# PUBLIC ACCOUNTS COMMITTEE 1970-71

(FOURTH LOK SABHA)

## **HUNDRED AND TWENTY FOURTH REPORT**

[Audit Report (Civil), 1970-and Appropriation Accounts (Civil) 1968-69 Relating to the Ministry of Tourism and Civil Aviation (Department of Civil Aviation)]



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<sup>\*</sup>Not printed (One copy laid on the Table and five copies placed in the Parliament Library.

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Shri Avtar Singh Rikhy-Joint Secretary.

Shri A. L. Rai-Deputy Secretary.

Shri T. R. Krishnamachari-Under Secretary.

#### INTRODUCTION

- I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this Hundred and Twenty-Fourth Report of the Public Accounts Committee (Fourth Lok Sabha) on Appropriation Accounts (Civil), 1968-69 and Audit Report (Civil), 1970 relating to the Ministry of Tourism and Civil Aviation (Department of Civil Aviation).
- 2. The Appropriation Accounts (Civil), 1968-69 and Audit Report (Civil), 1970 were laid on the Table of the House on the 14th April, 1970.
- 3. The Committee examined paragraphs relating to the Ministry of Tourism and Civil Aviation (Department of Civil Aviation) at their sitting held on the 14th August, 1970. The Committee considered and finalised the Report at their sitting held on the 8th December 1970. The Minutes of these sittings form Part II\* of the Report.
- 4. A statement containing summary of the main Conclusions/Recommendations of the Committee is appended to this Report (Appendix II). For facility of reference these have been printed in thick type in the body of the Report.
- 5. The Committee place on record their appreciation of the assistance rendered to them in the examination of these accounts by the Comptroller and Auditor General of India.
- 6. The Committee would also like to express their thanks to the officers of the Ministry of Tourism and Civil Aviation and India Meteorological Department for the Cooperation extended by them in giving information to the Committee during the course of their evidence.

#### ATAL BIHARI VAJPAYEE,

Chairman, Public Accounts Committee.

New Delhi; December 14, 1970. Agrahayana 23, 1892 (S).

<sup>\*</sup>Not printed (One cyclostyled copy laid on the table of the House and five copies placed in Parliament Library.

#### REPORT

#### Chapter I

## MINISTRY OF TOURISM AND CIVIL AVIATION

(DEPARTMENT OF CIVIL AVIATION)

Delay in Installation of Equipment

#### Audit Paragraph

- 1.1. In April 1966, against an indent placed by the Director General of Civil Aviation in September 1965, the Director General, Supplies and Disposals, placed on firm 'A' a contract for purchase of 4 Italian "high power air-route surveillance radars" at a cost of Pos. 3.90 crores. Rs. 44.60 lakhs in foreign exchange have been paid so far (February 1970), the balance amount being payable in ten equal annual instalments with interest at 6 per cent per annum on diminishing balances. The delivery dates stipulated in the contract were 31st January 1969, 30th April 1969, 31st July 1969 and 30th November 1969. Major portion of the equipment was received in New Delhi, Bombay, Calcutta and Madras airports during May 1968 to May 1969 and the remaining consignment of parts was received during November/December 1969.
- 1.2. The siting of the installation of the equipment in Calcutta. New Delhi, Bombay and Madras airports was, however, finalised by the Director General of Civil Aviation only in April 1967, July 1967, September 1968 and September 1969 respectively. This resulted in delay in initiating the proceedings for acquisition of land in New Delhi and Calcutta, these proceedings have not been finalised so far (December 1969). In the case of Bombay and Madras airports, where land acquisition was not necessary as the sites are on departmental land, the preliminary estimates for the building and electrical works were sanctioned in September 1969 and August 1969. Allowing a minimum period of 12 to 21 months for planning and designing of work (as provided in the codes of the Central Public Works Department the agency responsible for execution of works) and another 16 months in the case of Delhi and 20 months in the case of Calcutta, Madras and Bombay for completion after award of the works to contractors as provided in the preliminary estimates, the equipment is likely to remain in storage for two to three years. By the time the civil, electrical works, etc., are completed and the equipment are installed and commissioned, the period of guarantee of one year from the date of commissioning or 15

months from the date of shipment from Italian port, whichever is earlier, would expire and it would not therefore be possible to hold the manufacturers responsible for any defects that may come to light on commissioning the equipment.

[Para 51 of the Audit Report (Civil) 1970].

#### (i) Purchase of equipments

- 1.3. The Committee enquired whether any tender was invited before the radars were purchased from the Italian firm. The representative of the D.G.S. & D. stated that the indent was placed by the Department of Civil Aviation with a proprietary article certificate and that the purchase was made on a single tender basis. He added that no tender could be issued under the rules when a proprietary article certificate is attached with an indent. The Secretary, Ministry of Tourism and Civil Aviation stated, "For these radars, Italian credit was available. In fact when the proposal was made to the Ministry of Finance one of the conditions was that the scheme should be fitted into a credit scheme. So, there was no question of calling for tenders in the sense of global tender because it was the specific equipment supplied by an Italian source. But of course before deciding to purchase this equipment its cost was taken into account in the sense that it was not going to be more expensive from the Italian firm. In fact we found that one of those sets which costs Rs. 35 lakhs or so from Italy would have cost Rs. 5 lakhs from the U.S.A."
- 1.4. Asked whether the cost was the only consideration, the Secretary stated, "That was an important consideration. If it had been very much more expensive than equipment from other sources we would have probably thought of not utilising the credit. We would not have frittered away the money for the sake of credit though we did have the advantage of supplier's credit." He added, "I am told they are excellent radars. The firm has a world-wide reputation and it is very good equipment." The Committee desired to know whether the Department obtained information from other countries about its usefulness before it was purchased. The Secretary informed, "We get information from other countries. Italy itself, Norway, Scandinavia and other countries in Europe have got ten or twelve of these radars. The radar though manufactured by Italian company 'SELENIA' its technical specifications are according to technical agreement of U.S.A. Air Route Surveillance Radar."
  - 1.5. Asked further how many firms were there who supplied this type of equipment, the Secretary replied that he did not have this information. The Committee pointed out that even if the Government wanted to utilise the supplier's credit, it should have

been ascertained that the rate of purchase was the lowest and enquired whether the Ministry verified from other sources before accepting the supplier's credit for its purchase that it was not only the best equipment but was also the cheapest. The Secretary stated, "The Ministry can only reply that when the proposal was sanctioned, i.e., when financial sanction was obtained, the Ministry of Finance were not able to release any free foreign exchange. They made it a condition of the sanction that the purchase would be fitted into some aid scheme. Now it so happened at that time that credit from Italy was available."

- 1.6. The Committee then desired to know whether credit from any other country was not available for this particular equipment. The representative of the Ministry of Finance stated: "In the normal course, I would have excepted that some other countries if we had approached them, might have offered credit facilities-I am only guessing. I am not giving any specific answer. I am not in a position to say more." The Secretary, Ministry of Tourism and Civil Aviation added: "I am in a position to say that, the Ministry of Finance suggested that we operate the Italian credit-I am afraid that as to whether there was other credit available or not I am not in a position to say." The Committee wanted to know what reasons weighed with the Ministry of Finance for taking such a decision. The witness stated: "We have no information on this. When we approached the Ministry for financial sanction, the question as to where the foreign exchange was to be found from was for the Ministry of Finance in the Department of Economic Affairs to consider. They have a picture of what is possible and they advise us and naturally we do not say 'No we want only this'. If funds are available from somewhere and we are asked to operate on them, we willingly do so." The representative of Finance after checking up the position clarified: "There was a discussion about this by the officers of the Ministry of Finance with the Civil Aviation officers. In the minutes it is stated that since the High-Power Air-Route Surveillance Radars are being manufactured under U.S. licence in Italy also and the Italian make is cheaper than the U.S. one, efforts should be made to get the Italian one."
- 1.7. The Committee on the basis of evidence tendered before them can only conclude that Government did not fully satisfy themselves that the Higher Power Air-Route Surveillance Radars purchased from the Italian firm on the basis of the supplier's credit offered were the best or the cheapest for the price paid for them. It appears at the time of deciding on this purchase the Government were not in possession of information regarding availability of this equipment and its relative prices in countries other than USA and Italy; no attempt

was made to find out if credit would be available from any other source. In the opinion of the Committee a purchase of this magnitude involving Rs. 3.90 crores of which Rs. 2.83 crores were in foreign exchange should not have been considered without obtaining adequate comparative data on all aspects of the purchase from available sources. This lack of inquiry is all the more deplorable because as the Committee have commented in a latter section of this report, the Department do not expect to install the equipments ordered for in 1966 and received by December, 1969 any time before the end of 1971. The Committee, therefore, desire hat in future in all cases of substantial purchases comparative economics should be worked out after getting information from all accessible sources prior to accepting a supplier's credit. The manner in which this can be ensured may be settled between the Ministry of Finance (Department of Economic Affairs) and the Purchasing Ministries.

#### (ii) Missing Parts

1.8. It was understood from Audit that on receipt of consignments a number of discrepancies were found and that the firm was asked to supply the missing items. According to contract "all claims respect of breakages damages or shortages are to be submitted to the contractor by the consignees within 30 days of receipt of stores at destination. If no claims are received within this period, it will be presumed that the goods have been received correctly and in good condition and no claim after this period will be entertainable by the contractor." When this provision was pointed out to the witness, he stated: "In fact when the shipments were received these were immediately checked. In all cases except one the necessary claim discrepancies were pointed out to the firm within a period of one month—only in one case this was not done but there also it was done in 45 days." According to a written statement submitted to Committee subsequently the dates of receipt of the consignments and the dates on which the shortages were reported to the firm were as follows:

					 		Date of receipt	Date of reporting
DELHI								
1st consignment						,	15-4-68	25-5-68
2nd consignment							15-11-69	17-12-69
CALCUTTA								
rst consignment and consignment	:	•	:	:			13-1-69 31-12-69	71-1-69 6-2-70

BOMBAY  1st consignment 2nd consignment	:		:	•		11-6-68 <b>2-7-68</b> 8-11-69 1-12-69
MADRAS		:		•		22-6-68 11/12-6-69 16-4-70 No dis- crepancy

It was also stated that "the firm have accepted all the discrepancies reported and agreed to make good all the shortages. They have not yet intimated when they would replace the missing parts."

- 1.9. The missing items were stated to be about fifty in number costing Rs. 13,000. The Committee wanted to know whether any one of the radars was complete in all respects. The Secretary stated that "the position is that in all the radars meant for Bombay, Madras, Delhi as well as Calcutta certain items are missing" and added that without these parts the radar could not be operated.
- 1.10. The Committee observe that in respect of the missing parts without which none of the radars purchased from Italy can be operated, the Department has not got any indication from the firm as to when these will be made available although more than two years have elapsed since shortages were reported first. The Committee are anxious that delay in replacement of these parts should not defer the installation of the equipment. They therefore desire that the matter should be taken up vigorously with the firm so as to ensure receipt of supplies well before the targeted date of installation of the equipments.
- 1.11. The Committee also note that in 3 out of 7 cases the shortages were reported beyond the period of 30 days. The Committee note that the firm has agreed to supply the missing items, but they cannot help feeling that the Department should have been sufficiently alert in reporting the discrepancies without delay.

#### (iii) Period of warranty

1.12. The period of guarantee in respect of the equipments was one year from the date of commissioning or 15 months from the date of shipment from an Italian port, whichever was earlier. The contract was concluded in April, 1966 when the Suez Canal was open for traffic and the consignments from Italy would have been received direct from Italy through the Suez Canal. Subsequently the Canal was closed. The Committee wanted to know whether the Government approached the suppliers to extend the period of 15

months reckoned for guarantee from the date of shipment as it would have taken longer time for the consignments to reach India via the cape of Good Hope. The Secretary, Ministry of Tourism and Civil Aviation confirmed that the shipment came after the closure of the Canal and stated: "That is a very good point. I wish we had thought of it earlier."

1.13. The Committee note that although the consignments were shipped from Italy after the closure of the Suez Canal and it took much longer time in transit via the Cape of Good Hope the period of warranty of 15 months from the date of shipment as decided before the closure of the Suez Canal remained unaltered and no attempts were made to extend the period of warranty proportionately. The Committee cannot appreciate how this important aspect was overlooked. The Committee would like Government to take appropriate action in time in regard to cases where the conditions relevant to the period of warranty are materially altered after the execution of contracts. The D.G.S. & D. should also keep a watch in this respect for remedial action.

1.14. In reply to a question the Ministry informed the Committee as follows:—

"The dates of thipment of the different consignments of the equipment from the Italian port are given below:

*			 	 	 	
					nit batch	2nd batch
DeIhi .					26-2-68	<b>30-9-</b> 69
Calcuta					30-12-68	30-9-69
Bombay .					30-4-68	30-9-69
Madras .					20-3-69	30-9-69

The last consignment of equipments was shipped from the Italian port on 30th September, 1969. The warranty period should, therefore, commence from this date and we have taken up the matter with D.G.S. & D. who in turn referred it to the suppliers. In consignments already received certain items though of small value but important from the point of the installation and operation of the radar equipment have been found missing or damaged. These have been brought to the notice of the suppliers who have agreed to make replacements. In view of the foregoing the Department is approached D.G.S.&D. to approach the suppliers to amend the contract so that the warranty commences from the date of shipment of the replacement items."

- 1.15. The Committee find from a letter dated 14th August, 1970 from the contractors addressed to the D.G.S.&D. a copy of which was furnished to them that as regards warranty the contractors had to say the following:—
  - "With regard to warranty, although not contractually bound to do so, as a gesture of cooperation and as a very special case, we are agreeable to treat the 15 months' warranty in respect of the radars supplied to the various consignees as reckoning from 30th September, 1969 being the date of shipment of the last consignment."
- 1.16. The Committee enquired whether the Department hoped to instal any of the radars before the expiry of the extended period of guarantee i.e. before 30th December, 1970. The Secretary stated, "As I said earlier, there is the other aspect of it. Certain equipment was short. We have informed the firm of the shortages. Now our view is, of course this may be an arguable point, that when the guarantee says 15 months' from the date of shipment from the Italian port, then obviously it must be interpreted as meaning 15 months from the date of shipment of all the equipment and not part of it. Otherwise the guarantee would be meaningless. From that point of view, we are of the opinion that the guarantee period will continue to run after this December and it will start from the date of the shipment of the balance equipment."

"In addition to that I will read relevant portion from the warrant. 'The stores covered in this contract are guaranteed for a period of one year from the date of commissioning or 15 months from the date of shipment from the Italian port whichever is earlier on the strict understanding that the equipment is used according to the instructions in the Makers' Maintenance Manual. The warranty covers the defects in material or workmanship. That question of defects and material workmanship will arise only if the part is available. And secondly, according to the instructions we have got in the Maintenance Manual here, if we follow the order of operating the equipment, we will find that we cannot operate, because so many items referred to there are missing. We had pointed out those items..... The missing items are about fifty."

1.17. He added: "I think in the case of Madras and Bombay, they should be installed by about September October of next year. Unfortunately we have not been able to instal this equipment as yet. I had submitted that in spite of this letter (14th August, 1970) from

the firm that the guarantee period will start from the 30th September, 1969 the last shipment—we feel that the period of 15 months cannot yet be calculated because they have still to ship some other equipment. Nevertheless I do anticipate that the guarantee period may well run out on us before the installations are put up."

- 1.18. Asked about the penalty provision in the contract for the non-supply of missing parts the witness stated that there is a clause for 2 per cent liquidated damages. The Committee then pointed out that the firm had already extended the period of guarantee "as a gesture of cooperation" and asked whether the Government would be in a position to contest the non-supply of balance equipments within the delivery period stipulated in the contract. The Secretary replied: "The question of invoking the guarantee would only arise when the equipment has been installed. If it works satisfactorily the question of guarantee obviously does not arise I concede that this might be a fine point and the firm might possibly contest. To that my answer would be that the firm is a firm of repute in Italy and it is highly unlikely that they are going to back out."
- 1.19. Asked further by the Committee whether by accepting the extension of guarantee although according to the firm they were "not contractually bound" to extend, the Government would not be put to any difficulty in enforcing the contract the Secretary continued: "As I said only a few minutes before I came to the meeting of the PAC this letter (dated 14th August, 1970) was given to me by the D.G.S.&D. We shall have to examine it—we have to know the import or implication behind this. All these things will have to be very carefully considered."
- 1.20. The Committee are unhappy that the Department of Civil Aviation are not able to instal even a single radar precured at such a heavy cost within the normal warranty period. They are also not satisfied with the way the period of warranty was got extended by the firm "as a gesture of cooperation". The Secretary, Ministry of Tourism and Civil Aviation however, had taken a position before the Committee that the warranty period should be counted not only from the date of shipment of the last consignment but also from the date of shipment of all the missing parts. The Committee desire that where there is a doubt about interpretation of the terms of a contract the views of the Ministry of Law should be obtained at the earliest opportunity.
- 1.21. The Committee might be informed of the final outcome of the negotiations with the firms on this point.

#### (iv) Delay in installation of equipments

1.22. The Committee asked when the provision of the radars was contemplated and whether it was a part of the Third Five Year Plan during which period they were to be purchased and installed. The witness stated that it was taken up a little earlier but it was in March, 1964 that the final proposal was made and the Finance Ministry accorded their approval in September, 1965. The indent was placed on the D.G.S. & D. in the same months *i.e.* September, 1965 and the tender was received in November of the same year.

1.23. The Committee pointed out that the Department initiated the proposal for installation of radars in September, 1963 but the proposal was sent to the Ministry in December, 1964. The sanction was obtained in 1965. The Committee wanted to know the reasons for the unusual delay of two years for sending the proposals to the Ministry of Finance for their sanction. The witness stated: "I must confess there was delay in this matter due to various reasons. In September, 1963 proposals were made to the Ministry of Finance: in October, 1963 the Finance asked for certain clarifications; in December, 1963 it was submitted with clarifications; in January, 1964, there was a discussion in the Ministry of Finance; in February the proposal was submitted in a revised form; on 1st May, 1964 the D.G.C.A. was to submit a fresh proposal. This happened and ultimately the proposal was submitted in the complete form and it is from that date I will really project it as a firm proposal before the Government because before that it was a mere question of discussion and putting the proposal in shape."

"In December, 1964 the proposal was made that this equipment should be purchased from this firm. Towards the end of the same month the matter was discussed in the Ministry of Finance; then again a few days later a certain project report was asked for. In early 1965 the project report was submitted. After a month the Ministry of Finance was reminded. In May, 1965 there was certain correspondence between the Finance Ministry and ourselves. Then in July, the Ministry of Finance released the foreign exchange. Then in August we had to get certain further clarifications. There was some delay."

1.24. The witness further stated that before the Department submitted the proposal for buying the equipment and even before the Government sanction came, the Department had considered possible sites for installation but there were a variety of matters which had to be considered. The firm had to be consulted as regards the siting criteria. It was only in February, 1966 that the firm informed DGCA

what the technical criteria was. Immediately in February, 1966 the siting work started and before that preliminary surveys were made on geneal assumptions.

- 1.25. The Committee are grieved to note that a project contemplated for modernisation of 4 airports during the Third Plan (1961—66) was not expected to reach completion even by the middle of the revised Fourth Plan (1969—74).
- 1.26. The proposal to instal 4 "high power air-route surveilance radars" was originally sent by the Ministry of Tourism and Civil Aviation to the Ministry of Finance in September, 1963. Thereafter a dialogue ensued between the two ministries with the result that the foreign exchange was released only in July 1965. Taking two years in obtaining foreign exchange for an aeronautical project where technical advancement and obsolescence take place at an accelerated rate highlights the existence of bottlenecks and rigidity in our decision making and financial sanctioning procedure. The Committee would like the matter to be gone into by Government and the procedure streamlined for expeditious finalisation of proposals.
- 1.27. The Committee are also not convinced that the sitting data could not be obtained earlier than February, 1966. Thereafter the way the sites were selected in all the four major air ports, the acquisition of land processed as commented in the succeeding section of this report, shows that the entire project was marked by lack of planning and foresight. The Committee wish that all the processes for installation of equipment should be clearly identified and target dates fixed when equipments are ordered keeping in view the delivery schedule and the guarantee period under the contract.
- 1.28. The Committee pointed out that technical details in site criteria were available with the Department in February, 1966. But the site was finally selected in July, 1967 in Delhi. The Committee wanted to know the reasons for delay of one year and three menths. The witness stated that the Siting Board consisting of representatives including from the I.A.F., met in October, 1966, after the final technical criteria was available and that the Board recommended a site outside the Palam air field. They could not recommend a site within the Palam air field because of technical considerations of the interference potential between the radar and the Defence installation already in operation. Before the site was finalised the question of the location for the display unit arose. The radar equipment has two component parts—one is a radar and the other is a display unit. The display unit has to have a micro-wave link with the other system so that a picture is projected from where the air traffic control

takes place. The person who is controlling it can have a picture from 200 miles. The display unit presented a problem because the air traffic control in Delhi is in Safdarjang airport and not in Palam. The question arose whether it should be located in Safdarjang or Palam. It was ultimately decided on technical considerations that it should be at Palam. A new site was finalised. At a meeting of the Standing Advisory Committee on Radio Frequency Allocations which is under the Department of Communications, the P&T Department raised certain objections from the point of view of interference with their microwave equipment and that had to be settled through discussions before the site was finally approved by the Standing Advisory Committee. Then the list of works and plans for the installation of the equipment were supplied to the CPWD in November, 1967 for the preparation of estimates and a revised drawing was supplied to them in April, 1968. The reason for that was that the CPWD had prepared certain draft drawings.

1.29. The Committee asked whether they could not finalise the site when the work on the draft drawings was in progress. The witness stated that the work went on separately but in the meanwhile the Department were in fact thinking of plans and they had prepared a draft plan. But that draft plan had to be referred to the manufacturers also because of certain technical considerations as the equipment was a heavy one. It was only in April, 1968 that the Italian firm finally approved on those draft drawings. The witness further stated: "The Committee started its functions in April, 1966. They did recommend a site in July, 1967 and there was delay. The business of the display units came into the picture and complicated the problem. I agree there as delay from April, 1966 to July, 1967. But evidently it took that time to sort out that technical problem."

1.30. The Committee drew attention of the witness to the objection from the Post & Telegraph Department and asked whether the Department could not anticipate that at the time of selecting the site and take the Communications Department also into confidence. The witness stated that the office of the DGCA did take that into account. The P&T Department objected to the site on the ground that if the radar equipment was installed at that site, it would interfere with their installations. The objection of the P&T Department was later ruled out by the Committee but he admitted that it did cause some delay. The witness continued further that the estimates had to be sanctioned and that two separate estimates were prepared one for land acquisition and the other for the civil

and electrical works. The preliminary estimate for land acquisition was submitted to the Government in May, 1968 and was sanctioned in September, 1968. That was why the land acquisition proceedings could not be taken up before that date. In October, 1968, action for land acquisition was initiated by CPWD after technical sanction was accorded by the competent authority. Notification under Section 4 was issued in September, 1969. The Land Acquisition Authority had intimated that the land would be handed over by the end of August, 1970.

1.31. The Committee pointed out that while the land acquisition proceedings were started in May, 1968 the notification was issued in September, 1969. The Committee wanted to know the reasons for the delay of one year and four months. The Committee also asked whether there was any liaison between the Department of Civil Aviation and the Land Acquisition authorities. The Chief Engineer, Northern Zone, CPWD, stated that as soon as the sanction for acquisition of the land was received in September, 1968, the Delhi Administration was approached in November, 1968 to intimate the cost of land. Before writing to them, the CPWD had to demarcate the site and get the field and plot numbers etc. from the Patwari and the Tehsildar, as they had to give the complete information. That work was done in November, 1968. In January, 1969 the CPWD informed the Land Acquisition Authorities-the Deputy Commissioner, Delhi Administration that the land had been demarcated and land acquisition proceedings should be taken up. After repeated reminders, Section 4 Notification was issued in September, 1969.

1.32. To a question by the Committee regarding liaison between the CPWD and the Delhi Administration authorities to expedite the matters, the witness stated that the CPWD were in continuous touch with the Delhi Administration. Though the land acquisition was the responsibility of the Delhi Administration, the CPWD had to give them all particulars about the survey numbers, boundaries etc. for which they had to go to the lower-most authority in the Revenue Department. On receipt of the particulars, the Delhi Administration had to make the draft Notification and again send it back to CPWD for verification. The CPWD had to do the same thing over again so that there was no mistake in the Notification. Apart from that, the CPWD had to be doubly sure that the site which was demarcated by them on the map was the final site and that there would not be any difficulty. The Department had to do all these things with communication officers and with the Delhi Administration which took time

1.33. When asked by the Committee about the reasons for not taking advance action in Delhi as the CPWD did in the case of Calcutta, the witness stated that in Delhi the CPWD could not take any advance action as could be done at Calcutta because they were aware that there was some difficulty about clearing the site. The site was finally cleared by the P&T authorities only in May, 1968. The witness further stated that the CPWD were promised that land would be given to them by the end of August 1970. The work relating to planning and designing was completed and the administrative sanction was also obtained. Tenders were invited on 7th August, 1970. The Department was hopeful that the moment the land was handed over to them, they could start the construction and complete the building in a year, i.e., by September, 1971. The Committee desired to know the time that would be taken by the Civil Aviation Department to instal the radar equipment after completion of the building. The witness stated that once the land had been acquired, it would take eight months to complete the building and six months thereafter to make the equipment operational.

1.34. The Committee pointed out to the witness that in case of Calcutta it was found that the finalisation of site was done in April, 1967 and the land acquisition proceedings started in May, 1968. The Committee asked for the reasons for the delay of one year in the case of Calcutta also. The witness stated that Siting Board met in August, 1966 and recommended a site near Andol. That site was a private land; it was not departmental land. Before the recommendation of the Siting Board could be accepted certain information had to be collected in regard to the development of the site, the cost of earth work and the cost involved in shifting the State Government's high tension lines which were across the land. Some theodolite observation had also to be taken and that was possible only in February, 1967, because before that the site was under water. The site was finally accepted in April, 1967 when the local PWD took action for the acquisition of the land and placed a requisition on the State Land Acquisition Authorities. They also requested the State Government to waive the provisions of the State Acquisition Act which require calling for objections in view of the urgency of the matter. A draft notification under Section 4 of the Land Acquisition Act was sent to the State Government by the Collector of the Howrah District in March, 1968. They did not, however, agree to the waiving of the objection clause as the land was an agricultural land and it would not be proper to waive the clause regarding calling objections. Both the Civil Aviation Department and the CPWD followed up the matter with the State Government through correspondence.

as well as personal contact and in January, 1970 the State Government intimated that the case had been put up to their Revenue Minister for final orders. When the State Government was reminded in February. 1970. it was understood that the State Government's papers were not traceable and the result was that in March. 1970 the file had to be reconstructed with the assistance of the Department of Civil Aviation and the officers of the CPWD and the Collector of Howrah District. Thereafter the notification under Section 4 was issued on 27th March, 1970. In June, 1970 the State Government under constant reminders from the Department said that they had asked the Collector to expedite the acquisition proceedings. CPWD had taken in advance necessary action and completed their preliminary draft of plans etc. So the moment the land was handed over further action could be taken immediately. It was not known when the handling over would be done. The Chief Secretary was also addressed in that connection suggesting acquisition of land under the emergency clause.

1.35. When asked about the present position, the Department stated in a note that on an informal enquiry made by the Controller of Communications, Calcutta Region with the Collector, Howrah District, it was learnt that enquiry under Section 5 A of the Land Acquisition Act was in progress.

1.36. The Committee desired to know the time that would be taken by the Department to Construct the building and to instal the equipment after acquisition of land. The witness stated: "The only redeeming feature about this is that the CPWD have been able to complete their plans and estimates and the moment the land is given over to the CPWD, they will be able to start construction and as in the case of Delhi, perhaps they can do this in eight months and thereafter it will be about six months for installation—that means fourteen months or one and half year in all."

1.37. The Committee desired to know as to what extent Government had to pay extra compensation because of delay in issue of notification under Section 4 due to rise in land prices both in Delhi and Calcutta. The Department in a note, submitted to the Committee, stated that as the actual price of the land which might vary with the time and the importance of the area was determined only at the time of announcement of award, it would not be possible to indicate the extra compensation, if any, that could have accrued due to delay in the issue of notification under Section 4.

1.38. The Committee pointed out that in the case of Bombay and and Madras it was departmental land and yet there also there had been some delay. The Committee asked for the specific reasons for the delay. The witness stated that in Bombay the Siting Board met in March, 1966 and considered a number of sites within the Santa-Cruz Airport and the Juhu Airport, as departmental lands, and several sites in greater Bombay. Ultimately, it recommended the site in the Juhu Airfield in June, 1966. There was not much delay there and the preparation of the plans was undertaken. In November, 1966, the Air Headquarters asked the DGCA to shift the site from July airfield because of certain other installations which they proposed to set up. So several sites were then considered in Trombay Hill and in other places and meetings were also held with the Atomic Energy Commission, the All India Radio and the Land Acquisition Authorities but those sites were considered unsuitable for one reason or other-might be because of the cost of acquisition-and that position was explained to the Air Headquarters in November, 1967. In December, 1967 an Ad-Hoc Committee was appointed with representatives of Air Headquarters and the DGCA to study the problems. The Committee met a number of times between January, 1968 to May, 1968 and ultimately after many discussions and several inspections another site in Juhu Airport was recommended by Committee in May, 1968 and the site was ultimately finalised in September, 1968, after considering the various operational aspects. The P&T Department and the Overseas Communication Service raised objections to the site selected on 25th April, 1969 and 14th January, 1969 respectively. Clearance to the sites was given by them on 8th January, 1970 and 26th February, 1970 respectively. However, work on the project was not suspended because of the objections raised by them.

1.39. To a question the witness stated that the equipment arrived in Bombay in June, 1968. The site was selected in May, 1968 and approved in September, 1968. It was true that the equipment arrived earlier than the selection of site. The witness further stated that in Bombay a list of works and plans for the installation were supplied to the CPWD in September, 1968; they collected various data about the soil, availability of electricity and other relevant factors. They submitted the estimates in April, 1969. These were sanctioned in September, 1969 and the work commenced in December, 1969. It was expected to be completed in February, 1971. The Department in a note stated that tenders were invited by the CPWD for the building works in March, 1970. The works were awarded in May, 1970 and were stipulated to be completed in February, 1971 in respect of

the building and April, 1971 in respect of the tower. The installation of equipment would commence as soon as the buildings were ready.

- 1.40. The Committee pointed out that site selection was made in September, 1968. The CPWD submitted the estimates in April, 1969. The sanction was accorded in September, 1969. The Committee desired to know the reasons for the delay of one year between the site selection and according sanction of the estimates. The Chief Engineer, North Zone, CPWD stated that after the site selection, the DGCA authorities sent them the requiremens of construction (i.e. details of things to be provided in the building) in September, 1968. Various data such as availability of electricity water supply, soil data etc. were collected. The preparation of the drawings etc. took six months. After finalisation of all those formalities, the estimates were sent in April, 1969. Then the sanction was accorded in September, 1969. Immediately the detailed estimates and detailed drawings were prepared.
- 1.41. The Committee enquired whether it was necessary that the CPWD should wait for the sanction. The witness stated that first they had to get the sanction. Then only they could take up the preparation of estimates. The work consisted of two parts—one was the pile foundation and the other was the construction of tower. They had to call for tenders for the tower construction. Immediately after the sanction was received they started the work in December, 1969. The designs for the super-structure were prepared. The preparation of detailed estimates took two months. Tenders for building work were invited in March, 1970. The works were awarded in May, 1970 and stipulated to be completed by February, 1971.
- 1.42. The Committee enquired whether advance action for airconditioning the Bombay building was started so that the moment the building was completed tenders for the above work could be invited. The witness stated that after the building was completed, the Department of Civil Aviation would take six months to instal the equipment and air-conditioning in the buildings. Estimates had already been given and sanctioned. DGS&D would call for tenders and procure the plant. The Department in a note stated that advance action had already been initiated for air-conditioning the buildings at Bombay and Madras. Indent for air-conditioning plant required for the building at Madras had been sent by CPWD to the DGS&D. As regards air-conditioning plant required for the building at Bombay, tenders received by the DGS&D were under scrutiny of the Chief Engineer, CPWD.

- 1.43. The Committee pointed out that in the case of Madras the site selection was finalised in September, 1968 but the tenders were called in March, 1970. The Committee desired to know the reasons for the delay. The witness stated that at Madras the site was selected in September, 1968 and a list of works and plans for the installation was supplied to the CPWD in November, 1968 for preparing the estimates. The estimates were submitted to the Government by the CPWD in April, 1969 and were sanctioned in August, 1969. The detailed estimates were prepared by the CPWD for the construction of the building and the tower. Originally tenders were invited for both but no tenders were received. They broke up the tender into two parts and separate tenders were invited for building and tower in March, 1970. The works were awarded in May, 1970 for the building and the work had been started and was expected to be ready by March, 1971. Tenders were received in respect of tower work and it was expected to be awarded immediately after the scrutiny of the tenders. As regards the delay it took three to four months from the time estimates were submitted to the time they were sanctioned. According to the witness "perhaps this period could have been curtailed."
- 1.44. In reply to a question, the Department in a note submitted to the Committee stated that in the light of the recommendation of the Committee on International Airports for an early provision of the radar facility at Madras airport (even before the report of the Committee was published) a decision was taken in January, 1968 to divert the equipment intended for Nagpur to Madras. The preliminary report was received in May, 1968. The site was finalised in September, 1968. The list of works and plans for the installation were sent to the CPWD in November, 1968 for the preparation of the estimate. To another question the witness stated that the stipulated period for completing the works was 10 months from May, 1970, i.e., March, 1971. The installation of equipment would commence as soon as the buildings were ready.
- 1.45. The Committee desired to have an up-to-date chronological statement showing the action taken at each stage right from the preliminary survey of probable sites in September, 1963 in connection with the installation of the radar equipment in the airports at Delhi, Bombay, Calcutta and Madras. The Department furnished necessary information separately in respect of each of the four airports. (Appendix I).
- 146. The Committee note there has been delay in the siting Board meeting at Delhi. The Board met only in October, 1966 although

the siting data became available in February, 1966. It took 8 to 9 months for the finalisation of the selection of site at Delhi and Calcutta. In Bombay the site selection took 2½ years and it was finalised only in September, 1968 after the first batch of equipment was received in June, 1968. The Committee find that with better coordination among the departments concerned the work could have been pushed through with expedition.

1.47. The Committee further note that action for land acquisition was initiated in October, 1968 in Delhi although the site selection was over in July, 1967. The notification under Section 4 of the Land Acquisition Act, 1894 was issued only in September, 1969 and the land was not handed over till August, 1970. As regards Calcutta although the action was initiated shortly after the selection of the site the Section 4 notification was issued only in March, 1970 and it is not known when the land will be handed over. The Committee do not feel happy with the inordinate delay in acquiring the land. As the costly equipment had been imported long back the Department should have convinced the authorities concerned of the necessary for expeditious acquisition of land.

1.48. The Committee find that in Bombay and Madras where departmental land was available it took one year to have the preliminary estimates for the buildings sanctioned and the buildings are expected to be completed only by the middle of 1971 and that it will take another six months to instal the equipments. The Committee are not convinced that the delay in the preparation of estimates and getting them sanctioned was unavoidable. They wish that the procedure for preparation of estimate and getting them sanctioned streamlined so as to cut out needless red-tape and delay.

#### (v) General

1.49. In a note submitted to the Committee, the Ministry of Tourism and Civil Aviation explained the circumstances under which the four radars were procured as follows:

"In order to cope with the increased density of air traffic to and from major aerodromes, it was proposed to provide specific airways system to facilitate exercise of positive control and ensure safety on the enroute air traffic. The aircraft which fly along the airways are required to conduct their flights under the direction of the airways ground controller. For the implementation of the airways system, long range radar facilities are to be provided on the ground to know instantaneously the locations of the

aircraft in flight along the airways. As part of the scheme it was decided to instal High-Power Air Route Surveillance Radars (ARSR) at Bombay, Calcutta, Delhi and Nagpur aerodromes. The equipment intended for Nagpur was later diverted to Madras on the recommendation of the Committee on International Airports.

1.50. The existing radar system and its capacity are stated to be as follows:

Airport	In operation type	Remarks
Bombay	. Airport Surveillance Radai (ASR since April, 1963.	) Range 50 nautical miks (NM)
	Precision Approach Radar (PAR) since January, 1967.	Range upto 10 nautical miles.
	(These two radars form part of the Ground Controlled App- roach System—GCA).	
Calcutta.	. Surveillance Radar since Septem ber, 1965.	- Range about 80 miles.
	Precision Approach Radar (PAR since April, 1967.	) Range about 10 miles.
	(These two radars form part of the Ground Controlled App- roah System)	
Delhi	. Nil	
Madras .	. Airfield Control Radar (ACR) since December, 1965.	Range about 25 miles.

- 1.51. When asked about the additional benefits to be derived from the installation of the new equipment vis-a-vis the existing system the Ministry stated that the existing radar facilities at Bombay, Calcutta and Madras airports were meant for survellince of aircraft movements around the airport within their limited range. On the other hand, the Air Route Surveillance Radar (ARSR) had a range of 200 nautical miles. With this radar, it would be possible to have surveillance of aircraft movement along the defined air routes (airways) and also to exercise positive control over those routes.
- 1.52. The Committee enquired when the Government hoped to receive the Jumbo jets in Indian airports and whether the installation of the air-route surveillance radars was a 'must' for receiving the jumbo jets. The witness stated that two jumbo jets were being delivered to the Air India in March or April, 1971 and the third one would be delivered one year later. The Air India proposed to start

their jumbo jet flight westward, i.e. from Bombay to U.K. and U.S.A. in May, 1971. For Indian Airlines the Department were buying Boing 737. But the jumbo was a different plane i.e. 747. He added that it was not as if the jumbo jets could not operate without this equipment. The purpose of that equipment was to control air traffic approaching international air ports so as to be able to see the aircraft on the radar screen when they were about 200 miles away. They would be controlled from that point upto the time of landing at the airport. The equipment was for better safety and control. It was not that the aircraft could not land without it. 'Must' might have been used in the sense that it was a very desirable installation but it was not intended to convey that without that installation jumbo jets could not land.

1.53. The Committee note that the Study Group of International Airports Committee have recommended in their report (September, 1968) that the planned projects of installation of Air Route Surveillance Radar should be expedited for implementation as soon as possible and included it under immediate improvements recommended to be completed within the next two years to meet the international and domestic traffic needs. The Committee hope that the Department of Civil Aviation will lose no further time and instal the equipments without delay so that the needed facility will be available at the earliest and the risk of deterioration of equipments by prolonged storage avoided.

1.54. While the Committee deplore the lack of effective coordination and proper follow up action revealed in this case, they would suggest that the Department of Civil Aviation should ensure that in executing such projects in future there is better coordination with all the concerned agencies and proper follow up action is taken at each stage to avoid delays.

#### Delay in utilisation of machinery

Audit Paragraph

1.55. Out of seven weather bureau radio theodolites procured from abroad during February—October 1965, five were installed at five different stations between December, 1967 and November, 1968. The remaining two which cost Rs. 9.60 lakhs have not been installed so far as the building at Jodhpur (construction commenced in 1968) where one of them is to be installed has not been completed (August, 1969) and action to prepare and get the estimate sanctioned for construction of the building at Lucknow where the other is to be installed is yet to be taken (August, 1969).

[Paragraph 52—Audit Report (Civil), 1970.]

#### (i) Purchase of equipments

- 1.56. The Committee desired to know the necessity and basis for the purchase of the seven radio theodolites. The Ministry of Tourism and Civil Aviation, in a note, stated that as part of the India Meteorological Department's Third Five Year Plan for modernisation of observational equipment at upper air observations for obtaining more accurate upper air data to higher levels, it was proposed to instal modern wind finding equipment at 18 places. In the first batch 7 sets of U.S. Weather Bureau Radio theodolite (WBRT) equipments were obtained in 1965 from U.S.A. for installation at New Delhi, Bombay, Calcutta, Gauhati, Allahabad, Srinagar and Ahmedabad.
- 1.57. To a question regarding earlier arrangements in this regard in the places concerned, the Ministry in a note stated: "Upper air measurements at these stations were made earlier using mechanical radio sondes (clock and fan type) which could not provide sufficiently accurate data to the levels required to meet the exacting demands of modern aviation both civil and military. Therefore, a decision was taken to introduce the audio-frequency modulated radio sondes (an electronic system) at these stations using automatic tracking radio-theodolites and audio frequency modulated radio sondes made in the departmental workshops."
- 1.58. During evidence, the Committee enquired whether any tender was invited before purchasing the weather equipment. The witness stated that the equipments were obtained from ..... Corporation of America, financed from U.S.A.I.D. For projects to be financed from U.S.A.I.D., tenders had to be invited from U.S. manufacturers, in U.S.A. if there were more than one manufacturer. The ...... Corporation of America was the only firm in the world who were manufacturing that particular equipment. If anybody wanted to buy it he had to buy from that Corporation only. The equipment was a very special type of weather equipment and also one of the best equipments.
- 1.59. To another question whether a similar or different equipment serving the same purpose was available in any other country at a lower cost of the D.G. of Observatories stated: "We have got 8 Selenia radars. But this particular type of equipment (WBRT) is the best. At that time U.S. credit was abailable and so we went for this equipment. We cannot purchase similar type of equipment from anywhere else. This equipment has the capacity to follow radio sondes and give wind pressure temperature and humidity. We

have separate one for wind; for radio sonde it is separate one and that is the reason why I cannot call it exactly similar. The same purpose can be served if we have two types of equipments."

- 1.60. He further stated: "We have got 7 W.B.R.T. and 8 Selenia radars. We had previously another type of equipment—Metox radio theodolites. There are three types of equipments used for wind finding purposes. In important places we are putting the W.B.R.T. And second in importance, we put the Selenia. The old equipment which has been replaced by W.B.R.T. or Selenia are going to be installed at the other stations."
- 1.61. When asked about the source of purchase of other equipments, the witness stated that the 8 Selenia radars are purchased fom Italy under Italian credit. To a further enquiry as to why the Government did not go in for the 'superior' equipment from U.S.A., the Director General, observatories replied: "Because they (the Selenia equipments) are cheaper." The Committee wanted to know whether the selenia equipment would do, the Director General, observatories continued: "For a particular place I will have to determine as to which type of equipment shall be suitable. At places where the jet stream speed is more than hundred miles per hour, in northern India for technical reasons, we do wish to have very good equipment, i.e. the U.S.A. equipment. At places where you do not have strong winds there is no necessity for going in for this costly equipment."
- 1.62. As regards the difference between the W.B.R.T. and Selenia equipment, the Secretary, Ministry of Tourism and Civil Aviation had the following to say:
  - ".....as far as I know, it is not exactly the same equipment and it is intended also for slightly different purposes."

He further continued: "....there are three types of equipment. One is used for a particular purpose and another is used for another type of purpose and the third for a different type of purpose. It is not that the equipment was bad or second best and therefore no qualitative comparison between the equipment would be possible."

- 1.63. In a note furnished to the Committee subsequently, the following position emerged:
  - "I'he decision to go in for Selenia wind finding radars was taken in the context of the fact that Italian credit was more readily available compared to U.S.A. credit. How-

ever, the suitability of the Selenia Radar for the requirements of the India Meteorological Department and its comparative cost vis-a-vis those of W.B.R.T. equipment ordered earlier from U.S.A. were fully gone into before the decision was taken."

Both W.B.R.T. and Selenia Radar are primarily used for measurement of upper winds. The electronic systems are however different; W.B.R.T. being a radio-theodolite tracking an active target (transmitter) and Selenia being a radar to track a passive target (radar W.B.R.T. has capability for reception of radiosonde reflector). signals and therefore is being used to measure pressures, temperatures, and humidities in addition to winds. By addition of a suitable antenna and a receiver made in the departmental laboratories, the Selenia radar is also being used for tracking radiosondes W.B.R.T. has a greater range than the Selenia radar and hence has been installed at stations in north India to detect strong westerly jet schemes. The Selenia radars are located at peninsular stations where such great range is not necessary. The W.B.R.T. is a bulky equipment using conventional circuitry while the Selenia radar has mostly transistorized circuits. Being a radar, the Selenia equipment can also be utilized for storm detection purposes when it is not used for wind finding."

1.64. The details of purchase of the W.B.R.T. and Selenia equipments and their installation were intimated by the Ministry as follows:

#### "(A) Seven sets of W.B.R.T.

Source from which purchase: U.S.A.

Value: Rs. 41.93 lakhs (Before devaluation of the rupee).

Date of receipt: In three consignments during March—August, 1965.

Dates of installation:

New Delhi December, 1966.

Gauhati May. 1967

Bombay December, 1967

Calcutta April. 1968

Nagpur November, 1968.

Jodhpur June, 1970.

The seventh set is being used for training purposes at New Delhi as explained...."

This last mentioned set is actually meant for installation at Lucknow where a building to house this equipment is to be constructed. The administrative approval and expenditure sanction was issued on 13-7-70 and the C.P.W.D. has been requested to take up the construction work on an urgent basis.

# (B) Eight sets of Selenia wind finding radars

Source from which purchased: Italy (under Italian credit for 10 years).

Value: Rs. 48.56 lakhs (before devaluation). (Rs. 77.36 lakhs after devaluation).

Date of Receipt: 4th October, 1966.

Date of installation:

New Delhi. February, 1967
Hyderabad March, 1967.
Trivandrum October, 1967
Visakhapatnam March, 1968.
Bhubaneshwar July, 1968.
Madras September, 1968.
Bangalore January, 1969.
Goa. November, 1969.

The Selenia radar at New Delhi is used for training and testing of defective components from outstations."

1.65. The Committee note that 15 audiomodulated radio-sondel radar wind finding equipments were to be installed during the Third Five Year Plan period. The first batch of 7 sets of WBRT were purchased at the cost of Rs. 5.99 lakhs each during March-August, 1965 and thereafter 8 sets of Selenia wind finding radars were purchased at the cost of Rs. 6.07 lakhs (before devaluation) and Rs. 9.67 lakhs (after devaluation) each in October, 1966.

1.66. The Committee find that the Selenia wind finding radars were in fact costlier than WBRT equipment although the latter is admittedly a better equipment. The Committee are unhappy to note that purchases from two different sources were made without obviously evaluating the comparative advantages in regard to price and utility of each equipment. They accordingly desire that the Government should be circumspect in entering into purchases of this kind in future so that they get the best value for the foreign exchange spent.

#### (ii) Delay in installation

1.67. The Committee wanted to know the date of receipt of the equipment in the respective places and the date of installation in each of the places except Jodhpur and Lucknow. The Ministry, in a note, stated: "All the seven sets were received at the Central Radio Meteorological Division of the Department at New Delhi during

March—August, 1965 in three separate consignments and were supplied to the respective stations at the time of installations as follows:

New Delhi . December, 1966
Gauhati . May, 1967
Bombay . December, 1967
Calcutta . April, 1968
Nagpur . November, 1968

The sets were brought to Delhi as they had to be tested and modifications had to be made to their power supply system so that they could work on 50 cycles/sec. mains available in India (as against 60 cycles/sec. main supply in USA) without any additional frequency converter-generators. The modifications were done in the departmental laboratories at a very nominal cost.

1.68. Explaining the delay in installing in equipment, the Secretary, Ministry of Tourism and Civil Aviation stated: "The point was that there it was decided to instal the equipment at seven places originally and they were New Delhi, Bombay, Calcutta, Gauhati, Allahabad, Srinagar and Ahmedabad. Apart from Srinagar and Ahmedabad, it was decided to instal them in buildings which were owned by the Department. The buildings required certain modifications and additions on account of heavy equipment and, again, there were technical requirement of the equipment. There has been delay; there is no doubt about it... What happened was that this equipment also. This subsidiary equipment had to be made by the Department itself. It is a sort of flying equipment that was being developed and until it was developed it was not possible to use the other equipment."

#### 1.69. The Director General, observatories added as follows:

"One purpose was for getting the temperature, humidity and pressure in the upper atmosphere right upto 20 or 30 kilometers or so. Radiosonde instruments for measuring these are being manufactured by my department of the last 25 years. We have our own model but the model cannot be used for the new type of equiment (WBRT). Our model became outdated at that particular time. They were not capable of measuring temperature correctly at high levels. So we took a decision to go in for a more sophisticated model. Then development work started. The option was to import all the flying equipment, which involved foreign exchange. But we knew that we had the capacity to make

it. We expected that it will take about two years for enough instruments to be made by us. Hence in 1963 development of the new flying equipment was taken in hand and it was expected that within two years the new flying equipment would be available in the country. Otherwise the cost would be something like 2-1/2 lakhs of rupees for each one of the stations in terms of foreign exchange. Unfortunately our development had not caught up; it took about one more year. In 1966 the flying equipment was ready. The Delhi WBRT set was put into operation and then the flving equipment was tested on the ground for one year. So by 1967 the Delhi WBRT was in full operation. In two months or so our other equipment was also ready. Therefore, out of seven WBFT sets five were set up on our own bulidings. In Jodhpur, the moment the building was completed. the WBRT and the flying equipment was sent. Lucknow, the administrative sanction was received about 13th of July, 1970. So I am expecting that we would be able to instal this in another eighteen months or so."

1.70. According to a note furnished to the Committee "the stations (except Lucknow) were selected in 1961 at the time of formulation of the Department's Third Five Year Plan."

1.71. The Committee were informed that the delay in installing the equipments was partly due to delay in manufacturing departmentally the audio-frequency modulated radiosondes, a subsidiary equipment necessary for accurate measurement of upper air data. The Committee note that the manufacture was taken in hand only in 1963 although the Department initiated action for the selection of places in 1961 at the time of formulation of the Third Five Year Plan. The flying equipment was ready after testing only in 1967. The Committee regret to note the failure of the Department to take timely action to improve and modify the mechanical radiosondes, though they had experience of manufacturing this equipment for the past 25 years.

#### (iiii) Change of locations

1.72. In a note the Ministry of Tourism and Civil Aviation stated that since the buildings in which the radiosonde/radio wind units at Ahmedabad and Srinagar were located were not suitable for the installation of the heavy equipment and necessary land for the purpose was not available, it was decided in December, 1966 to instal the two equipments at Nagpur and Jodhpur which were among the 18 stations where such equipment was to be installed. The location

was changed from Allahabad to Lucknow in the year 1966 as the 1.A.F. was to take over the aerodrome at Bamrauli. Ultimately the radiosonde radio wind unit was actually shifted to Lucknow in August, 1966.

- 1.73. Drawing attention to the fact that at Ahmedabad and Srinagar the change had taken place in December, 1966, the Committee asked for the reasons for change of site. The witness stated that at Ahmedabad, the building that the Department were having was almost a garage. The equipment was too heavy and it was just not possible to operate the equipment there. Unless they had a separate special building for that purpose, they felt that it would not be possible to use WBRT at Ahmedabad. That was why it was shifted to another location. The decision to change over from Ahmedabad was taken in December, 1966.
- 1.74. The Committee pointed out that the decision to shift was taken in December, 1966; much after the arrival of the equipment and expiry of the warranty period. The witness continued: "What I can say is that at Ahmedabad in order to put this equipment we will have to get a building constructed. This action should have been taken much earlier. That is the main point. After the equipment had come, it was seen that the building at Ahmedabad was not suitable. There was no possibility of getting the building under construction in Ahmedabad well in time before the equipment arrived."
- 1.75. The Committee asked whether the Department could not anticipate the type of building they required. The witness stated: "There is a standard pattern of building for radiosonde and radio unit station. At every place all we need is a piece of land for this purpose. When that land is available, this type of building would be put up there. It is not very essential that one type of equipment should be in all places. All these equipment are intended for a net work of stations."
- 1.76. The Committee desired to know whether at the time of placing the orders for the equipment the Department were aware of the requirement in regard to buildings and whether any officer was sent to visit all these places to satisfy himself of the availability of suitable buildings. The witness stated that when the decision was taken to instal the equipment at Ahmedabad the Department was definitely aware that a building like that would be necessary.
- 1.77. The Secretary, Ministry of Tourism and Civil Aviation further stated: "The fact is that at Gauhati, Bombay, Calcutta and Nagpur, the equipment was ultimately installed in exising buildings, with 2982 (B) LS—3.

some modifications to make them a little stronger. In Ahmedabad and Srinagar, where the Department has originally decided to place this equipment but had to shift, they should have known about the building requirements etc. This must be readily accepted. I do not have an explanation for it. At the time of the Third Plan the Department had decided to instal the equipment in 18 places and these seven places were amongst those 18. Of course, the Department should have at that stage looked into whether the buildings were capable of taking the equipment or not. I think there is no answer to the point."

1.78. The Committee desired to know the reasons for shifting the site from Allahabad to Lucknow. The witness stated that the reason was that originally it was for Allahabad. Then the Airforce decided to shift to Bamrauli. So it became necessary for that equipment also to be shifted to Lucknow in line with the decision taken by the Airforce.

1.79. The Committee find that the location of the equipments was changed from Allahabad to Lucknow in August, 1966 and from Ahmedabad and Srinagar to Jodhpur and Nagpur in December, 1966 long after the receipt of the equipments and the expiry of the warranty period. The reason advanced for the shift from Allahabad is that the I.A.F. was to take over the aerodrome at Bamrauli (Allahabad). The Committee desire to be convinced that there was effective coordination between the IAF and the India Meteorological Department right from the time the sites were selected initially.

1.80. As regards the shift from Ahmedabad and Srinagar the Committee were given to understand that the buildings available were not suitable for the installation of the heavy WBRT equipment and that necessary land for the purpose of construction of proper buildings was also not obtainable. The decision to locate these theodolites at these two stations was taken in 1961. It is indeed strange that the deficiencies of the buildings and non-availability of land should have come to light only in 1966 five years after the formulation of the proposals. The Secretary, Ministry of Tourism and Civil Aviation conceded that the Department "should have known about the requirement. This must be readily accepted. I do not have an explanation for it." The Committee are distressed at the lack of care depicted in not realising the unsuitability of the buildings at these two stations where the equipments were to be located. Further changing the stations for location of the modern wind finding equipment because of unsuitability of the buildings shows that the earlier priorities assigned for modernisation of the stations were not very realistic. The Committee would, therefore, like to emphasise that there should be a proper and complete survey of all probable sites so as to establish their feasibility in all respects much ahead of the import of equipments in order to avoid the mistake of the kind that occurred in this case entailing delay in completion of the project.

#### (iv) Delay subsequent to change of location

- 1.81. It is understood from Audit that the Director General of Observatories informed them in August, 1969 that the Director General of Civil Aviation agree to give a plot of land near the Airport for the building at Lucknow in 1967. The CPWD furnished the estimates in 1968 and these were sent to Government for according administrative approval and expenditure sanction. The case was stated to be under correspondence between the Ministry of Tourism and Civil Aviation, Ministry of Finance, Ministry of Works & Housing and CPWD. The requisite administrative approval and expenditure sanction was issued on 13.7.1970.
- 1.82. The Committee pointed out that the location changed to Lucknow in August, 1966. The next step was taken in 1968. The administrative approval was obtained only in July, 1970. The Committee wanted to know the reasons for the delay of two years at each step. The Secretary, Ministry of Tourism and Civil Aviation stated: "As already stated, the decision to instal this in Lucknow was in August, 1966, and efforts were made to get a proper plot of land from the DGCA and it was possible to get this in April, 1967. The Department took up the matter with the CPWD. In 1968, the preliminary estimate was received from the CPWD and after a detailed examination of the proposal the Ministry of Finance referred the estimates for construction of the building to their Works and Estate Unit for technical scrutiny. Unfortunately the Works and Estate Unit in the Ministry of Finance would not accept certain costs and some sort of difference of opinion seems to have cropped up between the CPWD on the one hand and the Works and Estate Unit of the Ministry of Finance." He added: "I accept this delay. I have already submitted that this was due to the difference of opinion between the CPWD and the Ministry of Finance which unfortunately went on for some considerable time. I am of course not justifying it.
- 1.83. When asked for the present position, the Ministry stated in a note that the CPWD could now take action for preparation of detailed construction drawings, calling for tenders etc. and then start the construction. The completion of the building might take about

18 months. When the building at Lucknow was ready, the equipment at New Delhi (Lodi Road) would be shifted to Lucknow. The radio theodolite at New Delhi was in the meantime being used for training purposes.

1.84. The Department further stated in a note that the case for purchase of land at Jodhpur was started as early as 1961. But the land could be purchased only by August, 1966. Administrative approval and expenditure sanction for the construction of the building was accorded in November, 1967 and actual construction was started by CPWD in December, 1968. The building was completed and handed over to the Department in June, 1970. WBRT equipment was installed at Jodhpur in the same month on 28.6.70 and made operational from 1.7.70.

1.85. The Committee pointed out that steps were taken for the purchase of the land in 1961 and wanted to know the reasons why the land was purchased only in 1966. The witness explained: "Action was initiated by the Department to find permanent accommodation for their sonde and radio wind installation at Jodhpur as far back as in April, 1955 and not 1961. They tried to find permanent accommodation and they were in correspondence with the Collector and other local authorities. Their Regional Director also visited the area in order to locate some land. They were in correspondence with the local authorities between 1956 and 1959. Then, in November, 1961, Government sanction was obtained for the purchase of a plot of land measuring 4 lakhs sq. ft. along with the use of a building at an estimated cost of Rs. 90,000. Later on, however, the owner refused to give the land at that price and therefore it was not possible to purchase it. Then, a second effort was made in November, 1964. Admittedly, here again, there was delay. In November, 1964, this proposal was repeated for the purchase of 4 lakh sq. ft. of land and this time at a cost of Rs. 1,88,000, from another party. Unfortunately, some doubts arose as to the title of the land and, accordingly, the transaction was dropped. Thereafter, further enquiries were made and 8 plots were thought of. And after still further enquiries, two were found to be suitable and local inspection was arranged. Then, 3 offers were ultimately considered. One was at Rs. 0.75 paise per sq. ft. Another was at 63.6 paise per sq. ft. And the third was at 95 paise per sq. ft., but the gentleman, who had this land, ultimately reduced it to 50 paise per sq. ft. This rate of 50 paise was certified by the Collector of Jodhpur as being reasonable. The title was also verified from the Collector on the 26th November, 1955. The land was cleared by the Defence Ministry because there happened to be

Defence installations etc. in the vicinity. The administrative approval and 'expenditure sanction' was accorded in August, 1966. This is the background."

1.86. After the location was changed to Lucknow in 1966 it took nearly 4 years to accord administrative approval and expenditure sanction for the construction of building for which a plot of land was made available by the Director General of Civil Aviation in April, 1967 and the construction has not started yet (August, 1970). The Secretary, Ministry of Tourism and Civil Aviation while admitting the delay urged in extenuation that "this was due to the difference of opinion between the CPWD and the Ministry of Finance which unfortunately went on for some considerable time." The Committee can hardly appreciate such inordinate delay in according financial concurrence.

1.87 The Committee note that Jodhpur was one of 18 stations where modern wind finding equipments were to be installed as part of the India Meteorological Department's Third Five Year Plan. Although according to the witness action was initiated by the Department to find permanent accommodation for the installation of the equipment as far back as in 1956, the land could be purchase only in 1966. The Committee can hardly appreciate such inordinate delay. Further they note that it took a year for according administrative approval and expenditure sanction and another year to start construction of the building. The Committee are of the view that the delay of one year at each stage is not something which was inevitable.

1.88. The Committee have suggested investigation into lack of coordination between the different ministries in earlier part of this report. This case may also be included in its ambit and the Committee apprised of the result.

## (v) General

1.89. The Ministry of Tourism and Civil Aviation, in a note, stated: "The contract provides for a period of guarantee of 15 months from the date of FAS, New York or 12 months after arrival at ultimate destination in India whichever is sooner. The equipment was

received in three different consignments and the dates of shipments of each of these are as under:

- (i) 7 radomes shipped on 25th November, 1964 on SS Jala Durga.
- (ii) 6 radio theodolites and 10000 ft. of cables shipped on 8th March, 1965 on SS Jaladhir.
- (iii) 1 radio theodolite booked on 25th March, 1965 on SS Jalakrishna.

In case of 6 theodolites the warranty period expired on 8th June, 1966 and in respect of 7th, it expired on 25th June, 1966. All the sets are in operation and have been giving excellent service. The Department has, therefore, not been put to any loss on account of not installing the equipment within the warranty period."

- 1.90. The Committee drew attention of the Secretary, Ministry of Tourism and Civil Aviation to the fact that the warranty period expired in June, 1966 and that not a single equipment was installed during this period. The Secretary replied: "Admittedly the period has expired but fortunately they have been functioning to our satisfaction."
- 1.91. According to the Performance Budget relating to the Department of Civil Aviation and India Meteorological Department for 1970-71, the project "establishment of audiomodulated radio sondel radar wind finding equipment at 15 stations" was approved for implementation during the Third Plan (1961-66). However, order for the equipment could be placed only during the latter half of the Third Plan. No equipment was installed during the Third Plan.
- 1.92. The Committee are perturbed over the tendency on the part of the Departments to delay the completion of planned projects due to lack of coordination between the ministries or advance planning with a targeted programme. In this case not a single equipment was installed during the Third Plan period. Six WBRTs procured during March-August, 1965 were actually installed between December, 1966 and June, 1970 long after the expiry of the warranty period in June, 1966 and the remaining one is yet to be installed. That "fortunately they (the equipments installed) have been functioning to our satisfaction" does not justify the failure to instal them within the warranty period. The Committee have elsewhere in this report drawn attention to delays and lapses in taking advance action-

The Committee would like the Government to consider in what manner the departmental procedures and practices should be streamlined to gear them up for speedy action and make planning meaningful.

New Delhi;
December 14, 1970.

Agrahayana 23, 1892 (Saka)

ATAL BIHARI VAJPAYEE

Chairman,
Public Accounts Committee.

### APPENDIX I

Chronological Statement showing the action taken at each stage right from the preliminary survey of probablesites in September, 1963 in connection with the installation of the radar equipment in the airports at Delhi, Bombay, Calcutta and Madras (Separately)

(Vide para 1.45 of the Report)

### Chronological order of events Delhi

Date		Event
6-9-63 .	•	. Letter to CCC informing that the equipment is not finalised—Note regarding site requirements enclosed.
15/22/63-CI 27-12-63	I dı.	Asked the Controllers for Progress in selection of site.
6-1-64 .		. CCD intimated that action has been taken to survey all possible sites in and outside airfield.
<b>2</b> 4-3-66	•	. Survey of Delhi/Gurgaon area was completed by CCD with the help of the local Secretary of the Radio Cable & Wireless Board. Few more areas to be surveyed.
11-4-66	•	. We asked Selenia for siting criteria to avoid interference from Defence Radar operating in the same frequency range.
6-5-66 .		. Selenia replied.
25-5-66	•	. We asked Air Headquarters their point of view for the location of Radar.
29-6-66		. Reminder to AHQ.
20-8-66	٠	. CCDs Report Received DDA, P & T, Cable & Wireless Board, AIR, Overseas Communications were cnsulted. Site near village Ranhote was recommended.
14-9-66		. CCD advised to convene siting Board.
19-9-66	•	. CCD advised that AHQ approval may be obtained first.
10-10-66		. CCD called for Board to be held on 26-10-66.
14-10-66		. CAD wants display at Safdarjung.
19-11-66		. Minutes of Siting Board for CCD recommending the above site.
(The l	ocatio	on of display unit whether at Palam or Delhi was to be decided.)
7-7 <b>-</b> 67 .		. Hqs approved site.
22-8-67	•	. CRC forwarded tentative plans and list of works to DGCA for approval.
15-9-67		. Our comments were sent to CRC.
14-11-67	•	. Plans sent to CPWD by CRC vide his letter No. 10-2/11(67) dated 14-11-67.
April, 68		. Building Plans were revised as per the advise of the manufacturers.

Date		Event		
27-5-1968		. Proposal for acquisition of land submitted to Government.		
10-6-1968		Referred to Finance for concurrence.		
5-7-1968	•	. Ministry of Finance asked for re-examination of the case on the lines suggested by them.		
8-7-1968		. Again referred to Ministry of Finance.		
7-8-1968		. Returned by Finance with a query.		
12-8-1968		. Referred to Finance again.		
24-8-1968		. Finance agreed to the proposal subject to certain conditions.		
26-8-1968		. DGCA was asked to elucidate the position,		
26-8-1968		. Proposal for building works submitted to Government.		
29-8-1968		. DGCA furnished the requisite information.		
2-9-1968		. Case was referred to Ministry of Finance again.		
5-9-1968		. Ministry of Finance finally concurred in the proposal.		
6-9-1968		. Sanction accorded.		
12-9-68		. Estimate sanctioned by Ministry on 6-9-68-Intimated all concerred		
23-9-68		. Referred to Finance for concurrence.		
October, 19	68	. Initiated proceedings for land acquisition.		
16-10-68		. Returned by Finance for further examination on the lines suggested by them.		
18-10-68		. D.G.C.A. was requested for comments		
9-12-68		. D.G.C.A. furnished required information.		
30-12-68		. Referred to Ministry of Finance.		
16-1-69		. Finance concurred in the proposal.		
20-1-69	,	. Sanction issued.		
22-1-69		<ul> <li>A.E., C.P.W.D. Palam wanted us to check the demarcations mad by him.</li> </ul>		
6-2-69 .		. Demarcation approved. E.E. informed.		
4-2-69 .		. Ministry sanctioned Building Works on 20-1-69. All concerned informed.		
17-2-69	•	. E.E. Wrote to Deputy Commissioner, Delhi for acquisition of land (54.75 acres).		
21-3-69		. SW wants some clarification on the Building.		
1-4-69 .	•	. E. E. informed us the Deputy Magistrate has taken action for marking land etc.		
10-4-69		. Additional District Magistrate initiated action.		

Date			Event	
M irch/July	1969		Reminders sent to land acquisition authorities and personal contacts.	
22-7-69			(Site correspondence from 31-1-69) S.E. C.P.W.D. reminded Deputy Commissioner.	
August '69	•		DDG to CE for reduction of time taken for building. CE replied building would be ready in 8 months after land and 3 months for air conditioning and Stand by power supply.	
14-8-69			Notice under Section 4 issued.	
Nov. '69			Clearance applied to DDA.	
11-2-70			S. E. approached Secretary Land & Building Delhi.	
24-2-70			AE wrote to Asstt. Housing Commissioner for expediting.	
2-3-70 .	٠	•	S. E. wrote to Secretary Lands & Building, Delhi Administration for arranging release of land.	
11-6-70	•		SE wrote Land acquisition Collector again asking for handing ove the land.	
26-6-70		•	From EE to D of C stating Section 6 of Land Acquisition Act issued on 9-3-70.	
and July' 70			Land acquisition officer intimated that the award would be given and land would be acquired in August, 1970.	

# Chronoligical Order of Events Bombay

Date	Event
Sept. 1963 .	. Preliminary Survey of probable sites initiated. Following broad guide lines given:—
	<ol> <li>Frequency rage of Radar</li> <li>Pulse width of Radar</li> <li>Coverage of Radar</li> </ol>
	4. Power requirements of Radar,
	No details of microwave link equipment were given. This was only to keep the Regional Controller of Communications informed of the proposals to purchase Radar equipment and to be on the look out for suitable sites. No detailed Survey could be carried out till finalisation of equipment to be precured.
7 Feb. 1966	Technical data on siting of equipment received from manufacturers.  This gives a detailed information on the fectors to be taken into account on shadow considerations, moving target indicator considerations with special reference to the type of the radar and microwave link equipment selected for procurement.

Date	Event
7 Feb. 1966 . 25 March 19 <b>66</b>	CRCD. requested to prepare a rough design of buildings to house equipment.  Siting Board meeting at Bombay. (IAF representative: Controller of Aerodromes; CPWD and Hqrs. & CRC&D) sites considered by S/Board are:—(1) Santa Cruz Airfield (2) Juhu A/F (3) Powaii hill top (4) Matheran (5) Kanheri hills: Recommended Juhu Air-field. Consideration by Hqrs. of the site recommended from the operational and other angles.
June 1966	Approval by D.G. for the site obtained on 1st June, 1966.  As no accommodation available in airfield for display units proposal for construction of separate operational building to house airways & radar display suggested: CCB & Cont. of Aerodromes prepare a tentative design of building.
8 Nov. 1966 .	. IAF request for shifting of site for radar of some classified defence installation.
Dec. 1966 .	. Resurvey of sites requested.
Feb. 1967 .	. Correspondence between CCB & Hqr. regarding the need for shifting site from Juju.
Mar. 1967 .	. CCB. indicated the following sites Santa Cruz Airport, Powaii Hill: Transmitting Station, Andheri and Trombay Hill site.
April, 1967	. Meeting with Atomic Energy Commission regarding Trombay Hill Site.
May, 1967 .	. From CCB. to CRC letter regarding merits & demerits of sites at Trombay and Powaii Hills.
June, 1967 .	. In view of difficulties CRC suggests installation of radar at Santa Cruz.
July, 1967 .	. CCB. informed that Santa Cruz is not suitable from ATC point of view being of restricted range in Mandasore and Aurangabad Sector: requsted to consider the site on Powaii Hill with particular reference to equisition of land/development of site.
August, 1967	. Discussion by CCB, with Revenue Authorities regarding Powai site (acquisition/development).
24 August, 1967	. CCB, requested to get development & acquisition costs for both Powaii & Trombay Hills. It was learnt that location of T.V. Tower at Trombay Hill had not been finalised.
28 Sept. 1967	<ul> <li>Meeting held on 20th Sept., 1967 with Atomic Energy Commission to discuss Trombay Hill Site: for discussing A.I.R. represen- tative interference problems.</li> </ul>
Oct. 1967	. Letter from IAF enquiring if another site has been selected.
13 Nov. 1967.	. Informed CCB. rejecting Trombay site due to maintenance prob- lems: requested to investigate Andheri Site.
6 Nov. 1967 Nov. 1667 Dec. 1967	<ul> <li>Meeting at AHQ, requesting them to review their earlier decision</li> <li>Details of Juhu site given to Air Force</li> <li>From AHQ, asking for details of Building Tower etc. Ad Ho Committee formed.</li> </ul>
23 Jan. 1968	. Sub-committee met.

Dat	:6	Event
<del></del>		No minutes of the committee kept due to classified nature.
Jan. 1968 .	•	CCB. requested to locate few more sites at Juhu airfield. Certain guide lines were given.
27 Feb. 1968 .		Six sites suggested by Controller of Commun cation, Bembay.
Mat. 1968 .	•	Only one site considered suitable from operational angle though inferior to site selected earlier.
16 Apr. 1968.	•	Air Force nominated another representative as previous member was transferred.
26 Apr. 1968 .	•	The committee meeting held: details passed on. Decided to inspect site on 24th May, 1968.
May, 1968 .		Meeting held at Bombay.
13 June, 1968		Report of the committee finalised after discussion.
July, 1968 .		Report submitted by committee.
13 July, 1968		Site approved by AHQ.
9 Aug. 1968		Approval of site. Consideration and acceptance of report by DGCA
16 Sept. 68 🛮 .		List of works forwarded to CPWD for framing estimates.
26 Sept. 1968		Discussion with D.G. regarding site-selected for Radar.
8 April, 1969		Estimate framed by CPWD.
14 May, 1969.	•	Estimate scrutinised to see that all works have been included and approved by D.G. later and submitted to Government.
21-5-1969 .		Referred to Finance for concurrence.
4-6-1969 .	•	Returned by Finance for routing through Internal Finance.
16-6-1969 .	•	Returned to Finance through Internal Finance.
9-9-1969	•	Finance concurred in the proposal subject to certain conditions.
11-9-1969 .	•	Sanction accorded.
Nov. 1969 .	•	Meeting held at Bombay with CPWD for taking up the work on priority basis in the mean-time detailed estimate including structural design of Tower by CPWD received.
Dec. 1969 .	•	Letter from Superintending Surveyor of Works asking clarifications regarding loading etc.
**		Driving of block for determining pile foundation work carried out details of pile foundation worked out.
Jan. 1970 .		Tender Notices for pile foundation issued.
Feb. 1970 .	•	Power Supply to Radar Site approved by State Government.
27 Mar. 1970		Pile foundation work commenced.
March, 1970 .	٠	Tenders for building and Tower opened. Due to poor response tender date extended to 3-4-1970.

Date	Event	
15 April, 1970]	. Layout of building on ground completed.	
15 April, 1970	. Fresh tenders for building & Tower called due to very high costs,	
May, 1970 .	. Work awarded.	
16 May, 1970.	Driving of pile foundation completed.	
1 June, 1970.	. Pile foundation work in progress: Works for Tower super structure awarded.	
15 June, 1970	. Excavation for the building commenced.	
17 July, 1970	. Pile foundation completed; work on building in progress.	
4 Aug. 1970 .	. Super structure for Tower in progress; columns for foundation of ARSR building completed.	

# Chronological Order of Events Calcutta

Date			Event		
Sep. 1963	•	•	Preliminary Survey of probable sites initiated. Following broad guide lines given: —		
			<ol> <li>Frequency range of Radar</li> <li>Pulse width ,,</li> <li>Coverage ,,</li> <li>Power requirements ,,</li> </ol>		
			(No details of microwave link equipment were given. This was only to keep the Regional Controller of Communications informed by the proposals to purchase Radar equipment and to be on the look out for suitable sites. No detailed Survey could be carried out till finalisation of equipment to be procured.)		
Feb. 1966			Siting criteria received from the firm.		
May, 1966			Preliminary Survey made and report received.		
June, 1966			Report under consideration.		
16 July, 1960	5	•	Controller of Communication, Calcutta Rn. asked to convence a meeting.		
24 Aug. 1966	5		Siting board meeting proposed.		
9 Sept <b>. 19</b> 66		•	Minutes of Survey Board received. (Intrests: IAF; Controller, of Aerodromes; C.P.W.D.; D.G.C.A. & Regional Officers) Seven sites were considered (1) near Barasath Chandanpur village (2) Rekjokni (3) Jagadpur (in Barasath) (4) Konnagar (Hocgly Distt.) (5) Kendual (Howrah) (6) two more sites.		

Date	Event
	(Site near Sandipur (near Andur) recommended because of specific requirements of IAF to avoid interference with their Radar and ATC operational requirements. After inspection, a new site 1/2 mile away to original site—selected.)
Oct. 1966 .	. Consideration of report at Headquarters. Information asked for regarding earthwork for development of work; Theodolite/observations to compute estimated coverage; investigate line of sight for Microwave link—estimated cost of shifting 33 KVA power line at site.
Nov. 1966 .	. CCC informs that site under two feet of water; No observations possible; cost of development of site indicated.
18-11-1966	C.R.C. suggestion for reduction in extent of development due to high cost.
Dec. 1966 .	. C.P.W.D.— trying to estimate cost of shifting power lines (11 & 33 KVA) passing through the site.
Feb. 1967 .	. Reminder sent regarding cost of shifting of power lines.
25-2-1967	. Revised estimate cost of development received.
March, 1967 ,	Theodolite observation received; delay due to area under innundation till end of Dec.
,,	. Coverage computed; all aspects under consideration at Head-quarters.
3-4-1967 .	. Site approved by competant authority.
June'1967 ,	. Detailed survey of site and plot numbers obtained.
Aug. 1967	Requisition by CPWD on land Acquisition Officer West Bengal Government requested for waiving objection under Sec. V of Land Acquisition Act.
Oct. 1967 .	. Application for clearance of site from SACFA.
,,	. List of works and plans from CRC&D for preparation of est mate.
Sept.1967 .	<ul> <li>Reference from CCC regarding certain portion of land handed over to High Way Deptt. Requirements of area for Radar revised.</li> </ul>
28-11-1967 .	Reminder to land Acquisition Officer by CPWD.
Dec. 1967 } . Feb. 1968 }	. Several personnel contacts with Land Acquisition Officer by CPWD.
Feb. 1968	. Firm demand for H.T. power with State Electricity Board.
March, 1968 .	
,,	collector Howrah inform Draft notification to Section 4 sent to Government West Bengal for publication. Also inform, that in view of the land being agricultural land Section 5A can not waived.

D	ate	Event
March, 196	8	. Joint inspection of site by members of CPWD and State Electricity Board.
April, 1968		Estimate for diversion of 33 KVA received by CPWD from State Electricity Board.
June, 1968		. Estimate for land Acquisition sent to Government.
1-7-1968		. Referred to Ministry of Finance for concurrence.
6-7-1968		Finance agreed subject to certain conditions.
8-7-1968		. Referred to Finance again.
July, 1968		Reminder to West Bengal Government to expedite Sec. IV notification and several personal contacts by CPWD.
4-8-1968	-	. Finance concurred in the proposal.
6-9-1968		. Sanction accorded.
Sept. 1968		. Government sanction for acquisition of land received.
**		Approval of SACFA for the Radar Site obtained.
<b>39</b>	•	From D.G.C.A. to Chief Engineer, Calcutta for taking steps to reduce the period of construction of building to the barest minimum.
11-9-1968		. Proposal for building works submitted to Government.
24-9-1968		. Referred to Finance for concurrence.
Oct. 1968	•	Assistant Secretary, West Bengal informs that matter rests with land and land Revenue Department and matter being expedited.
8-10-1968		Finance agreed to the proposal subject to the revision of est mates.
9-10-1968		. D.G.C.A. was requested for comments.
2-11-1968		. D.G.C.A. furnished his comments.
6-11-1968		. File referred to Ministry of Finance.
19-11-1968		. Reminder to Collector by CPWD.
**		. Letter to Secretary to expedite publication.
Dec. 1968		. Reminder to West Bengal Government.
19-12-1968		. Finance raised further points.
24-12-1968		. D.G.C.A. was requested to furnish the required information.
Feb. 1969	•	. Personal contacts by D.G.C.A. and executive Engineer with State Government West Bengal.
7-2-1969		. Referred to Finance.
11-2-1969		. Finance concurred in the proposal.
13-2-1969	•	. Sanction Accorded.

Date	Event
March, 1969	. Reminder to West Bengal Government.
April, 1969 .	Secretary, West Bengal asks collector information regarding persons affected and rehabilitation.
May, 1969 .	D.G.C.A. gives a clarification to Government sanction and special features of radar site.
<b>M</b> 3y/June, 1969	Several contacts by CCC & CPWD with State Government Officials and Collector.
<b>27-</b> 6-1969 .	Meeting arranged with land acquisition authorities CPWD etc.  Joint inspections of site.
July, 1969	Detailed report of collector to West Bengal Government.
July/Aug. 1969	. Contacts by CCC with West Benagl Government to give carification and supplying additional information.
<b>22</b> -9-1969 .	. Another reminder by CPWD.
23-9-1969 .	. Meeting with member Board of revenue and Revenue authorities Explanatory note on the essentiality of the project as per request of member sent.
Oct./Dec., 1969	. Contacts with West Bengal Government by CCC and CPWD. It was informed that the case was with Shri Harikrishna Konar, Minister, for orders.
Jan. 1970 .	. Member Board of Revenue retired and no further information available inspite of personal contacts.
27-2-1970 .	Government of West Bengal dissolved; meeting with Deputy Secretary Land Revenue Department and urgency of land requirement explained learnt that concerned file of State Government not traceable.
March, 1970	. CCC and CPWD made copies of all correspondence from their files and that of collector of Howrah and handed over to Secretary for reconstruction of file.
9-3-1970 .	. Further clarification asked for regarding essentiality of the project and selection of particular site as it falls on Agricultural land.
2-6-1970 .	. Sec. IV notification issued in March, 1970.
10-7-1970	<ul> <li>State Government has instructed collector to expedite acquisition proceedings.</li> </ul>
	Chronological Order of Events Madras
Date	Event
27-1-1968 ,	. Controller of Communication was intimated that Nagpur Radar will be diverted to Madras. He was asked to conduct Preliminary survey on high priority. CPWD also was informed.
25-5-1968	Report from Controller of communication received. Three sites were selected and relative merits brought out. (Report under study in Headquarters. Though Mosque hill site was considered ideal at had to be dropped due to other factors like development sst, augmentation of Power supply, Interference with other intallation. The next best site was to be considered and subsequently preferred. This required careful and elaborate consideration).

Date			Event
Aug. 1968			The next best site was referred to ARA Directorate for clearance
September, 1	968		Site approved by Director General.
10-9-1968	•	•	Controller Radio Construction and Development Units was advise to prepare Plans.
14-11-1968			Works list was forwarded by CRC to CPWD.
22-1-1969	•		Superintending Engineer was requested to prepare estimate quickly.
3-4-196 <b>9</b>	•	٠	SE informed DGCA that preliminary estimate was under pre- paration. (Time was required for obtaining data regarding typ of foundations and other technical data).
15-5-1969			Preliminary estimates was sent to Government for sanction.
21-5-1969	:		Referred to Finance for concurrence.
4-6 <b>-1969</b>			Finance returned with comments.
13-6-1969			Sent to Finance again through Internal Finance with comments
13-8-1969			Finance concurred in the proposal subject to revision of estimate
16-8-1969			Sanction Accorded.
3-9-1969			Government's sanction was received.
5-10 <b>-196</b> 9			CPWD wanted load details for detailed estimate.
23-10-1969			Details were furnished by CRC.
March, 1970		•	Separate tenders were called as there was no response to the first one—opening of tender 22-3-1970.
25-4-1970	•	•	CCM informed DGCA that the work was likely to be awarded in days.
May, 1970	•	•	Work was awarded for building. Tenders were received for Tower But the rates were high. CPWD are trying to bring down the rate.
Aug. 1970			Building is expected to be completed in March, 1971.

APPENDIX II

# Summary of main Conclusions Recommendations

SR. No.	Para No.	Ministry/Department concerned	Conclusions/Recommendations			
		(a)	(4)			
(1)	(2)	(3)	(4)			

1. 1.7 Department of Civil Aviation

The Committee on the basis of evidence tendered before them can only conclude that Government did not fully satisfy themselves that the High Power Air-Route Surveillance Radars purchased from the Italian firm on the basis of the supplier's credit offered were the best or the cheapest for the price paid for them. It appears at the time of deciding on this purchase the Government were not in possession of information regarding availability of this equipment and its relative prices in countries other than USA and Italy; no attempt was made to find out if credit would be available from any other source. In the opinion of the Committee a purchase of this magnitude involving Rs. 3.90 crores of which Rs. 2.83 crores were in foreign exchange should not have been considered without obtaining adequate comparative data on all aspects of the purchase from available sources. This lack of inquiry is all the more deplorable because as the Committee have commented in a latter section of this report, the Department do not expect to instal the equipments ordered for in 1966 and received by December, 1969 any time before the end

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of 1971. The Committee, therefore, desire that in future in all cases of substantial purchases comparative economics should be worked out after getting information from all accessible sources prior to accepting a supplier's credit. The manner in which this can be ensured may be settled between the Ministry of Finance (Department of Economic Affairs) and the Purchasing Ministries.

2. I.10 Deptt. of Civil
Aviation

The Committee observe that in respect of the missing parts without which none of the radars purchased from Italy can be operated, the Department has not got any indication from the firm as to when these will be made available although more than two years have elapsed since shortages were reported first. The Committee are anxious that delay in replacement of these parts should not defer the installation of the equipment. They therefore desire that the matter should be taken up vigorously with the firm so as to ensure receipt of supplies well before the targeted date of installation of the equipments.

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The Committee also note that in 3 out of 7 cases the shortages were reported beyond the period of 30 days. The Committee note that the firm has agreed to supply the missing items, but they cannot help feeling that the Department should have been sufficiently alert in reporting the discrepancies without delay.

The Committee note that although the consignments were shipped from Italy after the closure of the Suez Canal and it took much longer time in transit via the Cape of Good Hope the period

of warranty of 15 months from the date of shipment as decided before the closure of the Suez Canal remained unaltered and no attempts were made to extend the period of warranty proportionately. The Committee cannot appreciate how this important aspect was overlooked. The Committee would like Government to take appropriate action in time in regard to cases where the conditions relevant to the period of warranty are materially altered after the execution of contracts. The D.G.S. & D. should also keep a watch in this respect for remedial action.

5. I 20 Deptt. Civil Aviation

The Committee are unhappy that the Department of Civil Aviation are not able to instal even a single radar procured at such a heavy cost within the normal warranty period. They are also not satisfied with the way the period of warranty was got extended by the firm "as a gesture of cooperation". The Secretary, Ministry of Tourism and Civil Aviation, however, had taken a position before the Committee that the warranty period should be counted not only from the date of shipment of the last consignment but also from the date of shipment of all the missing parts. The Committee desire that where there is a doubt about interpretation of the terms of a contract the views of the Ministry of Law should be obtained at the earliest opportunity.

6.	I .2I	-do-	The Committee might be informed of the final outcome of the negotiations with the firms on this point.
7.	1.25	-do-	The Committee are grieved to note that a project contemplated for modernisation of 4 airports during the Third Plan (1961—66) was not expected to reach completion even by the middle of the Fourth Plan (1969—74).
8.	1.26	-do-	The proposal to install 4 "high power air-route surveillance radars" was originally sent by the Ministry of Tourism and Civil Aviation to the Ministry of Finance in September, 1963. Thereafter

a dialogue ensued between the two ministries with the result that the foreign exchange was released only in July 1965. Taking two years in obtaining foreign exchange for an aeronautical project where technical advancement and obsolescence take place at an accelerated rate highlights the existence of bottlenecks and rigidity in our decision making and financial sanctioning procedure. The Committee would like the matter to be gone into by Government and the procedure streamlined for expeditious finalisation of pro-

posals. The Committee are also not convinced that the siting data -do-1.27 could not be obtained earlier than February, 1966. Thereafter the way the sites were selected in all the four major air ports, the acquisition of land processed as commented in the succeeding section of this report, shows that the entire project was marked by lack of planning and foresight. The Committee wish that all the processes

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schedule and the guarantee period under the contract.

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for installation of equipment should be clearly identified and target dates fixed when equipment are ordered keeping in view the delivery

1.46 Department of Civil Aviation

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The Committee note there has been delay in the siting Board meeting at Delhi. The Board met only in October, 1966 although the siting criteria became available in February, 1966. It took 8 to 9 months for the finalisation of the selection of site at Delhi and Calcutta. In Bombay the site selection took 2½ years and it was finalised only in September, 1968 after the first batch of equipment was received in June, 1968. The Committee find that with better coordination among the departments concerned the work could have been pushed through with expedition.

II. 1.47 -do-

The Committee further note that action for land acquisition was initiated in October, 1968 in Delhi although the site selection was over in July, 1967. The notification under Section 4 of the Land Acquisition Act, 1894 was issued only in September, 1969 and the land was not handed over till August, 1970. As regards Calcutta although the action was initiated shortly after the selection of the site the Section 4 notification was issued only in March, 1970 and it is not known when the land will be handed over. The Committee do not feel happy with the inordinate delay in acquiring the land. As the costly equipment had, been imported long back the Department should have convinced the authorities concerned of the necessity for expeditious acquisition of land.

The Committee find that in Bombay and Madras where departmental land was available it took one year to have the preliminary estimates for the buildings sanctioned and the buildings are expected to be completed only by the middle of 1971 and that it will take another six months to instal the equipments. The Committee are not convinced that the delay in the preparation of estimates and getting them sanctioned was unavoidable. They wish that the procedure for preparation of estimate and getting them sanctioned streamlined so as to cut out needless red-tape and delay.

The Committee note that the Study Group of International Airports Committee have recommended in their report (September, 1968) that the planned projects of installation of Air Route Surveillance Radar should be expedited for implementation as soon as possible and included it under immediate improvements recommended to be completed within the next two years to meet the international and domestic traffic needs. The Committee hope that the Department of Civil Aviation will lose no further time and instal the equipments without delay so that the needed facility will be available at the earliest and the risk of deterioration of equipments by prolonged storage avoided.

ments by prolonged storage avoided.

While the Committee deplore the lack of effective coordination and proper follow up action revealed in this case, they would suggest that the Department of Civil Aviation should ensure that in executing such projects in future there is better coordination with all the concerned agencies and proper follow up action is taken at each stage to avoid delays.

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14. 1.54 -do-

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15.	1.65	Deptt. of Civil Aviation	The Committee note that 15 audiomodulated radio-sond radar wind finding equipments were to be installed during the Thir Five Year Plan period. The first batch of 7 sets of WBRT we purchased at the cost of Rs. 5.99 lakhs each during March-Augus 1965 and thereafter 8 sets of Selenia wind finding radars we purchased at the cost of Rs. 6.07 lakhs (before devaluation) at Rs. 9.67 lakhs (after devaluation) each in October, 1966.
16.	1.66	-do-	The Committee find that the Selenia wind finding radars we in fact costlier than WBRT equipment although the latter is admitted by a better equipment. The Committee are unhappy to note the purchases from two different sources were made without obvious evaluating the comparative advantages in regard to price and utility of each equipment. They accordingly desire that the Government should be circumspect in entering into purchases of this kind future so that they get the best value for the foreign exchange specific contents.
17.	1.71	-do-	The Committee were informed that the delay in installing t equipments was partly due to delay in manufacturing departmental the audio-frequency modulated radiosondes, a subsidiary equipmenecessary for accurate measurement of upper air data. The Committee note that the manufacture was taken in hand only in 19 although the Department initiated action for the selection of place in 1961 at the time of formulation of the Third Five Year Plan.

flying equipment was ready after testing only in 1967. The Committee regret to note the failure of the Department to take timely action to improve and modify the mechanical radiosondes, though they had experience of manufacturing this equipment for the past 25 years.

The Committee find that the location of the equipments was changed from Allahabad to Lucknow in August, 1966 and from Ahmedabad and Srinagar to Jodhpur and Nagpur in December, 1966 long after the receipt of the equipments and the expiry of the warranty period. The reason advanced for the shift from Allahabad is that the I.A.F. was to take over the aerodrome at Bamrauli (Allahabad). The Committee desire to be convinced that there was effective coordination between the IAF and the India Meteorological Department right from the time the sites were selected initially.

As regards the shift from Ahmedabad and Srinagar the Committee were given to understand that the buildings available were not suitable for the installation of the heavy WBRT equipment and that necessary land for the purpose of construction of proper buildings was also not obtainable. The decision to locate these theodolites at these two stations was taken in 1961. It is indeed strange that the deficiencies of the buildings and non-availability of land should have come to light only in 1966 five year after the formulation of the proposals. The Secretary Ministry of Tourism and Civil Aviation conceded that the Department "should have known about the requirement. This must be readily accepted. I do not have an explanation for it." The Committee are distressed at the lack of care depicted

18. 1.79 -do-

19. 1.80 -do-

in not realising the unsuitability of the buildings at these two stations where the equipments were to be located. Further changing the stations for location of the modern wind finding equipment because of unsuitability of the buildings shows that the earlier priorities assigned for modernisation of the stations were not very realistic. The Committee would, therefore, like to emphasise that there should be a proper and complete survey of all probable sites so as to establish their feasibility in all respects much ahead of the import of equipments in order to avoid the mistake of the kind that occurred in this case entailing delay in completion of the project.

Deptt. of Civil Aviation. 1.86 20.

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After the location was changed to Lucknow in 1966 it took nearly 4 years to accord administrative approval and expenditure sanction for the construction of building for which a plot of land was made available by the Director General of Civil Aviation in April, 1967 and the construction has not started yet (August, 1970). The Secretary, Ministry of Tourism and Civil Aviation while admitting the delay urged in extenuation that "this was due to the difference of opinion between the CPWD and the Ministry of Finance which unfortunately went on for some considerable time." The Committee can hardly appreciate such inordinate delay in according financial concurrence.

The Committee note that Jodhpur was one of 18 stations where modern wind finding equipments were to be installed as part of the India Meteorological Department's Third Five Year Plan. Although according to the witness action was initiated by the Department to find permanent accommodation for the installation of the equipment as far back as in 1956, the land could be purchased only in 1966. The Committee can hardly appreciate such inordinate delay. Further they note that it took a year for according administrative approval and expenditure sanction and another year to start construction of the building. The Committee are of the view that the delay of one year at each stage is not something which was inevitable.

22. I.88 -do-1

The Committee have suggested investigation into lack of coordination between the different ministries in earlier part of this report. This case may also be included in its ambit and the Committee apprised of the result.

23. 1.92 -do-

The Committee are perturbed over the tendency on the part of the Departments to delay the completion of planned projects due to lack of coordination between the ministries or advance planning with a targeted programme. In this case not a single equipment was installed during the Third Plan period. Six WBRTs procured during March-August, 1965 were actually installed between December, 1966 and June, 1970 long after the expiry of the warranty period in June, 1966 and the remaining one is yet to be installed.

That "fortunately they (the equipments installed) have been functioning to our satisfaction" does not justify the failure to instal them within the warranty period. The Committee have elsewhere in this report drawn attention to delays and lapses in taking advance action. The Committee would like the Government to consider in what manner the departmental procedures and practices should be streamlined to gear them up for speedy action and make planning meaningful.

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