was a reporting network, for instance, and you would be reporting your positions to each other. So we would keep that sort of thing on the general operations plot.

The disposition of the enemy, so to speak, in the broadest context, was also important for all of us. We not only had to keep it relative to our own ship's safety, but we also had to keep a picture that would allow the Commodore and his staff to make some of the major command decisions with respect to the maneuver for instance that they needed to take. Or whether he wanted to respond by directing the BONAVENTURE to increase its Ops tempo and fly longer, or fly shorter. All of those kinds of considerations would be supported by our information.

So generally speaking, there was always a duty officer from the Commodore's staff, not necessarily always in the Ops Room, but certainly in it a lot, keeping track of what was developing. Often he would give direction to me, or my counterpart on watch, as to what their information requirements were, and therefore we would work at gathering information to support his decision requirement.

Quite frequently, the Commodore would come in himself, and have a look at the plot, and talk things over, with his own staff. Although we were, if you wish, sort of minor players, in some ways, we were the information providers. And therefore we would often communicate and talk with the Commodore as well, in terms of what we thought was going on, or whether there was any recommendations we could make towards his decision-making.

So it was quite a good relationship. And from an experience point of view, for somebody like myself, at a relatively junior level, to be working in the context of a Fleet Commander, rather than just a ship, was an interesting professional development experience as well.

INTERVIEWER: Now, while we're talking about the Commodore, you did mention that the captain does not, or did not, visit the Ops Room that much. Would you keep the Captain in the tactical picture by going to the Bridge to brief him?

ANDERSON: Yes. Sometimes. Mostly it was done by intercom. Remember, we're back in the late'60s, and we were dealing --in one case, when I first went there, Captain Bob Falls, later Admiral Bob Falls-- was the commanding officer, he was an experienced ship's captain himself. He had driven a destroyer; he was also a pilot. And his style, I think, was to stay on the Bridge, which was somewhat of the style of those days. The captains didn't come down into the Ops Room that much. They did it all in their head, and kept information flowing upwards.

The second captain I had was Jim Cutts, Captain Jim Cutts. He was only there in command of the ship for four or five months, and participated in one big exercise. And, quite honestly, I don't remember whether he came down much or not, but he, of course, was a surface officer, not a pilot. And his approach was different.

But the carrier, I think, tended to keep captains on the Bridge because that's where they needed to be, most of the time, in terms of flying operations.

He, of course, lived on the Bridge. The captain had a sea cabin, and when we were at sea, he rarely went aft to his cabin, which was under the round-down of the flight deck. He just lived in the island. So, that was his life.

INTERVIEWER: Can I move on to some of your experiences with some of the major pieces of equipment in the Ops Room? Can you tell us what worked while you were there, what did not work, etcetera?

ANDERSON: Well, generally speaking, I don't think there was much of a problem with the equipment, given that most of our equipment in the Ops Room was standard Ops Room equipments: SPA 8s, SPA 4s, the UHF radios of the day, the HF radios of the day, the Plot tables.

But the one thing BONAVENTURE had that no other ship had that no other ship had at that time, was the SPS501 radar, which was later introduced with the DDH280s. We had the Litton LW03 antenna. In fact it was a marvelous piece of kit, tremendous improvement over the old SPS12 radar. Consequently our Air Search radar performance was much better than most of the Canadian ships. Most of the time, as well. Because the way we were set up with our maintenance people, we had a maintenance 'party'. There were three or four RPs, very experienced ones -- remember the old trade, the L-T trade? Worth their weight in gold? Well, we had several of them around. You just couldn't afford to have your displays and tables and radios not working, with respect to air safety, and consequently if something broke, there was an awful lot of effort made to fix it as quickly as possible. It didn't always work, but most of the time it did. And so, in my recollection, I cannot recall any -- from an operations equipment point of view -- any major disasters with our equipment.

Recall that BONAVENTURE also had a TACAN, which was unique. And it was a critical piece of air navigation equipment. And it seems to me that there were times when it didn't work.

And the other really critical bit, which affected flying, was the ground control approach radar, which was one of a kind as well. And again, I think it was kept at a pretty high state of readiness, because if it failed, you, really -- if you were in Instrument Flight Rules condition -- you were grounded, because you couldn't fly your airplanes, because you couldn't get them back.

INTERVIEWER: What about ECM equipment?

ANDERSON: Yes there was, actually. I've been trying to remember that. We had a Radio 3, not a Radio 3, but an EW Room, but I cannot recall (…?)

INTERVIEWER: Was there a WLR1, or (…?)

ANDERSON: Yes, in fact you could see in some of the pictures I've got. You can see the antenna for it.

INTERVIEWER: Those were the days when it was just being introduced really ?

ANDERSON : Yeah it was, and I think we used it, but I'm just at a loss to recall whether it worked, or didn't. Don't remember.

INTERVIEWER: But the radars were the key ones? There's no question about it. Was there a SPA 32 was it or (…?)

ANDERSON: Yeah, I know what you're thinking of. I don't think we had one of those in those days, in BONAVENTURE. They came a little later. The Ops Room controlled all the radars except the one navigation radar, which was on the Bridge -- the SPS10, the SPS505, and the Decca radar, short range, but the Bridge also had a second Decca radar

which they could use, and could control directly. Because one of the management problems, in terms of radar, was, who needed what range? and what kinds of settings? If there was nothing I learned better, in the carrier, than it was to tune a radar properly, which I'd never learned anywhere else. But John Harwood taught me very quickly how to tune radars for peak performance. And sometimes, you know, the Trackers guys would need radars out at, optimized for 100, 125 miles. The helicopters were in close and they wanted a closer setting. So part of your job, as the ORO, was to kind of find a happy medium between the demands.

And then if we were getting into a point where we might have been doing some sort of a weapon shoot, and, say, we had a T-bird towing a target for us, then you needed some different settings. And the weapons officer once in a while would enter the picture and say, "I need the radar to do This, or I want it to turn faster, or … so one of the great challenges in the carriers, is to keep the radars optimally tuned, in peak…

INTERVIEWER: Now when you conducted 'blind pilotage', (…?)

ANDERSON: I was the blind pilotage officer, for the carrier.

INTERVIEWER: And, presumably, radars were obviously key, there. At that point. Were they controlled by the navigator?

ANDERSON: Well, he had a separate Decca arrangement up on the Bridge, which was installed, I think, in the '68 / 69 time frame, perhaps one of the first uses of a stand-alone Decca arrangement. He used to do his own 'blind' on that, but I would be doing really traditional blind pilotage, SPS10, and the Decca radars that we had down in the Ops center. And plotting fixes … you know, I never saw a foreign port, because I was always down doing blind pilotage!

INTERVIEWER: John, I think that most people will agree that BONAVENTURE was a special ship in our outfit at the time, and what I'm interested in is to whether you can tell us, why was it special to you?

ANDERSON: Well, as I said, early on, I was quite nervous about going to this ship, but once I had settled in, it took --- I had a three-month overlap with Tim Porter, and I had to work myself up to take over from him. And he was a good teacher, as well, as was John Harwood. But the whole thing -- and I made some notes here, and perhaps I'll just read you some of the impressions that I had of the carrier. These were written in 1970, just a few days after I left BONAVENTURE, and the ship had actually paid off.

And I concluded by saying, with almost 27 months of my career spent in this fine ship, I thought that I should record some of my impressions, and some of the highlights of her activities. On the impressions side, I said that on the whole, the ship functions by divisions within departments. And unlike a destroyer, where you might, as an officer, likely get to know most of the ship's company, by name, say within the first year of serving on the ship, you only, in a ship this size, with some 800-odd people as part of the

ship's company, you get to know your division, and the key senior people in the other departments. After two years in the ship, I was still meeting people for the first time, who had been on the ship for as long as I had. (laugh)

You have very channeled, up and down to the Bridge, to your cabin, to eat, and then when you're standing, seven on seven off, five on five off type of rotation, which is the first time I stood that, in that ship, first time I had run into that.

But I go on to say that a fully operational carrier is like a well-made Swiss clock in internal organization.

To an outsider, one sees aircraft land, for recovery and launch again. However, on the flight deck, on the Bridge, in the Operations Centre and below decks there are about 400 officers and men at work to achieve what I call perfect harmony and to achieve the aim in their four, eight or 12 hours of responsibility, of getting the next launch ready, or of controlling a launch in the air in its operational role.

One man, doing the wrong thing, at the wrong time, can destroy the clockwork precision. That mistake may cost lives.

Generally, I thought people who have not served in a carrier, tend to overdo the Big Ship theme. Certainly there are disadvantages to serving in this class of ship, but they are far outweighed by the advantages. In fact, the non-servers, as I've called them, are basing their opinions on comments from other non-servers, and they know naught of what they speak.

Advantages that immediately spring to mind: excellent cuisine. We had a separate gallery for the wardroom, simply because the main galley was far too much forward to allow the movement of food. I'll pass over the good bar. From an operational point of view, serving in a command ship, with an OTC; a fairly comfortable ride in rough weather, although we had some uncomfortable ones as well; and an exposure to the control of aircraft at sea, both tactically and in an air traffic control sense. Good port visits.

You were the center of action of the Canadian fleet at the time; and, anyway, my overall sense is that it's absolute teamwork, personality driven. I mean there were times when you didn't get on with various people, but you knew that if somebody made an error, very quickly it could kill somebody with an aircraft. And consequently people worked at a high pace. They were very, very careful, very thorough, very professional. And the teamwork was just incredible.

And I think that was my lasting impression of the ship. And it's one, amongst all the other things that one then carried forward into the rest of one's career, with respect. My regard for naval pilots went right off the scale, high. They earned every bit of extra pay that they made, flying those machines off that tiny flight deck.

It was just an incredible experience. And it sit me well in terms of my future employment, working in destroyers, carrying helicopters, and being able to talk to airmen in a way that I could not have done so, I think, if I had not served in the carrier. And so there was a credibility that you took with you, once you had served in the Ops complex of that ship, that unless you had been there, you didn't understand, and you couldn't replicate anywhere else. You know.

I would have striven to command that ship, if it had lasted. Without any doubt, I would have been banging on the door to be the captain of BONAVENTURE, if she was still around.

Yes, an incredible experience.

INTERVIEWER: This has been an interview with John Anderson, and it is the end of Side 2. The interview was conducted on the 27th of November, 2001. Interview ends.

TRANSCIPT ENDS