

[Chairman: Mr. Oldring]

[2 p.m.]

MR. CHAIRMAN: With us this afternoon we have the Hon. Les Young, Minister of Technology, Research and Telecommunications. Joining Mr. Young this afternoon are Fred Bradley, a member of our committee and also chairman of the Alberta Research Council, and two gentlemen from the department: Brian Nicol, the director of telecommunications, and Richard Paquette, the director of electronics. Welcome, gentlemen. We're pleased to have you with us this afternoon. Mr. Minister, maybe we can turn it over to you for any opening comments you might have, and we can proceed from there to question period.

Just a note of advisement for committee members. Mr. Young was able to fit us in this afternoon on short notice but was able to commit to only an hour. The minister does have other engagements shortly after three.

Mr. Minister, I'll turn it over to you for your comments.

MR. YOUNG: Thank you. In this setting, Mr. Chairman and members of the committee, can I stay sitting or need I stand?

MR. CHAIRMAN: Yes.

MR. YOUNG: I gather that the two items of interest to the committee would be the Electronics Test Centre and microchip fabrication.

MR. McEACHERN: Is that all? AGT?

MR. YOUNG: If you want to talk about AGT, sure. But at that point we're talking about bonds. Right?

MR. NELSON: It's the Heritage Savings Trust Fund.

MR. YOUNG: In any event, let me start with the Electronics Test Centre and see where we go from there. The Electronics Test Centre is one of the components of an environment which we're trying to put in place — in fact, are putting in place — to support the electronics industry. The electronics industry is expanding very rapidly. It's very dynamic and has a huge

market potential. Equally important, it seems to be found in a lot of other industries as a necessary concomitant of a whole variety of other industries. Without the electronics industry, of course, we wouldn't be getting into computer-assisted design and computer-assisted manufacturing and that sort of thing. So this Electronics Test Centre is one of those components which had as its purpose assisting manufacturers, primarily in Alberta and western Canada.

From the point of view of the capital construction budget information, the Electronics Test Centre has been in the developmental stages, and at this stage there is still some capital investment remaining to be made. Not all the funds which were set aside have been invested, and there are several reasons for that. Since we're talking about equipment to a considerable degree, one is that it wasn't known exactly what kinds of requests were going to come to the test centre and, therefore, what kind of equipment would be desired to meet those requests. The other is that there has been some phased implementation of the equipping of the centre.

From the point of view of assisting the private sector, prior to the advent of the Electronics Test Centre manufacturers from Alberta had to go either east or south. I think Toronto was the closest point if they went east. I'm not sure whether it was Seattle, but it was someplace considerably south, and they may even have had to go to California; I'm not sure about where they could get it tested. Three problems developed with that. One was a long lag between sending components out to have them tested and their return. Secondly, when they were sent away and came back tested, they didn't have immediate access to an explanation of where the problems were. Those were considered to be fundamental problems. The third one, which I've alluded to, was really the time line. In this industry time is very, very critical.

To this point the centre has been up and running; not, I have to advise you, to the original expectations I indicated in the estimates earlier this summer. Nevertheless, the number of calls on the centre from Alberta companies to the end of October was 141 projects and 95 different Alberta companies. I think it is pretty good to have 95 of our own

companies involved in making use of the centre. Since the centre opened, there have been a total of 222 projects for 162 companies. The other major contributor is British Columbia: 40 projects and 34 companies. Referring to companies, you can see Alberta at 95, British Columbia at 34, Saskatchewan at five, Manitoba at four, 16 from the rest of Canada, and a smattering of foreign companies. I didn't track down what foreign companies but presume that to be primarily the United States.

If I could call on him, Mr. Chairman, I'd like Fred Bradley to outline for you where the centre is located and the committee style that's involved in managing it. The Research Council is very heavily involved in that, and Fred is chairman of the Research Council.

MR. BRADLEY: Thank you, Les. The Electronics Test Centre is located in the new laboratory and administration facilities the Research Council has in Mill Woods, so it's here in the city of Edmonton. The Research Council acts as the manager of the facility, and an eight-person management committee oversees the operations of the Electronics Test Centre. The chairman of the management committee is Dr. George Miller, who sits on the Alberta Research Council board, and Clay Iverson, from the Research Council board, is also on that management committee. Dr. Stewart, the president of the Research Council, is on it, as is Dr. Mitchell, who is vice-president of the advanced technologies area of the Research Council. We also have Dr. Sleky, from Nova Corporation, for private-sector involvement, and they're very much involved with the Electronics Test Centre. Dr. Strohschein, dean of engineering at NAIT, is also on the management committee, and we have a person from the Department of Technology, Research and Telecommunications. It was Bob Wilkes and is now Mr. Paquette, who is with us here today. They meet on a monthly basis and report to the ARC board on a quarterly basis as to their operations.

I've been through the Electronics Test Centre, and I'm very impressed with the facility we have there and the work they're doing. It may be worth while for this committee to tour that facility at some point in time. It really gives you a feel for the work they're doing and how they go about it and the important role

they play in terms of providing that service to industry in the province.

MR. YOUNG: Mr. Chairman, one of the areas we haven't covered is what approval from this test centre really means to a manufacturer in Alberta. At this date the electronic products test centre has received recognition or accreditation from the following or is in the final stages of negotiation of recognition: the federal Department of Communications, so that any product that is approved by the Electronics Test Centre is automatically acceptable for use in any area for which the Department of Communications has responsibility; the Standards Council of Canada, and it's one of the few non-CSA operations that is accredited to test products in a manner acceptable to the council; the Canadian Department of National Defence and also the U.S.A.; the Federal Communications Commission of the United States; and the Japanese metals and machinery inspection institute. So it has wide recognition of the level of quality which the centre staff are capable of on their own with the equipment they now have.

I mentioned that not all the equipment was in place at the moment, and I can give you some indication of directions that are currently being considered. One is calibration services to the electronics industry. Another is electromedical equipment testing, and they are considering seminars on design and testing and evaluation to assist the industry.

I think maybe that's enough of an introduction at the moment. Perhaps we should wait on questions.

MR. CHAIRMAN: Thank you, Mr. Minister. We have seven people down for questions already, and we'll start with the Member for Calgary Buffalo, followed by the Member for Edmonton Kingsway.

MR. CHUMIR: Mr. Chairman, I'm interested in the issue of co-ordination of the government's investments and approach to stimulating the electronics industry in the province. Before I start my questions, I'd just like to get clarified what aspects of this issue his department is responsible for. I know we're dealing with the Electronics Test Centre and there's the microchip design and fabrication centre, which are being directly funded by the heritage trust

fund. But on top of that we in Alberta have government investment and participation in, for example, the Alberta Microelectronic Centre. Is that a matter that's under the jurisdiction of the minister's department?

MR. YOUNG: Yes, inasmuch as it relates to government.

MR. CHUMIR: What co-ordination is going on in terms of all these programs? What is the philosophy the government has behind what types of programs it funds and supports, including a determination as to why the projects which have been funded by the heritage fund have been funded by that entity as opposed to the Alberta Microelectronics Centre, which I understand has been funded by the department of economic development?

MR. YOUNG: To approach your question first of all on the what's going on kind of thing and what's the philosophy -- I always know I'll never bring the needed documentation to these meetings. I have a speech that I use, which I don't have with me. I think I would describe it this way. Some years ago -- I can't tell you exactly when because I wasn't minister at the time -- there were some meetings held with leaders in a variety of developing industries. Those meetings resulted in a sort of plan of what was then considered necessary by industry leaders in order to develop an environment in Alberta that would be conducive to the flourishing of the private sector in those areas. We weren't anxious to become involved in funding the private sector, although we're in the loan game through Vencap, AOC, and sometimes directly from Treasury, but we wanted to be sure that we put the building blocks in place as nearly as we could.

In my judgment, the electronics industry is the industry with the most advanced set of government-sponsored building blocks, if I can use that expression. I don't have my list at my fingertips, and you will recognize that I haven't been in the saddle for a while, so my immediate working memory isn't quite as sharp as it should be. But let's say that right now we have the electronics products test centre, which, as Fred mentioned, is managed by the Alberta Research Council. The prime purpose of that is the testing of product so that our manufacturers could be competitive with those situated near a

test centre.

We also have in position, or are developing, the Alberta Microelectronic Centre, which is an involvement of both universities, Calgary and Alberta, with a focus in Calgary on the design of the integrated circuit chip and the intention in Edmonton that we should be able to do part of the fabrication of those chips. Another component is the supercomputer, which is in Calgary, as you know. That has as its purpose the provision of a tremendously high-powered capacity for not only research but also industrial applications.

Just two weeks or so ago I opened the electronic industry information system. I guess the best way to describe it is that it's a kind of resource centre for the electronics industry. I could perhaps describe it this way. It is managed by the Alberta Research Council and at the Alberta level provides information on all the seminars, meetings, what have you, involved in the electronics industry at any time. As soon as it finds out about these training sessions and whatever going on in the province, it puts them into the network. It also provides information on patents in and out of Alberta, and that's North America-wide. Through Alberta Government Telephones and the North American communications system, it's part of an information system which allows one, whether in Athabasca or in downtown Calgary, to contact by computer, with the appropriate modem, or by telephone, if that's the route it has to go, the Research Council circuit, which ties into our national circuit in Canada for electronics information, which ties into the total North American one. It not only deals with patents and technical information but also carries United States government contracts or tenders, so it's a very powerful system. I think the registration or initial charge to the company is \$50. I guess they're actually allowed a couple of weeks free service so that they can experience whether they like it or not. The monthly charge is \$3, I believe, and there is a line charge of \$24 an hour for anybody using the service. It's really narrowed the North American world right down so that regardless of where one working in the electronics area is situated, he can get access to all this information on a pretty inexpensive and very timely basis. The key is to know what to ask for. To try to assist companies to that end, the electronics industry information

system is providing seminars for individuals or companies to learn how to access in the most expeditious way the information that is available. Quite frankly, I think that's a very powerful system and quite a boost to our manufacturers. The Alberta Laser Institute is in a way another component of the electronics system and so is the Alberta Telecommunications Research Centre.

In short, what we have endeavoured to do is put these building blocks in place, hopefully at the least cost, and let the industry then develop. I've simply described the electronics one because that's what we're into. Then of course there is the whole challenge of incubating small electronics companies, which we've been trying to support in an indirect sense, I guess you could say, through the technology associations, particularly in Edmonton and Calgary but we could look beyond that, and also the financial structures that are required for new companies.

Have I covered some of the area you were interested in?

MR. CHUMIR: You've covered quite a bit of territory indeed, perhaps almost rivalling the Provincial Treasurer in his capacity in that regard.

MR. YOUNG: That was not my ambition.

MR. CHUMIR: That was probably the fault of the question.

Let me get down to what's troubling me. I've heard a lot of this program, that centre and this centre, but haven't heard much about policy, philosophy, and strategy. As we look at microelectronics and the industry, at least my perception of it, they're very focussed in small areas. The Silicon Valley attracts people, a critical mass, and they feed on each other and they're close, with information being transmitted. Similarly, the area around Ottawa in Canada has been very successful in developing the industry. What I hear is a program here, a program there, a piece here, and a piece there, but no philosophy. I'm wondering where the critical mass is. Is there a plan? Where is our industry to be focussed? Are we just going to parcel it out between Calgary and Edmonton? I understand, for example, that 70 percent of microelectronic activity is in Calgary. Is there a philosophy to

focus in a certain area to get the best value for our money? As part of that question, I would ask how large a staff your department has and how many are located in Calgary. Is it the usual mere pittance, a few people, with most of them located here in Edmonton?

MR. YOUNG: Maybe somebody can give me the staff.

MR. NICOL: Forty-seven is the total staff, including your staff and the clerical staff.

MR. YOUNG: Forty-seven is the current count. I'm pretty sure none are located permanently in Calgary, but there is a lot of communication back and forth. I think you've already seen from my description of the electronics building blocks that staff may not be in Calgary, but at least half the building blocks, if not more, are in Calgary. I don't want Edmonton MLAs to get on my back.

You asked about philosophy. You're a member of the Legislature representing a Calgary riding. From the latest information I've heard, Calgary happens to have more computers per person than any other city in Canada. I think that's right. It has had tremendous development, partly because of the focus on the oil and gas industry and the technologies that have emerged from that. You also have in Calgary manufacturing of telecommunications equipment, which is Northern Telecom, with almost 1,000 people in Calgary and a few in Edmonton. They are exporting virtually worldwide out of the Calgary facilities.

I guess the message I want to communicate about the philosophy is that we're trying to create a climate and support that we think are beyond the reach of most companies, especially small ones, and make them available, if you will, on a subsidized basis at the present time. We hope that some of these building blocks I have mentioned will eventually become self-sustaining through a charge for use or a toll, but that is not so at the present time.

Since you used the expression Silicon Valley, my own ambition wouldn't be a Silicon Valley. I think we're now into the hard electronics equipment, and quite frankly, we're now seeing mergers between international companies in the challenge to stay ahead of the race as far as that is concerned. But we do have a

tremendous potential for niches that can be carved out for Alberta companies. We've got some of the best talent in our two universities. I'm sorry I can't speak for the other two universities; I don't know how much Lethbridge is involved.

MR. NICOL: Not to a great extent in electronics.

MR. GOGO: But in a quality way.

MR. YOUNG: Absolutely, John.

Athabasca University is very involved in distance learning and has been speaking with me about some initiatives they would like to take. It would seem to me that our goal ought to be to lead, to maintain a lead, in certain of the smaller niches we can carve out, which in themselves are very large in an international market sense. I hope that addresses the Silicon Valley question.

MR. CHUMIR: It does. However, if I'm permitted the luxury of a comment, all my business sense tells me that we would be very sensible to focus our efforts on building a critical mass. Of course, you know I wouldn't be disappointed to see that in Calgary, where there appear to be many natural advantages, rather than fragmenting it around the province.

MR. CHAIRMAN: The Member for Edmonton Kingsway, followed by . . .

MR. CHUMIR: Is that my three?

MR. CHAIRMAN: Yes.

MR. GOGO: It sounded like five.

MR. CHAIRMAN: You had your main question and two supplementaries. The Member for Edmonton Kingsway, followed by the Member for Calgary Fish Creek.

MR. McEACHERN: Mr. Chairman, I was going to ask one or two questions on the Electronics Test Centre and microchip design fabrication. I think those things have been fairly well explored, so I will go straight to the other issue I mentioned earlier. I am interested in the issue of Alberta Government Telephones. The heritage trust fund has nearly \$1.5 billion

invested in Alberta Government Telephones. My question is related to the heritage trust fund, not so much to the Crown corporation and how it operates, although to some extent I suppose the first question overlaps.

The other day I raised with the Premier the idea of perhaps selling off some of those debentures or cashing them in, so to speak, perhaps early, if one didn't get too big a penalty, or just as some of them came due over a period of time. Of course, some questions follow from that. What would one do with it if one did? I raise the issue because it would seem to me that the borrowing power of AGT is more or less the same as the borrowing power of the Alberta government. It's within a small percentage point I would think. To use heritage trust fund money as debentures in AGT is not particularly innovative or productive.

The Premier seemed to agree with that. I talked to him earlier about it, but when I raised it the other day, he started talking about possibly privatizing all of AGT. I guess I'm looking for an expression of opinion from yourself. Do you think the heritage trust fund committee is likely to cash in some of those debentures? If so, what would be the rationale for doing so, and how would the revenues generated be treated?

MR. CHAIRMAN: Maybe before the minister comments, the Chair would point out that it would be appropriate to comment on the debenture question, but I don't think the privatization of AGT is within the parameters of this committee.

MR. McEACHERN: You'll notice that I didn't exactly ask that, although I see no reason why he shouldn't comment as a member of the government in any way he likes.

MR. YOUNG: Thanks. With the leave of the committee, I'd just like to restate a point I made earlier as a follow-up to Mr. Chumir, because I don't want it lost. I tried to make the point that when we talk about the synergy or the momentum or the critical mass with our electronics communications systems, as was being discussed here, we really have brought that critical mass that would be in Edmonton/Calgary or anywhere else in the province pretty much together. I don't see that we need to look at it as: because it's Edmonton

or because it's Calgary, they can't be in sync, be supportive of one another, and be part of the critical mass you're looking for. I would apply that same reasoning to other smaller communities. It seems to me that with the electronics industry information system, we really have made it possible for people any place in Alberta to have access to a good portion of the critical mass or the synergism that otherwise they had to go and sort of be on site to be a part of. I would want to leave that with the committee, because I think these developments are very important to the balanced growth geographically across the province.

Now, to the question on the bonds — I think that's what they are.

MR. McEACHERN: They're debentures.

MR. YOUNG: Debentures. I haven't looked at the maturity dates on those, but there are probably a variety of dates. If my recollection is accurate, the sale of debentures to Alberta Government Telephones was seen as a form of investment for the Heritage Savings Trust Fund. They do provide a return.

MR. McEACHERN: Is that some information that you could provide to this committee? Could you get a little summary of that for the committee?

MR. YOUNG: I don't think it's in the book there, but I don't know of any reason it couldn't be provided to the committee. We'll undertake to generate that.

Presuming we get a market transaction, which is what those transactions were in the first place, I don't think we would gain anything at this stage by having AGT pay them off and go to the open market to borrow to get the money to pay them off. I would have to look at them a little bit more. Presuming the conditions were all market conditions, in my view we're just going to be churning the market.

If the goal becomes providing the trust fund with liquidity, then that is a different question. I'm just not quite sure . . .

MR. McEACHERN: Getting to the second question or follow-up on it. The AGT debentures as part of the other Alberta division — it's hard to know the amount, and if you could

put the percentages on those figures for each of those debentures, it would be helpful -- have been earning supposedly around 14 or 15 percent as an investment. So I'm assuming that AGT isn't too far off that. That's a fairly big portion: \$1.5 billion of the \$8 billion. If the borrowing power of the Alberta government is the same as the borrowing power of AGT on the market, then it's kind of like a non-use of the funds. If AGT could go to the open market, that would free up that money to the heritage trust fund, which would then have some decisions to make, of course, as to what else they could do with it that might perhaps be more useful socially or whatever other investments they could make. Or it might be more lucrative if they could invest it somewhere at 14 -- well, I guess 14 wouldn't be any better than what they're getting now. [interjections] It's hard to explain.

Suppose they could invest it somewhere at a higher rate than what we could borrow money; fine. But if they can't, then surely it would make sense to cash some of them in, because we're in a deficit position with the government. It would make sense to cash some of them in and put it against the debt of the province.

MR. CHAIRMAN: The Chair is wondering if that wouldn't be a more appropriate question for the Treasurer, if we have him back at some point in the future, than for the Minister of Technology, Research and Communications.

MR. McEACHERN: Perhaps. He might like to comment.

MR. YOUNG: It probably would be more appropriate for the Treasurer, because you're really asking from a Treasurer's point of view what the best source of funds, et cetera, is. I'm in a position of responding from a responsibility, I guess, for AGT in this circumstance. It may be to AGT's advantage if they could get a request from the Heritage Savings Trust Fund to pay off those bonds at no premium and secure money at less cost elsewhere. I suspect that with interest rates the way they are, that might be possible, but I don't think that's a very good deal for the trust fund.

MR. McEACHERN: But you are on the investment committee of the heritage trust

fund as well so will be faced with those kinds of decisions.

MR. YOUNG: I really can't respond to you other than if the goal you're seeking is liquidity, more cash in the Heritage Savings Trust Fund for whatever purpose — and that's another debate — then presumably one could try to cash out or make liquid some of those debentures.

MR. McEACHERN: I guess I was asking for your opinions and feelings about that. Maybe you've said what you intend to.

MR. YOUNG: I'm about as neutral as they come on this one.

MR. McEACHERN: Could I then switch to a sort of different line for my third question?

MR. CHAIRMAN: A final supplementary maybe.

MR. McEACHERN: Perhaps you could talk to us a little bit about some of the offshoots of AGT: Alta-Can Telecom and NovAtel. Perhaps you could tell us a little bit about those two corporations and how they're doing.

MR. CHAIRMAN: The Chair is again finding it difficult to relate that to the purpose of the heritage trust fund hearings.

MR. McEACHERN: They've got a heck of a pile of heritage trust fund money, are investing in some high-tech companies, and are expanding their worldwide contacts and investments.

MR. YOUNG: Mr. Chairman, if it won't set a precedent, I'll give you a very brief answer on those two companies. NovAtel is a combination partnership between AGT and Nova Corporation. NovAtel's strength has been in the development of the cellular radio system. NovAtel has found a very significant market in the United States, where the telephone system is much less developed than ours, where you have a dispersion of population. I understand that at the present time NovAtel is operating full-out on the manufacture of telephone equipment. They're producing to the fullest extent for that particular market.

You asked about research. They're involved in some pretty extensive research, and I'm sorry

I'm not personally able to get into it for you. They apparently have 550 people employed and \$100 million in export sales to the U.S. and \$20 million to the United Kingdom, so they're very much into the export market. I think Alta-Can is in the much earlier stages of development, and I can't give you a great deal of additional information without looking it up and checking. I'm sorry; because I was under the weather for a couple of months, I simply couldn't get around and personally check out some of these things that I would otherwise have at my fingertips today.

MR. CHAIRMAN: That officially concludes the questions from the Member for Edmonton Kingsway. The Member for Calgary Fish Creek, followed by the Member for Lacombe.

MR. PAYNE: Mr. Minister, I recall that when the former Minister of Economic Development announced the Electronics Test Centre, the government's justification for that fairly significant investment was that in the province of Alberta, particularly in Calgary, a considerable number of electronics industry companies and organizations heretofore were required to go to eastern Canada and the United States to test various components fabricated or used in their particular products. In your opening remarks you cited the number of client companies that had made use of the centre since it was opened last December, I recall. I'm not particularly interested in the specific number or, indeed, even the dollar value of the projects undertaken or evaluated by the Electronics Test Centre. Whatever that number is, my interest is in how it compares to the anticipated number used by the government to justify the investment in the first instance.

MR. YOUNG: I think I'd draw a distinction between the number used to justify and expectations. If we were going to have an electronics industry of substance in western Canada, there simply had to be — it was a major deficiency. I imagine other MLAs had representations from electronics manufacturers; I certainly had some. Those people were — perhaps "desperate" is too strong a term, but they were close to being desperate. They were simply handicapped by their inability to get their products tested except at great cost. They'd have to fly down

and wait and fly back.

In terms of the expectations or the projections, we had hoped the centre would become self-sustaining in '87-88. Reluctantly, I doubt that it will be able to achieve that. I would say they are running at about -- I hesitate to put a fraction on it -- the 60 percent area of expectation. It might be lower than that.

There are two reasons for that. One is that the time scale originally used would have had the centre open earlier than it did. So we have to expect that they're not meeting the original projections because it wasn't on track at the projected time. Secondly, the downturn, especially in the oil industry -- a lot of the electronics was originally based in the oil industry -- has meant a real slowdown in that source of activity. The electronics industry itself has been growing but not at quite the projected rate. I would think that it's going to require support next year. When I talk about next year, I'm speaking of the next fiscal year for the government. I'm hopeful that it won't require much support beyond that, that at that point it will be self-sustaining.

I'm told that the location of the test centre here has made it possible to bring products onto the market six to eight months faster than was otherwise the case. Right now the Electronics Test Centre has contracts worth roughly \$300,000 that it expects to have completed by the end of this fiscal year, March 31. That's as of the end of October, so it's really current. So that does indicate that the trend line is in the right direction; it's just a little bit lower than we had originally projected it to be. I think we should be quite enthused by that, because it hasn't been the easiest spell of weather we've been going through in economic terms.

MR. PAYNE: Mr. Chairman, just one minor supplementary. Mr. Minister, in mid-October you issued a news release with respect to what was called an electronics industry information system in Calgary. You described it as a gateway to market research, competitor intelligence, and so on. As I read the statement, it occurred to me that much of the work of that Calgary agency could be of direct benefit to both the electronic products test centre and the microchip design and fabrication facilities. I'm always uneasy about brand-new government agencies whose primary objective is to become self-sustaining, realizing or

achieving their own particular mandate and perhaps becoming overly focussed. I want to reassure myself that there will be a viable continuing relationship between the information facility in Calgary and the other two facilities that are the subject of the heritage fund report.

MR. YOUNG: The electronics industry information system is currently run through the Alberta Research Council. I already mentioned that it's part of a data base network that's made available through the North American telecommunications system. The Research Council is just the entry point into the total system. Well, it's more than just the entry point; it's the entry point and it's the point at which the Alberta information is added: meetings, seminars, and whatnot. Other information, and hopefully some contract information, may be available from that source as well. So it is a window, if you will.

In terms of networking to try to maintain or assure the synergism that I think you were concerned that we do maintain, there is an Electronic Industry Association. That's relatively new. I think it's been in existence for four years, or maybe less than that. That now has some 70 members, and it's my intention to listen pretty closely to some of the things they have to say. There are very vibrant, vigilant groups in both Calgary and Edmonton, and maybe elsewhere but unfortunately I haven't had the opportunity to travel, that are looking at the electronics industry and the software and what they believe would be useful for government support. I think that vigilance is going to keep the private sector really tuned in and keep the Research Council, in this case, aware of what's going on. I want to say again that the Research Council has a resource centre system in Calgary for information, but has terminals in both Calgary and Edmonton so they can tie in to either location.

MR. PAYNE: That's helpful. Thank you.

MR. R. MOORE: Mr. Minister, you touched on a little of the area I want a little more explanation on, and that is: how receptive is the private sector to what we're doing? Is there any feedback that we're doing something that is helpful to them? What is the reaction to what we've done so far?

MR. YOUNG: When we speak about these building blocks, I've had only positive reaction. I've had some very positive reaction and suggestions as to other things we could be doing; lots of those. I think these initiatives have been very well received. As I mentioned initially, they were concepts derived from meetings with the private sector, and we have to keep having those kinds of meetings because obviously there's a pretty dynamic situation out there and a lot of changes. Generally when we — and I'm speaking departmentally or governmentally — evaluate from a list of alternatives, initiatives that we could undertake, much weight is given to the industry-driven request: how much industry support is there for something? I think that's a good test of whether we're on the right track or the most important track. There are lots of suggestions for building blocks we could put in place in different sectors, but I think the first test has to be: what does the industry want? That's a little tough to get a handle on, but through meetings we try to assess and evaluate.

MR. R. MOORE: Mr. Minister, is the demand there? Do you have to advertise, or is the demand coming to you from the private sector?

MR. YOUNG: I don't think we have to advertise in that sense. I suppose one could measure demand. Let us say that we have 120 or 150 electronics manufacturers in the province. We don't know how numerous the electronics software companies are, but in my opinion they are a multiple of the hardware types. When you talk about demand, if you consider 150 or 200 voices, that is small compared to the population at large, but in terms of its significance within that industry, I think it is the representation we have to hear.

MR. R. MOORE: As most of the requests come from within the province, obviously they are from outside the province. Have you any idea what proportion of the work is being done?

MR. YOUNG: I would say that the requests from outside the province — we have trade missions coming through and we try to do our best in hosting those, but we're not in the business of buying at any price to get a company here. I am always more comfortable with developing and building Alberta-based

companies that have their feet in this province than I am in trying to entice footloose companies here, because usually it's going to cost us. Sometimes they're integral and critical to developing the mass we referred to earlier, but by and large I think our best success will be with development from within.

MR. R. MOORE: Thank you very much, Mr. Chairman. I appreciate that last comment of yours.

MR. GOGO: Mr. Chairman, I'd like to ask the minister a question, as well as Mr. Bradley, if I might. First of all, the minister. I note that Alberta spends more than three times per capita than any other province for research. One is tempted to ask you about research generally. However, Mr. Minister, the CF-18 contract that was just awarded to Canadair — one can't help but observe that it is a fighter aircraft. One presumes that it's related to defence. The province that got it is the only province in Canada that doesn't belong to our new Constitution. One is a little curious about that. The question I have for you, though, is related to the technology transfer that's referred to. To your knowledge, would any of this technology transfer be involved with electronic testing that may be utilized at the ARC?

MR. YOUNG: That's a really tough question to deal with, because I think what we reasonably know at the present time is that Northwest Industries has a commitment for a portion of that work. The question is: what kind of work?

AN HON. MEMBER: Ten percent, I think.

MR. YOUNG: Ten percent. But will it be in manufacturing, in the service establishment, or where? One has to recognize the changes that Northwest Industries has recently gone through, but if Northwest Industries is involved to some degree — I believe that at the present time there are three establishments in Alberta that can build to military specs. Northwest Industries is one, General Systems Research is one, and I think Field Aviation is the other. Those are the three. Any work that comes to any one of them will sure be a help in maintaining that quality level that is necessary for any military activity. We're trying to get a

handle on just how much might come through and how much technology transfer there would be. I am sure it will be months before the dust settles on that well enough for us to appreciate it. General Systems Research has told me that they expect some work from that particular contract to be subbed from Northwest Industries.

MR. GOGO: Mr. Chairman, to Mr. Bradley. I note that the Research Council is 65 years old, and I note the way they work with AOSTRA. For example, the private sector and AOSTRA work together for the benefit of research in hydrocarbons and so on. Mr. Bradley, with regard to the Electronics Test Centre that's carried out at the Research Council, is the same agreement entered into that when a product is tested and research done on electronic matters, if that is then marketed by the private sector, there's a repayment of some kind to the ARC through the Electronics Test Centre?

MR. BRADLEY: Do you wish me to answer this, Les? Obviously the Electronics Test Centre operates to meet the requirements of the time. There's certainly a confidentiality agreement there in terms of the technology they use. What we are doing is testing a product to make sure it meets the standards industry has put forward to various standards associations. In that sense, we're providing a service. We're not involved directly in research. We have the facility to do all the various testing a new product would require in terms of meeting what the market would expect, to the market specifications. So for that particular aspect of the Electronics Test Centre, no, we aren't involved in that way.

MR. GOGO: I'm referring to the material that I have: research support for manufacturers. Thereby, if there's expenditure of public funds with regard to research support for manufacturers, assuming manufacturers then sell their widgets and realize profits, one would almost think there would be some commitment by those manufacturers for repayment for research support to the Electronics Test Centre. Is that the case?

MR. BRADLEY: It's a toll facility, so the company wishing to have a product tested or

accessing those services would pay for it. They pay a fee directly for that service.

MR. GOGO: Thank you, Chairman.

MR. CHAIRMAN: I assured the minister we would have him out of here within an hour. We appreciate the answers and information you shared with us this afternoon. We're delighted to see you as healthy as you are and back at it again. Thank you for coming.

We also appreciate the invitation to the Alberta Research Council. I'm sure the committee would like to fit that tour in at some appropriate time in the future, hopefully not too far down the road.

MR. YOUNG: I'd just like to restate the offer that has already been made. From my point of view, this is a pretty exciting area, and it's awfully hard to describe what's going on in some of these places. If you as a committee have time for the electronic products test centre, the Canadian Standards Association test centre for electrical equipment is just a block or two away from that building. There are a lot of things that would probably be very useful if the committee could take the time to look at them by visiting the Research Council. Any time you can find for it, the chairman and I will certainly try to assist you.

MR. CHAIRMAN: Thanks very much.

MR. GOGO: Mr. Chairman, just on a point of order, while the minister is here, I note that we received a new schedule today. We were to have Mr. Weiss here on Friday. Friday has now been cancelled, according to Mr. Weiss. Mr. Chairman, would the committee entertain asking the Hon. Les Young if this Friday, the 7th, we could visit the Alberta Research Council, inasmuch as perhaps most members had already planned for a heritage fund committee meeting that day? If it's appropriate, if they're interested in having us for lunch like the University hospital did, it might also work out well if they can bring in some sandwiches.

MR. McEACHERN: Could we do a morning one instead of an afternoon one?

MR. R. MOORE: If that's in the form of a

motion, I would second it.

MR. McEACHERN: From ten to twelve would be fine for me, but later would not be so convenient. Ten to twelve was scheduled anyway, wasn't it?

MR. CHAIRMAN: I'm at the direction of the committee. We'll be in Calgary, of course, until Thursday evening.

MR. CHUMIR: I have personal problems on Friday, but that need not deter the committee generally. The observation that I was going to make is that the potential of the electronics industry is so important to this province that I would be very interested in arranging a visit not just to one portion, just to the Research Council facility; I'd like to see what's going on in respect of all aspects of it. It would be very worthy of a day in the Calgary area and a day in the Edmonton area, and if there's anything else anyone wants to do, perhaps slot that in. Quite frankly, I would be very happy to forego the visit to the Prince Rupert facility, which I have some personal problems with, not having been here the day the decision was made. I think the importance of the committee visiting that in relation to our understanding what's going on in the electronics area, where there is a future and where we'll be looking at more investments in the future, as opposed to one static investment in that grain terminal — I would ask the committee to consider whether or not we can't develop an extensive program of visiting the electronics facilities and perhaps foregoing Prince Rupert.

MR. CHAIRMAN: I think it's important that the committee visit as many of the projects as we can. I don't think we need to drop one to accommodate another.

Maybe we can excuse the minister while we're ...

MR. PAYNE: Following up on Mr. Chumir's suggestion, I think it's got some merit, but I feel ill-qualified to respond today. Could I suggest that we defer discussion and decision on the latter suggestion until we've had our session with the ARC and the Electronics Test Centre? Once we've done that, I think I'll be in a better position to determine my own response to the latter suggestion. Why don't we just hang

tough on that one?

MR. McEACHERN: I would be much in favour of visiting something on Friday morning in place of Mr. Weiss's anticipated visit here.

MR. NELSON: I won't be here Friday.

MR. PAYNE: I personally have a clear preference for later in the day, because we'll be in Calgary late Thursday night, and I was planning to drive up Friday morning.

MR. McEACHERN: I have a problem. Our convention starts in the afternoon — at noon, as a matter of fact.

MR. HERON: Good; let's make it in the afternoon. [laughter]

MR. McEACHERN: Thanks a lot.

MR. BRADLEY: From the Research Council's point of view, we can accommodate morning or afternoon, whichever.

MR. CHAIRMAN: We have a motion right now and a seconder for a noon till four tour. I'll call the question on that. All those in favour? Opposed, if any? It's carried.

MR. GOGO: Alex, could you slip away for an hour?

MR. PAYNE: Like midday?

MR. McEACHERN: It's not totally essential that I be there immediately at twelve.

MR. CHAIRMAN: Is there any other business?

MR. R. MOORE: I move that we adjourn.

MR. CHAIRMAN: We stand adjourned until tomorrow at 10 a.m.

MR. BRADLEY: What was the decision with regard to the tour on Friday?

MR. CHAIRMAN: The tour on Friday will be arranged from noon till 4 p.m.

MR. CHUMIR: Just the Research Centre?

MR. CHAIRMAN: Yes.

MR. McEACHERN: Mr. Chairman, in terms of the question I asked about Alberta Government Telephones raising the privatization matter, I was a little surprised that the chairman of the committee was worried about my getting into areas that are not directly and specifically heritage trust fund. I think it was clear from talking to both the Premier and the Treasurer that they'll be interested in our recommendations about the heritage trust fund in its sort of total Alberta context, not just in the narrow specifics within Alberta. I'm sure Mr. Getty would appreciate some feedback in terms of what we think should be done with the Crown corporations and their relationship to the heritage trust fund. I'm a little surprised at the attempt to narrow the discussion to that extent. It is perfectly within Mr. Young's right to decide that he doesn't want to answer that in great detail at this time; maybe he hasn't formulated an opinion on it.

Do you see the point I'm making? I think the questions here should be able to be quite wide-ranging if we are to make recommendations about the heritage trust fund.

MR. CHAIRMAN: I think the Chair has tried to be very lenient in that direction at times, recognizing that today we had a minister appearing in front of us for one hour and we had seven people who wanted to ask questions.

MR. McEACHERN: Fair enough.

[The committee adjourned at 3:12 p.m.]