立法會

調查赤鱲角新香港國際機場自1998年7月6日開始運作時所出現的問題的原委及有關事宜專責委員會

第30次公開研訊的逐字紀錄本

日期： 1998年12月17日(星期四)
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地點： 立法會會議廳

出席委員

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何鍾泰議員(副主席)
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常務董事
翟達安先生

陪同證人出席研訊的其他人士

的近律師行合夥人
溫德陶先生

Chairman:

Thank you for attending the thirtieth hearing of the Select Committee today.

Before the hearing begins I would like to remind Members that a quorum must be present for the entire hearing, that is, five members, including the Chairman.

I would like to take this opportunity to remind the public and the media that disclosure of the evidence given at the hearings outside the proceedings will not be protected under the Legislative Council (Powers and Privileges) Ordinance. The media should obtain legal advice as to their legal responsibilities.

Before I summon the witness, Mr Anthony CHARTER, Managing Director, Hong Kong Air Cargo Terminals Limited, I wish to seek Members' views on Mr CHARTER's request that he be accompanied by the following person during the hearing: Mr Peter WINTLE, Partner, Deacons Graham & James. If Members have no objection I suggest that Mr WINTLE be allowed to accompany Mr CHARTER during the hearing but he will not be allowed to address the hearing or to prompt the witness in his replies to Members.

If Members do not have other comments on the procedures of the hearing, I declare the hearing open and summon the witness, Mr Anthony CHARTER, Managing Director, Hong Kong Air Cargo Terminals Limited.

(Mr Anthony CHARTER entered the Chamber
accompanied by Mr Peter WINTLE)

Mr CHARTER, thank you for attending the hearing of the Select Committee again. You are summonsed before the Select Committee today to give evidence and to produce papers, books, records and documents related to the Select Committee's scope of enquiry. Please note that you are still under oath when giving your evidence.

Mr CHARTER, the Select Committee has agreed that you may be accompanied by Mr WINTLE during the hearing to assist you in the handling of documents or to render you legal advice when necessary, but he will not be allowed to address the hearing or to prompt you in any way in your replies to Members.

The Select Committee will now deal with the papers, records and documents that the witness has provided after the hearing on 29 September 1998.

The Select Committee notes that the witness has already provided the following documents after the hearing on 29 September:

(a) Letter dated 30 September from Mr Peter WINTLE of Deacons Graham & James to Clerk to the Select Committee and the attached documents;

(b) Two letters dated 12 October 1998 from Mr Peter WINTLE of Deacons Graham & James to Clerk to the Select Committee and the attached documents;

(c) Letter dated 27 October 1998 from Mr Peter WINTLE of Deacons Graham & James to Clerk to the Select Committee and the attached documents;

(d) Experts' report prepared by Mr Jerome DAY and Mr Max NIMMO on behalf of Hong Kong Air Cargo Terminals Limited; and

(e) Supplemental statement of Mr Anthony Carley CHARTER.

Mr CHARTER, are you now formally producing to the Select Committee all the documents mentioned above as evidence?

Mr Anthony CHARTER, Managing Director, Hong Kong Air Cargo Terminals Limited, (MD, HACTL):

Yes, we are.

Chairman:

I now declare that all the documents mentioned above are admitted as evidence produced to the Select Committee.

Mr CHARTER, may I now ask you the first question. Given that there has been evidence given by yourself and your deputy, Mr K K YEUNG, to the Commission of Inquiry, given that you have now got your own consultant studying what happened on AOD vis a vis the systems, and given that we now

also have the report by the consultants to the Commission regarding the problems that HACTL had on AOD, and looking at your supplemental statement to the Select Committee, could you tell this Committee whether there are any new information or material that have surfaced since the last time you gave evidence to this Committee which might come to different conclusions as to what caused the chaos in the cargo handling side on AOD?

MD, HACTL:

As to all the issues that we feel contributing to the problems on AOD, I think we have identified in my original testimony. Evidence that has come up since then throws a different light to some extent on the importance of various elements that we identified, rather than changing any of the factors that we feel contributory originally. It is a question of degree of importance, I feel.

Chairman:

A measure of the priority and the scale of how each element affected the outcome of the problems?

MD, HACTL:

Yes, yes.

Chairman:

Is that what you are saying?

MD, HACTL:

Yes, I mean one thing that the experts have come up and placed a lot more emphasis on was the impact of the chaos on the apron caused by the lack of flight information to us. We identified that as a problem on AOD. In fact it was, as far as we were concerned, an AOR item.

We were under considerable pressure at the Commission in terms of apportioning blame or otherwise with regard to those issues. Through the Commission's inquiries we didn't perhaps put that much emphasis on the lack of flight information and the lack of dollies. And personally, having had time to reflect on it, I think they did contribute quite significantly. I am not saying they

are the overriding issues but they certainly made our problems far greater on AOD.

Just to give you an example, something that I didn't realise when I gave my evidence before, the average delay on departing flights on that day, on the first day of airport opening, was 147 minutes. Now, what we do for processing cargo is that 3 hours prior to flight departure, we move the cargo out on to the dollies. So, if on average all aircrafts are departing two and a half hours off schedule, it means that the export cargo is sitting on the dollies almost twice as long, and hence such situation contributed to the problem of shortage of dollies.

And again I think because of the chaos on the passenger side there was tremendous pressure on our people to clear in-bound dollies. You had to have empty equipment to meet arriving aircraft to off-load those aircraft before you could load the out-bound loads. And that contributed to our people panicking to get the stuff off the inbound dollies as fast as they could. And that led to data mismatch. It was a contributing factor to data mismatch. People were putting in information manually, entering it into the system without making a proper record of what they were putting in.

Chairman:

Vice-Chairman.

Dr Hon Raymond HO Chung-tai

Madam Chairman. Mr CHARTER, can we look at it from a different angle? In view of the fact that completion of the building, ST1, was falling behind its construction programme quite significantly, even when a series of works were ordered still you were not able to get the temporary occupation permit until 3 July, and hence would you say that a lot of the testing and also training of your staff were not actually carried out adequately nor sufficiently before AOD?

Chairman:

Mr CHARTER.

MD, HACTL:

Obviously, with more time, we would have been able to conduct more testing and more training, and we would like to have more time to do that. With regard to the testing, if I can talk about that first, our experts in their independent report basically feel that the testing we did indicated that the system was capable of handling the loads that were required on Day 1 if there hadn't been other contributory factors.

With regard to training, I think we would like to have more time for training. We conducted training in a normal operational environment. What I think we didn't do sufficient training on was perhaps training when things went wrong. Because the manual procedures that we had to fall back to on Day 1 was an unexpected situation. It wasn't what the staff were trained to do, and possibly there should have been more training for the fall back situation.

Dr Hon Raymond HO Chung-tai

Now, since you mentioned the report done by your own consultants, I think that report gave you a lot of support, obviously. If I can refer you to that document, Page 18, second paragraph in the middle of that page, the sentence beginning with "Under the pressure ...". Page 18, report by Jerome DAY and Max NIMMO. Now, it reads like this:

> "Under the pressure of difficulties with the mechantronic and other cargo handling equipment on AOD and in the midst of much externally produced chaos, some of the human operators of the cargo handling equipment in manual mode did not key in accurate information about cargo movements and locations."

Now, because of the very late completion of the building, in fact even on AOD, according to some of the ramp handlers when they came to give their evidence, there was still a lot of debris everywhere within that building. And here, the operators possibly were not trained properly, so when there was a bit of difficulty they were not able to key in the correct information. If you consider this to be a kind of contingency plan in the manual mode, would you say there is no real excuse that they were not able to key in the correct information?

Chairman:

Mr CHARTER.

MD, HACTL:

No, I am saying there is no excuse. I agree. In fact I said that we were trained to operate the system in automatic mode, and probably the area that we overlooked was the fall back situation where probably there was a lot less training conducted because we didn't expect these problems to occur.

Dr Hon Raymond HO Chung-tai

Yes, but manual mode is supposed to be the fall back measure. Is that right?

MD, HACTL:

It is not a mode that we would expect to use. It was a mode that we had to use on that day.

Dr Hon Raymond HO Chung-tai

Yes, but since there is a mode there in your system that should have been prepared for use in case of emergency.

MD, HACTL:

Not really, no. This was an emergency situation and we moved out of manual as quickly as we could.

Dr Hon Raymond HO Chung-tai

If this was not the contingency plan, what would be your contingency plan?

MD, HACTL:

Well, I think that comes back to what I said last time. We always expected the system to continue to operate in automatic mode. We would expect a level of faults to occur but we had 75 percent of the facility available. We could accommodate a certain level of faults. What we are saying is, for various reasons, for all these factors that we have indicated previously, for various reasons, it was not possible for us to maintain the equipment in automatic mode. That was actually not something that was envisaged to have happened.

Dr Hon Raymond HO Chung-tai

Well, that is something I would find it difficult to understand, because, if you say when the automatic mode cannot be operated, then you would go to the manual mode and at the same time you are also saying that the manual mode is not the fall back mode, or fall back measure. Now, there must be some contingency plan in case both of these fail?

Chairman:

Mr CHARTER.

MD, HACTL:

Not really. I mean we are dependant on operating in an automatic mode. In fact once you take the LCS control out of the system, you are in very serious risk of ending up with data mismatch. So, it is never our plan to take the system really to a stage where linking of LCS control to the inventory control is missing.

Dr Hon Raymond HO Chung-tai

In other words you did not actually plan to have any contingency plan because you assumed that your automatic mode would be in operation under all circumstances?

MD, HACTL:

Well, yes, but I don't accept the statement that we didn't have a contingency plan. The contingency plan was to live with a certain level of faults within the system, which is what we did at Kai Tak. We never had an error-free system at Kai Tak. You can never have an error-free system with such a complex mechanical integrated system. And so the modular design was the basis of our contingency plan. If we had a serious failure in any one module we would then bypass that element of the system and use other parts of the terminal. That was always our plan.

Dr Hon Raymond HO Chung-tai

So, you are saying in other words, Mr CHARTER, that the system at ST1 is

more sophisticated, more highly integrated than the system you had at Kai Tak?

MD, HACTL:

It is, actually.

Dr Hon Raymond HO Chung-tai

And that means you had developed the Kai Tak system much further to reach your ST1 system?

MD, HACTL:

A little further, yes.

Dr Hon Raymond HO Chung-tai

And hence you would need time to test your system and to train your personnel?

MD, HACTL:

Yes, we know that we had to condense, if you like, our training because of the problems with the building completion. We ran these through-put tests on the system and in fact there is evidence there to show that the through-put tests we conducted gave us confidence to believe that the system would adequately cope. What happened was a level of faults in the system, for various reasons which are listed there, the 22 reasons, all contributed in one way or another, some with more importance than another, which got us to a situation where we were not able to continue largely because of data loss.

Dr Hon Raymond HO Chung-tai

If you refer to the report by Dr Ulrich KIPPER, Page 112 of Paper no. M3.

Chairman:

Volume XIII, Paper no. M3, Page 112. This is the report by Dr KIPPER to the Commission of Inquiry.

Dr Hon Raymond HO Chung-tai

Page 112 in Paper no. M3 "Summary of CHS breakdown".

Chairman:

Do you have it, Mr CHARTER?

MD, HACTL:

Not yet, I am afraid.

Dr Hon Raymond HO Chung-tai

Have you got that, Mr CHARTER?

MD, HACTL:

Yes.

Dr Hon Raymond HO Chung-tai

In the middle there, "Summary, CHS breakdown". If I could just refer you to the first item, "CSS/BSS - LCS software problems (major)". According to Dr KIPPER, in his view, there were major problems in the software of CSS and BSS or perhaps BSS, right? Coming back to your own consultant's report, if I may refer you to Page 30 of that report, I would just like to deal with this item. I am sure our colleagues will deal with other items later on. Page 30 of your own consultant's report, Day and Nimmo's report.

At the top there, note in Appendix 10 that there is reference made to "interruption to testing due to the building activity by GPY", who was your contractor, right, your main contractor. "This is a common theme throughout most of the commissioning documents." That means that was quite a major problem right through the course up to AOD. Now, can we just look at this Appendix 10 very quickly? Paper no. E23-10. This was a progress overview of electrical installation/manual mode commissioning with a cut off date, 30 June 1998. Have you got that, Mr CHARTER?

MD, HACTL:

Yes.

Dr Hon Raymond HO Chung-tai

Now, in the middle there you can see "roof equipment delay by GPY", and further down, "Warning ..." - fairly large writing there - "Warning: fire door interfaces not tested due to GPY delay. Typhoon shutter door interfaces not tested due to GPY delay. Dolly transfer CSS not tested because decks were not accessible."

Now, this shows that the lateness or the readiness of the building did cause some problems to certain tests which were not carried out, which could not be carried out.

MD, HACTL:

Yes.

Dr Hon Raymond HO Chung-tai

Now, you can come back to Page 36 of the main report by your consultants, Day and Nimmo, in the middle of that page. Have you got that, Mr CHARTER?

MD, HACTL:

Yes.

Dr Hon Raymond HO Chung-tai

It reads like this:

"There has been some discussion during the Inquiry of the testing carried out on the BSS before AOD. HACTL was pushed very hard for testing time and elected to test only those functions that were essential to AOD operations….HACTL was well aware that extensive testing of equipment was desirable, but had no alternative but to reduce tests in order to be ready for AOD."

So, in fact you curtailed some of the tests which could have been significant, could have been essential in the testing procedures?

MD, HACTL:

According to our expert's report, though, that the testing we did was to test the through-put capacity. Certainly we had to cut down on some testing but the necessary testing that was needed to ensure that we could handle the through-put on Day 1, they believe, was undertaken.

Dr Hon Raymond HO Chung-tai

Now, in any system, if the testing is not complete or cannot be completed before the actual operation, you would anticipate certain problems arising during the operation?

MD, HACTL:

Yes, we expected problems on Day 1.

Dr Hon Raymond HO Chung-tai

So, these were actually foreseen problems?

MD, HACTL:

No, it is a question of degree, as I have explained. At Kai Tak we operate systems that incur faults on a daily basis, 160 faults a day. We expected a level of faults and we do experience a level of faults even now when the system is operating perfectly normally.

Dr Hon Raymond HO Chung-tai

Are you disagreeing with the comment made by Dr KIPPER in that your CSS and BSS software, these 2 ,were major problems?

MD, HACTL:

I am disagreeing with that. I think he has very little evidence to say that.

In accordance with what our experts have found - I don't think Mr KIPPER spent a great deal of time in HACTL at all - our experts spent about 2 or 3 months analysing the problems, and certainly their views are very diametrically opposed to this point. Basically what our experts are saying is that we didn't have software problems in the LCS.

Chairman:

Mr CHARTER perhaps I can jump in here to ask one quite important question. I think that you have in fact said before to the Select Committee, and in fact Mr K K YEUNG in his statement to the Commission has also said more or less the same thing, that was, it was not possible to fully test such sophisticated cargo handling machinery until live operations commenced on site.

Now, that seems to give us the impression that you were not able to test in live situation, and on the day it was the live situation. So, that was the only thing which you did not actually cater for. And when it happened, the system might not in fact be up to it or there might be more faults than you anticipated. You had in fact conducted adequate tests to be ready for AOD but it was just the live situation that you had not tested for.

But what I would like to ask you is whether you had actually conducted all the tests which you needed to do, you originally scheduled to do, but were not able to do because of the physical delays, physical construction delays in the works?

MD, HACTL:

I think it is clear in the evidence that is before the Commission and before yourselves that we had a far longer testing period proposed under the original programme, but with contracting completion dates we had to condense our testing into a much shorter period, and we had to make choices on the scope of that testing. And I would say we concentrated on trying to test those elements that we needed to be operational on AOD.

Chairman:

So, it is not quite accurate to say that because it was not possible to test within a live situation so there was a certain amount of, well I wouldn't say unpreparedness, a certain amount of tests which you weren't able to test in any

case until you came to the live situation? I mean, what you are saying now is that you did pick and choose, didn't you?

MD, HACTL:

I don't think that's quite fair. I think we talked about live load testing as an element of the 22 items, and not just that, if we had had live load that would have been it, we would have been OK. We were pressed for time. We did the testing that we needed to do to establish that we could push the through-put through the facility that we needed to achieve on Day 1. And there were areas where we would like to have more testing. I don't think we've hidden that fact. But because of time constraints we had to go with what we were able to do, and we believed we were ready to operate given the through-put tests we had achieved.

Chairman:

But as the situation turned out it wasn't quite adequate, was it?

MD, HACTL:

For various reasons.

Chairman:

We will come to that in a minute, because in Dr KIPPER'S findings he did also say that perhaps you underestimated the readiness that you required for AOD, but anyway I think if you could ...

Dr Hon Raymond HO Chung-tai

Just one more point, Madam Chairman. Thank you. Same report by your consultants, Page 39, Section 3.2.1, second paragraph. Now, your consultant said that:

> "…It is our firm opinion that the difficulties encountered with the BSS did not contribute to the overall breakdown of the CHS on OAD."

Although he did say that the problem of this should be assessed, did not contribute to the overall breakdown, but wouldn't you say that it could also be

taken to mean that it did contribute to some extent to the breakdown of the CHS on AOD?

MD, HACTL:

Mr CHARTER.

MD, HACTL:

No. Now, the two are separate systems. I would agree with you in one way, that the lack of the BSS gave us operational problems, but it did not contribute to the breakdown of the CSS. I am saying that the faults we were getting on the ...

Dr Hon Raymond HO Chung-tai

Sorry, the breakdown on CHS, not CSS.

MD, HACTL:

I am sorry. Well, I think there are 2 elements of the operation.

Dr Hon Raymond HO Chung-tai

I know BSS and CSS are separate systems.

MD, HACTL:

Yes, OK.

Dr Hon Raymond HO Chung-tai

But we are talking about the breakdown of CHS, cargo handling system.

MD, HACTL:

Yes, right. We were bypassing the BSS through using lifts to get cargo from the truck levels up to the workstation levels. It wasn't terribly efficient. It certainly made life extremely difficult for operations that BSS was not operating at its full capacity. It was intermittent. I would agree with that.

Dr Hon Raymond HO Chung-tai

Because of the lack of training of the operators BSS was actually not operating in the normal way, in a haphazard way and hence it caused quite serious problems to the CHS, and it did contribute to the breakdown of the CHS to some extent, wouldn't you say that?

MD, HACTL:

Well, the BSS was important for handling bulk export cargo on Day 1, and bulk export cargo accounts for about 30 percent of our total exports. Imports all get broken down and put into the box storage system generally speaking. But the imports could get into the CSS and be held there and broken down incrementally throughout the days and put into the BSS. So, the BSS as they rightly point out hasn't got the same sort of time pressures on it as the CSS.

Dr Hon Raymond HO Chung-tai

But the problem is, Mr CHARTER, the failure of this BSS led to your excessive occupation of the use of the dollies.

MD, HACTL:

No, it has not really got anything ... The CSS or the BSS?

Dr Hon Raymond HO Chung-tai

BSS.

MD, HACTL:

No, the BSS is the box storage system. There is a manual operation between the CSS and the box storage system. The cargo is put into the storage boxes and then the boxes are manually wheeled over to the box storage system and input by the staff. Now, there was an element of staff being unfamiliar with the input into the box storage system, I agree, but we were also experiencing teething problems with the box storage systems. For example, acceleration of the stacker cranes was found to be a problem. They were accelerating too fast. The boxes were slipping on the tines of the stacker cranes, and therefore the boxes got

out of position and then you had the stacker cranes stopped. So, we did have mechanical problems in the box storage system, but it didn't affect the operation of the CSS.

Chairman:

And the operation of the CSS was in fact the component which your consultant identified as contributing to the breakdown of the CHS.

MD, HACTL:

Well, the CSS, the container storage system, is certainly the major part of our system. It is linked to the warehouse workstation areas where the container build-up and breakdown are done. It links all the link-bridges to the container storage system. It encompasses all the container hoists and the container stacker cranes. In terms of size of system it is 3 times the size in value of the box storage system.

Chairman:

Yes, but my question is: Is it not right that your consultant has actually identified CSS as the contributing factor rather than BSS which also had problems but BSS was not contributing to the breakdown of the CHS on the day.

MD, HACTL:

That's right. That's what the experts are basically saying, "leave the BSS aside. It was a peripheral system. The major problem was the CSS."

Dr Hon Raymond HO Chung-tai

But Mr CHARTER, although it says here, only the CSS was ultimately involved in the breakdown, when you have this CSS, BSS or the other way round, it is a matter of containerisation and de-containerisation, in a way the breakdown of CSS led to failure of other parts of the system?

MD, HACTL:

Well, the thing about the BSS is, it is not so time-critical as the CSS. You have got 48 hours for people to come and collect cargo, whereas the CSS is

driven by aircraft schedules and that is why the CSS is so important. It is through the CSS that we put the majority of our cargo. 70 percent of our exports go nowhere near the BSS. They go straight into the CSS.

Chairman:

I think we are getting very, very technical here. We need to focus on the questions that the Select Committee wants answers. Basically it really is the testing of these systems that we have been talking about, BSS, CSS and CHS, and the way that these testings have actually been concertina-ed because of the physical construction timetable. Because of that you yourself have actually said that there needed to be some adjustments to make sure that things would be ready in your judgment on AOD.

So, in fact what we are now asking is: First of all whether the fact that such tests had to be concertina-ed, whether that contributed to the breakdown of the CHS system on the day? Secondly, how did that affect the training programme for the people?

And I think that what the Vice-Chairman is trying to put to you is that in spite of what you had said, in your supplemental statement, you also said that, based on the CSS and LTSS through-put tests, your staff had a reasonable basis on expecting the CHS handle to be able to the estimated through-put.

I mean, the judgment of whether the CHS could handle the estimated through-put is one thing, but what is important is whether actually, the tests that needed to be done were all done. For those 3 key systems, especially the CHS which, according to Dr KIPPER, there was some omission of tests, in fact "significant lack of CHS testing" - this is what he said in his report. I think the answer that you really need to give us is whether this fact was due to the construction delay and whether this fact contributed to the breakdown of the CHS on AOD?

MD, HACTL:

Well, all I can say is we would like to have more time, obviously, but I believe the amount of testing that was done on the CHS was adequate to demonstrate that the system could cope on AOD.

Dr Hon Raymond HO Chung-tai

May I add another question?

Chairman:

Yes, go on.

Dr Hon Raymond HO Chung-tai

Madam Chairman. Mr CHARTER, now I would like you to comment on this paragraph on Page 28 of your consultant's report. Page 28 at the top there. Have you got that, Mr CHARTER?

MD, HACTL:

Yes.

Dr Hon Raymond HO Chung-tai

Now, it reads like this:

"The installation is of a typical industrial standard and the components are suitable for the application. There has been a quantity of dust deposited inside the various control cubicles, which could cause problems at a later date and has already been responsible for some failures of equipment. From the reports it is apparent that some equipment has also been damaged by water. Commissioning of this installation was not done under ideal conditions and was worse than, on average, one would expect. Difficult as it might have been the obstacles have been overcome by the commissioning staff."

How would you comment on this? Would you say this underlines the difficulties at site, because the building was actually not quite ready for operation and hence it caused a lot of problems such as dust and water and also, as I mentioned just now in Appendix 10, stability was also a problem?

MD, HACTL:

Yes, I mean that went on throughout the construction period. I don't think

they are necessarily just talking about the last couple of months, but they are talking about the installation period. The installation went on for 2 years and it was always a problem to us.

Dr Hon Raymond HO Chung-tai

Would you say the building, ST1, not being really ready construction-wise caused a lot of the problems that took place on AOD?

MD, HACTL:

Well, it was one of the factors.

Dr Hon Raymond HO Chung-tai

Thank you, Madam Chairman.

Chairman:

Is there any question on training from other Members? Training?

Hon Edward HO Sing-tin:

Yes.

Chairman:

Mr Edward HO?

Hon Edward HO Sing-tin:

Chairman, I would just like to refer to Dr KIPPER'S report.

Chairman:

M3, Page 112 in Volume XIII, is that Page 112 you want to refer to, or which page?

Hon Edward HO Sing-tin:

Well, Page 109 refers to training.

Chairman:

Yes, have you got it, Mr CHARTER?

MD, HACTL:

Yes, I have it.

Hon Edward HO Sing-tin:

Well, in Page 109, there were some observations by Dr KIPPER on training. First of all, "The new and unfamiliar operating environment for HACTL staff " in Item 6.4.5.1 and then Item 6.4.5.2 "Insufficient training of HACTL's operational and maintenance staff." then it gave some details. Turning over the page, in the middle of the page, Paragraph 9, for instance, which is in thick print, it says:

"One-day training in a group of 20-30 people is far from being sufficient for operating the new ST1 CHS."

The whole of this couple of pages refer to the requirement of training and in Dr KIPPER'S opinion, insufficient training was undertaken. I would like to ask Mr CHARTER for his opinion?

Chairman:

Mr CHARTER.

MD, HACTL:

I think we are talking largely here about familiarisation training. It has to be remembered that a lot of the training that we did was classroom training, and we modified systems at Kai Tak, which we knew we were going to be running at CLK. So largely what we needed to do at CLK was familiarisation training, getting staff familiar with the environment and the layout. And certainly I think because of the problems we had with the building inspections and so on, it did curtail to some degree the familiarisation training that we needed to give our

staff.

Hon Edward HO Sing-tin:

So, would Mr CHARTER say that insufficient training was the cause of some human errors, like inputting?

MD, HACTL:

Let me say there were increased incidents of human error because of the lack of time for familiarisation training, but I don't think it is right to say there wasn't training. There was a lack of training perhaps on site.

Hon Edward HO Sing-tin:

Yes, that's what I mean, the lack of training.

MD, HACTL:

Yes, on site, on-site training.

Chairman:

In fact, Mr CHARTER, your own deputy, Mr YEUNG, in his statement to the Commission, which is Paper no. E4, in Volume IV, Paragraph 64, admitted as much. Do other Members have that already?

Hon Edward HO Sing-tin:

Yes.

Chairman:

That is Paragraph 64:

"The recurrent power failures, water damage and general disruption caused by the overlapping construction and installation work severely interfered with HACTL's staff training schedules in relation to the operation of cargo handling machinery. Although HACTL made every possible effort to

familiarise its operational staff with the cargo handling machinery to be used at ST1, effective on-site training at ST1 was made very difficult by the constant interruptions leading up to the opening of the new airport.

Although much of the cargo handling equipment now in use at ST1 is similar to that in operation at Kai Tak before the move to ST1, on-site training is essential to an effective staff training programme in the new working and systems environment which it was impossible to create at Kai Tak. The on-site training was frustrated by the continual disruptions leading up to the opening of the new airport."

So, in fact your own Mr Yeung admitted that because of the physical condition and all the disruption caused by inadequate facilities and equipment before AOD, on-site training was far from satisfactory. Would you not agree?

MD, HACTL:

I think I have agreed.

Chairman:

You have. Would you agree that that is one of the very key factors that impacted the chaos on AOD?

MD, HACTL:

It was a factor but that gives quite a limited view of that particular problem. We had been training, commissioning the CSS for 6 months. We had been using operational staff to do that so a large number of workers that had quite extensive training on the equipment there. There was a proportion of our staff who had limited familiarisation training. That's all I am saying. We would like to have more time to give more training to that proportion of staff who had not been involved in the commissioning.

Hon Edward HO Sing-tin:

Chairman, I think one of the key problems which was noted was when CHS has to be switched to manual mode, the operational staff was not equipped to do that because they were not trained. I mean it was not anticipated.

MD, HACTL:

Yes.

Hon Edward HO Sing-tin:

I think you said it earlier just now?

MD, HACTL:

Yes.

Hon Edward HO Sing-tin:

Can you repeat the reasons why this kind of scenario was never anticipated, that is, switching to manual mode?

Chairman:

Mr CHARTER.

MD, HACTL:

Well, the reason we wouldn't want to switch to manual mode is because of the degradation on the performance of the system. We had never envisaged it being a mode which could successfully process the requirements. So, it wasn't envisaged as a way we could operate the terminal.

Hon Edward HO Sing-tin:

Yes, but nevertheless, Chairman, the system can be operated manually, and in a way it did but not very successfully, right?

MD, HACTL:

With a lot of danger that you end up with data mismatch and you lose the inventory, which was actually happened on AOD.

Hon Edward HO Sing-tin:

According to Dr KIPPER'S report, there were different reasons for

switching to manual mode. He gave several instances where one would have to switch to manual mode. I think one of them is this unit load device. He mentioned that if some of these were mis-shaped, they went off the line and this kind of thing, then, one had to switch on the manual mode. That is what happened, isn't' it?

Chairman:

Mr CHARTER.

MD, HACTL:

Well, we did have faults occurring in the system, yes. In that case an engineer would be called if that happened to switch into maintenance mode to, if you like, move the container back into the middle of the deck. The engineer would then re-set in a normal situation to automatic mode. The system would then take it through to its destination point.

So I think one has to be a little bit careful in the use of the terminology and again maintenance mode was really a situation where you take the equipment out of any relationship with the computer control, largely to be used by the engineers, as I understand it.

Hon Edward HO Sing-tin:

Yes, but on the other hand it is not something that would be totally unanticipated, I mean, this kind of container going off the rail?

MD, HACTL:

No, but we would rely on our maintenance staff to rectify that situation rather than our operations people, and they are trained to do that. In fact this comment that our training was inadequate for operations and maintenance staff. I have a little bit of a difficulty with the inference that our maintenance staff weren't trained largely because a lot of them had been involved in commissioning the equipment for 6 months prior to that. The equipment that is being used in ST1 in terms of hardware is very similar to what we were using at Kai Tak. So, I think our engineers really were fairly well trained. And in fact the first stage of the fall back that we tried to get into on Day 1 was to get the engineers out there riding on the equipment operating it manually because our operations staff

didn't have that expertise. And in fact we don't allow our operations staff to do that because you can cause an awful lot of damage to equipment.

Hon Edward HO Sing-tin:

Excuse me, I have found it. Actually it is in your own consultancy report, not Dr KIPPER'S. Page 40 of that report, Paragraph 3.2.2, "switching to manual mode", he said that there are 3 reasons for switching the manual mode. For example, (1) genuinely defective equipment; or (2) light load problem such as a mis-shaped ULD's running over the side which we discussed; (b) roller beds being misaligned; (c) pieces of polyethylene wrapping dripping down and so on. So, I mean clearly this could occur, I mean these problems could occur and one would have to switch to manual mode. And I think what you said just now is that your operational staff would not be the ones to do that.

MD, HACTL:

It would be the maintenance staff that would be called if a problem like this happened. They would be called to rectify the problem. And once the fault had been rectified the system would be switched back to LCS control, so that it was back into a situation where automatic inventory updates were occurring.

Hon Edward HO Sing-tin:

But how frequently, I mean, how quickly can maintenance people respond to such a situation?

MD, HACTL:

That's right. Well, let me say that this happens on a daily basis now and it happened on a daily basis at Kai Tak, and as I mentioned at the moment we are suffering something like 240 faults a day. These faults are serviced by the maintenance engineers, not by the operational staff. So they rush to a deck, they rectify the mechanical problem, or if it is a sensor trip, and then they reset the equipment to get it back into LCS control.

主席：

單仲偕議員。

單仲偕議員：

主席，我想請問"Mr Anthony CHARTER"，他是否有機會參閱"Dr KIPPER"的"report"？

Chairman:

Mr CHARTER.

MD, HACTL:

I have glanced through it. I can't say I have studied it. I have looked at the conclusions.

單仲偕議員：

你是否於出席此研訊前參閱該報告？

MD, HACTL:

A couple of days ago.

單仲偕議員：

其實此報告已清楚描述有關問題。文件第91頁列出14個最初因素，即"initial problems"。"Dr KIPPER"認為其中兩個是主要的問題所在，包括"I-9"和"I-10"，即"CSS/LCS software bug"和"BSS/LCS software bug"。這些最初因素導致其後的"consequential problems"。他又列舉11個問題，並指出其中兩個為主要原因，即"C-4"和"C-9"。"C-4"是"cargo handling process slow down"，而"C-9"則是"inventory mismatch"。我想請問"Mr Anthony CHARTER"，"Dr KIPPER"的分析已清楚指出，最初是因"software bug"，即軟件出現錯誤所致。但在你的供辭及你們的報告內，均沒有強調此點。經過這幾個月反覆思量後，你是否同意"Dr KIPPER"的意見，即"I-9"和"I-10"是最初、最主要的因素？

Chairman:

Mr CHARTER.

單仲偕議員：

這報告很清楚……You do not agree with me?

MD, HACTL:

No, I do not agree that CSS software was a problem. And that is based on our own expert witnesses' evaluation. You say I have had months and months to go over this. I have not had months and months to go over this. Frankly I have been busy trying to get the operation up and running. And it wasn't until about October that actually we, as a group of HACTL managers, had time to sit down and really try and analyse what happened on Day 1.

But according to our own expert witnesses' evidence and advice, they do not believe that we had a software problem within the LCS, and I have to accept what they say. They have had 3 or 4 months to analyse it. They are far more technically competent than I am. They believe it was other factors rather than our software.

HACTL management's confidence was obviously very severely shaken on the second day because of our loss of the inventory and we suspected that that might be a software problem. But after a lot of analysis it doesn't appear to have been the problem.

單仲偕議員：

我認為這是相當關鍵的，因我們最後作判斷時亦須參考這幾份報告。"Mr Anthony CHARTER"，請參閱第107及108頁，第108頁中間部分清楚寫出"Impact of I-9 and I-10 on CHS breakdown was major. There have been paragraphs describing the causes of these problems and the conclusion is that I-9 and I-10 are the major problems. I-9 is the CSS/LCS software bug and I10 is the BSS/LCS software bug."

Chairman:

Mr CHARTER.

MD, HACTL:

Well, I, looking at the ...

Hon SIN Chung-kai:

You know, Mr CHARTER ....

Chairman:

Wait, wait. You asked your question, and leave time for Mr CHARTER to answer.

Hon SIN Chung-kai:

OK, I just want to finish my question. I am sorry.

Chairman:

Yes, just finish it.

Hon SIN Chung-kai:

Yes, concerning the initial problems, on Page 91, Dr KIPPER tried to rule them out one by one. Out of these 14 problems, he ruled out 11 and marked I-9 and I-10 as 2 major, and I-14, ISS stand-by system as moderate causes of the problems. So Dr KIPPER has done a very thorough job to analyse this and you disagree with these conclusions?

MD, HACTL:

I do. I don't necessarily disagree with the inventory mismatch. I am saying that the reason for the mismatch is not software problems.

Hon SIN Chung-kai:

No, the inventory mismatch is a consequential problem. That is C-9. The initial problem is I-1 to I-14. And from the initial problems, I think it is logical that the initial problems bring about some consequential problems. So, from I-1 to I-14, that is I-9 and I-10 are the major problems which are identified by Dr KIPPER.

MD, HACTL:

Well, I am afraid I have to disagree with you on this point.

Hon SIN Chung-kai:

No, this is not my report. This is Dr KIPPER's.

MD, HACTL:

Well, I don't accept his report, and if in fact you talk to our expert witnesses themselves they disagreed with his report. And I can only tell you that basically our experts had done a thorough analysis on our system, a far greater analysis than Dr KIPPER, and they believe that we did not have material software problems within the LCS. That's all I can tell you, and therefore I cannot agree with Dr KIPPER's statement that we had software problems. I agree there was an inventory mismatch but I say it was nothing to do with our software.

Chairman:

Any more questions on this one? If not, can I just briefly go back to an earlier point that Mr CHARTER made concerning training. He said that, yes, for operational staff may be there was a lack of time, but for maintenance staff because they had been working there for months in commissioning and all that, there was no reason why they wouldn't have been sufficiently trained.

But according to Dr KIPPER, if you can turn to the same document that we referred to earlier, Paper no. M3, and that part on training, Page 110, it specifically referred to the maintenance staff in Paragraph 11:

> "HACTL's staff was not prepared to manage the difficult situation after airport opening. We noted the lack of knowledge in HACTL's maintenance staff to handle the system and the manual flow of data while the equipment was not working in automatic mode. The amount of manual labour needed on AOD was not anticipated."

So, that must somehow aggravated the problem. And then Paragraph 13:

> "Consequently, both HACTL's operational and maintenance staff were not able to use the modified CHS in the recovery phase."

Now, how would you respond to that, because that refers specifically to the maintenance staff whom you said should have been adequately trained?

MD, HACTL:

First of all, that is a comment by Demag, our contractor, and that has to be taken into account. That is a Demag comment. Obviously Demag are trying to protect their position as well. And I think one has to be very, very clear what one is talking about. If one is talking about maintenance of the equipment, the mechanical equipment, that's one thing. If one is talking about the various areas of computer control or off-line PLC, running of the system, that is a different issue. And yes, I would say that in terms of running in an off-line PLC mode people were unfamiliar with that.

Chairman:

Miss CHOY So-yuk?

Hon CHOY So-yuk:

Thank you, Madam Chairman. I would also like to refer to this same report by Dr KIPPER on the part of fall back measures. Here it says in Paragraph 12 on Page 110, it says:

> "Neither testing of the CHS in manual mode was done nor training of the staff for operation in manual mode."

So, this is one part. And then in the same report, Page 92:

> "Initial consequence, I-14. IS as stand-by system for LCS was not operational on AOD."

So, obviously you are not training your staff to work on manual mode. There was not also a stand-by system operational. So, what was your fall back system? I mean, you must anticipate problem but your staff are not trained to work on a manual system. So, why you switched to manual system when you knew that your staff were not trained to that kind of working mode?

Chairman:

Mr CHARTER.

MD, HACTL:

Well, they were not trained because we knew there were very real risks while going into manual mode. There was a danger of losing the inventory which in the end crippled us. So, it is not something we go to lightly. We didn't anticipate the level of faults we were going to experience on Day 1. We believed that the system would be able to handle the through-put that it was necessary to handle. It was the level of faults in the system for whatever reason that caused us to reach a point where we had lost the inventory.

Hon CHOY So-yuk:

Madam Chairman, of course we know that it is risky to fall back on manual mode, but obviously you did it and you quickly fell into a manual mode on ACD. So I really could not comprehend why then, this is obviously an obvious fall back system for you when you had encountered the problem. You quickly switched to manual mode. But why were your staff were never trained to work on such a fall back situation?

MD, HACTL:

Well, I can't speak with authority in this area as to know exactly what training was done, but manual operations is not the way we can process cargo through the terminal in normal circumstances. We had an emergency situation so we had to clear the apron. We were doing all we could to do that.

Hon CHOY So-yuk:

But obviously, I mean, on AOD, you did not have a better fall back system other than a manual mode. You decided to work on such a manual mode which you know your staff were not trained properly to work.

Chairman:

Mr CHARTER.

MD, HACTL:

We had to do something. The automatic system, the interruptions on the system, we were coming to gridlock. We had to do something to get the cargo off the apron.,

Chairman:

But Mr CHARTER, you know of course that one of the findings in Dr KIPPER's report was that, according to him, there was no contingency planning. "Lack of contingency planning" was what he said. And you were telling us that first of all you did not actually cater for manual mode but that was the sort of last resort. You had to resort to that because it was so chaotic. You had to take that on but your staff were not trained for that.

And then you told us the contingency plan. You were asked about the contingency plan, not just this time but I think the last time also, and what you said to us was that, "oh, you know, we knew that there would be a number of faults and we would be correcting them as they cropped up."

But surely that seems to suggest to us that there was no in between. Either your break down totally, like what you did on AOD, or you just keep correcting or dealing with whatever faults that come up. There was no in between. Was that the kind of situation that normally you would expect from such a highly sophisticated and professional service that you offer?

MD, HACTL:

Generally we believe in providing the fall back through equipment redundancy, in terms of finding a different module or path to process that cargo rather than switching to a different level of control, yes. So it was an abnormal situation and not one that we practice today at all.

Hon CHOY So-yuk:

Madam Chairman, can I then ask Mr CHARTER, does this imply that you had not thought of a better contingency plan? You actually thought that you could operate it fully? So, it is kind of an all or none system? There was, as the Chairman just asked, there was no middle way that you could fall back into?

Chairman:

Mr CHARTER.

MD, HACTL:

During our recovery programme we managed to operate with additional people doing the inventory checks on the stacker cranes. We were able to devise an alternative way of operating with additional staff. It was never our intention to operate that way.

Chairman:

No, but this is the point, Mr CHARTER. You never expected the system to crash or to break down so there was never any preparation for manual mode of operation, right? I mean, your staff were not trained for that. But on the day what actually happened, and then later on of course it did break down, the CHS did break down, but it started to slow down to start off with, and then it rapidly got worse and worse and worse until such a time that you felt that you had to go to manual operation, which you were not prepared for.

Now, I mean, as far as this Committee is concerned we have to put the question to you. Is it because you have no expectation or anticipation of such a possibility altogether, because all your tests were so satisfactorily conducted and so comprehensively done that you felt that there was no need at all to anticipate this kind of scenario? Or was it because it just happened very suddenly and it was totally unexpected or what? Why was it that it gave you such a degree of confidence that you felt that there was no need for manual operation, there was no need for other contingency? That is the first question.

Second question is, as far as we gather, even the stand-by system was not operational on the day, given the problems that you were facing. So, wouldn't you have said that that is one fall back that you had that you didn't use? And why didn't you use it?

MD, HACTL:

Well, I am not competent to go into detail about the stand-by system but I think it is misleading in what they say about the stand-by system there, and I would ask you to directly that question to somebody else.

But I think you summarised it very well. I think our approach to this whole operation was that we have to operate in automatic mode. Anything less than automatic mode, the system will not process the through-put, therefore it was vital for us to ensure that we could operate in automatic mode without losing the computer inventory, and anything other than that was unimaginable. And so

we took the view that the fall back had to be the redundancy of the systems. That we had to have 75 percent of the system available for 50 percent of the tonnage, giving us a 50 percent buffer, and that was the way we approached it.

Chairman:

And did you have that?

MD, HACTL:

Yes, we believed we did.

Chairman:

So, what happened?

MD, HACTL:

We got a fault level far worse than we expected for a whole variety of reasons.

Chairman:

And you still maintain that it is not a software problem?

MD, HACTL:

It transpires that it is not fundamentally a software problem. It was largely human error.

Hon CHOY So-yuk:

Madam Chairman, sorry, can I just finish this part? Now, since Mr CHARTER mentioned that you had a system. And you were saying it was unimaginable to switch it to a manual mode. I still cannot comprehend then why on AOD you decided to choose a mode which you feel is risk and unimaginable, instead of using a redundant stand-by system? You doubt that it is not operational was misleading. Then why should you not choose to use that system on AOD
instead of using a mode which you claim as unimaginable?

Chairman:

Mr CHARTER.

MD, HACTL:

Well, again, I am not technically competent to talk about the stand-by system, and I am not trying to duck the question but I think I could give you wrong information on that point.

Chairman:

But it is very difficult for us to accept, Mr CHARTER, that as the man who is overall in charge of the operation, you are not able to at least explain, of course we don't expect you to be a technologically expert ...

MD, HACTL:

I can give you a guess. This is something to do with a fall back mode which has to be operated by our computer control group, I think, and it was a question of resources also being available to cope with the problems on the ground. I am guessing here. You asked me to guess.

Chairman:

I think, Mr CHARTER, we are not asking you to guess. We are asking what your understanding is vis a vis the stand-by system. Did you understand that HACTL had a stand-by system or didn't you have a stand-by system? I think it is unacceptable for us to hear from you that you didn't know and you don't know. Did you have a stand-by system?

MD, HACTL:

Well, it depends what we are talking about. Are we talking ...?

Chairman:

This is the IS system.

MD, HACTL:

Yes, but the IS system is a very small part of our whole computer system. We have stand-by systems for the computer system in all other areas. This is a very technical and specific area, and I am sorry, I can't answer your question.

Chairman:

No, the question is, no matter whether the system is big or small system,, did you understand it to be a stand-by system which could actually be used in case of failures?

MD, HACTL:

No, no, I didn't understand it as being that.

Chairman:

So, it wasn't a stand-by system? Either it was a stand-by system or it wasn't a stand-by system.

MD, HACTL:

I am not exactly sure what is meant by a stand-by system.

Dr Hon Raymond HO Chung-tai

I think, Madam Chairman, to come back to your software. Now, Dr KIPPER's report, Page 103, Paper no.M3.

MD, HACTL:

You have to remember I said I have glanced at this report. I haven't had a chance to study it. I looked largely at the conclusions.

Dr Hon Raymond HO Chung-tai

Well, I would like to refer to certain sentences. I think the sentences would give you a very clear meaning of what they were talking about. Have you got Page 103?

MD, HACTL:

I have, yes.

Dr Hon Raymond HO Chung-tai

Now, in the middle there, second paragraph, last sentence:

"50 percent of the tests ..."

- here we are talking about the CHS test stages, cargo handling system test stages, second paragraph, last sentence:

> "50 percent of the tests have not been conducted offsite at Kai Tak." [This was in accordance with your Mr Y W HO, and then it reads on:] "And obviously no testing of CSS-LCS and BSS-LCS." [Next paragraph:] "It is assumed that there was a significant delay in CSS-LCS and LCS-BSS software development."

It seems that even until AOD the LCS development was not finalised. Some functions had not been handed over by CDG, control system design group, in accordance with the evidence given by your Y W HO. And here, would you say that, just now you were telling us that there was a considerable amount of software development when you moved from Kai Tak to Chek Lap Kok, and it means that in the process of developing or further developing your software you didn't really have enough time to complete the whole project, according to what was said here?

MD, HACTL:

No, that's not actually the case, and in fact the report I am reading off here has parts of what you read out crossed out. So, I am looking at the supplemental report here. The end of that first sentence is crossed out. But basically ...

Dr Hon Raymond HO Chung-tai

I am not sure that is underlining or crossed out, because underlining is done in the first paragraph.

MD, HACTL:

I think it is crossed out.

Dr Hon Raymond HO Chung-tai

Well, even if that is crossed out, the first sentence that I read out in the third paragraph still says that there was a significant delay in CSS-LCS and LCS-BSS software development. And also the late handover as I read out just now. You agree with what is said here?

MD, HACTL:

Well, I have to go back and explain. LCS applies to both the CSS and BSS, and the LCS development on CSS, the same LCS system is used for the BSS so the software development on LCS was developed first. 30 percent of the BSS/LCS is created in what they call a virtual system and can be tested offsite. So I accept that the LCS development of the BSS was late but, because it was based largely on the LCS/CSS which was fully tested and commissioned and there was no problem with that - in fact I think according to the reports it was almost ready in January '98, and there were very few software developments on that side thereafter - I don't accept that the software for the LCS/BSS was not complete. But for various reasons we were concentrating on the commissioning of the CSS because it was a more vital system for us.

Dr Hon Raymond HO Chung-tai

In fact here your Mr Y W HO did say that some functions were not actually handed over by the CDG.

MD, HACTL:

Yes, but how important those were I don't know. I don't think they necessarily were terribly important.

Dr Hon Raymond HO Chung-tai

Well, you are saying that you don't know, that means they are not

important?

MD, HACTL:

Well, I would have thought that anything that was needed for Day 1 would have been done, otherwise I would have been told about it.

Dr Hon Raymond HO Chung-tai

Are you disputing what it says here "even until AOD the LCS development was not finalised." Do you agree with that or not?

MD, HACTL:

I am not disputing that. I do not know what the situation was there but I think whatever was not finalised was not terribly important in terms of our processing capability. I stress again we do not believe we had LCS problems in either the CSS or the BSS.

Hon SIN Chung-kai:

May I draw your attention, Mr Anthony CHARTER, in your expert's report, Page 44, this is the report by your consultants:

> "We conclude therefore that AOD breakdown of HACTL's ST1 CHS processing was not primarily caused by inadequacies of LCS, but that, at worst, what may have been mis-perceived as slowness of the LCS, was the result of shortcomings in other areas."

OK, the fact is LCS was slow on the first day, on AOD.

MD, HACTL:

No, that's not what they are saying. They are actually saying that it appeared to be slow ...

Hon SIN Chung-kai:

OK, it appears to be slow.

MD, HACTL:

... for other reasons. That is very, very important. That is quite a different conclusion to what you are suggesting.

Hon SIN Chung-kai:

OK, may I refer to another report. That is Page 1010 of Dr KIPPER's report, Point 8:

"The problem of slow response was known by HACTL prior to AOD. Slow response BSS, slow response CSS, problems."

There are some records I think within your documentations and it is very likely that the cranes were idle on AOD, the problem of the cranes was caused by the same LCS problems. The reasons why you have to change onto manual mode in the early morning on AOD, do you have an answer to this question?

MD, HACTL:

Well, now you are jumping from the BSS back to the CSS. We are talking about the CSS now, are we?

Hon SIN Chung-kai:

OK, forget about this question. The question is : It appears that LCS is slow, does this induce your operators to change from automatic mode to manual mode?

MD, HACTL:

That is what they are saying, yes. But, they also go on to say that it was nothing to do with our software. It was a perceived slowness, and in fact if you read the paragraph on perceived slowness I think it explains it far better than I can.

Hon SIN Chung-kai:

But from Dr KIPPER's report on Page 1010 there are substantial documents concluding that your response time is slow. Am I wrong?

MD, HACTL:

Well, if you accept what Dr KIPPER says, but I don't. I am afraid Dr KIPPER spent very little time at HACTL. He has read evidence, obviously.

Chairman:

I thought, Mr CHARTER, that even in your own consultants' report they are not disputing the fact that there has been slowness of the LCS? They are not disputing that. What they are saying is the cause of the slowness is not because of the software or not because of that, but because of other factors which have caused the slowness. So the fact was not being disputed.

MD, HACTL:

That's right.

Chairman:

Miss CHOY So-yuk.

Hon CHOY So-yuk:

Madam Chairman, it is also on HACTL's own consultant's report, Page 40. Here it says, I am referring back to the switching to manual mode thing. Again the Vice-Chairman just mentioned the reasons, genuinely defective equipment, live load problems, and faulty or dirty sensors producing incorrect interruptions. So, these are all valid reasons to be switching it on. Then here in your report it says, in the second last paragraph of this page:

> "On AOD there were many such instances of valid switches to manual mode."

Obviously it says that the reasons why you had to change to manual mode were mainly internal problems: genuinely defective equipment, mis-shaped ULD's running over and so on, roller beds being misaligned, pieces of polyethylene wrapping dripping down or faulty or dirty sensors.

Chairman:

There is no need to read it. OK, Mr CHARTER?

MD, HACTL:

I am not sure what the question is.

Chairman:

The question is: Even your consultants have actually identified these reasons as valid reasons for switching into manual mode?

Hon Edward HO Sing-tin:

With respect I have already asked that question.

Hon CHOY So-yuk:

And my question is, Mr CHARTER, do you acknowledge that these are the reasons for switching to manual mode?

Chairman:

I thought Mr Edward HO is right: That question has been answered. Are there any other questions?

Hon Edward HO Sing-tin:

Not on the same subject.

Chairman:

On a different topic? What is your question? I want to go on to readiness, but anyway, you go on first.

Hon Edward HO Sing-tin:

Yes, Mr CHARTER, in your witness statement you said you had no reason to believe that it was not ready on AOD. But looking at what happened now and your own consultants' report, it sums up a certain number of faults, if you refer to Page 57 of your consultant's report. We know about these things, the dirty sensors, sensor misalignment, sensor safety in the locks triggered by cargo

packaging, ULD's jamming the conveyors. Earlier on, you also said you would prefer more training, training was not adequate. On testing, I think even your consultants' report said that more extensive testing by your staff would be the preferred option.

So, all of that, did you know before AOD that testing was not adequate, training was not adequate or that this equipment here, the sensors and so on, were not tested so that all these problems occurred?

Chairman:

Mr CHARTER.

MD, HACTL:

Let me say I know I was short of time. I think I have said that before. And obviously we were doing what we felt we needed to do as a bare essential to get operational. And we believed that we had covered the training, the through-put testing, to a sufficient level to allow us to go operational. We believed we were ready. With the wonderful advantage of hindsight obviously it is easier to say there were shortcomings here, shortcomings there. And to some degree, as I said before, it was a question of risk.

Hon Edward HO Sing-tin:

Yes, I think, Mr CHARTER, in your own statement you said you were not alerted by your consultant or your staff of any serious problems outstanding. So, would you say that if there was any fault it would be consulting staff who didn't advise you on these problems?

MD, HACTL:

No, I wouldn't like to put that down to my staff. It was a collective position. My senior staff and myself were in touch with the day-to-day situation on a regular basis.

Hon Edward HO Sing-tin:

Mr Chairman, did they at any time tell you that training was not sufficient or testing was not sufficient prior to AOD?

MD, HACTL:

No, we believed we had done enough to go operational. Obviously we would like to have more time.

Hon Edward HO Sing-tin:

They said to you that it was sufficient, did they?

MD, HACTL:

I don't think I asked anybody that question point blank. We were working towards 6 July. We had to be operational on 6 July. The consensus view was that we had got everything covered.

Chairman:

Given that you only obtained your TOP on 3 July, and everybody knows that you were very hard-pressed. The construction was really delayed until quite late in the day and you yourself have actually said it would be a very close-run thing. Was there any kind of audit done before AOD to in fact gauge the exact position, the exact degree of readiness you were in, or the systems, your staff and so on? Was there such an audit done?

MD, HACTL:

No, we are very much a hands-on manager type operation, all of us. We deal with the day-to-day operation. You know, you can get a feel for where we stood. It is our bread and butter business. We believed, operations believed, the control development group, information services, we believed we were ready to operate, although it was going to be difficult, and we knew it wouldn't be smooth sailing but we didn't expect a crash.

Chairman:

And never mind about hindsight. I mean, looking back on it today that is not totally fair, of course, It is wise after the event. I am asking your state of

mind on AOD when things started to go wrong, slowing down, crashing, breaking down, the systems breaking down on that day. Did it occur to you or did your senior management in fact discuss the matter to say "we weren't quite ready"?

MD, HACTL:

Well, no we didn't, we didn't put it in that way, no.

Chairman:

But did you consider at that time that you weren't quite ready on AOD?

MD, HACTL:

No, that wasn't the first thought that came to my mind, no. The question was, "what's happening? What's going wrong?"

Chairman:

So, in other words you were totally taken by surprise?

MD, HACTL:

I was totally taken by surprise.

Chairman:

Are there any other questions?

Hon SIN Chung-kai:

I want to ask Mr Anthony Charter to give some comments on your experts' conclusions. In his conclusions, he says:

> "Invariably, it is difficult to be the manager who says, "I don't think we are going to be ready". The immense pressure from all levels of Government and management at ST1 would have made any real except "we are confident of being ready" unthinkable."

What is you comment on the remarks of your experts?

MD, HACTL:

What was my level of confidence? Is that the question?

Hon SIN Chung-kai:

Yes.

Chairman:

Mr CHARTER.

MD, HACTL:

I think I wasn't 100 percent confident. I would be the first to admit that. I think that came out in saying that we would manage somehow. I knew we were going to have difficulties. Obviously it is a question that goes through one's mind beforehand but I was confident enough to believe that we could operate.

Hon SIN Chung-kai:

One thing I would like to request Anthony CHARTER, it is up to you, if you want to react to the comments on Dr KIPPER's report, because it may help us when we draw our conclusions. These 2 reports are to a certain extent quite different. I cannot say they are contradicting, but they have different point of view to quite a large extent. That makes our conclusion difficult.

MD, HACTL:

I appreciate that, and I think the experts all sat down to argue this out among themselves at one stage and I don't think they could reach agreement. So, I think what I would ...

Hon SIN Chung-kai:

It is up to you. If you think you need to say anything please let us know, let us have them in writing.

MD, HACTL:

Thank you.

Chairman:

Yes, and Mr CHARTER I would certainly like to ask for your response to the stand-by system.

MD, HACTL:

Alright.

Chairman:

I think that's quite important because as we assess the contingency measures or the lack of them, or whatever, again for the writing of the report it would be immensely useful.

MD, HACTL:

I appreciate the opportunity to come back on that one.

Hon CHOY So-yuk:

Madam Chairman, can I ask Mr CHARTER to comment on one sentence which is on Page 58 in Day and NIMMO's report, Paper no. E23 the fourth line in the second paragraph which says :

> "Testing prior to AOD was under controlled condition using ULD's specially built for testing, which in hindsight, gave an unrealistic expectation of the performance of the terminal under live load conditions."

Would you agree that actually you had underestimated the difficulties which you might encounter on live load conditions?

MD, HACTL:

Did we underestimate the difficulties? I think one thing, from my own

personal experience, that surprised me was the level of faults we were having with polythene sheets and ropes and things tripping the sensor. And perhaps we didn't fully take on board the slight design change here to what we had at Kai Tak in terms of the operation. At Kai Tak it tends to be a single beam. At ST1 it is a curtain, a curtain of light which gave far more occasions where the sensors were tripped by these polythene sheets. And yes, I suppose that was an oversight on our part.

Hon CHOY So-yuk:

Thank you.

Dr Raymond Ho:

Madam Chairman, Mr CHARTER, I would like to come back to the experience of Demag because they developed the CSS software. According to your consultants' report their main experience was in storage and sortation systems but their main experience was actually gained at Kai Tak, but Kai Tak was a less complicated system than Chek Lap Kok, than your ST1.

Now, you were actually relying completely on their performance in the development of the ST1 system. Is that right?

MD, HACTL:

No, I think one has to understand that it is only Level 1 and Level 2 that are provided by the contractors, and that the LCS level was built by ourselves.

Dr Raymond Ho:

But the rest was done by yourselves?

MD, HACTL:

Yes.

Dr Raymond Ho:

I see, OK. Now, because of the lack of time in the testing as well as

training of your personnel, did you actually carry out any brief assessment before AOD?

MD, HACTL:

I think this is something which is an on-going, day-to-day assessment of the situation. All our senior managers were on site. I was on site. That was the best way of assessing risk, getting the test results, etc, etc. We didn't commission a separate team, if you like, or an independent checker to check.

It would have been quite difficult for somebody else because they don't understand the operation in the way that we understand the operation. We frequently deal with workaround situations. If something isn't working we find another way to do it. That is quite common. So, we were relying very much on our own internal assessment. We had been through commissioning terminals at Kai Tak. I mean that's all we do for a living, really.

Dr Raymond Ho:

Wouldn't you say, Mr CHARTER, that when you say workarounds, they are really make-do measures?

MD, HACTL:

I agree, but provided you can cope on Day 1, that's the important thing. So, you assess what other ways you have to deal with situations as they occur.

Dr Raymond Ho:

I think in a way wouldn't you say you were taking chances because you tried to rush the building to get it ready, and fortunately you were able to get the TOP on 3 July, 3 days before opening. And also your contractor was not able to really tidy up the place and leaving a lot of debris everywhere, and you had not enough time to train your personnel. You did not have enough time to complete your testing. You were actually taking chances, hoping everything would turn out to be OK on AOD?

MD, HACTL:

We believe we were ready to operate. We would like to have more time.

I think I have said that over and over again.

Dr Raymond Ho:

Thank you.

Hon CHOY So-yuk:

Sorry, thank you, Chairman. Again I would like to refer to your own consultants' report, Day and Nimmo's report, again on Page 58, the paragraph:

> "From fault reports produced prior to AOD it is evident that there was an increase in the number of faults from the number that could have been anticipated."

So, obviously before AOD you had already an increased number of fault reports. And I couldn't understand why you never raised the concern that you might not be ready for AOD to the Government.

Chairman:

Mr CHARTER.

MD, HACTL:

Well, our test results were showing that, despite the level of fault reports, it was a level that we could live with. We have never had a 100 percent error-free system. It is not how these systems work.

Hon CHOY So-yuk:

I mean, you were certainly anticipating some kind of faults, but here it said clearly that there was an increased number. Obviously, you could have anticipated a mounting number of faults.

MD, HACTL:

There was an increase in the number of faults. It doesn't necessarily say it reached a level where we didn't think we could operate. That's quite an important difference.

Hon CHOY So-yuk:

Obviously, on AOD we found that you had to fall back into a system which you thought it to be unimaginable. So, this was a misjudgment on your side that the number of faults would be manageable on AOD.

Chairman:

Mr CHARTER.

MD, HACTL:

That was on AOD. There was an increasing number of faults from that which we anticipated. I agree with that.

Chairman:

Prior to AOD, not on AOD.

MD, HACTL:

From fault reports produced prior to AOD?

Chairman:

Yes, yes.

MD, HACTL:

That's our testing reports. It is evident that there was an increase in the number of faults, i.e. on AOD, than the number that could have been anticipated.

Hon CHOY So-yuk:

The report prior to AOD showed that the number of faults was higher than what could be anticipated as probably normal cases.

MD, HACTL:

I don't think that ...

Hon CHOY So-yuk:

And under such a situation ...

Chairman:

I don't think that was said in the report, to be fair, but I think what it said here is that in fact whatever testing you had before AOD you had more.

MD, HACTL:

Yes, on Day 1.

Chairman:

And more than anticipated on AOD. In fact that was why the consultant said that in hindsight the testing gave an unrealistic expectation of the performance, because what turned out was that there were more faults than expected previous to AOD. I think that was the point that was being made there.

MD, HACTL:

Yes.

Chairman:

So, are there any other questions? If not, then, we would appreciate, if Mr CHARTER could supplement the points in writing to us.

MD, HACTL:

Thank you.

Chairman:

I think today's hearing will end here. Please note that the Select Committee might consider it necessary to order you to come back, in which case you have to come back. We hope we won't need to do that but you never know. You may now withdraw. Thank you very much.

MD, HACTL:

Thank you.

(The hearing ended at 4:30 pm)