

HUNDRED AND THIRTY-EIGHTH REPORT

PUBLIC ACCOUNTS COMMITTEE (1982-83)

(SEVENTH LOK SABHA)

REPLACEMENT OF A BASIC TRAINER AIRCRAFT

MINISTRY OF DEFENCE

[Action taken on Eighty-Seventh Report
(Seventh Lok Sabha)]



Presented in Lok Sabha on 22.4.1983
Laid in Rajya Sabha on

LOK SABHA SECRETARIAT
NEW DELHI

April, 1983 (Chaitra, 1905 (Saka))

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Corrigenda to 138th Report of PAC
(Seventh Lok Sabha)

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7			Insert the following under CHAPTER II	
			"RECOMMENDATIONS AND OBSERVATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT"	

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PUBLIC ACCOUNTS COMMITTEE

(1982-83)

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1. Shri T. R. Krishnamachari—*Joint Secretary.*
2. Shri K. C. Rastogi—*Chief Financial Committee Officer.*

INTRODUCTION

I, the Chairman of the Public Accounts Committee as authorised by the Committee, do present on their behalf this Hundred and Thirty-eighth Report on action taken by Government on the recommendations of the Public Accounts Committee contained in their 87th Report (7th Lok Sabha) on replacement of a basic trainer aircraft relating to the Ministry of Defence.

2. The Committee had, in their 87th Report, pointed out that the question of finalising a joint operational requirement (OR) to meet the requirements of the Air Force and the Civil Aviation for a common trainer aircraft was allowed to get bogged down in routine inter-departmental references resulting in undue delay. The Committee are not convinced with the Ministry's explanation that in view of positive indications from the D.G.C.A. that the Ravathi MK-II could be modified to meet the air staff requirements, the search for a common trainer aircraft was further progressed and that it was only when the unexpected escalation in fuel prices occurred that the whole exercise became uneconomical and the idea was given up. The Committee have pointed out that it took over five years for the Ministry to come to a definite conclusion in the matter and to drop the idea of having a common trainer aircraft. This is indicative of the fact that the matter was not pursued with the sense of urgency that it deserved. According to the Committee, this long delay was avoidable. The Committee have emphasised that suitable lesson should be drawn by the Ministry from their experience in this case.

3. The Committee had in their Eighty-seventh Report, recommended that the Ministry of Defence should undertake a comprehensive review of major development projects initiated during the last 15 years with a view to ascertaining the reasons for delay in their execution. In response to the Committee's recommendation, Government have constituted a High Level Committee, which has been asked to submit its Report by 30 April, 1983.

4. The Committee considered and adopted this Report at their sitting held on 31 March, 1983. Minutes of the sitting form Part II of the Report.

5. For facility of reference and convenience, the recommendations and observations 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.

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

NEW DELHI;

April 4, 1983

Chaitra 14, 1905 (Saka)

SATISH AGARWAL

Chairman,

Public Accounts Committee.

REPORT

CHAPTER I

1.1 This Report of the Committee deals with the action taken by Government on the Committee's recommendations and observations contained in their Eighty-Seventh Report (7th Lok Sabha) on Paragraph 7 of the Report of the Comptroller and Auditor General of India for the year 1979-80, Union Government (Defence Services) on Replacement of a Basic Trainer Aircraft.

1.2 The Eighty-Seventh Report which was presented to Lok Sabha on 16 April, 1982, contained 14 recommendations. Action taken notes have been received in respect of all the recommendations/observations. The recommendations have been categorised as follows:—

- (i) Recommendations and observations that have been accepted by Government:

S. Nos. 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14.*

- (ii) Recommendations and observations which the Committee do not desire to pursue in the light of the replies received from Government:

Nil

- (iii) Recommendations and observations replies to which have not been accepted by the Committee and which require reiteration:

S. No. 2.

- (iv) Recommendations and observations in respect of which Government have furnished interim replies:

Nil

1.3 The Committee will now deal with action taken by Government on some of their recommendations.

Feasibility of a common trainer aircraft for the Air Force and Civil Aviation (Serial No. 2, Para 1.93)

1.4 Commenting on the manner in which the proposal for having a common trainer aircraft to meet the requirements of the Air Force

*Not vetted in Audit.

as well as the Civil Aviation authorities, was allowed to get bogged down in routine inter-departmental references, the Committee had in Para 1.93 of the 87th Report observed as under:—

“The Committee find that it took about 5½ years for the Air Headquarters/Department of Defence Production to come to the conclusion that ‘Revathi Mark II’ being then developed by the Directorate General of Civil Aviation would not be able to meet the requirements of the Air Force. It is clear from the records made available to the Committee that even initially when the recommendations of the Aeronautics Committee were referred to them for comments, the Ministry of Tourism and Civil Aviation had clearly stated that ‘though the Revathi will meet the civilian requirements trainer aircraft, it will not meet the requirements of the Air Force, since it does not fall within the aeronautics category’. HAL on their part suggested that in case Revathi Mark II was accepted by the IAF, HAL could undertake its manufacture. In case it was not accepted by IAF, a joint OR to meet the needs of IAF and Civil Aviation be issued together with the anticipated requirements for feasibility study by HAL. Conceding that the recommendations of the Aeronautics Committee needed in depth examination, the Committee regret to note that the question of finalising a joint OR to meet the requirements of the Air Force and the Civil Aviation for a common trainer aircraft was allowed to get bogged down in routine inter-departmental references and no effort was made to set up a joint machinery to study the feasibility of the proposal about which had already been expressed both by the Aeronautics Committee as well as by the DGCA as to its acceptability to the Air Force. The Secretary, Department of Defence Production deposed that it could be said in retrospect that there was a certain amount of ‘ambivalence in the Report of the Aeronautics Committee and that in terms of specifications, roles and requirements of civil training in a flying club and the training required by a pilot in Air Force are totally different. The Department of Defence Production have further informed the Committee that except for the very basic training when the pilot is introduced to flying, there is very little commonality between the Air Force and the Civil flying organisations. While one trains its pilots to use the aircraft as a weapon platform or for operational

employment, the other is largely offered to normal commercial type of route flying."

1.5 In the action taken note dated 22 December, 1982, the Ministry of Defence have stated:—

"In order to arrive at a joint OR for an *ab-initio* trainer that would meet the requirements of the Air Force and Civil Aviation, Air HQ had issued ASR 4/71 in May 71 for a feasibility Report. DGCA, who were then developing the Revathi Mk. II offered the aircraft in May, 1972, for evaluation by the IAF as they felt that the aircraft would meet the requirements of a common trainer. The aircraft did not however meet the requirements of the Air Force. However, in view of positive indications from the DGCA that the Revathi Mk. II could be modified to meet ASR 4/71, the search for a common trainer aircraft was further progressed. An effort in the direction of incorporating modifications was also made during 1971-73 by the DGCA. It was only when the unexpected escalation in fuel prices made the whole exercise uneconomical was the same given up."

1.6 The Committee had, in para 1.93 of the 87th Report, pointed out that the question of finalizing a joint operational requirement (OR) to meet the requirements of the Air Force and Civil Aviation for a common trainer aircraft was allowed to get bogged down in routine inter-departmental references and no effort was made to set up a joint machinery to study the feasibility of the proposal about which doubts had already been expressed both by the Aeronautics Committee (1969) as well as by the D.G.C.A. as to its acceptability to the Air Force. The Committee had observed that from the records made available to them it was clear that even initially when the recommendations of the Aeronautics Committee were referred to the Ministry of Tourism & Civil Aviation for comments, they had stated that "though the Revathi will meet the civilian requirements as a trainer aircraft, it will not meet the requirements of the Air Force since it does not fall within the aeronautics category. The Department of Defence Production had also informed the Committee that "except for the very basic training when the pilot is introduced to flying, there is very little commonality between the Air Force and the civil flying organizations". The Ministry have in their reply stated that in view of positive indications from the D.G.C.A. that the Revathi MK-II could be modified to meet the air staff requirements, the search for a common trainer

aircraft was further progressed and that it was only when the unexpected escalation in fuel prices occurred that the whole exercise became uneconomical and the idea was given up. The Committee are not convinced with this explanation since the Aeronautics Committee had as far back as 1969 stated that they were "sceptical" of the prospects of successfully combining the requirements of the Air Force and the Civil Aviation and they had therefore recommended a careful study of the matter. That it took over five years for the Ministry to come to a definite conclusion in the matter and to drop the idea of having a common trainer aircraft is indicative of the fact that the matter was not pursued with the sense of urgency that it deserved. The Committee consider that this long delay was avoidable. The Committee trust that suitable lesson will be drawn by the Ministry from their experience in this case.

*Appointment of a High Level Committee to review major projects
(S. No. 14, Para 1.105)*

1.7 Emphasizing the need for carrying out a comprehensive review of major developmental projects initiated during the last 15 years with a view to ascertaining the reasons for delay in their execution, the Committee had in Paragraph 1.105 of their 87th Report, recommended as follows:—

"In some of their earlier Reports, the Committee have dealt with similar cases of undue delays in the execution of developmental projects entrusted to HAL, consequent escalation in costs and infructuous expenditure on procurement of stores/equipment. The Committee desire that the Ministry of Defence should undertake a comprehensive review of major developmental projects initiated during the last 15 years with a view to ascertaining the reasons for delay in their execution (including the delays caused by frequent changes in ORs/ASRs). This review should attempt to correlate the effect of the delays on the morale and combat-worthiness of Defence personnel and the steps that may be necessary to obviate them. This study may also identify the projects which were abandoned half way and the reasons therefore. The Committee would like this study to be entrusted to a high level team consisting of eminent scientists in the field of Defence research as well as high ranking representatives of the three Services and HAL. The Team may be asked to furnish its findings within a year and the same should be reported to the Committee as soon as available."

1.8 In their letter dated 9-3-1982, the Ministry of Defence (Department of Defence Production) stated as follows:—

“.....A High Level Committee recommended by the PAC has since been constituted. This Committee has been requested to furnish its Report by 30-4-1983. After receipt of this Report, Action Taken Note on Para 1.105 would be sent to the Lok Sabha Secretariat.”

1.9 The Committee had in Paragraph 1.105 of their Eighty-Seventh Report, recommended that the Ministry of Defence should undertake a comprehensive review of major developmental projects initiated during the last 15 years with a view to ascertaining the reasons for delay in their execution. The Committee had desired this study to be entrusted to a high level team consisting of eminent scientists in the field of Defence Research as well as high ranking representatives of the three Services and HAL, who might be asked to furnish the findings within a year. The Committee are glad to note that in response to their recommendation, Government have constituted a High Level Committee, which has been asked to submit its Report by 30 April, 1983. The Committee trust that the High Level Committee would be able to finalise and submit its Report by the stipulated date and that its recommendations would be urgently processed and implemented with a view to streamlining the system of planning for the Defence Services. The Committee would like to be apprised of the recommendations of this High Level Committee as well as action taken thereon at an early date.

Need for continuous coordination and long term perspective plan
(Sl. No. 12—Para 1.104)

1.10 Emphasizing the need for very close and continuous co-ordination between the Ministry of Defence/Department of Defence Production, the Defence Research and Development Organisation and HAL, the Committee had in para 1.104 of their 87th Report observed:—

“The Committee would like to point out in conclusion that the present case highlights the need for very close and continuous coordination between the Ministry of Defence/Department of Defence Production, the Defence Research and Development Organisation and the HAL. The Committee have been assured that cognizance has been taken at the government level of the need for long term perspective plan which would take into account the lead time for indigenous development and production to meet the

requirements of the users in a manner that would be cost effective. The Committee expect that concrete steps in this direction would be taken without further loss of time."

1.11 The Ministry of Defence (Department of Defence Production) have 'noted' the above recommendation.

1.12 In their 87th Report, the Committee had emphasized the need for very close and continuous coordination between the Ministry of Defence/Department of Defence Production, the Defence Research and Development Organisation and HAL. The Committee were assured that cognisance has been taken at the Government level of the need for long term perspective plan which would take into account the lead time for indigenous development and production to meet the requirements of the users in a manner that would be cost effective. The Committee had desired that concrete steps in this direction should be taken without further loss of time. In their reply showing action taken in the matter, Government have simply 'noted' the recommendations of the Committee which had elicited positive response during evidence. The Committee consider this to be a totally vague and inadequate reply to a specific recommendation. The Committee would therefore like to be apprised of the concrete steps taken by the Government to bring about better coordination between the organisations above mentioned and also with regard to the formulation of a perspective plan as earlier recommended by the Committee.

CHAPTER II

Recommendation

The Committee observe that the search to replace HT-2 basic trainer aircraft which had been inducted in service in the Air Force in April 1953 was started as far back as in November 1965 when it was felt that the aircraft needed to be replaced by a more modern one with a powerful engine and better maintenance and construction characteristics. The anticipation at that stage was that it would be possible to replace the aircraft by 1970. With this end in view, the HAL were asked to undertake a feasibility study. The Committee, however, find that it took 2½ years merely to identify the changes required and to finalise the operational requirements (OR) for the proposed aircraft and the same was issued on 3 May, 1968. It is surprising that it should have taken so long to specify the requirements, considering that this aircraft is stated to be not a high technology item and the expertise was already available in the IAF since the existing aircraft had been built indigenously around an imported engine. The Committee find that further modifications became necessary when instead of "a sturdy undercarriage" initially projected by the Air HQs and a tail-wheel type undercarriage proposed by HAL in the feasibility report of February, 1969 it was decided to have a fixed tri-cycle (Nose wheel) undercarriage. However, development of the basic trainer aircraft was temporarily set aside in view of the observations made by the Aeronautics Committee (1969) to the effect that the feasibility of having a common basic trainer aircraft to meet the requirements of the Air Force as well as Civil Aviation authorities should be carefully examined. The Committee find that the Aeronautics Committee had prefaced their recommendation with the remark that they were 'sceptical' of the prospects of successfully combining the requirements of the Air Force and the Civil Aviation since the former required a fully aerobatic aircraft which could only be met by a machine in a price range unlikely to be acceptable to the civilian users.

[Sl. No. 1 (Para 1.92) of appendix to 87th Report of the Public Accounts Committee (7th Lok Sabha)].

Action taken

In response to Air HQR's communication of Nov., 1965, for a more modern *ab-initio* trainer aircraft than HT-2 aircraft, HAL submitted a proposal in January, 1966 stating that it should be feasible to improve the performance of HT-2 aircraft by re-engining it with a new engine and new propeller. Since some of the improvements desired by Air HQrs in more modern *ab-initio* trainer aircraft could not have been achieved with the modifications proposed by HAL, further discussions were held with HAL and HQ Training Command. It was only when the basic requirements of the aircraft were agreed upon that OR 1/68 was issued.

2. Even though the Aeronautics Committee were 'sceptical' of the prospects of successfully combining the requirements of the Air Force and the Civil Aviation, they did recommend a careful study before launching the project which was examined and not found feasible. The observations of the P.A.C. are however noted.

3. DADS has seen.

[Ministry of Defence (Department of Defence Production)
O.M. No. 48(42)|33|82|D(HAL) dt. 1-2-1983]

Recommendation

The Committee further note that while the Air Force authorities had decided in May 1969 itself to go in for a trainer aircraft with a tri-cycle undercarriage, it was only in Nov. 1971 that the DGCA were asked to examine the feasibility of two major modifications viz tri-cycle under-carriage and aerobatic capability which in effect would have meant a totally new design. The DGCA on their part confirmed that they already had plans for incorporating a tri-cycle under-carriage and expressed confidence that Revathi Mark II was capable of aerobatic manoeuvres. No efforts in this direction were however made since it was later found on deeper consideration that this would have resulted in increased structural weights, increased fuel consumption and consequential rise in operational and maintenance costs apart from higher initial cost of the engine and aircraft which the flying clubs and training institutions on the civil side could ill afford.

[Sl. N.o. 3 (Para 1.94) of appendix to 87th Report of the
Public Accounts Committee (7th Lok Sabha)]

Action taken

In May 1969 itself the report of the Aeronautics Committee was submitted to Government which included a recommendation to find a common Trainer Aircraft to meet the Civil and Air Force requirements after carrying out a careful study to develop a new aircraft to replace the HT-2. The CCPA's approval to the recommendation was obtained in December, 1970. ASR 4/71 was forwarded to HAL and DGCA in May 1971. However, as DGCA already had the Revathi under development, it therefore became necessary to ascertain the suitability of that aircraft against the Air Force requirements. After an assessment of the Revathi was made by Air HQ, DGCA were asked to examine the feasibility of incorporating the tri-cycle undercarriage and aerobatic capability.

2. An effort in the direction of incorporating the modifications was made by the DGCA throughout the period 1972-73, and only when the sudden escalation of the fuel prices made the whole exercise uneconomical, was the same given up.

3. DADS has seen.

[Ministry of Defence (Department of Defence Production)
O.M. No. 48(42)|35|82|D(HAL) dt. 30-11-1982]

Recommendation

The Air Force authorities found in the preliminary trials carried out in May 1972 that Revathi Mark.II suffered from several short-falls and would not meet their requirements without major modifications. The proposal of the DGCA made in November 1973 to set up a Committee to sort out the problems, made in the context of their inability to incorporate the desired modifications, appears to have been ignored and the process of evaluation, re-evaluation and estimating the cost of modifications went on for another year without any tangible results. The proposal was finally abandoned in October, 1974.

[Sl. No. 4 (Para No. 1.95) of appendix to 87th Report of the
Public Accounts Committee (7th Lok Sabha)]

Action taken

After the suggestion of the DGCA made in Nov. 1973 to set up a Committee to look into the whole question and sort out the problems, Air HQs considered it prudent to re-assess the aircraft to

see whether the required modifications had been implemented, and whether the aircraft would acceptably meet the ASR. After the aircraft was offered for evaluation in July, 1974, it became clear that the performance of the aircraft had not improved much since the earlier evaluation in 1972. Even if a Committee had been set up, it would have been necessary to evaluate the aircraft before taking a final decision. The Air HQrs attempted to evaluate the aircraft as soon as practicable, and a decision was taken immediately after the evaluation was over.

2. DADS has seen.

[Ministry of Defence (Department of Defence Production)
O.M. No. 48(42)|37|82|(HAL) dt. 22-12-1982].

Recommendation

The Committee would like to express their unhappiness over the fact that five and a half precious years were lost in the search for the elusive common trainer aircraft. The Feasibility Report prepared by HAL in February 1969 remained in cold storage till Sep. 1975 and the HAL was "kept waiting" for Government's decision in the matter.

The Committee find that due to inordinate delay in the development of a new piston engine trainer aircraft there has been a steep escalation in the developmental cost as well as in the unit cost. While the developmental cost which was estimated at Rs. 168 lakhs in April 1975 has gone up to Rs. 537.40 lakhs at 1980 price level, the unit cost of manufacture has gone up from Rs. 6.40 lakhs (1974-75) to Rs. 9.00 lakhs (1977) and further to Rs. 19.25 lakhs at 1980 price level. According to the Ministry of Defence the present estimated cost compares favourably with the landed cost of similar contemporary aircraft produced abroad apart from the savings in foreign exchange. While this may be so the fact remains that substantial economics would have accrued had the Ministry taken timely decision in the matter and allowed HAL to go ahead with the development work.

[Sl. Nos. 5 & 9 (Para 1.96 & 1.100) of appendix to 87th Report of the Public Accounts Committee (7th Lok Sabha)]

Action taken

HAL's Feasibility Report prepared in February, 1969, for development and manufacture of a new piston engine trainer aircraft

could not be progressed in view of the recommendation of the Aeronautics Committee to explore the feasibility of having a common trainer aircraft for IAF and civil requirements. Accordingly, ASR 4/71 was formulated to investigate the possibility of a common trainer aircraft. On further consideration and at the suggestion of HAL, the preparation of Feasibility Report against ASR 4/71 was not pursued to avoid duplication of efforts in the event of successful emergence of a common trainer, viz., Revathi aircraft, then being developed by DGCA. HAL were finally asked in September, 1974, to prepare a Feasibility Report to meet ASR 4/71 when it became clear that Revathi Mk.II would not meet the requirements of Air Force. However, the observations of the PAC are noted.

2. DADS has seen.

[Ministry of Defence (Department of Defence Production)
O.M. No. 48(42)|45|82|D(HAL) dt. 22-12-1982]

Recommendations

The Committee regret to observe that the authorities failed to take note of the position so plainly stated not only in the Report of the Aeronautics Committee but also by the Ministry of Tourism and Civil Aviation. It is really unfortunate that matters were allowed to drift for such a long time. Secretary, Defence Production stated in evidence that the recommendations of the Aeronautics Committee were taken a little too seriously . . . we spent a lot of time to come to the conclusion that this was not the answer. "The Committee note with dismay the total absence of any sense of urgency in the Department of Defence Production/ Air Headquarters even in the face of a badly felt need. The DGCA are also partly to blame for their failure to examine the cost and feasibility aspect of the proposed modifications at the time the matter was referred to them in November, 1971. Having first given the impression that they had plans to provide the tri-cycle under-carriage; they took two years to inform the Air Force authorities that they had no plans to incorporate the major modifications desired by them.

The Committee are thus led to the conclusion that lack of adequate coordination and inter-action between on the Department of Defence Production, the Air Headquarters, the DGCA and HAL has been responsible for the abnormal delay to which the project has been subjected.

[Sl. Nos. 6 & 7 (Para 1.97 & 1.98) of appendix to 87th Report of Public Accounts Committee 1981-82 (7th Lok Sabha)].

Action taken

After the ASTE (Aircraft and Systems Testing Establishment) had evaluated the Revathi aircraft, a report was forwarded to the DGCA, who in December, 1972, forwarded a Feasibility Report on the modifications recommended by ASTE. In the Feasibility Report DGCA requested the Air Hqs. to reconsider the need for the major modifications in the light of the weight penalty and time required for carrying them out. Air Hqs. views on the Feasibility Report were sent to DGCA in March, 1973, wherein they were asked to provide certain clarifications before Air Hqs. could recommend a 'Go Ahead' for the project. Subsequent to the proposal of the DGCA of November, 1973, for constitution of a Committee to sort out the problems connected with the development of Revathi, the matter was discussed with DGCA in February, 1974. In this meeting it was agreed that before proceeding further with consideration of Revathi Mk. II for IAF, the improvement, if any, in the performance of the Revathi Mk. II, as a result of lateral control system modification would be evaluated. The aircraft was re-evaluated in July, 1974. As during this re-evaluation, Revathi Mk. II did not meet some essential requirements of ASR-4/71, the proposal of adopting Revathi Mk. II aircraft as *ab-initio* piston engine trainer was dropped.

2. It would be seen from the above sequence of events that the question of utilisation of Revathi Mk. II with suitable improvements remained under active consideration of Air Hqs. DGCA and Ministry of Defence till September, 1974, when it was finally decided to drop the proposal to adopt Revathi Mk. II as a Basic Trainer Aircraft for IAF.

3. The recommendation of the Committee for setting up a suitable machinery for closer consultation/ co-ordination on matters of common interest pertaining to joint aircraft projects is noted.

4. DADS has seen.

[Ministry of Defence (Department of Defence Production) O.M. No. 48(42)|38|82|D(HAL) dated 30-11-1982.]

Recommendation

Consequent upon the failure to develop a trainer aircraft common to both the civil aviation and Air Force, the HAL were asked in September, 1974 to examine the feasibility of designing, developing and manufacturing a basic piston trainer aircraft 'C' (HPT-32) as per ASR 4 of 1971. Certain changes in the performance parameters based

on feasibility studies were incorporated in ASR 10/75 and the new basic trainer aircraft was required to be inducted in the Air Force by 1977-78. The Committee have been given to understand that three proto-types of the new aircraft were developed, the third proto-type did its first demonstration flight on 31st July, 1981 when study Group of the Committee visited HAL, Bangalore. According to latest anticipation the aircraft is expected to be inducted in service only in 1985-86. Meanwhile the life of the HT-2 aircraft has been extended up to 1984 despite the fact that it has become difficult to maintain these aircraft due to ageing non-availability of spares, outdated signal equipment and unreliable Cirrus major engines.

[Sl. No. 8 (Para 1.99) of appendix to 87th Report of the Public Accounts Committee (7th Lok Sabha)]

Action taken

Noted.

DADS has seen.

[Ministry of Defence (Department of Defence Production) O.M. No. 48(42)/39/82/D(HAL) dt. 30-11-1982.]

Recommendations

Apart from the huge escalation in cost that has occurred in this case, a more disturbing aspect of the inordinate delay is the demoralising effect on the training of pilots on an ageing unreliable and diminishing fleet of aircraft. The Committee understand that the HT-2 aircraft have been involved in a large number of accidents/incidents particularly due to engine failures. Consequently, solo flying by the trainees has had to be stopped. As an interim arrangement, the flying duration at the basic stage has been reduced from 40 to 30 hours. The Committee understand that it would be possible to revert to the normal training pattern only after 1986 when sufficient assets of HPT-32 aircraft are available and additional flying training units are established. The Committee thus find that the interim pattern of training does not allow full spectrum of basic stage exercises. This is indeed unfortunate.

The Committee note that the number of incidents in which HT-2 aircraft has been involved has been quite severe—the rate being as high as 43.09 per 10,000 flying hours in 1978-79. The Committee understand that difficulties are being experienced since 1975-76 in overhaul of Cirrus Major Engines fitted in this aircraft due to lack of critical

spares such as cylinder heads, crank shafts etc. It was with a view to getting over these difficulties that HAL had proposed as early as in January 1966 that it should be possible to improve the performance of aircraft 'A' by re-engining it with a new engine and a new propeller. The matter was however not pursued at that stage since it was felt that an upgraded engine would not by itself solve the problem. The Committee understand that the proposal has since been revived. (Trials carried out by HAL in September 1981 to assess the performance of re-engined aircraft showed that its performance was similar to that of the pre-modified aircraft, and it may be possible to allow the trainee pilots to follow the normal flying syllabus of 40 hours of basic stage exercises in solo flying. It is proposed to re-engine 12 aircraft at an approx. cost of Rs. 4.84 lakhs per aircraft exclusive of profits chargeable by HAL. The Committee regret that the proposal mooted as early as in 1966 was not pursued till matters came to ahead.

The Committee expect that this work would be completed without any further hitch so as to ensure that the existing trainer aircraft are put to optimum use and the training of pilots which had been affected adversely over the last few years is resumed on the normal pattern. [Sl. Nos. 10, 11 & 12 (Para 1.101, 1.102 & 1.103) of appendix to 87th Report of the Public Accounts Committee 1981-82 (Seventh Lok Sabha)]

Action taken

The observations of the Committee have been noted. However, it would be possible for the Air Hqrs to recommend solo-flying by the trainee pilots and restore the flying syllabus to 40 hours against the present 30 hours and to cover the full spectrum of basic stage exercises during 1983-84 when the re-engined HT-2 aircrafts are expected to become available. The re-engined HT-2 aircrafts would be replaced by HPT-32 aircraft as and when these become available in adequate numbers.

2. The aim of the proposal made by HAL in 1966 to re-engine the HT-2 aircraft was to enhance the capabilities of the HT-2 aircraft. On examination, it was seen that the proposal would not invest improved capabilities to the extent desired and, therefore, the proposal was not progressed further. The present action to re-engine the HT-2 is only to prolong its use a little longer in its existing configuration and performance and not as a replacement for the old HT-2.

3. DADS has seen.

[Ministry of Defence (Department of Defence Production O.M.
No. 48(42)|42|82|D(HAL) dated 1-2-1983.]

Recommendation

The Committee would like to point out in conclusion that the present case highlights the need for very close and continuous coordination between the Ministry of Defence|Department of Defence Production, the Defence Research and Development Organisation and the HAL. The Committee have been assured that cognizance has been taken at the government level of the need for long term perspective plan which would take into account the lead time for indigenous development and production to meet the requirements of the users in manner that would be cost effective. The Committee expect that concrete steps in this direction would be taken without further loss of time.

[Sl. No. 13 (Para 1.104) of Appendix to 87th report of Public Account Committee (7th Lok Sabha)]

Action taken

Noted.

2. DADS has seen.

[Ministry of Defence (Department of Defence Production) O.M.
No. 48(42)|44|82|D(HAL) dated 22-12-1982.]

Recommendation

In some of their earlier Reports*, the Committee have dealt with similar cases of undue delays in the execution of developmental projects entrusted to HAL, consequent escalation in costs and infructuous expenditure on procurement of stores/equipment. The Committee desire that the Ministry of Defence should undertake a comprehensive review of major developmental projects initiated during the last 15 years with a view to ascertaining the reasons for delay in their execution (including the delays caused by frequent changes in ORs/ASRs). This review should attempt to correlate the effect of the delays on the morale and combat-worthiness of Defence personnel and the steps that may be necessary to obviate them. This study may also identify the projects which were abandoned half way and the reasons therefor. The Committee would like this study to be entrusted to a high level team consisting of eminent scientists in the field of Defence research as well as high ranking representatives of the three Services and HAL. The Team may be asked to furnish its

*33rd Report (7 L. S.)

76th Report (7 L. S.)

findings within a year and the same should be reported to the Committee as soon as available.

[Sl. No. 14(Para 1.105) of Appendix to 87th Report of the Public Accounts Committee (Seventh Lok Sabha)]

Action taken

** ** ** **

2. As regards Action Taken Note on Para 1.105, it may be stated that the Department of Defence Production is required to furnish the reply by 15-4-1983. A High Level Committee as recommended by the PAC has since been constituted. This Committee has been requested to furnish its Report by 30-4-1983. After receipt of this Report, ATN on Para 1.105 would be sent to the Lok Sabha Secretariat.

[Ministry of Defence (Department of Defence Production) O.M. No. 48 (42) | 10 | 82 | D(HAL) dated 9/3-1983]

CHAPTER III

**RECOMMENDATIONS AND OBSERVATIONS WHICH THE
COMMITTEE DO NOT DESIRE TO PURSUE IN THE LIGHT OF
THE REPLIES RECEIVED FROM GOVERNMENT**

—NIL—

CHAPTER IV

RECOMMENDATIONS AND OBSERVATIONS REPLIES TO WHICH HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION

Recommendations

The Committee find that it took about 5½ years for the Air Headquarters/Department of Defence Production to come to the conclusion that 'Revathi Mark II' being then developed by the Directorate General of Civil Aviation would not be able to meet the requirements of the Air Force. It is clear from the records made available to the Committee that even initially when the recommendations of the Aeronautics Committee were referred to them for comments, the Ministry of Tourism and Civil Aviation had clearly stated that 'though the Revathi will meet the civilian requirements as a trainer aircraft, it will not meet the requirements of the Air Force since it does not fall within the aeronautics category'. HAL on their part suggested that in case Revathi Mark II was accepted by the IAF, HAL could undertake its manufacture. In case it was not accepted by IAF, a joint OR to meet the needs of IAF and Civil Aviation be issued together with the anticipated requirements for feasibility study by HAL. Conceding that the recommendations of the Aeronautics Committee needed in depth examination, the Committee regret to note that the question of finalising a joint OR to meet the requirements of the Air Force and the Civil Aviation for a common trainer aircraft was allowed to get bogged down in routine inter-departmental references and no effort was made to set up a joint machinery to study the feasibility of the proposal about which doubts had already been expressed both by the Aeronautics Committee as well as by the DGCA as to its acceptability to the Air Force. The Secretary Department of Defence Production deposed that it could be said in retrospect that there was a certain amount of 'ambivalence' in the Report of the Aeronautics Committee and that in terms of specifications, roles and requirements of civil training in a flying club and the training required by a pilot in Air Force are totally different. The Department of Defence Production have further informed the Committee that 'except for the very basic training when the pilot is introduced to flying, there is very

little commonality between the Air Force and the Civil flying organisations. While one trains its pilots to use the aircraft as a weapon platform or for operational employment, the other is largely offered to normal commercial type of route flying'.

[Sl. No. 2 (Para 1.93) of appendix to 87th Report of the Public Accounts Committee (7th Lok Sabha)].

Action taken

In order to arrive at a joint OR for an ab-initio trainer that could meet the requirements of the Air Force and Civil Aviation, Air HQ had issued ASR 4/71 in May 71 for a feasibility report DGCA, who were then developing the Revathi Mk. II, offered the aircraft in May, 1972, for evaluation by the IAF as they felt that the aircraft would meet the requirements of a common trainer. The aircraft did not however meet the requirements of the Air Force. However, in view of positive indications from the DGCA that the Revathi Mk. II could be modified to meet ASR 4/71, the search for a common trainer aircraft was further progressed. An effort in the direction of incorporating modifications was also made during 1971—73 by the DGCA. It was only when the unexpected escalation in fuel prices made the whole exercise uneconomical and the same idea was given up.

2. DADS has seen.

[Ministry of Defence (Department of Defence Production)
O.M. No. 48(42)/34/82/D (HAL) dated 22-12-1982].

CHAPTER V

**RECOMMENDATIONS AND OBSERVATIONS IN RESPECT OF
WHICH GOVERNMENT HAVE FURNISHED INTERIM REPLIES.**

—NIL—

NEW DELHI;
April 4, 1983

Chaitra 14, 1905 (S)

SATISH AGARWAL,
Chairman
Public Accounts Committee.

APPENDIX

Conclusions and Recommendations

Sl. No.	Para No.	Ministry/Deptt. concerned	Conclusion/Recommendation
1	2		4
1	1.6	Defence (Department of Defence Production)	3 <p>The Committee had, in Para 1.93 of the 87th Report, pointed out that the question of finalizing a joint operational requirement (OR) to meet the requirements of the Air Force and the Civil Aviation for a common trainer aircraft was allowed to get bogged down in routine inter-departmental references and no effort was made to set up a joint machinery to study the feasibility of the proposal about which doubts had already been expressed both by the Aeronautics Committee (1969) as well as by the D.G.C.A. as to its acceptability to the Air Force. The Committee had observed that from the records made available to them it was clear that even initially when the recommendations of the Aeronautics Committee were referred to the Ministry of Tourism & Civil Aviation for comments, they had stated that "though the Revathi will meet the civilian requirements as a trainer aircraft, it will not meet the requirements of the Air</p>

Force since it does not fall within the aeronautics category". The Department of Defence Production had also informed the Committee that "except for the very basic training when the pilot is introduced to flying, there is very little commonality between the Air Force and the civil flying organizations". The Ministry have in their reply stated that in view of positive indications from the D.G.C.A. that the Bevathi MKII could be modified to meet the air staff requirements, the search for a common trainer aircraft was further progressed and that it was only when the unexpected escalation in fuel prices occurred that the whole exercise became uneconomical and the idea was given up. The Committee are not convinced with this explanation since the Aeronautics Committee had as far back as 1963 stated that they were "sceptical" of the prospects of successfully combining the requirements of the Air Force and the Civil Aviation and they had therefore recommended a careful study of the matter.

That it took over five years for the Ministry to come to a definite conclusion in the matter and to drop the idea of having a common trainer aircraft is indicative of the fact that the matter was not pursued with the sense of urgency that it deserved. The Committee consider that this long delay was avoidable. The Committee trust that suitable lesson will be drawn by the Ministry from their experience in this case.

The Committee had in Paragraph 1.105 of their Eighty-Seventh Report, recommended that the Ministry of Defence should undertake a comprehensive review of major developmental projects initiated during the last 15 years with a view to ascertaining the reasons for delay in their execution. The Committee had desired this study to be entrusted to a high level team consisting of eminent scientists in the field of Defence Research as well as high ranking representatives of the three Services and HAL, who might be asked to furnish the findings within a year. The Committee are glad to note that in response to their recommendation, Government have constituted a High Level Committee, which has been asked to submit its Report by 30 April, 1983. The Committee trust that the High Level Committee would be able to finalise and submit its Report by the stipulated date and that its recommendations would be urgently processed and implemented with a view to streamlining the system of planning for the Defence Services. The Committee would like to be apprised of the recommendations of this High Level Committee as well as action taken thereon at an early date.

In their 87th Report, the Committee had emphasized the need for very close and continuous coordination between the Ministry of Defence/Department of Defence Production, the Defence Research and Development Organisation and HAL. The Committee were assured that cognizance has been taken at the Government level of the need for long term perspective plan which would take into account the lead time for indigenous development and production to meet the requirements of the users in a manner that would

be cost effective. The Committee had desired that concrete steps in this direction should be taken without further loss of time. In their reply showing action taken in the matter, Government have simply 'noted' the recommendations of the Committee which had elicited positive response during evidence. The Committee consider this to be a totally vague and inadequate reply to a specific recommendation. The Committee would therefore like to be apprised of the concrete steps taken by the Government to bring about better coordination between the organisations above mentioned and also with regard to the formulation of a perspective plan as earlier recommended by the Committee.

PART II

MINUTES OF THE 69TH SITTING OF THE PUBLIC ACCOUNTS COMMITTEE (1982-83) HELD ON 31-3-83

The Committee sat from 1500 to 1800 hrs. in Committee Room No. 50, Parliament House, New Delhi.

PRESENT

Shri Satish Agarwal—*Chairman.*

MEMBERS

2. Shri Bhiku Ram Jain
3. Shri Sunil Maitra
4. Shri Dhanik Lal Mandal
5. Shri Uttam Rathod
6. Shri G. Narsimha Reddy
7. Shri Ram Singh Yadav
8. Dr. Sankata Prasad
9. Smt. Pratibha Singh
10. Shri Syed Rahmat Ali
11. Shri B. Satyanarayan Reddy
12. Shri Nirmal Chatterjee

REPRESENTATIVES OF THE OFFICE C&AG

1. Shri R. K. Chandrasekharan—*ADAI (Reports)*
2. Shri G. N. Pathak—*DADS*
3. Shri S. R. Mukherji—*DACWM*
4. Shri N. Sivasubramaniam—*Director Receipt Audit*
5. Shri R. S. Gupta—*Joint Director of Audit (Defence Services).*

SECRETARIAT

1. Shri T. R. Krishnamachari—*Joint Secretary.*
2. Shri K. C. Rastogi—*Chief Financial Committee Officer*
3. Shri K. K. Sharma—*Senior Financial Committee Officer.*

** ** ** **

3. The Committee then considered and adopted the following draft Reports without any modifications:—

(i) Draft Report on action taken on 87th Report of PAC (7th Lok Sabha) regarding Replacement of a basic trainer aircraft.

(ii) Draft Report on action taken on the 67th Report of PAC (7th Lok Sabha)—Union Excise Duties—Semi finished steel products and Beedi Workers Welfare Cess.

4. The Committee authorised the Chairman to incorporate such modifications as may be necessary, in the light of factual verification of the aforesaid Reports by Audit.

The Committee then adjourned.

SECRET

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