

**PUBLIC ACCOUNTS COMMITTEE
(1978-79)**

(SIXTH LOK SABHA)

HUNDRED AND THIRTY-FIRST REPORT

DEFENCE SERVICES

MINISTRY OF DEFENCE

[Paragraphs 36 and 22 of the Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services)].

*Presented in Lok Sabha on 24-4-1979
Laid in Rajya Sabha on 24-4-1979*



सत्यमेव जयते

**LOK SABHA SECRETARIAT
NEW DELHI**

April, 1979/Chaitra, 1901 (S)

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CORRIGENDA TO 131ST REPORT OF PUBLIC ACCOUNTS
COMMITTEE (SIXTH LOK SABHA).

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*PART II

Minutes of the sittings held on

11-8-1978 (AN)

19-4-1979 (AN)

*Not printed. One cyclostyled copy laid on the Table of the House and five copies placed in Parliament Library.

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INTRODUCTION

I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this Hundred and Thirty-first Report of the Public Accounts Committee (Sixth Lok Sabha) on Paragraphs 36 and 22 of the Report of the Comptroller & Auditor General of India for the year 1976-77, Union Government (Defence Services).

2. The Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services) was laid on the Table of the House on 6th May, 1979. The Public Accounts Committee examined paragraph 33 at their sitting held on 11th August, 1978 and considered and finalised this Report at their sitting held on 19th April, 1979.

3. A statement containing main conclusions or recommendations of the Committee is appended to this Report (Appendix). For facility of reference these have been printed in thick type in the body of the Report.

4. The Committee place on record their appreciation of the assistance rendered to them in the examination of these paragraphs by the Comptroller and Auditor General of India.

5. The Committee would also like to express their thanks to the Ministry of Defence for the co-operation extended by them in giving information to the Committee.

NEW DELHI;

April 20, 1979

Chaitra 30, 1901 (S).

P. V. NARASIMHA RAO,

Chairman,

Public Accounts Committee.

REPORT

Import of defective special purpose carriers

Audit paragraph

1.1. During July-October 1971, the Ministry of Defence concluded 3 contracts with two suppliers 'A' and 'B' for supply, *inter alia*, of 250 numbers of special purpose carriers at a total cost of Rs. 1028.25 lakhs, as detailed below:

Month in which contract was concluded	Supplier	Quantity contracted	Rate	Total value	Scheduled delivery date
(Rupees in lakhs)					
July 1971	'A'	100	3.87(FOB)	387.00	July-August 1971
July 1971	'B'	100	4.275(CIF)	427.50	To be completed by 31 August, 1971.
October 1971	'B'	50	4.275(CIF)	213.75	November 1971

1.2. The quality and proper functioning of these carriers were guaranteed by supplier 'A' upto 5,000 k.m. or till 12 months from the date of delivery, whichever was earlier. The guarantee offered by supplier 'B' was similar except that the 12 months period was to be reckoned from the day of arrival of these carriers at an Indian Port. The contracts also specified the range of ambient temperature for the engines as (—) 40°C to (+) 50°C.

1.3. The contracts envisaged that final inspection would be carried out by the purchaser in India. The conditions for acceptance inspection, *inter alia*, stipulated that the normal operating temperature of oil in the engine would be 80°—90°C and that for short spells the maximum permissible oil temperature could be 110°C. The maximum permissible temperature in the gear box was not to exceed 110°C but for short spells temperature upto 120°C was permissible.

1.4. Ninety-nine carriers delivered by supplier 'A' were received in India during October-November 1971 (one carrier having been supplied earlier in 1970 for trial purposes). Carriers numbering 150 delivered by supplier 'B' were received in India during October 1971—January 1972.

15. User trials conducted during March-April 1971 on the carrier received from supplier 'A' in 1970 had indicated that the engine had a tendency to overheat. The remaining carriers received from the two suppliers were inspected by the Directorate of Inspection during October 1971—February 1972 and accepted.

16. On receipt of a defect report from a user unit regarding overheating of oil in the engine/gear box in 70 carriers received from supplier 'A', a joint investigation was carried out by the representatives of supplier 'A' and of the Directorate of Inspection in July 1972. During this investigation, overheating of oil was confirmed and it was also revealed that the oil temperature in the engine/gear box under ambient temperature condition of 40°-41°C rose to 120°C and beyond within 45 minutes to 1 hour. Temperatures beyond 120°C could not be recorded specifically since the gauge fitted to the carrier was calibrated upto 120°C only. Thereafter, the matter was discussed with supplier 'A' who assured the purchaser that operation of the engine/gear box would be quite safe even when the oil temperature reached 120°C since the lubricating oil used in India was of a superior quality and that he was satisfied that the working temperature would not go beyond 120°C under Indian conditions. This assurance was incorporated in a memorandum of understanding signed between the supplier and the Ministry on 25th July, 1972.

17. About the same time the Directorate of Inspection informed the Ministry that (1) since the warranty of the first lot of carriers (19 numbers) received from supplier 'A' was to expire in August 1972, a formal claim would have to be preferred on the supplier before that date, (2) the carriers received from supplier 'B' suffered from similar defects of overheating since the maximum temperature of engine oil recorded was 117°C and (3) the defect of overheating which was due to inadequacies of design should be examined by Research and Development (Vehicles) Organisation on the basis of which a decision should be taken regarding their future use. The Directorate of Inspection considered (August 1972) the defect of overheating to be of a very serious nature as it would affect the life expectancy of the engine and the gear box assemblies. The Directorate also observed that the performance of the carriers was not upto the prescribed specifications. In view of the defect, instructions had been issued not to deploy these carriers in certain regions.

18. In September 1972 supplier 'A' issued an amendment to the operating instructions to the effect that the oil temperature might be allowed to go upto 120°C for a short period.

1.9. In February 1973, the Ministry informed supplier 'A' that by specifying the maximum acceptable temperature as 120°C the problem of overheating had not been resolved and asked him to suggest suitable remedial measures or modifications to the engine and gear box assemblies with a view to obviating the effect of overheating. Supplier 'A', however, replied that the functions of the engine and gear box assemblies were not affected by overheating.

1.10. The defect of overheating in respect of the carriers received from supplier 'B' was taken up with him by the Ministry in April 1973 by which time the warranty had already expired.

1.11. In September 1973, the Directorate of Inspection informed the Ministry that, in view of the serious limitations imposed by the defect of overheating on the deployment of the entire fleet of carriers, the users were pressing for a solution to the problem both in regard to provision of temperature gauges with extended registration range to measure temperatures beyond 120°C and for effecting improvements/modifications in order that the defect was entirely removed.

1.12. Since no tangible solution to the problem was suggested by the suppliers, the Directorate of Inspection decided in September 1974 to carry out a study with a view to evolving a suitable modification for removing the defect. The study which was taken up in October 1974 and completed in May 1976, brought out that pending modification, deployment of the carriers was severely restricted during summer and that the users were not satisfied with their performance.

1.13. The modification evolved by the Inspection Organisation was incorporated in 10 carriers for user/technical trials which were completed in January 1977. The modification was approved by the Army Headquarters in March 1977 for implementation on the remaining 24 carriers (95 received from supplier 'A' and 145 from supplier 'B'). The cost of modifications was estimated at about Rs. 6 lakhs on material alone.

1.14. In the meantime (December 1976), supplier 'A', who had been asked to bear the actual cost of modifications, replied that no obligation lay with him either in regard to reconstruction of the engine and gear box or in regard to participation in the cost of modifications carried out in India.

1.15. In June 1977 both the suppliers were requested to make necessary cost compensation for the modifications. Replies from the suppliers were awaited (December 1977).

1.16. The Ministry of Defence stated (December 1977) that the modification stores were under procurement and that the work of modification of 240 carriers was expected to be completed by the summer of 1978. The Ministry added that one of these carriers had remained off-road due to overheating.

[Paragraph 36 of the Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services)].

Placement of Order

1.17. The Audit Paragraph reveals that during July—October 1971, the Ministry of Defence concluded three contracts with two suppliers (A) and (B) for supply, *inter alia* of 250 numbers of special purpose carriers at a total cost of Rs. 1028.25 lakhs. The relevant details about these orders and the financial implications involved are as follows:

Month in which contract was concluded	Supplier	Quantity contracted	Rate	Total value	Schedule delivery date
(Rs. in lakhs)					
July 1971	'A'	100	3·87(FOB)	387·00	July-August 1971.
July 1971	'B'	100	4·275(CIF)	427·50	To be completed by 31st August 1971.
October 1971	'B'	50	4·275(CIF)	213·75	November 1971

1.18. The Committee desired to know the background necessitating the import of these carriers. The Defence Secretary informed the Committee as follows:

“The Armed Personnel Carriers are used for the support of Infantry personnel to carry them to the battle field. We were already looking for APCs from sometime around about 1970 but they had not materialised. By the time when these were ordered, we were in somewhat desperate need of APCs. This was in the context of a very extraordinary national emergency. We were being pushed into a War and it was suggested by the top command

of the Army that the A.P.Cs were very necessary for operational needs. In this particular case, the contracts were entered into to procure 250 of them, 100 of them from country 'A', 150 from country 'B'; in fact, some more were procured from country 'C'."

1.19. When enquired whether they had tried any other source, the Defence Secretary explained:

"We were going by all the information we had in respect of availability of APC from the Eastern, Western or other sources. This was the only source from which we could get them, and get them in time.

The particular time of the order when they were needed and actually came to be needed.....was the time when this problem of over-heating was not likely to be in our way. It really relates to the hotter summer months."

1.20. The Committee desired to know the mode of selection of suppliers 'A' and 'B' together with the details of the technical specifications relating to the carriers, prescribed in the supply orders. The Committee also enquired about the stage at which the inspection was to be carried out to ascertain whether the supplies were according to these specifications. In a note, the Ministry of Defence stated as follows:

"Normally selection of foreign suppliers in the case of weapon and other Defence equipment is based on study of published sources and trade literature. These are evaluated against *Qualitative Requirements*. Our technical specifications are not normally conveyed to a foreign supplier.

As per Article 3 of the contract with supplier (A) and Article 2.4 of the contract with Supplier (B), the stores were to be inspected and accepted after receipt in India."

1.21. The Committee desired to know as to when these carriers were first inducted into service. In a *note the Ministry of Defence informed as follows:—

"The APC in question were the first Wheeled APC procured by us. Concurrently we were also contracting for a similar *Wheeled* APC from another country. No Wheeled APCs were procured prior to 1971."

*Not vetted by audit.

1.22. Referring to the prices contracted with suppliers 'A' and 'B' which were Rs. 3.87 lakhs (FOB) and Rs. 4.275 lakhs (CIF) respectively, the Committee sought explanation for the difference in these prices. The Defence Secretary informed the Committee as follows:

"We tried to put them together on c.i.f. basis and comparison would then be—

Rs. 4.10 lakhs for the supply from Party A.

Rs. 4.27 lakhs for the supply from Party B.

The period of payment-terms of payment—in these two cases were different. In one case the rate of interest is 2 per cent and in the other case it is 4 per cent."

Guarantee for the proper functioning of the carriers

1.23. According to Audit Paragraph, the quality and proper functioning of the carriers were guaranteed by supplier 'A' upto 5,000 km. or till 12 months from the date of delivery, whichever was earlier. The guarantee offered by supplier 'B' was similar except that the 12 month period was to be reckoned from the day of arrival of these carriers at an Indian Port. The contract also specified the range of ambient temperature for the engine as (-) 40°C to (+) 50°C.

1.24. The Committee desired to know as to why the condition of '12 month guarantee' from the date of delivery was accepted in the case of supplier 'A' as distinct from the 12 months' guarantee from the day of arrival Indian Port, in the case of Supplier 'B'. In a note,* the Ministry of Defence informed as follows:—

"For the supply made on FOB, the period of 12 months' guarantee is often counted from the date of delivery of a vehicle and such an arrangement was accepted in the present case as a result of the terms that could be negotiated with the supplier."

1.25. Pointing out that the vehicles were to be used for quite a long time, the Committee enquired the reasons for obtaining guarantee only for 5000 kms. or for 12 months whichever was earlier. The Defence Secretary informed:

"There was the guarantee and there was the warranty. The other one was valid for ten years."

He further added:

"Beyond the period of guarantee the warranty governs the continuance of the functioning of that particular equipment against any manufacturing defect that may come to notice."

*Not vetted by Audit.

1.28. Elucidating the position further, another representative of the Ministry of Defence stated as follows:

“As far as the manufacturing defects are concerned, that covers a period of ten years as per the warranty clause of the contract. For any defect other than manufacturing, the guarantee stipulated a period of 12 months or 5000 kms whichever is earlier.”

Conditions for Acceptance

1.27. The contracts envisaged that final inspection would be carried out by the purchaser in India. The conditions for acceptance inspection *inter alia* stipulated that the normal operating temperature of oil in the engine would be 80°—90°C and that for short spells the maximum permissible oil temperature could be 110°C. The maximum permissible temperature in the gear box was not to exceed 110°C but for short spells temperature upto 120°C was permissible.

1.28. The Committee desired to know as to why the term ‘short spells’ was left vague without exactly specifying it. In a *note, the Ministry of Defence informed as follows:

“Short spell is generally of 10—15 minutes and no necessity to specify the same was felt at that time since there is no laid down definition for the term ‘Short Spell’ known to us.”

User trials on the carriers

1.29. As one carrier had been supplied earlier in 1970 by Supplier ‘A’ for trial purposes, 99 carriers delivered by this supplier were received in India in October-November, 1971. Carriers numbering 150, delivered by supplier ‘B’ were received in India during October 1971—January, 1972.

1.30. According to the Audit Paragraph, a sample carrier received from supplier ‘A’ in 1970 was subjected to user trials during March-April 1971, when it was discovered that the engine had a tendency to overheat. The Committee desired to know whether the fact of overheating noticed during this trial was formally brought to the notice of supplier ‘A’ before regular supplies were to commence and if so, outcome thereof. The Ministry of Defence intimated the Committee as follows:

“Representatives of Supplier ‘A’ were present in India during the trials carried out on one APC in March and April, 1971. Although there is no definite record to this effect, there

*Not vetted by Audit.

is reason to believe that they would have been atleast acquainted if not also associated with the outcome of the trials.

The problem of overheating was already known at the time of contracting the supplies which were procured because of operational necessity."

1.31. While enquiring about the ranges of ambient temperature under which the carrier was operated during the trial, the Committee also desired to know the effects of overheating on the performance of the engine/carrier. In a *note, the Ministry of Defence intimated as follows:—

"Overheating could give rise to problems relating to functioning of the vehicle and in the long run, effect the life of the engine. However, it should be noted that at the time when these vehicles were actually imported and required for operational purposes, there was no problem of high temperatures which are encountered only in summer months.

The purchase was made because of pressing operational need and presumably, in the hope that a satisfactory solution would be found for the problem of overheating which had come to notice. In fact, such a solution was indeed found at a later stage.

Meanwhile, the users were advised to make use of the vehicles keeping in view the problem of over-heating which had come to notice."

1.32. The Committee further ascertained whether preliminary sample trials were also conducted in the case of supplies from supplier 'B' and if so, whether the overheating difficulty was also experienced in the case of these carriers. In a note, the Ministry of Defence intimated as follows:—

"The vehicles from supplier 'B' were not among those tried and tested in March/April 1971, but their demonstration had been witnessed by our team in that country and their performance found satisfactory."

Joint Investigation in the defect of overheating

1.33. It is learnt from Audit that on the basis of user trials, General Officer Commanding Division had remarked on 31st March, 1971 that the carrier was not suitable for operation in a certain terrain.

1.34. On receipt of a defect report from a user unit regarding overheating of oil in the engine/gear box in 70 carriers received from

*Not vetted by Audit.

supplier 'A' a joint investigation was carried out by the representatives of supplier 'A' and of the Directorate of Inspection in July, 1972. During this investigation, overheating of oil was confirmed and it was also revealed that the oil temperature in the engine/gear box under ambient temperature condition of 40°-41°C rose to 120°C and beyond within 45 minutes to 1 hour.

1.35. The Committee desired to know whether any other defects were also noticed during the acceptance inspection by the Inspection Directorate. The Ministry of Defence intimated through a note that apart from the normal repairs and adjustments necessitated due to transit damage, no other defects were noticed.

1.36. According to the Audit Paragraph, temperature beyond 120°C could not be recorded specifically since the gauge fitted to the carrier was calibrated upto 120°C. Thereafter, the matter was discussed with supplier 'A' who assured the purchaser that operation of the engine/gear box would be quite safe even when the oil temperature reached 120°C since the lubricating oil used in India was of a superior quality and that he was satisfied that the working temperature would not go beyond 120°C under Indian conditions. This assurance was incorporated in a memorandum of understanding signed between the supplier and the Ministry on 25 July, 1972.

1.37. Since the defect of overheating in the carriers received from supplier 'A' was not rectified by the supplier's service team, the Committee desired to know the types of services rendered by the supplier when the defect of overheating was pointed out to them, under the service guarantee contract of March 1972 with the supplier. In a *note, the Ministry of Defence intimated as follows:

"In terms of the Service/Guarantee Contract signed with supplier team, the Service Team was *inter alia* to provide qualified technical assistance during the unloading, de-preservation and commissioning, to organise repairs, handle guarantee claims, attend to problems relating to operation, servicing repairs and to make frequent inspection of individual vehicles to forestall more serious problems. The Service team was, however, unable to render any specific service relating to the problem of overheating. Under Article 6 of the contract, Government of India was required to pay for all expenses connected with transportation of the Service Team in India and expenditure in connection with the use of work and equipment."

1.38. The Committee enquired whether the Government had technically examined the assurance given by supplier 'A' that operation

of the engine/gear box would be quite safe even when the temperature reached 120°C and if so, its outcome and follow-up action. In a *note, the Ministry of Defence intimated as follows:—

“The operation of the engine and gear box even when the temperature reaches 100°C and 120°C respectively was examined and it was found that it is reasonably safe to operate them for 15—20 minutes since the lubricating oil used by us starts breaking up only at about 140°C. However, continued operation at these higher temperatures is not recommended.”

1.39. The Directorate of Inspection had also written to the Ministry of Defence, suggesting as follows:—

- (i) Since the warranty in respect of the first lot of 19 carriers received from supplier 'A' was to expire in August 1972, a formal claim would have to be preferred on the supplier before that date.
- (ii) The carriers received from supplier 'B' suffered from similar defects of overheating since the maximum temperature of engine oil recorded was 117°C.
- (ii) The defect of overheating which was due to inadequacies of design should be examined by Research and Development (Vehicles) Organisation on the basis of which a decision should be taken regarding their future use.

1.40. The Audit Paragraph further reveals that the Directorate of Inspection also considered (August 1972) the defect of overheating to be of a very serious nature as it would affect the life expectancy of the engine and the gear box assemblies. The Directorate of Inspection had also observed that the performance of the carriers was not upto the prescribed specifications. In view of the defect, instructions had been issued not to deploy these carriers in certain regions.

1.41. The Committee desired to know whether in view of the defect of overheating noticed in the carrier, it was not considered advisable to have the guarantee period extended beyond 12 months. In a note, the Ministry of Defence stated as follows:—

“As the carriers were an urgent operational requirement, the contracts were signed on the terms given by the supplier. The question of extending the guarantee period was taken up with the supplier 'A' subsequently, who, however, did not accept the same.”

1.42. The Committee further enquired whether supplier 'B' was also similarly requested for extension of warranty and if so, results thereof. The Ministry of Defence intimated as follows:—

“The Supplier 'B' was approached on 6 April, 1973 and were asked that the warranty for the engine and gear box assembly should be extended. No reply in this regard has been received.”

1.43. The Committee desired to know the action taken on the suggestion made by the Inspection Directorate that the defect of overheating due to design inadequacies should be got examined by the Research and Development (Vehicles) Organisation. In a *note, the Ministry of Defence intimated as follows:—

“The problem of overheating was remitted concurrently to the R&D, the EME and the DGI to find a solution. In this case, the DSI's Organisation was able to come forward with a satisfactory solution.”

1.44. The Committee asked for a copy of the instructions issued by the Ministry not to deploy the carriers in certain regions in view of their poor performance. In a *note, the Ministry of Defence intimated as follows:—

“The problem of overheating was already in the knowledge of the Army Headquarters at the time of procurement which was made, nevertheless, on considerations of operational necessity. In the instructions issued by them, the users were cautioned of this problem and advised to keep this in view in the matter of terrain, temperature, etc.”

1.45. Referring to the rise in temperature beyond 120°C in the case of carriers supplied by 'A' and beyond 117°C in the case of those supplied by 'B', the Committee pointed out that it appeared that both the supplying countries being cold countries were insisting that this would not be dangerous or would not be harming the machinery. The Committee desired to know the views of the Army in this context. The Defence Secretary explained as follows:

“We did continue to debate with them for a long time. We did run into the problem of overheating even during March-

*Not vetted by Audit.

April 1971 trials. They felt that the oil which they were using was superior. They said heating upto 120°C may be allowed. In fact they modified their earlier instruction which was for 110° to 120°C. But the basic thing is that this problem of overheating had come to notice even before we purchased it. This was an urgent operational necessity. There was no hope of getting APC from any other source.”

1.46. Referring to the explanation given by the Ministry of Defence that “the problem of overheating was already known at the time of contracting the supplies”, the Committee desired to know why it was not deemed necessary to make it as one of the terms of the contracts that the defect of overheating would be removed by the suppliers at their own cost. In a *note, the Ministry of Defence intimated as follows:

“As was explained in the course of the oral evidence given by the Defence Secretary on 11 August 1978, under the operational compulsions facing us in 1971, the decision making process had to be compressed and simplified in order to enable us to procure the necessary military hardware in time, for the operations that—it was apprehended—might be forced upon us by reason of the developing circumstances. In the circumstances, a stipulation in the contract that the defect should be rectified by the suppliers at their own cost appears to have either got over-looked or was perhaps not found feasible.”

1.47. It is seen from the Audit Paragraph that in September 1972, supplier ‘A’ issued an amendment to the operating instructions to the effect that the oil temperature might be allowed to go upto 120°C for a short period. The Committee desired to know the implications and anticipated benefits of this amendment. In a *note, the Ministry of Defence informed as follows:—

“The amendment to the operating instructions issued by the Supplier ‘A’ September 1972 has helped in that:—

- (a) The Guarantee and Warranty clauses are now operative upto this temperature; and
- (b) this gave a guideline for the User when operating in areas of high temperature.”

*Not vetted by Audit.

1.48. The Audit Paragraph further reveals that the Ministry of Defence had stated in February, 1973, that by specifying the maximum acceptable temperature as 120°C, the problem of overheating had not been resolved and asked the supplier to suggest suitable remedial measures or modifications to the engine and gear box assemblies with a view to obviating the effect of overheating. Supplier 'A', however, replied that the functions of the engine and gear box assemblies were not affected by overheating. The Committee desired to know whether the Government had accepted this contention of the supplier and if not what further steps were taken by them to have the defect of overheating removed by the supplier. In a *note, the Ministry of Defence informed as follows:—

“We had in February 1973 conveyed to supplier 'A' that by merely specifying the maximum acceptable temperature at 120°C the problem of overheating has not been resolved as temperature still continues to go beyond 120°C. Remedial measures were asked for and replacement of existing gauges to read beyond 120°C. They were further reminded on:—

- (i) 27-3-72
- (ii) 5-4-1974
- (iii) 1-6-1974
- (iv) 13-12-1974
- (v) 4-4-1975.

Supplier 'A' replied on 11-4-1975 that if their revised instructions of September 1972 are scrupulously followed the vehicle can be used without any constraint. Supplier 'A' was again reminded on 4-6-1975 to settle the issue as well as to reimburse cost of modifications. Reminded again on 14-1-1976. Issue again discussed with representatives of supplier 'A' in Ministry on 30-4-1976.

7-12-76—Supplier 'A' intimated about modifications carried out in India and asked to agree to make payment thereof.

21-12-76—Supplier 'A' rejects Indian Claim.

Issue subsequently discussed on different occasions in Feb. 77, on 18-6-77, 28-12-77 and the latest in April 1978.”

1.49. It is seen from the Audit Paragraph that the defect of overheating in respect of the carriers received from supplier 'B' was taken

*Not vetted by Audit.

up with them by the Ministry in April 1973 by which time the Guarantee period had already expired. The Committee desired to know the reasons for not bringing the defect of overheating to the notice of supplier 'B' within the guarantee period. In a *note, the Ministry of Defence informed as follows:

"The issue regarding the overheating of engine assemblies in respect of vehicles received from Supplier 'B' was in fact taken up with them by the Defence Ministry on 14-9-72, more than a month before the *Guarantee* was to expire. It is regretted that this point escaped notice when the draft Audit para was referred to the Ministry for examination of facts."

Limitations imposed by the defect of overheating.

1.50. The Audit Paragraph reveals that the Directorate of Inspection informed the Ministry of Defence in September 1973 that in view of the serious limitations imposed by the defect of overheating on the deployment of the entire fleet of carriers, the users were pressing for a solution to the problem both in regard to provision of temperature gauges with extended registration range to measure temperatures beyond 120°C and for effecting improvements/modifications in order that the defect was entirely removed.

1.51. The Committee desired to know the specific steps taken by the Ministry on the aforesaid report by the Directorate of Inspection, emphasizing urgent need for finding solution to the problem of overheating as this limitation proved to be a serious handicap in the deployment of the entire fleet of carriers. In a *note, the Ministry of Defence informed the Committee as follows:

"The DGI had urged solution to the problem of overheating which had imposed serious limitations to the deployment of the APC Fleet. The issue was discussed with a visiting delegation of supplier 'A' in Sept-Oct. 1973 who promised to send an early reply. No reply was forthcoming despite reminders issued on 5-4-1974, 1-6-1974, 13-12-1974 and 24-3-1975. On 4-4-1975 the issue was discussed with local representatives of supplier 'A' who again promised an early reply. In this meeting they were also asked to consider whether they would reimburse the cost of modifications being worked out by us.

Supplier 'A' replied on 11-4-75 stating (i) that revised instructions of September 1972 specifying that APC can be exploited at 100°C and that as soon as temperature reaches 120°C, a decreasing on the load of engine should be carried out; (ii) that if above instructions are strictly followed, the vehicle can be used without any constraint."

1.52. It is seen that supplier 'A' were repeatedly stating that if all the revised instructions were scrupulously followed, motor and gear-box temperature could not exceed 120°C. The Committee desired to know whether the revised instructions were or were not scrupulously followed. Since the Committee felt that demonstration for scrupulously following these revised instructions should have been given before the representatives of supplier 'A' when they were in India, the Committee sought specific confirmation whether such a demonstration was actually arranged or not. In a *note, the Ministry of Defence intimated as follows:—

"From the user point of view, the revised instructions were being followed and in fact additional precautions were being taken. No demonstration, however, was arranged by the supplier in India."

1.53. The Committee also desired to know the action taken by the Ministry to arrange for the temperature gauges with extended registration range to measure temperatures beyond 120°C and also sought confirmation whether such temperature gauges were actually produced by supplier 'A' and used in their country. In a *note, the Ministry of Defence informed as follows:

"There is no definite information whether in the country of supplier 'A' temperature gauges registering temperatures beyond 120°C are manufactured but on our part, we had approached them to supply such gauges."

1.54. It is seen from the Audit Paragraph that since no tangible solution to the problem was suggested by the suppliers, the Directorate of Inspection decided in September, 1974 to carry out an immediate study by the Controllerate of Inspection (Special Vehicles) with a view to evolving a suitable modification for removing the defect.

1.55. It is further seen that the aforesaid study by the Controllerate of Inspection (Special Vehicles), which was taken up in October, 1974 was completed in May, 1976, evolving modifications to be

carried out in the carriers for removal of the defect of overheating. This study had also clearly brought out that pending these modifications, deployment of the carriers was severely restricted during summer and that the users were not satisfied with their performance. The Committee desired to know the reasons for taking a period of about 2 years in the completion of this study, which was required to be conducted immediately. In a note the Ministry of Defence intimated as follows:

“It is to be remembered that the trials had to be carried out in different ranges of terrain. Inevitably, therefore, such trials involved quite a few months and in this case a period of 20 months or so was actually found necessary.”

Carrying out and result of modifications

1.56. It is seen from the Audit Paragraph that the modifications evolved by the Directorate of Inspection were incorporated in 10 carriers for user/technical trials which were completed in January, 1977. These modifications were consequently approved by the Army Headquarters in March, 1977 for incorporation in the remaining 240 carriers at an estimated cost of about Rs. 6 lakhs on material alone. The Committee desired to know whether the modification stores have since been procured together with the date and cost of their procurement. The Committee also desired to have the latest position with regard to the execution of these modifications in all the 240 carriers. In a *note, the Ministry of Defence informed as follows:

“The modification prepared by the Inspection Agency and tried out on 10 APCs was found to be satisfactory. The Modification Kits for all the affected APCs have been procured indigenously and most of the vehicles have already been modified. The remainder will be completed during 1978. The actual cost of the Modification Kit per vehicle is Rs. 2500.00. There has been no increase in the estimated cost.”

1.57. The Committee desired to know the mileage covered by each of the 250 carriers so far together with the specific clarification as to how far the defects in the carriers have affected their operational use. In a *note, the Ministry of Defence stated as follows:—

“The APCs with the troops have logged varying runs of engines from 2,000 to 8,000 kms.

The APCs procured were put to operational use even though the problem of overheating which had come to notice had to be kept in view in using them."

1.58. The Committee desired to know whether comprehensive tests have been made on the carriers on incorporation of the modifications therein so as to ensure that they are now completely fit for deployment in all the terrains. The Defence Secretary informed the Committee as follows:—

"With the modification that has been made, we have reason to believe and hope that this will now function in all terrains."

1.59. Elaborating the position further, another representative of the Ministry stated as follows:—

".....after the modifications had been carried out in this Vehicle.....the performance had been very satisfactory."

Recovery of the cost of modifications from the suppliers

1.60. The Audit Paragraph reveals that supplier 'A', who had been asked to bear the actual cost of modifications, replied that no obligation lay with him either in regard to reconstruction of engine and gear box or in regard to participation in the cost of modifications carried in India. In June, 1977 both the suppliers were requested to make necessary cost compensation for the modifications. Replies from the suppliers were stated to be awaited (December 1977). The Committee desired to know the latest position about the recovery of the cost of modifications from suppliers 'A' and 'B'. In a *note, the Ministry of Defence intimated as follows:

"On 21-12-1976, supplier 'A' intimated that APC being used in India is of the same version as similar vehicles delivered to many other countries with climatic conditions similar to India but where no defects of this nature were encountered. The vehicles demonstrated well in the various terrains and conditions. They further went on to claim that if the revised technical instructions as issued by them in September 1972 are strictly applied, the performance of the gear box and engine is not affected. They have also stated that if all the revised instructions are scrupulously followed, motor and gear box temperature cannot exceed 120°C. For these reasons, they have

*Not vetted by Audit.

not agreed to participate in the cost of any modification made by the Indian side. On the other hand, they have recommended that we strictly follow, the exploitation documents. Supplier 'B' informed on 6-3-78 that they would not be able to reimburse to the Indian Government the cost of modification of vehicles as according to the stipulation in the 2 contracts, the equipment delivered was of the same standard as for their own Armed Forces and further suggested that any modification done by us would have to be borne by the Indian side."

1.61. The Committee note that during July—October 1971, the Ministry of Defence had concluded 3 contracts with two foreign suppliers, 'A' and 'B' for the supply, inter alia, of a total of 250 special purpose carriers at a total cost of Rs. 1028.25 lakhs. Deliveries of the vehicles were received between October 1971 and January 1972. A defect was noticed in these vehicles which seriously affected their operation in certain regions during a certain season. To make them fully operational, repairs had to be carried out departmentally involving an estimated expenditure of Rs. 6 lakhs on material alone which the suppliers have so far refused to reimburse, although the defect was in the nature of 'manufacturing defect' for which the suppliers were responsible if it was pointed out to them during the warranty period. The Committee appreciate the submission of the Defence Secretary before them that the supplies were obtained "in the context of a very extraordinary national emergency in the hope that a satisfactory solution would be found for the problem of overheating" and that "there was no hope of getting Armoured Personnel Carriers from any other source." This factor substantially mitigates the gravity of the lapses in these transactions brought to the notice of the Committee by Audit. Nevertheless, the fact remains that, had the emergency continued into the ensuing summer, the field formations would have had to grapple with grave problems on account of these defective vehicles. They therefore wish to identify and record the lapses with a desire that the Ministry of Defence should hereafter be more cautious in entering into import transactions for defence stores even during an emergent situation and endeavour to avoid these lapses. The shortcomings and lapses in the transactions pointed out in the Audit Paragraph and confirmed during evidence, written as well as oral, are as under:—

- (i) The contract provided that the "stores were to be inspected and accepted after receipt in India". There was no

provision for preshipment inspection. In the case of stores to be imported, it is advisable to have preshipment inspection to vouch for the quality of the stores being as contracted for.

- (ii) In the case of supplies from 'B', the 12 month guarantee period was to be reckoned from the day of arrival of these carriers at an Indian port. It would have been more favourable to the country if this period was reckoned from the date of delivery as was the case in respect of supplies from source 'A'.
- (iii) The conditions for acceptance inspection inter alia stipulated that the normal operating temperature of oil in the engine would be 80°—90°C and that for "short spells" the maximum permissible oil temperature could be 100°C. The maximum permissible temperature in the gear-box was not to exceed 110°C but for "short spells" temperature up to 120°C was permissible. As the maximum permissible oil temperature in the engine and gear-box directly affects the operational efficiency of the vehicles, the use of the words "for short spells" which gave a vague description, should have been avoided and it should have been insisted upon the suppliers that the specifications were clearly worded.
- (iv) It is stated in evidence that "the problem of over-heating was already known at the time of contracting the supplies". That the engine had a tendency to overheat is stated to have been "discovered" also during the March-April 1971 trials of a sample received from supplier 'A' at which the supplier's representatives were present. Yet, the Ministry of Defence failed to formally approach the supplier to rectify the defect before transshipment which began 6 months later.
- (v) Even when the trial of the sample of supplier 'A' had disclosed the defect, no samples were asked for from supplier 'B' for trial. The reason given during evidence was that "their demonstration had been witnessed by our team in that country and their performance found satisfactory". As it happened, the supplies from the second supplier also turned out to be similarly defective.
- (vi) In a Memorandum of Understanding signed between supplier 'A' and the Ministry on 25-7-72, the supplier assured the purchaser that the working temperature would not go

beyond 120°C under Indian conditions and that the engine would be quite safe even when the oil temperature reached 120°C. The vehicles were however equipped with instruments which could not record temperatures beyond 120°C. The assurance was therefore ab initio meaningless.

- (vii) In terms of the service/guarantee contract of March 1972 with supplier 'A' Government of India was required to pay for all expenses connected with the transportation of the service team in India and expenditure in connection with the use of working equipment. The team was to provide qualified technical assistance and inter alia "attend to problems relating to operation, servicing repairs and to make frequent inspection of individual vehicles to forestall more serious problems". The team was, however, unable to render any specific service relating to the problem of overheating. Thus, the Ministry allowed another opportunity to slip by to have the patent defect removed under the contract.
- (viii) It was stated that "the decision making process was compressed" on "operational compulsions" and also in view of the fact that at the particular time of the order they (vehicles) were needed and actually came to be needed "was the time when this problem of overheating was not likely to be in our way". These arguments are rather weak in view of the fact that cost of procurement was no less than Rs. 10.28 crores and the vehicles were not only for one-time use but had to be borne with for a long time. Fortunately, the emergency ended in a shortwhile. Had it continued into the ensuing summer, it would have created problems for the field formations.
- (ix) It was only in September 1974 that the Directorate of Inspection decided to have an immediate study carried out into the problem of overheating by the Controllerate of Inspection (Special Vehicles). This decision should have been taken much earlier as in August 1972 itself the Directorate of Inspection had confirmed this defect of overheating to be of a very serious nature proving to be a major handicap in the deployment of these carriers and also when no tangible solution of the malady had been forthcoming. Further, when an immediate study was emphasised in the decision of 1974, it took about 2 years for the Controllerate of Inspection (Special Vehicles) to

complete this study in May 1976 and evolve suitable modifications. The matter obviously did not receive urgent attention at all these stages.

1.62. The Committee hope that the work relating to the carrying out of modifications in the 240 carriers, which was expected to be completed by the end of December, 1978, has been completed. The Committee would like to be informed whether these carriers are now entirely fit for effective deployment in all seasons and terrains. The Committee would also like to be informed of the corrective measures adopted by the Government for avoiding lapses enumerated in the preceding para.

Incorporation of incorrect data in a contract

Audit Paragraph

2.1. In June 1977, a High Court dismissed a petition of a Commander Works Engineer for leave to appeal to the Supreme Court against its earlier judgment (March 1977) upholding the compensation awarded by an arbitrator appointed by the Engineer-in-Chief in respect of a work done by a contractor. An amount of Rs. 9.88 lakhs was paid to the contractor in August 1977 in terms of the Court decree in addition to Rs. 5.81 lakhs admitted by the Department. The salient features of the dispute were as follows:

“Tenders were invited (January 1969) by a Zonal Chief Engineer for the construction of access roads to a Naval depot at a station (cost as per schedule of rates: Rs. 5.38 lakhs). Two quotations—one for Rs. 7.80 lakhs and the other for Rs. 5.49 lakhs, 45 per cent and 2 per cent respectively over the above cost—were received. The Zonal Chief Engineer accepted the lower tender and concluded a contract with the tenderer in May 1969. The work was to be completed within 9 months. Earthwork *inter alia* comprising the following was provisionally included in the contract:

	Quantity in Cu. m.	Rate Cu. m.
Rough excavation in hard soil	44,300	Rs. 5.78—7.13
Excavation over areas in hard soil	2,420	Rs. 4.19—5.94
Excavation over areas in ordinary rock	550	Rs. 8.41—9.83

2.2. The contract also provided that no deviation changing the original nature and scope of the contract should be ordered beyond + 50 per cent of the value assessed of individual trade items specified in the contract.

2.3. Earth required for the work was to be obtained by excavation from 5 specified quarries. Work commenced in June 1969 and in September/October 1969, the contractor informed the Garrison Engineer that hard soil in 2 quarries had been excavated and sought permission to start work in ordinary rock. The Garrison Engineer approached (October 1969) the Commander Works Engineer seeking approval for a deviation order to the contract on the plea that cutting hillsides in laterite i.e. ordinary rock (not catered for in the contract), was required in all the quarries. The proposed deviation order provided for 33,225 Cu m. of 'rough excavation in soft (ordinary) rock at the rate of Rs. 9.05-10.70 per Cu.m. by reducing an equal quantity from rough excavation in hard soil', involving an estimated additional expenditure of Rs. 1.14 lakhs. In February 1970, the contractor requested a quick decision in order to complete the work before monsoon, failing which the work was likely to be delayed for another year resulting in loss to him. In March 1970, after inspection of the site by the Zonal Chief Engineer and the Commander Works Engineer along with the contractor, the Commander Works Engineer intimated to the Garrison Engineer that the strata were only 'hard soil' and that the question of deviation order did not arise. The contractor was informed accordingly by the Garrison Engineer and directed to complete the work by the due date.

2.4. Representations were made by the contractor (March—July 1970) indicating his disagreement inability to complete the work in time and intention to claim compensation for delay in decision. The contractor also cited the recommendations of the Garrison Engineer classifying the work as 'rough excavation in soft rock', disputed the decision to treat it as 'rough excavation in hard soil' and requested the Zonal Chief Engineer to reconsider the decision with a view to avoiding arbitration in the dispute. The Zonal Chief Engineer informed (July 1970) the contractor that the dispute could be referred to arbitration only after completion of the work under the terms of the contract. He, however, suggested that four patches—two selected by him and two by the Garrison Engineer—might be left undisturbed in each quarry in order that the soil could be examined if an arbitrator were appointed. Work was recommenced in August 1970 and completed in March 1972.

2.5. Soon after recommencing the work, the contractor informed the Garrison Engineer that the work being done by him was in 'water and liquid mud and interrupted by tides' and that he should be allowed extra payment on that account. This was, however, not agreed to by the Garrison Engineer as no extra charges were payable under the contract due to site conditions. Since the dispute still persisted, the Engineer-in-Chief in November 1970 (during the course of execution of the work) appointed a Superintending Engineer of the Zonal Chief Engineer's office as an arbitrator.

2.6. The arbitrator (who retired from service in November 1971) awarded in July 1972 a sum of Rs. 8.91 lakhs in favour of the contractor against his claims totalling Rs. 12 60 lakhs as under:

	Amount awarded (Rs. in lakhs)
The extra amount claimed by the contractor on account of classification of the strata as ordinary rock instead of a hard soil was worked out for 325 Cu.m. under the deviation limit in the contract and for the balance quantity at enhanced rates (Rs. 9.05—10 29 per Cu.m.). The Commander Works Engineer contended that both excavation and earthwork were to be treated as one item for the purpose of deviation limit under the contract and that the extra amount payable, even assuming that excavation was in ordinary rock, worked out to only Rs. 0.66 lakh. The arbitrator, however, admitted the claim in full.	2.69
The claims of the contractor for an extra amount of Rs. 8.87 on account of his working in foul positions (water, mud, tidal conditions etc) and loss due to flood were contested by the Commander Works Engineer on the ground that no joint records of quantities of work affected had been submitted in support of these claims. The arbitrator did not, however, accept this contention and partly admitted the claims.	6.22
Total:	8.91

2.7. The award of the arbitrator was contested by the department in a Court mainly on the following grounds:

- the general conditions of contract had been wrongly interpreted in that instead of determining the maximum quantity of work permissible under the contract by increasing the total value of all excavation and earthwork by 50 per cent, the quantity of individual items of excavation and earthwork had been enhanced; and
- No records had been relied upon to ascertain the quantity of earth sunk and soil washed away and the award was based on hypothetical quantities given by the contractor.

The case was, however, dismissed (October 1975) by the Court on the plea that:

- the award could not be remitted or set aside when a mistake did not appear on the face of it;
- the work (excavation in hard soil) had been radically changed which should have required fresh agreement; and
- the contractor had to work in the rainy season and floods due to the delay by the higher authorities in approving the recommendations made by the Garrison Engineer.

2.8. A Court decree accepting the award with 6 per cent interest payable from the date of decree was accordingly issued.

2.9. An appeal filed by the Commander Works Engineer against the Court decree in May 1976 was dismissed (March 1977).

2.10. The following interesting points were observed in this connection:

- The quantity of 'excavation over areas in ordinary rock' indicated in the contract (550 Cu.m.) was unrealistic, the actual quantity excavated being 35,002 Cu.m. Even before tendering, the Garrison Engineer had suggested (March 1969) that cutting of hill-sides should be indicated as both 'hard soil' and 'laterite' (ordinary rock)—without any break-up—but this was not agreed to.
- The Ministry of Finance (Defence) had pointed out (June, 1973) that incorrect data of soil conditions incorporated in the tender had led to arbitration and consequent loss which had to be regularised and responsibility fixed.
- In his statement to the arbitrator, the contractor had stated (April 1972) that he had never applied for arbitration and

that the Engineers on their own had nominated the arbitrator.

- The payment made to the contractor by way of interest alone worked out to Rs. 0.96 lakh. The total cost of the work amounted to Rs. 15.69 lakhs, i.e., 286 per cent of the contracted cost.

2.11. The Ministry of Defence stated (December 1977) that it was not a case of incorporating incorrect data of soil conditions in the tender documents but that of classification of the excavated material and that the contention of the Department leading to the classification of the excavated material was not accepted by the arbitrator. The Ministry added that the extra payment allowed to the contractor was not being treated as a loss to Government.

[Paragraph 22 of the Report of C. & A.G. for the year 1976-77, Union Government (Defence Services)]

Finalisation of details for earth work

2.12. According to the Audit paragraph, earth work *inter-alia* comprising the following was provisionally included in the contract entered into in May, 1969, for the construction of access roads to a Naval Depot:

	Quantity in Cu.m.	Rate cu.m.
Rough excavation in hard soil	44,300	Rs. 5.78—7.13
Excavation over areas in hard soil	2,420	Rs. 4.19—5.94
Excavation over areas in ordinary rock	550	Rs. 8.41—9.83

2.13. The Committee desired to know the basis on which the aforesaid break-up of hard soil and ordinary rock was determined for inclusion in the contract. In a note, the Ministry of Defence intimated the Committee as follows:

“The break up of hard soil and ordinary rock was determined on the basis of the quantity of these materials required for the work in hand. 44,300 Cu.m. of hard soil was required for the embankment of the road. This excavation was to be carried out from the soft layers of quarries without excavating into harder layers involving ordinary hard rock. 2,420 Cu.m. of excavation over areas in hard soil was required for the cutting on the road alignment to

for the gradients of the roads. 550 Cu.m. of ordinary rock was required for cutting for the formation of the approach road."

2.14. The Committee further desired to know whether detailed investigations on soil strata were conducted before assessing the quantities of hard soil and ordinary rock for inclusion in the tender document, and if so, details therefor and action taken thereon. The Committee also desired to know whether prior expert opinion was obtained before finalising the requisite details. The Ministry of Defence intimated the Committee as follows:—

"No detailed soil investigation or determination of soil type was considered necessary. The soil was visually examined and classification for purposes of excavation was to be based on the types of implements used for excavation. These were ascertained by the normal "trial pit method"."

2.15. According to the Ministry of Defence, no expert opinion was obtained, nor was it considered necessary.

2.16. It is seen from the Audit Paragraph that earth required for the work was to be obtained by excavation from 5 specified quarries. The Committee desired to know whether any excavation had been done from these quarries in the past and if so, details of the soil strata then found. The Committee also sought confirmation whether the portions of the areas in these quarries from where hard soil was to be excavated, was indicated in the drawing. The Ministry of Defence informed the Committee as follows:

"There are no records available to show that excavation was carried out from these quarries earlier.

All the quarries 'A', 'B', 'C', 'D' and 'E' from where the cutting of hard soil was to be done had been marked in the site plan attached to the contract."

2.17. It is understood from Audit that in the Military Engineer Services the term 'Burrow Pit' site denotes areas where soil is obtained from excavation and 'Quarry' denotes areas where strata are rock. The Committee enquired as to why these areas were described as "quarries" and not "burrow pits" if mostly hard soil was found there. The Ministry of Defence explained* the position as follows:

"The contention that the term quarry denotes rock strata is not correct. For example, sand quarry, quarrying for

*Not vetted by Audit.

Murram are normally used terms. In general, **Burrow pits** mean pits from which soil is excavated. In the case of quarry, it will be of larger areas and may be of a hill side above ground level."

2.18. It is seen from the Audit Paragraph that in October 1969, the Garrison Engineer approached the Commander Works Engineer seeking approval for a deviation order to the contract on the plea that cutting hill-sides in laterite, i.e., ordinary work, not catered for in the contract, was required in all the quarries. The Committee desired to know whether at this stage or even earlier, the Department had considered the possibility, by choosing any alternative site for excavating hard soil, where laterite strata did not occur. In a note, the Ministry of Defence have intimated as follows:

"There was no place where hard soil not involving laterite beds could be obtained from the Defence Land. Transportation of soil from outside would have been uneconomical and also would have led to contractual implications since it was deviation from the contract."

2.19. The Committee further desired to know as to how the 'laterite' was to be classified as per standard schedule of Rates. The Ministry of Defence informed the Committee as follows:

"Laterite can be treated as hard soil as well as ordinary rock under different circumstances. It is treated as Hard Soil if it requires close application of picks to loosen and does not afford greater resistance to digging than the hardest of any of the items such as stiff heavy clay, shingle or small boulders under the provisions of clause i(b) (vii) on page 10 of SSR 62 which forms a part of the contract. It is however treated as ordinary rock if it can only be quarried or split with crowbars or wedges under the provisions of clause 1(c) (i) on page 10 of the same SSR."

2.20. It is seen from the Audit Paragraph that in October 1969, the Garrison Engineer proposed a deviation from the contract for 33,225 cu.m. of 'rough excavation in soft (ordinary) rock' at the rate of Rs. 9.05 to Rs. 10.70 per cu.m. by reducing an equal quantity from 'rough excavation in hard soil' involving an estimated additional expenditure of Rs. 1.14 lakhs. The Committee desired to know whether at least at this stage, it was not considered desirable to have the soil strata examined by a geologist or to obtain from the College of Military Engineering a test report on the nature of the soil strata. The Ministry of Defence intimated the Committee as follows:

"The deparment has at no stage disputed the existence of laterite in the quarries. The laterite excavated by the contractor was in its virgin state covered by a soil cushion. Since it was not exposed and weathered, it was soft in nature. The dispute was whether to pay this as a hard soil or soft rock. In this connection it is also submitted that the faces of the quarries left after the work showed only close pick-axe marks thus distinctly indicating that the work had been carried out by use of ordinary implements. However, the Deviation order was initiated by GE as he felt that laterite should be classified for the purpose of excavation as ordinary rock under clause 1 (c) (i) on page 10 of SSR 1962. The GE's proposal to carry out excavation in soft rock from quarries A and B for filling in embankment of road work was not agreed to by the CWE. CWE also directed the GE to obtain hard soil from quarries A, B, C, D and E, marked in the Contract drawing as per terms of contract. The necessity for getting advice of geologist|CWE did not arise as there was no doubt."

2.21. The Committee desired to know the reasons for not accepting the Garrison Engineer's suggestion of March 1969 that cutting hill sides should be indicated as both 'hard soil' and 'laterite' (ordinary rock) without any breakup. In a note, the Ministry of Defence explained as follows:

"This case is about 10 years old and it is regretted that there is nothing on record to show why the amendment suggested by the Garrison Engineer was not agreed to. However, presumably as the classification of Hard Soil as well as ordinary rock for the purpose of excavation was to be done on the basis of hardness of strata and implements to be used for excavation, no particular mention of laterite was made. Since the outcrop in the entire area was generally of laterite, any mention of laterite under excavation in hard soil might have conflicted with the item of ordinary rock provided separately in the schedule."

2.22. It is further seen from the Audit Paragraph that in March 1970, after inspection of the site by the Zonal Chief Engineer and the CWE alongwith the contractor, the Commander Works Engineer intimated the Garrison Engineer, who in turn informed the contractor that the strata were only 'hard soil' and that the question of deviation order did not arise.

2.23. The Committee desired to know the basis on which it was considered by the Zonal Chief Engineer, that the strata were only 'hard soil' and not ordinary rock (laterite). In a note, the Ministry of Defence intimated as follows:

"Chief Engineer gave guide lines indicating the basic principles for deciding the strata. Relevant contents of CE's instructions are reproduced below:—

"The basic fact in deciding the classification of hard soil/ordinary rock is the hardness of the strata met with. You are, therefore, advised to conduct an experiment at the site in the presence of the contractor and to decide the correct classification on the following basis:—

"When worked with picks|crow bar, if we can get blocks of laterite stones hard enough and useful for stone masonry, the strata can be classified as 'Ordinary Rock'. On the other hand, if the strata can be excavated with picks and shovel and if it is not possible to quarry laterite stones suitable for masonry works, it should be classified as 'Hard Soil'."

As it was found that the existing strata could be excavated by close application of picks, Garrison Engineer decided that it was hard soil only."

2.24. In September|October, 1969, the contractor informed the Garrison Engineer that hard soil in 2 quarries had been excavated and sought permission to start work in ordinary rock. Again, in February, 1970 the contractor requested a quick decision in order to complete the work before monsoon. But the contractor was informed about the decision by the Garrison Engineer after inspection of the site in March, 1970. The Committee desired to know the reasons for taking 6 months to communicate the decision to the contractor on the classification of soil strata. The Ministry of Defence informed the Committee as follows:

"The issue had to be examined at various levels. As the contractor continued to dispute the contentions of the Department, joint inspection was also required by the Zonal Chief Engineer who was located in Madras. Under the circumstances, the delay which occurred is considered unavoidable."

Referring the dispute to Arbitration

2.25. It is seen from the Audit Paragraph that while replying to the contractor's representation for reconsideration of the decision on

the classification of soil strata, the Zonal Chief Engineer informed him in July, 1970 that the dispute could be referred to arbitration only after completion of the work under the terms of the contract and suggested that 4 patches be left undisturbed in each quarry for later examination of soil. The Committee desired to know as to how far this suggestion of the Zonal Chief Engineer was actually implemented and if so how many such patches were subsequently examined. The Ministry of Defence confirmed that four patches were left undisturbed as directed by the Chief Engineer and all these patches were examined by the Arbitrator.

2.26. The Committee further enquired whether there existed any clause in the contract to the effect that reference could be made to arbitration only after completion of the work. The Ministry of Defence intimated the Committee as follows:

“IAFW-2249, General conditions of Contract formed part of this Contract. Relevant extract from condition 70 of IAFW-2249 is reproduced below:—

“All disputes, between the parties to the contract (other than those for which the decision of the CWE or any other person is by the Contract expressed to be final and binding) shall after written notice by either party to the Contract to the other of them, be referred to the sole arbitration of an Engineer officer to be appointed by the authority mentioned in the tender documents.”

“Unless both parties agree in writing such references shall not take place until after the completion or alleged completion of the works or termination or determination of the Contracts under Condition Nos. 55, 56 and 57 hereof.”

2.27. The Audit Paragraph reveals that soon after recommending the work in August, 1970, the contractor informed the Garrison Engineer that the work being done by him was in ‘water and liquid mud and interrupted by tides’. This was, however, not agreed to by the Garrison Engineer as no extra charges were payable under the contract due to site conditions. Since the dispute still persisted, the Engineer-in-Chief, during the course of the execution of the work itself, appointed in November, 1970, a Superintending Engineer of the Zonal Chief Engineer’s office as an arbitrator. The Committee desired to know the basis on which the Garrison Engineer had disputed the contractor’s contention that no work had been executed in four positions and under tidal condition. The Committee also sought confirmation whether this stand was also subsequently pressed

in arbitration. In a note, the Ministry of Defence intimated as follows:

“The work on embankments was to be executed on existing paddy fields. Depending upon the season the water level if any was between 3” and 9” only. Any earth work carried out beyond this height was over the consolidated portion of the embankments. Thus there was no question of liquid and or foul position involved in this work. In this connection reference is invited to condition 4 of IAFW-2249 which is also pertinent as the nature of the site is supposed to be verified by the Contractor before quoting. As regards interruption due to tides the explanation is as follows:—

The area to the right of embankment was a fan-shaped catchment having only one culvert outlet. The nullah joins the Alwaye river approximately 1 KM down stream. Thus in the months of July, August during heavy rain falls, the surface water floods to the height due to narrow take off point and added to it the run off is arrested due to swollen waters of Alwaye river which gives a back flow. This is also aided by high tide into the estuary 15 KM down stream.

The work on embankment during these months was also at standstill and only the portion of work already executed had submerged. Therefore, application of tidal coefficient is not relevant to the fact.

During the arbitration, it was stressed that the work was affected neither by tides nor by four positions.”

2.28. The Committee desired to know the details about the specific disputes between the Department and the Contractor which necessitated the appointment of an arbitrator by the Engineer-in-Chief in November, 1970 in contravention of their earlier stand that the arbitrator would be appointed on completion of the work. The Committee also sought elucidation whether the contractor had specifically insisted on arbitration after recommencement of work in August, 1970. The Committee further enquired whether any time-limit was prescribed for the arbitrator to finalise his award and if so, whether he actually adhered to this time-limit. The Ministry of Defence explained the position as follows:

“When the particulars for appointment of Arbitrator was submitted in Oct. 70, there was a dispute regarding the

classification of soil at site. Contractor contended that the excavation is in laterite which is to be classified as ordinary rock as per SSR 62 Para C(i) on page 10. GE/CWE contended that even though it was laterite it could be excavated by close application of picks which is to be classified as Hard Soil *vide* para b(vii) on page 10 of SSR 62. Since the dispute was persisting, and though the contractor had recommended the work in August 1970, he was not progressing the work, the Chief Engineer requested E-in-C to appoint an arbitrator during the progress of the work itself as a special case. The contractor however did not specifically insist in writing for the appointment of an arbitrator, presumably because he was aware that MES were already progressing the case for appointment of an arbitrator.

No time limit was prescribed while appointing the Arbitrator."

2.29. It is further seen from Audit paragraph that in his statement to the arbitrator, the contractor had stated in April 1972, that he had never applied for arbitration and that the Engineers on their own had nominated the arbitrator. The Committee desired to know whether the action of the department in referring the disputes to arbitration of its own violation was in the interests of Government. The Ministry of Defence intimated the Committee as follows:

"The contractor had refused to progress the work without resolving the dispute of the classification of the strata. He had also asked for arbitration verbally several times. In the interest of work, the arbitrator was appointed during the currency of the contract. It may be mentioned that the contractor resumed work only after the assurance that an arbitrator would be appointed."

Challenging of Arbitrator's decision in the Court

2.30. The arbitrator, who retired from service in November 1971, awarded in July, 1972, a sum of Rs. 8.90 lakhs in favour of the contractor against his claims totalling Rs. 12.60 lakhs. The award of the arbitrator was contested by the Department in a court, and the court dismissed the case in October, 1975. A court decree accepting the award with 6 per cent interest payable from the date of decree was accordingly issued. An appeal filed by the Commander Works Engineer against the court in May, 1976, was dismissed in March, 1977. It is seen that while contesting the award of the contractor in a Court, the Department contended that the contractor's claim for extra payment of Rs. 2.69 lakhs on account of classification of soil strata as hard soil by treating the quantities of excavation and earthwork as separate

items for the purpose of the deviation limit of 50 per cent was based on a wrong interpretation of the general conditions of contract whereas both excavation and earthwork should be treated as one item. The Committee desired to know the date on which the arbitrator's award was contested in the Court and also whether any legal advice was obtained before contesting the award in a Court. The Ministry of Defence explained the position as follows:

“Apart from the question of extra payment on account of classification of soil strata the major issue agitated in the Court of Law was in respect of duplication of claims and the awards in respect of working in foul position and tidal conditions and soil that got sunk and washed away.

The arbitration award was contested in the lower court on 10-10-1975 and the judgement was passed on 18th October, 1975. The appeal submitted in the High Court, against the judgement passed by the lower court had been heard in the High Court on 17-11-1976 and the judgement was passed on 7-3-1977.

The Additional Legal Adviser was not initially in favour of contesting the award in the lower court, probably due to the fact that the entire details and history of the dispute was not fully known to them. However, the same office had strongly recommended for filing the appeal in the High Court.”

2.31. The Audit Paragraph reveals that the claims of the contractor for an extra amount of Rs. 8.87 lakhs on account of his working in foul positions, i.e., water, mud, tidal conditions, etc. and loss due to flood were contested by the Commander Works Engineer on the ground that no joint records of quantities of work affected had been submitted in support of these claims. The arbitrator did not, however, accept this contention and admitted the claims partly for Rs. 6.22 lakhs. The Committee desired to know the reasons as to why the Department did not consider it necessary to keep its own records of the quantities of work done in varied conditions in order to contest any possible claims of the contractor, if the matter went to arbitration. In a note, the Ministry of Defence explained as follows:

“The department had taken the stand that no work in foul positions was involved. Accordingly, it was not considered necessary to keep record of the quantities of work done

in varied conditions. It was further considered that keeping such a record would have amounted to our agreeing with the contractor's contention much against the departmental stand."

2.32. It is seen that in May, 1976 an appeal was filed by the Commander Works Engineer against the court decree made in October, 1975. The Committee desired to know as to why the Department took about 6 months' period in filing this appeal. The Ministry of Defence have explained as follows:

"The delay in filing the appeal was due to the fact that the legal advice was to be obtained from Madras by the Chief Engineer then located at Bombay. Appeal was filed immediately after obtaining the Legal Advice in May, 1976."

2.33. The Committee desired to know whether any responsibility has been fixed for incorporation of incorrect data of soil conditions in the tender and for other lapses. In a note, the Ministry of Defence intimated as follows:

"There was not much variation in the total quantity of earth work and excavation catered for under different items of the schedule. The difference was only in respect of ordinary rock quantity which exceeded the contract quantity as a result of the arbitrator deciding that soft laterite should be classified as ordinary rock. Correspondingly, the quantity of hard soil decreased considerably. It is felt by the department that the situation has arisen due to misinterpretation of the contract provisions by the arbitrator. The strong legal opinion in favour of filing an appeal in High Court, also bears this out.

This is therefore not a case of incorporation of incorrect data of soil conditions in the tender documents. In the classifications of excavation material, the arbitrator did not accept our contentions though he had adduced no reasons for it. The courts also did not go into the merits of the award, as such considerations did not come within the purview of the Arbitration Act.

In view of the above, it has to be reconciled that the payment allowed was not a loss to the Government. The question of fixing responsibility also does not arise."

2.34. It is seen from Audit Paragraph that the Ministry of Finance (Defence) had pointed out in June, 1973 that the loss resulting from

arbitration award going against the Department be regularised. However, the Ministry of Defence informed Audit in February, 1976 that the views expressed by them for not treating the extra payment as a loss to Government had since been concurred in by the Ministry of Finance (Defence). The Committee desired to know the reasons for the change in the stand of the Ministry of Finance (Defence). The Committee also enquired whether this loss has since been regularised. In a note, the Ministry of Defence have intimated as follows:—

“Ministry of Finance (Defence) had originally pointed out that the loss resulting from the arbitration award should be regularised, presumably because the full factual position had not been projected to them. On subsequent clarification of various points, Ministry of Finance (Defence) have concurred with this Ministry’s views that the payment allowed was not a loss to the Government. As such, therefore, no action is considered necessary for regularisation of this. It has been treated as normal expenditure on works.”

2.35. The Committee note that in May 1969, a contract for Rs. 5.49 lakhs was concluded with a contractor for the construction of access roads to a Naval depot at a station, on the basis of tenders invited in January 1969, by a Zonal Chief Engineer. Earth work inter alia comprising 44,300 cu.m. of rough excavation in hard soil at the rate of Rs. 5.78—7.13 per cu.m., 2,420 cu.m. of excavation over areas in hard soil at the rate of Rs. 4.19—5.94 per cu.m. and 550 cu.m. of excavation over areas in ordinary rock at the rate of Rs. 8.41—9.83 per cu.m. was provisionally included in the contract. According to the contract, no deviation changing the original nature and scope of the contract could be ordered beyond 50 per cent of the value assessed of individual trade items specified in the contract. The entire work was to be completed in 9 months. However, there was not only considerable delay in the completion of the work, which was commenced in June 1969 and completed only in March 1972, i.e. in 34 months against the original estimate of 9 months but also steep escalation in the costs which rose to Rs. 15.69 lakhs, i.e., 286 per cent of the contracted cost of Rs. 5.49 lakhs. Some of the salient features of the contract are dealt with in the succeeding paragraphs.

2.36. The Committee believe that the escalation in cost and abnormal delay in the completion of the work were to a large extent due to the incorporation of incorrect data of soil conditions in the

tender. This belief of the Committee is borne out by the fact that the quantity of excavation over areas in ordinary rock indicated as 550 cu.m. in the contract was unrealistic as according to the Audit paragraph the quantity of such excavation done was 35,002 cu.m. The Committee are surprised that the details of the quantities of hard soil and ordinary rock were included in the tender document on the basis of a mere visual examination of the soil and the types of implements used for excavation without undertaking soil investigations or, alternatively, obtaining expert opinion on the nature of the soil. Such prior soil investigations etc. were not deemed necessary by the authorities when even before finalisation of the tenders the Garrison Engineer had suggested in March 1969 that cutting of hill-side should be indicated as both 'hard soil' and 'laterite' (ordinary rock), without any break-up, which was, however, not agreed to.

2.37. Subsequently, in October 1969 the Garrison Engineer approached the Commander Works Engineer seeking approval for a deviation order to the contract on the plea that cutting hill-side in laterite was required in all the 5 quarries from where earth required for the work was to be obtained by excavation. This proposal of the Garrison Engineer involving an additional expenditure of Rs. 1.14 lakhs was made at a time when the contractor after excavating the hard soil in 2 quarries had sought permission to start work in ordinary rock. This proposal contained deviation from the contract for 33,225 cu.m. of rough excavation in soft (ordinary) rock by reducing an equal quantity from 'rough excavation in hard soil'. This proposal of the Garrison Engineer, which appears to have been quite correctly made, was summarily rejected. The Committee feel that at least at this stage when the Garrison Engineer had so explicitly indicated his doubts about the correctness of the soil strata shown in the contract, the authorities should have got examined the soil strata by a geologist or obtained a test report on the nature of the soil strata from College of Military Engineering etc. The Committee strongly disapprove this cavalier approach of the Department as they feel that had the decision on the proposal of the Garrison Engineer been taken after obtaining expert opinion on the nature of soil strata, the Department would have not only saved quite a substantial part of extra expenditure that had to be incurred but also reduced to a large extent the delay in the completion of the work.

2.38. The Committee further note that in September/October 1969 the contractor on excavating the hard soil in 2 quarries had sought

permission to start work in ordinary rock. As the decision on this point was not conveyed to the contractor till February 1970, he again reminded the authorities for a quick decision for the sake of completing the work before monsoon, failing which the work was likely to be delayed for another year resulting in loss to him. The Committee deplore the delay of more than 6 months in conveying to the contractor the decision in the matter after inspection of the site in March 1970 by the Zonal Chief Engineer and the Commander Works Engineer alongwith the contractor that "the strata were only 'hard soil' and that the question of deviation order did not arise." The Committee do not agree with the contention of the Department that this delay was unavoidable as joint inspection was required by the Zonal Chief Engineer who was located in Madras as they feel that such a joint inspection could be easily arranged early particularly in view of the fact that the entire work was to be completed within 9 months. This delay was, in fact, one of the reasons for the lower court to dismiss the case of the Department against the arbitrator's award on the plea that 'the contractor had to work in the rainy season and floods due to the delay by the higher authorities in approving the recommendations made by the Garrison Engineer'.

2.39. The Committee note that the contractor again represented in March-July 1970 inter alia requesting the Zonal Chief Engineer to reconsider his decision about the soil strata with a view to avoiding arbitration in the dispute. In July 1970, the Zonal Chief Engineer informed the contractor that the dispute would be referred to arbitration only on completion of the work. On recommencing the work in August 1970, the contractor approached the Garrison Engineer demanding extra payment on account of the fact that the work being done by him was in 'water and liquid mud and interrupted by tides'. The Ministry have admitted that the work on embankments was to be executed on existing paddy fields with a water level between 3" and 9" and that the area to the right of embankment was flood-prone during the heavy rainfall in the months of July and August and that "the work on embankment during these months was also at stand-still and only the portion of work already executed had submerged." Yet, the authorities failed to maintain their own records of the quantities of work done in varied conditions. Perhaps due to this failure, the authorities could not successfully contest the claims of the contractor for working in foul positions before the arbitrator, who partly admitted the claims of the contractor.

2.40. The Committee note that according to the conditions of the contract, references to arbitration on matters of dispute between the

parties to the contract could not take place until after the completion or alleged completion of the works unless both parties agree in writing. Further, the Zonal Chief Engineer had in July 1970 categorically informed the contractor that the dispute could be referred to arbitration only after the completion of the work under the terms of the contract. The Committee are surprised to note that the Engineer-in-Chief appointed in November 1970, a Superintending Engineer of the Zonal Chief Engineer's Office as an arbitrator even during the course of execution of the work and that too, suo moto without any request having been made by the contractor. The Committee strongly disapprove this action of the Department in referring the matter to arbitration in violation of the relevant provisions of the contract.

2.41. The Committee further note that no time limit was prescribed by the authorities for the finalisation of the award by the arbitrator. The Committee understand that according to the Arbitration Act, the arbitrator should normally finalise his award within four months. It is surprising that the arbitrator took about 21 months and gave his award in July 1972, after his retirement from service in November 1971. The Committee would like to know the specific reasons for this delay and the various steps taken by the Department from time to time to expedite the arbitration proceedings. The Committee fail to understand the rationale behind the provision in law of a limit of 4 months for the completion of arbitration when the actual time taken generally far exceeds this limit. The Committee reiterate their earlier recommendation made in paragraph 3.271 of their 9th Report (Sixth Lok Sabha) on Forest Department, Andamans and emphasise once again that the Ministry of Law should examine this aspect thoroughly in consultation with other Ministries who actually have to go in for arbitration proceedings in cases of agreements with private firms in order to amend the law suitably, if necessary.

2.42. The Committee further note that the arbitrator in his award of July 1972, awarded a sum of Rs. 8.91 lakhs in favour of the contractor against his claims totalling Rs. 12.60 lakhs. It is highly regrettable that the arbitrator's award of July 1972 was challenged by the Department in the lower court on 10 October 1975 after more than three years had elapsed and that too against the advice of the Additional Legal Adviser who, according to the Ministry, was not initially in favour of contesting the award in the lower court. The Committee would like to know the specific reasons for this un-

conscionable delay in taking the decision and for disregarding the legal advice. The Committee are convinced that had the Ministry taken timely action in this regard, they would at least have effected appreciable savings in the amount of Rs. 0.96 lakh paid by way of interest alone, which formed part of the total cost of Rs. 15.69 lakhs for the work.

NEW DELHI;
April 20, 1979

Caitra 30, 1901 (Saka).

P. V. NARASIMHA RAO,
Chairman,
Public Accounts Committee.

APPENDIX

Conclusions or Recommendations

Sl. No	Para No of the Report	Ministry/Department concerned	Conclusion or Recommendations
1	2	3	4

Ministry of Defence

The Committee note that during July—October 1971, the Ministry of Defence had concluded 3 contracts with two foreign suppliers, 'A' and 'B' for the supply, *inter alia*, of a total of 250 special purpose carriers at a total cost of Rs. 1028.25 lakhs. Deliveries of the vehicles were received between October 1971 and January 1972. A defect was noticed in these vehicles which seriously affected their operation in certain regions during a certain season. To make them fully operational, repairs had to be carried out departmentally involving an estimated expenditure of Rs. 6 lakhs on material alone which the suppliers have so far refused to reimburse, although the defect was in the nature of 'manufacturing defect' for which the suppliers were responsible if it was pointed out to them during the warranty period. The Committee appreciate the submission of the Defence Secretary before them that the supplies were obtained "in the context of a very extraordinary national emergency.....in the hope that a satisfactory solution would be found for the problem of overheating" and that "there was no hope of getting Armoured Personnel Carriers from any other source." This factor substantial-

ly mitigates the gravity of the lapses in these transactions brought to the notice of the Committee by Audit. Nevertheless, the fact remains that, had the emergency continued into the ensuing summer, the field formations would have had to grapple with grave problems on account of these defective vehicles. They therefore wish to identify and record the lapses with a desire that the Ministry of Defence should hereafter be more cautious in entering into import transactions for defence stores even during an emergent situation and endeavour to avoid these lapses. The shortcomings and lapses in the transactions pointed out in the Audit Paragraph and confirmed during evidence, written as well as oral, are as under:—

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- (i) The contract provided that the “stores were to be inspected and accepted after receipt in India”. There was no provision for preshipment inspection. In the case of stores to be imported, it is advisable to have preshipment inspection to vouch for the quality of the stores being as contracted for.
 - (ii) In the case of supplies from ‘B’, the 12th month guarantee period was to be reckoned from the day of arrival of these carriers at an Indian port. It would have been more favourable to the country if this period was reckoned from the date of delivery as was the case in respect of supplies from source ‘A’.

(iii) The conditions for acceptance inspection *inter alia* stipulated that the normal operating temperature of oil in the engine would be 80°—90°C and that for "short spells" the maximum permissible oil temperature could be 100°C. The maximum permissible temperature in the gear-box was not to exceed 110°C but for "short spells" temperature up to 120C was permissible. As the maximum permissible oil temperature in the engine and gear box directly affects the operational efficiency of the vehicles, the use of the words "for short spells" which gave a vague description, should have been avoided and it should have been insisted upon the suppliers that the specifications were clearly worded.

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(iv) It is stated in evidence that "the problem of over-heating was already known at the time of contracting the supplies". That the engine had a tendency to overheat is stated to have been "discovered" also during the March-April 1971 trials of a sample received from supplier 'A' at which the supplier's representatives were present. Yet, the Ministry of Defence failed to formally approach the supplier to rectify the defect before transhipment which began 6 months later.

(v) Even when the trial of the sample of supplier 'A' had disclosed the defect, no samples were asked for from supplier 'B' for trial. The reason given during evidence was that "their demonstration had been witnessed by our team in that country and their performance found satisfactory". As it happened, the supplies from the second supplier also turned out to be similarly defective.

(vi) In a Memorandum of Understanding signed between supplier 'A' and the Ministry on 25-7-72, the supplier assured the purchaser that the working temperature would not go beyond 120°C under Indian conditions and that the engine would be quite safe even when the oil temperature reached 120°C. The vehicles were however equipped with instruments which could not record temperatures beyond 120°C. The assurance was therefore *ab initio* meaningless.

(vii) In terms of the service/guarantee contract of March, 1972 with supplier 'A', Government of India was required to pay for all expenses connected with the transportation of the service team in India and expenditure in connection with the use of working equipment. The team was to provide qualified technical assistance and *inter alia* "attend to problems relating to operation, servicing repairs and to make frequent inspection of individual vehicles to forestall more serious problems". The team

was, however, unable to render any specific service relating to the problem of overheating. Thus, the Ministry allowed another opportunity to slip by to have the patent defect removed under the contract.

(viii) It was stated that "the decision making process was compressed" on "operational compulsions" and also in view of the fact that at the particular time of the order they (vehicles) were needed and actually came to be needed "was the time when this problem of overheating was not likely to be in our way". These arguments are rather weak in view of the fact that cost of procurement was no less than Rs. 10.28 crores and the vehicles were not only for onetime use but had to be borne with for a long time. Fortunately, the emergency ended in a short-while. Had it continued into the ensuing summer, it would have created problems for the field formations.

(ix) It was only in September 1974 that the Directorate of Inspection decided to have an immediate study carried out into the problem of overheating by the Controllerate of Inspection (Special Vehicles). This decision should have been taken much earlier as in August 1972 itself the Directorate of Inspection had confirmed this defect of overheating to be of a very serious nature proving to be

a major handicap in the deployment of these carriers and also when no tangible solution of the malady had been forthcoming. Further, when an immediate study was emphasised in the decision of 1974, it took about 2 years for the Contollerate of Inspection (Special Vehicles) to complete this study in May 1976 and evolve suitable modifications. The matter obviously did not receive urgent attention at all these stages.

The Committee hope that the work relating to the carrying out of modifications in the 240 carriers, which was expected to be completed by the end of December, 1978 has been completed. The Committee would like to be informed whether these carriers are now entirely fit for effective deployment in all seasons and terrains. The Committee would also like to be informed of the corrective measures adopted by the Government for avoiding lapses enumerated in the preceding para.

The Committee note that in May 1969, a contract for Rs. 5.49 lakhs was concluded with a contractor for the construction of access roads to a Naval depot at a station, on the basis of tenders invited in January 1969, by a Zonal Chief Engineer. Earth work *inter alia* comprising 44,300 cu.m. of rough excavation in hard soil at the rate of Rs. 5.78-7.13 per cu.m., 2,420 cu.m. of excavation over areas in hard soil at the rate of Rs. 4.19-5.94 per cu.m. and 550 cu.m. of excavation over areas in ordinary rock at the rate of Rs. 8.41-9.83 per cu.m. was provisionally included in the contract. According

Ministry of Defence

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to the contract, no deviation changing the original nature and scope of the contract could be ordered beyond + 50 per cent of the value assessed of individual trade items specified in the contract. The entire work was to be completed in 9 months. However, there was not only considerable delay in the completion of the work, which was commenced in June 1969 and completed only in March 1972, i.e., in 34 months against the original estimate of 9 months but also steep escalation in the costs which rose to Rs. 15.69 lakhs, i.e., 286 per cent of contracted cost of Rs. 5.49 lakhs. Some of the salient features of the contract are dealt with in the succeeding paragraphs.

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Ministry of Defence

The Committee believe that the escalation in cost and abnormal delay in the completion of the work were to a large extent due to the incorporation of incorrect data of soil conditions in the tender. This belief of the Committee is borne out by the fact that the quantity of excavation over areas in ordinary rock indicated as 550 cu.m. in the contract was unrealistic as according to the Audit paragraph the quantity of such excavation done was 35,002 cu.m. The Committee are surprised that the details of the quantities of hard soil and ordinary rock were included in the tender document on the basis of a mere visual examination of the soil and the types of implements used for excavation without undertaking soil investigations or, alternatively, obtaining expert opinion on the nature of the soil. Such prior soil investigations etc. were not deemed

necessary by the authorities when even before finalisation of the tenders the Garrison Engineer had suggested in March 1969 that cutting of hill-side should be indicated as both 'hard soil' and 'laterite' (ordinary rock), without any break-up, which was, however, not agreed to.

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Subsequently, in October 1969 the Garrison Engineer approached the Commander Works Engineer seeking approval for a deviation order to the contract on the plea that cutting hill-side in laterite was required in all the 5 quarries from where earth required for the work was to be obtained by excavation. This proposal of the Garrison Engineer involving an additional expenditure of Rs. 1.14 lakhs was made at a time when the contractor after excavating the hard soil in 2 quarries had sought permission to start work in ordinary rock. This proposal contained deviation from the contract for 33,225 Cu.m. of rough excavation in soft (ordinary) rock by reducing an equal quantity from 'rough excavation in hard soil'. This proposal of the Garrison Engineer, which appears to have been quite correctly made, was summarily rejected. The Committee feel that at least at this stage when the Garrison Engineer had so explicitly indicated his doubts about the correctness of the soil strata shown in the contract, the authorities should have got examined the soil strata by a geologist or obtained a test report on the nature of the soil strata from College of Military Engineering etc. The Committee strongly disapprove this cavalier approach of the Department as they feel that had the decision on the proposal of the Gar-

rison Engineer been taken after obtaining expert opinion on the nature of soil strata, the Department would have not only saved quite a substantial part of extra expenditure that had to be incurred but also reduced to a large extent the delay in the completion of the work.

6 2-38 Ministry of Defence

The Committee further note that in September/October 1969 the contractor on excavating the hard soil in 2 quarries had sought permission to start work in ordinary rock. As the decision on this point was not conveyed to the contractor till February 1970, he again reminded the authorities for a quick decision for the sake of completing the work before monsoon, failing which the work was likely to be delayed for another year resulting in loss to him. The Committee deplore the delay of more than 6 months in conveying to the contractor the decision in the matter after inspection of the site in March 1970 by the Zonal Chief Engineer and the Commander Works Engineer alongwith the contractor that "the strata were only 'hard soil' and that the question of deviation order did not arise." The Committee do not agree with the contention of the Department that this delay was unavoidable as joint inspection was required by the Zonal Chief Engineer who was located in Madras as they feel that such a joint inspection could be easily arranged early particularly in view of the fact that the entire work was to be completed within 9 months. This delay was, in fact, one

of the reasons for the lower court to dismiss the case of the Department against the arbitrator's award on the plea that 'the contractor had to work in the rainy season and floods due to the delay by the higher authorities in approving the recommendations made by the Garrison Engineer'.

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The Committee note that the contractor again represented in March—July 1970 *inter alia* requesting the Zonal Chief Engineer to consider his decision about the soil strata with a view to avoiding arbitration in the dispute. In July 1970, the Zonal Chief Engineer informed the contractor that the dispute would be referred to arbitration only on completion of the work. On recommending the work in August 1970, the contractor approached the Garrison Engineer demanding extra payment on account of the fact that the work being done by him was in 'water and liquid mud and interrupted by tides'. The Ministry have admitted that the work on embankments was to be executed on existing paddy fields with a water level between 3" and 9' and that the area to the right of embankment was flood-prone during the heavy rainfall in the months of July and August and that "the work on embankment during these months was also at stand-still and only the portion of work already executed had submerged." Yet, the authorities failed to maintain their own records of the quantities of work done in varied conditions. Perhaps due to this failure, the authorities could not successfully contest the claims of the contractor for working in foul positions before the arbitrator, who partly admitted the claims of the contractor.

Ministry of Defence

8 2.40 The Committee note that according to the conditions of the contract, references to arbitration on matters of dispute between the parties to the contract could not take place until after the completion or alleged completion of the works unless both parties agree in writing. Further, the Zonal Chief Engineer had in July 1970 categorically informed the contractor that the dispute could be referred to arbitration only after the completion of the work under the terms of the contract. The Committee are surprised to note that the Engineer-in-Chief appointed in November 1970, a Superintending Engineer of the Zonal Chief Engineer's Office as an arbitrator even during the course of execution of the work and that too, *suo moto* without any request having been made by the contractor. The Committee strongly disapprove this action of the Department in referring the matter to arbitration in violation of the relevant provisions of the contract.

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9 2.41 The Committee further note that no time limit was prescribed by the authorities for the finalisation of the award by the arbitrator. The Committee understand that according to the Arbitration Act, the arbitrator should normally finalise his award within four months. It is surprising that the arbitrator took about 21 months and gave his award in July 1972, after his retirement from service in November 1971. The Committee would like to know the specific reasons for this delay and the various steps taken by the Depart-

ment from time to time to expedite the arbitration proceedings. The Committee fail to understand the rationale behind the provision in law of a limit of 4 months for the completion of arbitration when the actual time taken generally far exceeds this limit. The Committee reiterate their earlier recommendation made in paragraph 3.271 of their 9th Report (Sixth Lok Sabha) on Forest Department, Andamans and emphasise once again that the Ministry of Law should examine this aspect thoroughly in consultation with other Ministries who actually have to go in for arbitration proceedings in cases of agreements with private firms in order to amend the law suitably, if necessary.

The Committee further note that the arbitrator in his award of July 1972, awarded a sum of Rs. 8.91 lakhs in favour of the contractor against his claims totalling Rs. 12.60 lakhs. It is highly regrettable that the arbitrator's award of July 1972 was challenged by the Department in the lower court on 10th October, 1975 after more than three years had elapsed and that too against the advice of the Additional Legal Adviser who, according to the Ministry, was not initially in favour of contesting the award in the lower court. The Committee would like to know the specific reasons for this unconscionable delay in taking the decision and for disregarding the legal advice. The Committee are convinced that had the Ministry taken timely action in this regard, they would at least have effected appreciable savings in the amount of Rs. 0.96 lakh paid by way of interest alone, which formed part of the total cost of Rs. 15.69 lakhs for the work.