

FORTY-FIFTH REPORT
PUBLIC ACCOUNTS COMMITTEE
(1985-86)

(EIGHTH LOK SABHA)

CONSTRUCTION OF A SUB-STANDARD AIRFIELD

MINISTRY OF DEFENCE

Presented in Lok Sabha on 29-4-1986

Laid in Rajya Sabha on 29-4-1986

LOK SABHA SECRETARIAT
NEW DELHI

April, 1986/Vasakha, 1908 (S)

Price : Rs. 1 45

CORRIGENDA TO FORTY-FIFTH REPORT OF THE
PUBLIC ACCOUNTS COMMITTEE (8TH LOK SABHA)

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
1	1.5	2	payment	pavement
2	1.9	2	biutminous	bituminous
20	1.53	last line	airfield".	airfield.
21	1.57	last line	dilitari- ness	dilatoriness
23		1 (under column 2)	1.15	1.51
24		1 (under column 4)	the flexible	that flexible
24		last line (under column 4)	airfield"	airfield
27		1 (under columns 1, 2 & 3)	These details are related to lines 3 to 6 under column 4	
27		6 (under column 4)	delitar- iness	dilatoriness

CONTENTS

	PAGE
ORIGIN OF THE PUBLIC ACCOUNTS COMMITTEE	(iii)
INTRODUCTION	(v)
REPORT	1
APPENDIX—Conclusions and Recommendations	23

PART II*

Minutes of sittings of the Committee held on :

12-2-1986

24-4-1986

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

PUBLIC ACCOUNTS COMMITTEE

(1985-86)

CHAIRMAN

Shri E. Ayyapu Reddy

MEMBERS

Lok Sabha

2. Shri J. Chokka Rao
3. Shri Amal Datta
4. Shri Ranjit Singh Gaekwad
5. Shrimati Prabhawati Gupta
6. Shri Harpal Singh
7. Shri Vilas Muttemwar
8. Shri G. Devaraya Naik
9. Shri Rameshwar Nikhra
10. Shri Rajmangal Pande
11. Shri H. M. Patel
12. Shrimati Jayanti Patnaik
13. Shri S. Singaravadivel
14. Shri Simon Tigga
15. Shri Girdhari Lal Vyas

Rajya Sabha

16. Shrimati Amarjit Kaur
17. Shri Nirmal Chatterjee
18. Miss Jayalalitha
19. Shri Ghulam Rasool Kar
20. Shri Chaturanan Mishra
21. Shri K. L. N. Prasad
22. Shri Ramanand Yadav

SECRETARIAT

1. Shri N. N. Mehra—*Joint Secretary*
2. Shri K. H. Chhaya—*Chief Financial Committee Officer*
3. Shri O. P. Babal—*Senior Financial Committee Officer.*

INTRODUCTION

1. The Chairman of the Public Accounts Committee, do present on their behalf this Forty-Fifth Report on Paragraph 18 of the Report of the Comptroller and Auditor General of India for the year 1983-84, Union Government (Defence Services) relating to construction of a sub-standard airfield.

2. The Report of the Comptroller and Auditor General of India for the year 1983-84, Union Government (Defence Services) was laid on the Table of the House on 14th May, 1985.

3. The Committee's examination has revealed that due to lack of adequate supervision by the Engineers and the executing staff, sub-standard work of air-field 'C' was taken over. The Committee have expressed deep concern that despite the fact that quite a number of serious defects were noticed even on preliminary inspection of the airfield, it was not put to use until October, 1976, by which time the stipulated period of one year for rectification of the defects by the contractor had almost expired.

4. In the opinion of the Committee, the punishment given to the three Supervisory Officers, who were responsible for carrying out the obligatory tests and maintain proper records, was not at all commensurate with the gravity of the offence. There were no extenuating circumstances and therefore deterrent punishment should have been more appropriate.

5. The Committee have found that the Senior Engineers of the Military Engineer Service cannot be absolved of their responsibility for their failure to exercise satisfactory supervision. According to the Committee, their responsibility was greater having regard to the fact that the airfield was in the forward area and needed in the event of hostilities.

6. The Committee have found this entire case most depressing. So many have failed to discharge their duties with the devotion and care expected of them, particularly where the country's security is concerned. The Committee have felt that everything was not above board. The Committee have urged the Government to take serious note of the various acts of omission and commission in this case and take appropriate steps to ensure that they do not occur again.

7. The Committee (1985-86) examined Audit Paragraph 18 at their sitting held on 12 February, 1986. The Committee considered and finalised the Report at their sitting held on 24 April, 1986. Minutes of the sittings form *Part II of the Report.

8. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in thick type in the body of the Report and have also been reproduced in a consolidated form in the Appendix to the Report.

9. The Committee would like to express their thanks to the Officers of the Ministry of Defence for the cooperation extended by them in giving information to the Committee.

10. The Committee place on record their appreciation of the assistance rendered to them in the matter by the Office of Comptroller & Auditor General of India.

NEW DELHI:

April 24, 1986

Vaisakha 4, 1908 (Saka)

E. AYYAPU REDDY,

Chairman,

Public Accounts Committee.

REPORT

AUDIT PARAGRAPH

Construction of a sub-standard Airfield

1.1 A review of the construction of two air-fields ('A' and 'B') out of the three ('A', 'B' and 'C') approved by the Government in May 1973 at a total outlay of Rs. 22 crores was included in paragraph 22 of the Audit Report (Defence Services) for 1975-76.

1.2 A review of the execution of the project for the third airfield 'C' revealed the following:

1.3 Sanction for acquisition of land (Rs. 0.04 crore) and administrative approval for works services (Rs. 5.80 crores) was accorded in September 1973 and May 1974 respectively. In December 1973, the Chief Engineer (CE) concluded a contract for Rs. 1.98 crores with firm 'X' for execution of work pertaining to runway, taxi-tracks, linked tracks and dispersal tracks of the air-field to be completed in January 1975. The work was actually completed in November 1975. The air-field was handed over to the users in March 1976 but was put to use only in October 1976.

1.4 The contractor was responsible for rectifying any defects noticed during one year after the date of completion of work. According to the Ministry of Defence (Ministry) firm 'X' had initially signed the final bill under protest without assigning any reasons; the protest, however, was subsequently withdrawn; the final bill was audited in September 1977 (but the amount was kept in deposit in February 1979) and at that stage there were no Government claims.

1.5 After the maintenance period of one year was over, the users intimated (December 1977) the Zonal CE that the flexible payment had started showing signs of disintegration to such an extent that the fine aggregate had started coming out and accordingly declared the air-field as hazardous to flying.

1.6 The Technical Examiner pointed out (November 1976 and February 1978) that certain obligatory tests to ensure quality control as prescribed in the contract were not carried out and records not maintained properly. This was also later mentioned by the Chief Technical Examiner in his report for the period October 1980—March 1981.

1.7 Under orders of the Air Headquarters (Air HQ) a Court of Inquiry was held during August 1978—May 1979 to investigate into circumstances under which the airfield had become unfit for operations and also to ascertain whether construction of the air-field and material used therefor were as per provisions specified in the contract agreement. The findings of the Court of Inquiry were as under:

Surface of bituminous portion of the runway including the overrun was pitted, abraded, ravelled, etc.

Work of asphaltic concrete done from 25th April 1975 to 10th May 1975 was below the contract specifications.

Non-use of the runway either by aircraft or by simulated vehicular traffic for about a year after its completion caused age hardening of bitumen and resulted in early deterioration of the airfield.

1.8 The Court blamed two commissioned officers and one junior commissioned officer for the lapses and recommended that the runway in its deteriorated state might not be used for operations, and it was remarked (August 1979) by the authorities at the Air Command concerned that guidelines on the use of active ingredients like cement were inadequate in the contract specifications and there was inadequate control/check by the executive staff at site. The proceedings of the Court of Inquiry were finally approved by the Air HQ in May 1982.

1.9 In order to ascertain the quality of the existing surface of the runway, chunk samples of bituminous macadam and asphaltic concrete were got tested at the College of Military Engineering in April 1979 and these were found to be outside the specified grading limit. Accordingly, the Air HQ sanctioned (September 1979) the work of re-surfacing of the runway at an estimated cost of Rs. 15.37 lakhs, subsequently revised (May 1980) to Rs. 22.43 lakhs. The Zonal CE concluded (October 1980) a contract for Rs. 26.29 lakhs with firm 'Y'; the work under the contract was completed in April 1981 at a cost of Rs. 32.15 lakhs.

1.10 Firm 'X' sought (April 1978) arbitration on account of certain disputes arising out of the operation of the contract, alleging that the work was held up frequently causing delay (of one year) in execution and resulted in losses, that the assessment made by the department of the work done was incorrect, that hire charges of tools and plant worked out by the department were incorrect etc. Since

it was revealed during technical examination that defective and sub-standard work was paid for, over-payments amounting to Rs. 57.59 lakhs were pointed out (August 1978) to the firm. The Engineer-in-Chief appointed (September 1978) an arbitrator. Firm 'X' put forward a claim for Rs. 1.28 crores before the arbitrator while the department claimed Rs. 71.97 lakhs (as revised during the course of arbitration) towards over payment/compensation on account of:

	(Rs. in lakhs) Value of claims
flexible bituminous pavement of air-field being non-functional necessitating complete resurfacing of pavement and surface variation being beyond tolerance limits	30.63
not-grinding high spots in concrete pavements and replacement/repairing of sunken/cracked concrete slabs	9.26
use of sealing compound not conforming to contract specifications	1.19
expansion/dummy and construction joints at places not straight and uniform in width	0.18
loss suffered by Government for air-field being non-functional	20.00
other causes	10.40
• miscellaneous	0.31
TOTAL :	71.97

1.11 In a non-speaking award the arbitrator awarded (October 1982) a sum of Rs. 35.43 lakhs (Plus interest) to the contractor and Rs. 0.15 lakh to the department against one of its claims for Rs. 0.18 lakh (other claims were rejected).

The Ministry stated (January and July 1984) that an application has been filed in the Court on 17th January 1983, the date of hearing was fixed on 20th July 1984 but further progress is not yet known (July 1984).

1.12 The following are the interesting points that emerge:

Due to lack of adequate control/check by the execution staff, sub-standard work was taken over by the department.

The air-field was not put to use for over one year after its completion, thereby causing the bitumen surface to harden and deteriorate.

Execution of sub-standard work necessitated resurfacing of the runway at a cost of Rs. 32.15 lakhs without which the airfield could not be put to operational use.

As observed by the Chief Technical Examiner certain obligatory tests to ensure quality control as specified in the contract were not carried out and records not maintained properly.

In a non-speaking award the Arbitrator awarded Rs. 35.43 lakhs to firm 'X' against its claims for Rs. 1.28 crores and only Rs. 0.15 lakh to the Department as against its claims for Rs. 71.97 lakhs, resulting in extra expenditure of Rs. 35.28 lakhs.

[Paragraph 18 of the Report of the Comptroller and Auditor General of India for the year 1983-84, Union Government (Defence Services)]

Need for construction of the Air-Field

1.13 In December 1973, the Chief Engineer concluded a contract for Rs. 1.98 crores with firm 'X' for execution of work pertaining to runway, taxi-track, linked tracks and dispersal tracks of the air-field 'C' to be completed in January 1975. The work was actually completed in November, 1975.

1.14 The Committee desired to know the specific purpose for which air-field 'C' was constructed in 1975. The Ministry of Defence stated as follows:—

“It was constructed for the purpose of a forward base for supporting air-operations during hostilities.”

1.15 Elaborating further, the Defence Secretary stated as follows during evidence:—

“A neighbouring country has set up a very large number of forward bases very close to the border. On the other hand, we discovered that our airfields were pretty far away. The fighter aircraft had a limited range. If that limited range is largely shared by its travel through our

own territory, the depth into which it can go to the enemy's territory is very small. It reduces significantly the range of the aircraft. Consequently, a view was taken that certain airfields should be set up and even when this was being considered, it was realised that these airfields were not for normal use; they were forward bases which would be made use of in certain situations. This is one of those airfields."

Delay in taking over and utilisation of the air-field

1.16 The Audit Para points out that the air-field which was actually completed in November, 1975 was handed over to the users in March 1976. It was put to use only in October, 1976.

1.17 The Committee desired to know the reasons for delay in taking over and non-utilisation of the airfield during the period from November, 1975 to October, 1976. In a note, Ministry of Defence stated as follows:—

"A Board of Officers was convened for taking over the airfield from the contractor. This Board after inspection of the airfield had pointed out the following defects:

- (a) Spalling of joints.
- (b) Longitudinal hairline shrinkage cracks (total 388 slabs).
- (c) Widening of longitudinal joints at some places in dispersal taxi track (total length 2 Kms.).
- (d) Flexible pavement started pitting over almost all the areas requiring surface treatment/dressing.

The above defects were rectified by the contractor. After the Board of Officers was satisfied, the airfield was handed over to the Air Force authorities in March 1976. Due to general unfavourable weather conditions during summer followed up by monsoon during April to September 1976 and the lack of ground equipment such as recovery/Nav aids and communication facilities, the activation of this base was planned for October 1976 in the interests of

flight safety and other operational reasons. The Air Headquarters allotted the NDB on 11-3-76 and VHF R/T on 29-6-76. Post allocation formalities and unit collection/installation and callibration took about 4-5 months. The equipment was finally installed and became functional after the period."

1.18 The Committee desired to know the arrangements for supervision of the air-field when it was under construction. The Defence Secretary explained as follows:—

"Engineers are the executing agency for the project. The project is meant for use by the Air Force. From our point of view there are two entities and engineers are operating on behalf of the users. Until the project is complete, it is still with the engineers."

1.19 The witness further added:—

"It is Military Engineering Service which operates for all the organisations under the Ministry of Defence and sometimes outside the Defence also. As I said, the airfield was handed over to the users on 29-3-1976 and was put to use in October, 1976. The question is: Why this delay from April to October?"

This place is located in an area where there are heavy pre-monsoon showers and sometimes there are strong winds also. In this case, before the monsoon there were heavy pre-monsoon showers. Then came the monsoon. There was also some delay on the part of the Air Force Department in providing certain facilities to make the airfield fully operational. All this was over by October 1976 and the air field put to use."

1.20 The Committee asked as to why the provision of ground equipment and communication facilities was not planned to synchronise with the completion of the airfield in November, 1975. The Defence Secretary stated as follows:—

"The non-directional beacon and certain navigational aids were the two things that had to be provided. And this took

about three to four months time to instal, test and tune them. When this was done in October 1976, the airfield was put to use. I would submit that there has been no inordinate delay but I accept that even this could have been avoided by tighter control and monitoring."

1.21 In a subsequent note, the Ministry of Defence explained as follows:—

"Provisioning action for the communication and Nav. Aids equipment required for the project was initiated in May, 1975 and an indent in respect of MF Beacons G-40B was placed in July, 1975. The supply materialised only in July, 1976."

1.22 The Committee asked the Ministry to furnish the contemporary document or record to prove as to how far the monsoon was responsible for delay in the take over of the airfield. The Ministry of Defence stated as follows:—

"Full fledged meteorological facilities at this place were established by the Air Force only in 1977."

Delay in taking timely action to remove the defects

1.23 The contractor was responsible for rectifying the defects noticed during one year after the date of completion of work. It is seen that roughness of the runway and presence of small pebbles were indicated by the users to local Military Engineering Services authorities without any defect report in June, 1977. The formal defect report was initiated by the users in December, 1977. The Committee desired to know as to why action for rectification was not taken in June, 1977 when the state of roughness of the runway and presence of small pebbles were indicated by the users to the local Military Engineer Service authorities. The Committee also asked as to why a formal defect report was not submitted by the users in June, 1977. In a note the Ministry of Defence stated as follows:—

"When the defects were first brought to the notice of MES in June, 1977 it was decided by the executives that these would be observed for some time before deciding on an

action plan to rectify them as it was expected that runway surface would improve with the usage of the runway and passage of time. As no improvement was noticed on subsequent use of airfield during September, 1977 and again in December, 1977 the matter was formally raised in a defect report by the users."

1.24 The Committee enquired whether any investigation was undertaken in June, 1977 to ascertain the reasons for the development of defects. The Ministry of Defence stated as follows:—

"When the defects were brought to the notice of M.E.S. in June 1977, they informed that the runway surface would improve with the usage of the runway. No investigation was, therefore, undertaken at that time to ascertain the reasons for the defects which were kept under observation."

1.25 The Committee desired to know the reasons for delay in giving the defect report—the Ministry of Defence stated as follows:—

"The defects were first noticed in June 1977 and brought to the attention of MES who stated that these defects would reduce with usage of the airfield. Thereafter on subsequent usage of the airfield no improvement was noticed. The matter was brought to the notice of the Engineers. The problem was discussed with Chief Engineer and CWE by the Base Commander during their visit to Base in November 77. They felt that these defects were not of serious nature and would be removed with usage. However, with no improvement being observed, the matter was formally raised by a defect report."

1.26 Asked about the action taken to rectify the defects at that stage, the Ministry of Defence stated as follows:—

"The defects were only kept under observation at that stage. It was thought necessary to study further the defects noticed before deciding on an action plan to rectify the same."

1.26(A) After the maintenance period of one year was over, the users intimated in December, 1977 the Zonal Chief Engineer that the flexible pavement had started showing signs of disintegration to such an extent that the fine aggregate had started coming out and accordingly declared the air-field as hazardous to flying.

Obligatory tests not observed

1.27 The Technical Examiner pointed out in November 1976 and February 1978 that certain obligatory tests to ensure quality control as prescribed in the contract were not carried out and records not maintained properly. This was also later mentioned by the Chief Technical Examiner in his report for the period October 1980—March 1981.

1.28 The Committee enquired as to why the obligatory tests were not carried out. The Defence Secretary stated as follows:—

“It is true that certain tests, five in number like wear test, tests for finding out flakiness content of bitumen, asphalt, concrete and tests regarding control bay for safety etc. were indeed not carried out. Consequently, action was taken against those people who were responsible for this. The Assistant Garrison Engineer is responsible for implementation of the project and the Garrison Engineer has the supervisory responsibility. In this case, after going through the proceedings, we have given very harsh punishment to all the three persons involved, the Garrison Engineer was given the severest displeasure of the Chief of Army Staff, which meant that this person has not been able to pick up his next promotion and has gone on retirement. This is the worst thing that can happen to a service officer. In the normal course, he would have gone upto the rank of a Colonel or a Brigadier. But he retired as a Lt. Colonel. For a uniformed person, this is a great punishment.

If a person sees that his junior has been moved up, he will not tolerate it. Here he cannot because of the severe displeasure of the Chief of the Army Staff. He was given severe displeasure to be recorded in his own record. These last two have an impact; they are placed on the record, but technically they were operated for a period of three years. When there is a displeasure on the record, it leads to some doubts in the mind of the evaluating officer. In short all the three persons who were found guilty of this either directly or indirectly have been very suitably punished."

1.29 The witness further added as follows:—

"I would also like to explain that there were 23 obligatory tests. Actually, I should have said this thing earlier. Out of 23 obligatory tests, in five tests, these people did not carry out anything. It is not my intention to be little what the hon. Member is mentioning, but I do want to clarify that it is not that that everything went wrong with the project, but, true that certain deficiencies were observed. I would also like to clarify that some of these deficiencies we had later discovered required a certain amount of amendment updating the modification in our own institutions which was the lesson we learnt from this and, therefore, rectificatory action had also been taken by the Engineer-in-Chief so as to ensure that episodes of this nature did not recur."

1.30 The Committee enquired whether the work was inspected/supervised regularly by the Engineer-in-Charge as well as higher Engineer authorities and all stages were passed/approved by the competent Engineer authority. The Ministry of Defence stated as follows:—

"Yes, Sir, As is seen from the records, the work had generally been continuously progressed under regular supervision of Engineer-in-Charge. Higher Engineer authorities also occasionally visited the work site. As at no stage the work was specifically stopped for sub-standard workman-

11

ship by the contractor, it is reasonable to assume now that the work was passed/approved at all stages by the competent authorities. :

Sub-standard workmanship in the pavement work can be due to various reasons such as:—

- (a) Use of sub-standard material.
- (b) Non-adherence to proper mixes as specified in the design.
- (c) Lack of supervision in attending to various activities such as curing, proper mixing of constituents, lack of temperature control while heating and mixing of bitumen with other constituents.
- (d) Non-compliance of laid down instructions as per the contract documents.

The cumulative effect of non-adherence to one or more of these aspects in various degrees has in this case resulted in sub-standard workmanship in completion of the job. As executives on ground are primarily responsible to ensure their compliance, they have been appropriately punished for negligence on their part."

1.31 The Committee further desired to know whether it was failure of the individual officers or it was due to a lacuna in the system which permitted officers to accept such sub-standard work. The Ministry of Defence stated as follows:—

"There was no lacuna in the system which permitted officers to accept sub-standard work. But GE and Engineer-in-Charge individually were found guilty for the lapses on their part for which punishment has since been awarded to them."

1.32 Asked as to for how many times the MES Chief Engineer visited the air-field during its execution, the Ministry of Defence stated as follows:—

"Engineer-in-Chief visited the airfield twice during execution of the work. Chief Engineer visited the airfield thrice during this period. Commander Works Engineer visited the site ten times during the execution of the work.

1.33 In a meeting held on 2nd January, 1976 by the Chief Engineer with the contractor, at the project, the Chief Engineer particularly mentioned the following few defects noticed by him during his inspection of works and directed that immediate action should be taken to rectify them:—

- “(a) *Cracks in the rigid pavements.* Certain cracks in the rigid pavement have been noticed and they should be rectified by cutting the slab to its full depth and width. A minimum of 4 ft. length of the slab should be then chisselled out/removed without damaging the edges of the adjoining portions and concreted afresh with provision of necessary construction and expansion joints on either side.
- (b) *Damages to the edges of the slabs at the joint.* The damages to the edges should be rectified properly and filling of joints done including finishing them properly.
- (c) *Joint Filling.* It was observed that at places joint filling has not been finished out properly which need rectification.
- (d) *Caking effect at certain area of flexible pavement.* It was directed that such areas where caking effect/scaling has been noticed, should be finished properly using precoated sand seal coat or such suitable methods so that the defect is eliminated once for all.
- (e) *Site Clearance.* It was mentioned that top lids and bottom portions of bitumen drums are seen lying at random in the airfield area. These should be got removed and entire site got neatly finished/cleared of other debris.

Chief Engineer also instructed to be vigilant on development of further defects and necessary materials in adequate quantity and quality together with a labour gang should always be available at site so that the defects are promptly attended to. The contractor concurred to take actions as mentioned above and the Chief Engineer then concluded his discussion.”

Testing by the College of Military Engineering

1.34 In order to ascertain the quality of the existing surface of the runway, chunk samples of bituminous macadam and asphaltic concrete were got tested at the College of Military Engineering in April 1979 and these were found to be outside the specified grading limit. The Committee desired to know as to how such samples were normally tested by the Department and also whether such a test was conducted in the present case. The Ministry of Defence stated as follows:

“(a) The testing of materials during execution is normally done in the field laboratory at site.

(b) Yes—please.”

Holding of a Court of Inquiry

1.35 Under orders of the Air Headquarters (Air HQ) a Court of Inquiry was held during August 1978—May 1979 to investigate into circumstances under which the airfield had become unfit for operations and also to ascertain whether construction of the airfield and material used therefor were as per provisions specified in the contract agreement. The findings of the Court of Inquiry were as under:

- Surface of bituminous portion of the runway including the overrun was pitted, abraded, revelled, etc.
- Work of asphaltic concrete done from 25th April 1975 to 10th May 1975 was below the contract specifications.
- Non-use of the runway either by aircraft or by simulated vehicular traffic for about a year after its completion caused age hardening of bitumen and resulted in early deterioration of the airfield.

1.36 The Committee desired to know whether the Director of Flight Safety or any other authority had carried out any operational or serviceability check of the airfield. The Committee also enquired whether any such authority had inspected the airfield during November 1975 to December 1977 and indicated any defects or operational

non-worthiness of the airfield. The Ministry of Defence stated as follows:

"The serviceability of the airfield was checked by a Board of Officers which was convened for taking over the runway in November 1977.

The airfield was checked in October 1976 and June 1977 by the Base Commander at the time of its activation. The disintegration of runway surface was brought to the notice of Chief Engineer and CWE in November 1977 after experiencing the problem of loose pebbles during the activation of the airfield in September, 1977. The Engineers maintained that the runway surface will improve with further use of the runway."

1.37 Since the airfield was declared hazardous for flying in December 1977, the Committee asked as to how it could be put to use in June, 1978. The Ministry of Defence stated as follows:

"As the Engineers had repeatedly pointed out that the runway surface would improve with constant use, it was put to restricted use after sweeping the runway before its activation during May 78."

1.38 The Committee desired to know as to why at least simulated vehicular traffic or other methods were not adopted to prevent deterioration of the runway. The Ministry of Defence stated as follows:

"The airfield was constructed in Nov. 75 and it was taken over by the users in March 76. The suggestion for use of simulated vehicular traffic emerged only during the proceedings of the Court of Inquiry. The Air Force was therefore unaware of this requirement and no instructions to this effect from MES exist. Issues of instructions in this regard is being considered." ●

Delay in approval of Court of Inquiry proceedings

1.39 Court of Inquiry proceedings submitted in June, 1979 were approved by the Air Headquarters only in May 1982. The Committee desired to know the reasons for delay. The Defence Secretary stated as follows:—

"I would respectfully submit that it was not the intention to defend anybody—at any stage—or to shield anybody. The reason was this as a unique case where this sort of an incident had occurred. Never had this sort of thing

happened earlier. The people on the spot might have given some way or room for complaints. Secondly this matter had to be examined between the Air-Headquarters and Engineer-in-Charge for a considerable time. Once the intensity or the gravity of the matter was realised appropriately, the matter was referred to the Central Road Research Institute, Roorkee.

Consequently at each stage this case had to be examined very carefully because of the uniqueness of the case. I do realise that it took a long time."

1.40 Some of the relevant extracts from the Report of the Road Research Institute are as follows:

"A few pavement samples analysed by MES Kirkee confirmed the use of right quantity of binder but large variation in the gradation of the aggregate have been noted both in bituminous macadam & asphaltic concrete. All this indicates that the quality control was not adequate.

The lane joints were not properly done. As a result, maximum roughening can be deserved at these joints. Also at these joints shallow troughs of 1-1.5 cm deep are formed, giving every chance for accumulation and infiltration of water into the base. Fine hair cracks are visible on the white marking paint on the runway giving an impression that the pavement has cracked. But on opening up of the surface it was observed that they are confined to paint layer only.

The colour difference between the lanes is quite marked depicting the lack of quality control during the construction.

The longitudinal and cross profile of the runway was not properly maintained. As against surface tolerance of 3mm to 6mm stipulated on asphaltic concrete and bituminous macadam surface respectively on A.C. surface these are as high as 1.5 cm."

1.41 The Committee enquired whether administrative action had been taken to fix responsibility for the lapses. The Ministry of Defence stated as follows:

"The following officers, who were responsible to carryout the obligatory tests and maintain proper records, were

punished on finalisation of the Court of Inquiry as per details given against each for non-compliance of existing orders on the subject:—

(a)	Lt. Col.	"Severe Displeasure of Chief of the Army Staff"
(b)	Capt.	"Severe Displeasure to be recorded by GOC-in-C Southern Command..."
(c)	Sub.	"Severe Displeasure to be recorded by GOC-in-C Southern Command."

1.42 It is seen from the Audit Paragraph that the authorities at Air Command had observed in August 1979 that guidelines on the use of active ingredients like cement were inadequate in the contract specifications. The Committee desired to know the reasons for this. The Ministry of Defence stated as follows:—

"It has been confirmed by E-in-C's Branch that the guidelines on the use of active ingredients like cement were adequate in the contract specifications."

1.43 The Committee desired to know whether the recommendations of the Court of Inquiry regarding maintenance of the airfield and points to be borne in mind by the MES while designing the runways and conclusion of contracts for such works have been examined and if so, what remedial steps have been taken to prevent recurrence of similar defects in future. In a note the Ministry of Defence stated as follows:—

"These points have been gone into and detailed instructions to be followed for carrying out the tests to ensure proper quality control have already been issued *vide* Engineer-in-Chief's Branch letter No. 27039/BO/Engr 2 Air dated 02 Jan. 1984."

1.44 *Resurfacing of the runway*

In order to ascertain the quality of the existing surface of the runway, chunk samples of bituminous macadam and asphaltic concrete were got tested at the College of Military Engineering in April, 1979 and these were found to be outside the specified grading limit. Accordingly, the Air HQ sanctioned in September 1979 the work of resurfacing of the runway at an estimated cost of Rs. 15.37 lakhs,

subsequently revised (May 1980) to Rs. 22.43 lakhs. The Zonal CE concluded in October, 1980 a contract for Rs. 26.29 lakhs with firm 'Y'; the work under the contract was completed in April, 1981 at a cost of Rs. 32.15 lakhs.

1.45 The Committee desired to know whether tests were carried out by College of Military Engineering or any such agency during the execution of the work. The Ministry of Defence stated as follows:—

“During execution, the tests were carried out at site by site agencies.”

Arbitration and Appeal in the Court:

1.46 The Engineer-in-Chief appointed in September, 1978 a Brigadier as an arbitrator. Firm 'X' put forward a claim of Rs. 1.28 crores before the arbitrator while the Ministry of Defence claimed Rs. 71.97 lakhs towards over payment/compensation. In a non-speaking award the arbitrator awarded in October, 1982 a sum of Rs. 35.43 lakhs (plus interest) to the contractor and Rs. 0.15 lakhs to the Ministry.

The contractor had claimed damages for Rs. 7,18,700.00 for breach of contract due to Department's failure to make the Batching Plant and its accessories operational. The arbitrator awarded him 4 lakhs on this account. The Committee desired whether any inquiry was instituted to find out why the Batching Plant was not made operational and if so a copy of such Inquiry Report together with the action taken thereon may also be furnished. In a note, the Ministry of Defence stated as follows:

“The Government incurred heavy expenditure on transportation of the Senior Elba Plant from long distance and erecting the same at site.

The plant was operational and contractor *vide* GE 8112 letter No. 8020/778.E8 dated 22.8.74 was intimated that the Elba Plant was in perfect working conditions and he could take over the plant from the AGE.

The contractor refused to take over the Plant on the false pretext that suitable acroforms were not issued under Schedule 'C' which was not the fact. Actually they did not take it over just to save hire charges.

Taking the above facts into account, no inquiry was considered necessary and as such not instituted.

The Government also claimed Rs. 31 lakhs for the loss suffered but the Arbitrator did not allow the claim.

The amount of Rupees four lakhs awarded by the Arbitrator to the Contractor has been rejected by the Court of District Judge, Jaipur City, Jaipur."

1.47 Asked whether the impartiality of the Arbitrator was in doubt, the Defence Secretary stated as follows:—

"If his impartiality was not in doubt, we would not have gone to the Court of law. The lower Court has already set aside the award on ground of legal misconduct. . . . We have asked for review of the judgement at the lower Court level."

1.48 The Committee desired to know whether any action had been taken against the Brigadier in view of the strictures passed against him. The Defence Secretary stated as follows:

"There are no other strictures. The Lower Court said that the same arbitrator should be appointed; the same arbitrator may be appointed to review the arbitration in the light of the observations they made. We said, this officer had ceased to be an engineer officer since he has already retired. Under the agreement subsisting between us and the contractor, he has become *functus officio* and cannot be appointed this is the ground which we have taken with the lower court which is coming up for hearing."

1.49 On 4-10-1985, the Department had filed an application in the Court of Distt. Judge Jaipur City *inter alia* requesting as follows:—

"Brig. General published his award on 8th Oct., 1982 which has been set aside by your honourable court *vide* order dated 12th Feb., 1985 with the direction that the learned Arbitrator should rehear both the parties after calling for all the relevant documents available with both the parties consider them and resubmit his award within 4 months.

It is submitted that Brig.———has already retired and is no more an Engineering Officer but a retd. Engineer as has been revealed from the enquiries, made subsequently. According to Arbitration clause Engineer-in-Chief has to appoint an Engineer Officer which is working as such.

It is, therefore, prayed that direction may kindly be issued to the Engineer-in-Chief Army HQ New Delhi—11 for appointment of an Engineer Officer as a sole Arbitrator as per your order dated 12 Feb., 1985 with further direction that the said Arbitrator should submit his award within 4 months from the date of entering on reference as per condition 70 forming part of the contract to this honourable court for further disposal and orders."

1.50 Firm 'X' has also preferred an appeal in the Rajasthan High Court against the decision of the Distt. Court.

1.51 In December 1973, a contract for Rs. 1.98 crores was concluded with firm 'X' for execution of work pertaining to runway, taxi-tracks, linked tracks and dispersal tracks of air-field 'C'. The air-field was constructed for the purpose of a forward base for supporting air-operations during hostilities. The work which was to be completed by January 1975, was actually completed in November, 1975. The Military Engineer Service was the executing agency for the project. It is unfortunate that due to lack of adequate supervision by the Engineers and the executive staff, work which was sub-standard was taken over. The various problems arising out of this lapse are discussed in the succeeding paragraphs.

1.52 As per contract conditions the contractor was responsible for rectifying any defects noticed during one year after the date of completion of the work in November, 1975. On completion of the work, a Board of Officers was convened for taking over the air-field from the contractor. The air-field was handed over to the users in March 1976 and was put to use only in October 1976. The aforesaid Board of Officers had noticed a number of serious defects even on preliminary inspection of the air-field. One of the defects they noticed was that flexible pavement had started pitting over almost all the areas requiring surface treatment/dressing. According to the Ministry of Defence, these defects were then got rectified by the contractor. The Committee are deeply concerned to note that inspite of the fact that quite a number of serious defects were noticed even on preliminary inspection of the airfield, the airfield was not put to use until October, 1976 by which time the stipulated period of one year for rectification of the defects by the contractor had almost expired.

1.53 According to the Ministry of Defence due to general unfavourable weather conditions during summer followed up by monsoon

during April to September 1976 and the lack of ground equipment such as recovery/Nav-aids and communication facilities, the activation of this base was planned for October, 1976 in the interest of flight safety and other operational reasons. But originally it was to have been completed in January 1975 and the contract for the work was concluded in December, 1973. It is surprising that during all this time ground equipment etc. were not planned to be made ready. Careful planning might well have expedited matters. In fact the delay has been adversely commented upon by the Court of Inquiry held in 1978-79. It has opined that Non-use of the runway either by aircraft or by simulated vehicular traffic for about a year after its completion caused age hardening of bitumen and resulted in early deterioration of the airfield."

1.54 The Committee are told that roughness of the runway and presence of small pebbles were brought to the notice of local Military Engineer Service authorities by the users, in June, 1977. Strangely enough, even without undertaking any investigation to ascertain the reasons for the development of these defects, it was stated by these authorities that the runway surface, would improve with use. Earlier when these problems were discussed by the Base Commander with the Chief Engineer and the Commander Works Engineer when they visited the Base in November, 1977, no reference appears to have been made to these defects, or that they would disappear with use. It was left to the users to point out to the Zonal Chief Engineer in December 1977 that the flexible pavement had started showing signs of disintegration to such an extent that they had to declare the air-field as hazardous to flying. The Committee can only deplore such a casual approach and complete lack of seriousness on the part of the concerned Engineers to their duties.

1.55 It appears that certain obligatory tests to ensure quality control as prescribed in the contract were not carried out and records were not maintained properly. The fact was also later corroborated by the Chief Technical Examiner in his report for the period October 1980-March 1981. These obligatory tests were wear test, tests for finding out flakiness content of bitumen, asphalt concrete and tests regarding control bay for safety etc. The Committee cannot but conclude that non-adherence to these tests led to sub-standard workmanship.

1.56 The Committee note that under orders of the Air Headquarters a Court of Inquiry was held to investigate into the circumstances under which the airfield had become unfit for operations and also to

ascertain whether the construction of the airfield and material used therefor were as per provisions specified in the contract agreement. The findings of the Court of Inquiry were as follows:

- (i) Surface of bituminous portion of the runway including the overrun was pitted, abraded, revelled, etc.
- (ii) Work of asphaltic concrete done from 25 April 1975 to 10 May 1975 was below the contract specifications.
- (iii) Non-use of the runway either by aircraft or by simulated vehicular traffic for about a year after its completion caused age hardening of bitumen and resulted in early deterioration of the air-field.

The Road Research Institute, Roorkee to which the matter was subsequently referred, observed in their report that there was lack of quality control during the execution of the project. The longitudinal and cross profile of the runway was not properly maintained, as against surface tolerance of 3 mm and 6 mm stipulated on asphaltic concrete and bituminous macadam surface respectively on A.C. surface these were as high as 1.5 cm. In short, there was complete lack of supervision and failure to enforce quality control.

1.57 As if to surpass this long series of acts of commission and omission, the Air Headquarters took 3 long years to consider and approve the findings of the Court of Inquiry. Whoever was responsible for such dilatoriness should be taken to task.

1.58 The Committee note that three Supervisory Officers, a Lt. Col., a Captain and a Subedar were punished on finalisation of the Court of Inquiry proceedings as they were responsible for carrying out the obligatory tests and maintain proper records. In the aforesaid cases, the punishment awarded was "Severe Displeasure of Chief of the Army Staff", "Severe Displeasure to be recorded by GOC-in-C Southern Command" and "Severe Displeasure to be recorded by GOC-in-C Southern Command" respectively. The Committee do not consider this punishment to be at all commensurate with the gravity of the offence. There were no extenuating circumstances and therefore, deterrent punishment should have been more appropriate.

1.59 The Senior Engineers of the Military Engineering Service cannot be absolved of their responsibility for their failure to exercise satisfactory supervision. Their responsibility was the greater having regard to the fact that the airfield was in the forward area and needed in the event of hostilities.

1.60 The Committee have found this entire case most depressing. So many have failed to discharge their duties with the devotion and care expected of them, particularly where the country's security is concerned. The Committee indeed feel that everything was not above board. The Committee would like Government to take serious note of the various acts of omission and commission in this case and take appropriate steps to ensure that they do not occur again.

NEW DELHI;
April 24, 1986
Vaisakha 4, 1908 (Saka)

E. AYYAPU REDDY,
Chairman,
Public Accounts Committee.

APPENDIX

Conclusions/Recommendations

Sl. No.	Para No.	Ministry Concerned	Conclusion/Recommendation
1	2	3	4
1	1.15	Defence	<p>In December 1973, a contract for Rs. 1.98 crores was concluded with firm 'X' for execution of work pertaining to runway, taxi-tracks, linked tracks and dispersal tracks of air-field 'C'. The air-field was constructed for the purpose of a forward base for supporting air-operations during hostilities. The work which was to be completed by January 1975, was actually completed in November, 1975. The Military Engineer Service was the executing agency for the project. It is unfortunate that due to lack of adequate supervision by the Engineers and the executive staff, work which was sub-standard was taken over. The various problems arising out of this lapse are discussed in the succeeding paragraphs.</p>
2	1.52	—do—	<p>As per contract conditions the contractor was responsible for rectifying any defects noticed during one year after the date of completion of the work in November, 1975. On completion of the work, a Board of Officers was convened for taking over the air-field from the contractor. The air-field was handed over to the users in March 1976 and was put to use only in October 1976. The afore-said Board of Officers had noticed a number of serious defects even on preliminary inspection of the airfield. One of the defects they</p>

noticed was the flexible pavement had started pitting over almost all the areas requiring surface treatment/dressing. According to the Ministry of Defence, these defects were then got rectified by the contractor. The Committee are deeply concerned to note that inspite of the fact that quite a number of serious defects were noticed even on preliminary inspection of the airfield, the airfield was not put to use until October, 1976 by which time the stipulated period of one year for rectification of the defects by the contractor had almost expired.

According to the Ministry of Defence due to general unfavourable weather conditions during summer followed up by monsoon during April to September 1976 and the lack of ground equipment such as recovery/Nav aids and communication facilities, the activation of this base was planned for October, 1976 in the interest of flight safety and other operational reasons. But originally it was to have been completed in January 1975 and the contract for the work was concluded in December, 1973. It is surprising that during all this time ground equipment etc. were not planned to be made ready. Careful planning might well have expedited matters. In fact the delay has been adversely commented upon by the Court of Inquiry held in 1978-79. It has opined that non-use of the runway either by aircraft or by simulated vehicular traffic for about a year after its completion caused age hardening of bitumen and resulted in early deterioration of the airfield."

4 1.54

—do—

The Committee are told that roughness of the runway and presence of small pebbles were brought to the notice of local Military Engineer Service authorities by the users, in June, 1977. Strangely enough, even without undertaking any investigation to ascertain the reasons for the development of these defects, it was stated by these authorities that the runway surface, would improve with use. Earlier when these problems were discussed by the Base Commander with the Chief Engineer and the Commander Works Engineer when they visited the Base in November, 1977, no reference appears to have been made to these defects, or that they would disappear with use. It was left to the users to point out to the Zonal Chief Engineer in December 1977 that the flexible pavement had started showing signs of disintegration to such an extent that they had to declare the air-field as hazardous to flying. The Committee can only deplore such a casual approach and complete lack of seriousness on the part of the concerned Engineers to their duties.

25

5 1.55

—do—

It appears that certain obligatory tests to ensure quality control as prescribed in the contract were not carried out and records were not maintained properly. The fact was also later corroborated by the Chief Technical Examiner in his report for the period October 1980—March 1981. These obligatory tests were wear test, tests for finding out flakiness content of bitumen, asphalt, concrete and tests regarding control bay for safety etc. The Committee cannot but conclude that non-adherence to these tests led to sub-standard workmanship.

1	2	3	4
6	1.56	D fence	

The Committee note that under orders of the Air Headquarters a Court of Inquiry was held to investigate into the circumstances under which the airfield had become unfit for operations and also to ascertain whether the construction of the air-field and material used therefor were as per provisions specified in the contract agreement. The findings of the Court of Inquiry were as follows:

- (i) Surface of bituminous portion of the runway including the overrun was pitted, abraded, revelled, etc.
- (ii) Work of asphaltic concrete done from 25 April 1975 to 10 May 1975 was below the contract specifications.
- (iii) Non-use of the runway either by aircraft or by simulated vehicular traffic for about a year after its completion caused age hardening of bitumen and resulted in early deterioration of the air-field.

The Road Research Institute, Roorkee to which the matter was subsequently referred, observed in their report that there was lack of quality control during the execution of the project. The longitudinal and cross profile of the runway was not properly maintained; as against surface tolerance of 3mm and 6mm stipulated concrete and bituminous macadam surface respectively on A.C. surface these were

7 1.57

—do—

as high 1.5 crs. In short, there was complete lack of supervision and failure to enforce quality control.

As if to surpass this long series of acts of commission and omission, the Air Headquarters took 3 long years to consider and approve the findings of the Court of Inquiry. Whoever was responsible for such delinquent behavior should be taken to task.

8 1.53

—do—

The Committee note that three Supervisory Officers, a Lt.Col., a Captain and a Subedar were punished on finalisation of the Court of Inquiry proceedings as they were responsible for carrying out the obligatory tests and maintain proper records. In the aforesaid cases, the punishment awarded was "Severe Displeasure of Chief of the Army Staff", "Severe Displeasure to be recorded by GOC-in-C Southern Command" and "Severe Displeasure to be recorded by GOC-in-C Southern Command" respectively. The Committee do not consider this punishment to be at all commensurate with the gravity of the offence. There were no extenuating circumstances and therefore, deterrent punishment should have been more appropriate.

9 1.59

—do—

The Senior Engineers of the Military Engineering Service cannot be absolved of their responsibility for their failure to exercise satisfactory supervision. Their responsibility was the greater having regard to the fact that the airfield was in the forward area and needed in the event of hostilities.

1	2	3	4
10	1.60	Defence	<p>The Committee have found this entire case most depressing. So many have failed to discharge their duties with the devotion and care expected of them, particularly where the country's security is concerned. The Committee indeed feel that everything was not above board. The Committee would like Government to take serious note of the various acts of omission and commission in this case and take appropriate steps to ensure that they do not occur again.</p>

