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REPORT OF THE

COMPTROLLER AND AUDITOR GENERAL

OF INDIA

UNION GOVERNMENT
NO. 10 (COMMERCIAL) OF 1989

SCHEDULING OF FLIGHTS IN AIR INDIA

FAILURE OF ELECTRIC TYPEWRITER PROJECT OF
HINDUSTAN TELEPRINTERS LTD.

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PREFACE

1. A reference is invited to prefatory remarks in Report of the Comptroller and Auditor General of India Union Government No. 1 (Commercial) of 1989 wherein mention was made that this Report will be presented in several parts.

2. This part contains two mini reviews viz., Scheduling of Flights in Air India and Failure of Electric Typewriter Project of Hindustan Teleprinters Limited.

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OVERVIEW

This Audit Report (Com.), 1989 contains two Mini Reviews. Significant Audit findings highlighted in this Report are :

I. Scheduling of Flights in Air India

The Air India operates services all over the world covering 39 on-line stations. The flight schedules are normally prepared twice in a year : Summer season from April to October and winter season from November to March. The schedule is built primarily on commercial consideration, but is also influenced by other factors like passenger convenience, bilateral arrangements with other airlines, availability of aircraft and cabin crew and traffic service requirments. Change in any of the above factors may lead to the rescheduling of flights. This review brings out significant points noticed by Audit in the study of adherance to the schedule, causes of cancellations and financial impact of delays and cancellations. (Para 1)

II. During the last five seasons ending summer 1988 taken up for study, there were 505 cancellations which were classified as follows :

(a) Commercial reasons	132
(b) Engineering reasons	53
(c) VVIP flights	148
(d) Lagos incident	78
(e) Other reasons	94
Total	505

III. Summer seasons witnessed progressively higher number of cancellations. While there was no cancellation due to commercial reasons in the first two seasons, the summer 1987 season accounted for as many as 104 cancellations due to commercial reasons which was the main reason for cancellations during that season. There was no cancellation due to engineering reasons in the first four seasons covered by the study. However, there were 49 cancellations due to engineering reasons in the summer 1988 season. About 50 per cent of cancellations due to VVIP movements took place in the summer season of 1988. A further analysis of the cancelled flights revealed that both during summer 1987 and summer 1988 seasons, the gulf sector shared nearly 60 per cent of the total cancellations. This sector has the highest yield among all the routes operated by the airline and hence the cancellations on this sector resulted in considerable loss of revenue to the airline. The details of estimated revenue and expenditure, which should normally form the basis for cancellation of a flight on commercial ground, were not available on record. Hence it was not possible to verify the justification for cancellations due to commercial reasons. (Para 2)

IV. For the year 1987-88, the Finance and Accounts Department estimated a net loss of Rs. 7.30 crores on account of cancellation of flights. On the same basis, during the summer season (first seven months) of the year 1988-89, a net loss of Rs. 6.86 crores is estimated due to cancellation of flights. Similarly, the incident of impounding of aircraft at Lagos resulted in cancellation of flights due to which the estimated loss was Rs. 2.11 crores. When flights are cancelled, many times the passengers are transferred to flights of other carriers. These airlines charge full fare to Air India irrespective of the fare collected by the Air India. Endorsement of tickets to other airlines, therefore, normally results in loss of revenue. In 1986-87 this loss was Rs. 1.28 crores, in 1987-88 it was Rs. 0.68 crore and during the first seven months of 1988-89, it was Rs. 2.01 crores. A test check of endorsed tickets for the month of October, 1987 revealed that out of 888 tickets, 614 tickets were endorsed due to delay, re-scheduling and cancellation of flights. (Paras 4, 5 and 6)

V. In order to maintain the services which are otherwise required to be cancelled due to paucity of aircraft, Air India takes aircrafts on lease. A study of three lease cases revealed that : (a) during October 1987 operation of one aircraft on lease from Middle East Airlines at a total payment of Rs. 191.50 lakhs resulted in a net loss of Rs. 32.47 lakhs; (b) another lease in July, 1988 from Egyptian Airlines resulted in a net loss of Rs. 14.50 lakhs and (c) in July, 1988 operation of one leased aircraft from Indian Airlines resulted in an over-all profit of Rs. 35.81 lakhs. (Para 7.1).

VI. An analysis of primary delays compared with the total number of flights operated by the airline revealed that the percentage of delays varied from 19.6 per cent to 25.3 per cent during the period under review. Till April 1987, no statistics was being maintained by the Corporation about the expenditure incurred due to extended delays of flights. However, it was seen that during the period from April, 1987

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to October, 1988 an amount of Rs. 366.53 lakhs had been spent on extended delays. The hotel expenditure incurred due to delays during the period under review amounted to Rs. 4.18 crores. About 48 per cent of this expenditure was incurred only during summer 1988. (Para 9).

2. Failure of Electric Typewriters Project—Hindustan Teleprinters Ltd.

I. Hindustan Teleprinters incorporated in 1960 took up manufacture of electric typewriters, based on Company's own design, as a diversification project in February, 1975. The design of the typewriters was not suitable and cost effective resulting in failure of the project.

II. The Company took up, in October, 1979, another project for electric typewriter based on the design and know-how supplied by M/s. Olivetti, an Italian Collaborator to whom fees amounting to Rs. 92.61 lakhs were paid. Although it was projected before COPU that production of electric typewriter would start in 1982-83, actual production commenced in March 1987 because apart from delay in approval of the project by GOI (July 1981), there were delays in ordering imported machines and components and in receipt of the imported/indigenous components. The total production during the period 1982-83 to 1988-89 was 1719 typewriters manufactured from components & 400 typewriters assembled from imported kits against the approved production programme of 21,000 numbers. The total sales during this period was 1009 typewriters and the balance were either kept for use in the Company or in stock. The heavy shortfall in production was due to lack of orders, lack of experience for the operators, failure of vendors to supply components, deviations in the specifications of components, etc. The poor sales were attributed by Company to trying to enter a satisfied market where customers preferred to buy the earlier models of manual typewriters and also because of the poor image of the Company due to its earlier indigenously designed production. The Company incurred a loss of Rs. 36.36 lakhs till the year 1988-89 (including loss on unsold stock of 1059 typewriters as on 31st March 1989) on the production and sale of typewriters due to high cost of production.

III. The production activities have come to a stop based on the Board's decision in March, 1989 that a stage has come where the project should be closed forthwith. However, the scope for revival of the project is under examination (Sept. 1989).

IV. At the juncture, production activities were stopped after March 1989.

(i) Capital expenditure of Rs. 180.81 lakhs on machinery, tooling and know-how had been incurred.

(ii) 1059 typewriters valued at Rs. 49.51 lakhs were lying unsold as on 31st March, 1989.

(iii) Unassembled imported and indigenous components valued at Rs. 48.68 lakhs were left with the Company as on 31st March, 1989.

(iv) Advances amounting to Rs. 148.91 lakhs given to suppliers of indigenous components were pending recovery as on 31st March, 1989.

(v) About 65 employees were engaged on the project.

AIR INDIA—SCHEDULING OF FLIGHTS

1. Introduction

1.1 The Air India operates services to various points in USA, U.K., Europe, Middle East, Gulf, Far East Asia and Africa covering 39 on-line stations. The number of flights notified periodically on different routes depends upon their fleet mix of Boeing 747, Air-bus A-310 and Air bus A-300, B 4 aircraft, further acquisitions and phasing of the old aircraft.

1.2 The flight schedules are normally prepared twice in a year, one for the summer season from April to October and the other for the winter season from November to March. Primarily, the schedule is built on commercial justification to operate between two earmarked stations. Other considerations are passengers' convenience and passengers' requirements like suitable time of arrival and departure, providing connections for passengers intending to travel to different destinations etc. Bilateral agreements with other countries and schedules of other airlines also play an important role in preparing the schedules. Other significant factors are availability of aircraft, maintenance and overhaul programme, availability of operating and cabin crew as well as ground support and traffic service requirements. Material changes in any of the above factors normally result in re-scheduling of the flights.

1.3 On the basis of papers and documents made available in course of audit, a study was conducted in the matters relating to adherence to the schedules chalked out, delays and cancellations of flights, the causes of cancellations as well as consequences of delays and cancellations. This review brings out the significant points noticed as a result of this study.

2. Cancellation of Flights

2.1 The table below shows the cancellations during the last five seasons ending summer '88 on account of various reasons :

Season	Due to commercial reasons	Due to Engineering reasons	Due to VVIP flights	Due to Lagos incident	Due to other reasons	Total cancellations
Summer '86 (April '86 to Oct. '86)	—	2	44	—	8	54
Winter '86 (Nov. '86 to March '87)	—	—	10	—	—	10
Summer '87 (April '87 to Oct. '87)	104	—	17	74	4	199
Winter '87 (Nov. '87 to March '88)	20	2	4	4	—	30
Summer '88 (April '88 to Oct. '88)	8	49	73	—	82	212
TOTAL	132	53	148	78	94	505

2.2 The above data, without reckoning the number of cancellations due to impounding of an aircraft at Lagos, indicated that :

(a) Summer seasons witnessed more cancellations as compared to the winter seasons.

(b) Cancellations during the summer seasons sharply increased from 54 in summer '86 to 125 in summer '87 and 212 in summer '88.

(c) While there was no cancellation due to commercial reasons in the first two seasons shown in the table, the summer '87 season faced on that score as many as 104 cancellations which accounts for 83 per cent of the total cancellations during the same season. The commercial cancellations are made when the load on a particular flight is considered to be poor, thereby not justifying its operation.

(d) Practically, there was no cancellation due to engineering reasons during the first four seasons covered by the study. However, there were 49 cancellations due to engineering reasons in the summer '88 season. When the aircraft cannot be released due to maintenance reasons or technical faults, the cancellation is attributed to engineering reasons.

(e) Though there were a total of 148 cancellations during the above five seasons due to VVIP movements, about 50 per cent of such cancellations were made only in the summer season of 1988. When an aircraft is chartered by the Govt. of India for movement of any VVIP, the cancellation arising out of diversion of such aircraft is attributed to VVIP flights.

(f) Summer '88 season experienced an unprecedented industrial agitation which contributed 43 cancellations (shown under "other reasons") during the period from 1st October, 1988 to 30th October, 1988.

2.3 A comparative picture of the cancellations monthwise revealed that both during summer' 87 and summer'88, the cancellations had been heavy in the months of September '87, October' 87, July' 88 and October'88 as given below:

Reasons	Sept. '87	October '87	July '88	Oct. '88
Commercial	32	36	—	—
Engineering	—	—	—	42
VVIP movement	—	15	66	—
Other reasons				
Lagos impounding	40	32	—	—
Industrial Agitation	—	—	—	43
Operating crew constraints	—	—	—	39
	72	83	66	124

2.4 Sector-wise analysis of the cancelled flights revealed that both during summer '87 and '88, the Gulf sector shared the major impact of the cancellations. It was 59 per cent of the total cancellations during summer '87 and 60 per cent during summer '88. Significantly this sector is of vital importance to the Corporation since this sector has been continuously a high yielding sector. Average yield per Revenue Tonne Kilometer (RTKM) on this sector has been Rs. 11.54 as against the over-all average yield of Rs. 6.61 for the Corporation during the last three years.

2.5 According to the Management, out of 53 cancellations made in the Gulf sector during October 1987, 26 were attributed to commercial reasons. Similarly, in September 1987, out of 43 cancellations in Gulf sector, 20 were attributed to commercial reasons. Keeping in view the fact that the Gulf sector is a high yielding and busy sector, the chances of cancellations due to commercial reasons are less. Seen in this back-ground, the categorisation of cancellations does not appear to be realistic. The basis on which decisions were taken to cancel the flights due to commercial reasons were not available on record. Moreover, the Management has not kept any record of estimated revenue and cost of operation, which were material factors in cancelling and classifying them under "commercial reasons". No system has been prescribed regarding maintenance of records containing material facts leading to cancellation of flights. This makes it difficult to evaluate such decisions.

2.6 It was also noticed that a fortnightly return, as required in Rule 16(1)(iv) of the Air Corporation Rules, 1954 containing information and explanatory notes in respect of concellation of scheduled air services was not being submitted to the Central Government.

3. Impact of Cancellations

The major effect of cancellation of flights is the loss of available capacity of the carrier, which finally results into loss of revenue. Apart from this, the cancellation creates considerable hardships and inconvenience to the passengers as they have to wait for the next available flight, seek transfer to other carriers or cancel their tickets. The airline has also to spend additional amount on keeping passengers in hotels during the time they are required to wait.

3.2 Cancellation of flights has resulted in a loss of 11.47 million Available Tonne Kilo Metres (ATKM) during the year 1986-87, 36.20 million ATKMs in the year 1987-88 and 37.4 million ATKMs in the first 7 months of the year 1988-89.

4. Loss of Revenue on Account of Cancellations

4.1 The Corporation did not have a regular system of assessing the revenue loss due to cancelled flights except in the case of VVIP flights. The loss of revenue to the airline on account of cancellation of flights is worked out on the basis of actual revenue earned on similar flights as reduced by the cash cost. Cash cost incurred on operation of flights includes aircraft fuel, landing fees and handling charges, material consumption, navigation charges, operating and cabin crew expenses, food and cabin services, etc.

4.2 The details of cancellation given in para 2.1 are computed by the Commercial Department. They do not consider the combination of two flights as cancellation of one of the flights for their statistics. On the other hand the Finance & Accounts Department prepares the statistics of cancellations on the basis of each flight report irrespective of combination of flights. For the year 1987-88, the Finance and

Accounts Department compiled the cancellation of flights as to 348 and calculated the loss as follows :

(Rupees in crores)

	No. of single flights cancelled	Revenue Loss	Savings in cash costs	Net loss
A-310	271	15.90	10.40	5.50
A-300	10	0.25	0.12	0.13
747-200	67	7.37	5.70	1.67
	348	23.52	16.22	7.30

The revenue loss was estimated in respect of total number of cancelled flights as a whole and the analysis of the loss on account of cancellations attributable to different reasons was not available.

4.3 An assessment made by Audit on the loss of revenue due to cancellations in summer 1988 season on the same basis as has been done for the year 1987-88 by the Finance and Accounts Department, is given below :

(Rupees in crores)

	No. of single flights cancelled	Revenue loss	Savings in cash costs	Net Loss
A-310	119	4.82	2.54	2.28
A-300	54	2.91	1.35	1.56
747-200	93	10.28	7.26	3.02
	266	18.01	11.15	6.86

While the Corporation suffered a net loss of Rs. 7.30 crores due to cancellation during the year of 1987-88, the loss would be about Rs. 6.86 crores during the summer season '88 only.

5. Impounding of Aircraft at Lagos:

5.1 During 1987-88, one A-310 aircraft was impounded by Nigerian Authorities from 25-8-87 to 21-10-87 for 58 days allegedly for carriage of contraband goods on the flight. It had seriously affected the normal schedule of flights in Air-India. It resulted in cancellation of 78 single services. ATKM to the extent of 8.7 million was lost and the net loss of revenue due to the detention of aircraft at Lagos was estimated at Rs. 211.20 lakhs.

5.2 Figures in respect of loss of ATKM and loss of revenue for the year 1987-88 in the preceding paragraphs are inclusive of those connected with detention of this aircraft at Lagos.

6. Loss on Account of Endorsement of Tickets to other carriers

6.1 When a flight is cancelled, on many occasions the passengers are transferred either to the next flight of Air India or to the flights of other carriers. In respect of places where Air India does not operate its services, the tickets issued stand endorsed to other carriers at the time of their issuance. Figures of endorsements given in the succeeding paragraphs do not include such tickets which ab-initio stood endorsed to other carriers. For passengers transferred to other carriers, Air India pays them normal fare laid down in the IATA Tariff irrespective of what has been earned by Air India on those tickets. In other words, the Airline tends to lose heavily in respect of those passengers who were scheduled to travel by Air India on special fares or reduced fares and who were transferred to other carriers. The maintenance of systematic records at Central Office in respect of endorsements made by the stations had been done away with from March 1986 and it has been revived since July 1987. On the basis of available records, it was seen that from July 1987 to October 1988, 12432 tickets had been endorsed to other carriers. Out of 12432 tickets, 5904 tickets i.e. around 47 per cent were issued on special fares or reduced fares.

6.2 An analysis of monthly figures of endorsements revealed that during October 1988 and July 1988, as much as 2012 and 1529 tickets respectively were endorsed to other carriers As against this, the average endorsements per month were only 777 during the period of 16 months ending October, 1988 (July 1987 to October 1988).

6.3 Significantly, on a consolidation of figures of revenue loss on account of transfer of passengers and cargo to other carriers due to delay of Air India flights, it was noticed that Air India lost a revenue of Rs. 128.02 lakhs in 1986-87, Rs. 68.93 lakhs in 1987-88 and Rs. 201.64 lakhs in 1988-89 (upto October 1988 only).

6.4 Similarly, during the month of October 1987 which was selected for detailed examination, 888 tickets had been transferred to other carriers. During this month, out of 888 tickets, 614 tickets were endorsed due to delay, rescheduling and cancellation of flights. A test check of 158 tickets endorsed to five other airlines was carried out with a view to work out the loss of revenue. The net loss on account of these 158 endorsements alone worked out to Rs. 1.80 lakhs.

7. Leasing of Aircraft

7.1 Whenever there are heavy cancellations of scheduled services, Air India takes aircraft on lease from other airlines to offset the adverse impact on its image. When the aircraft is chartered by Government of India for movement of any VVIP, the Corporation cancels/reschedules many of its scheduled services. Of late, Government of India requires two aircrafts, i.e., one for travel of VVIP and another as standby, which creates further capacity constraints for the airline. During the period of study, Air India had resorted to lease of aircraft on four such occasions. The financial implications of three such cases, which were available, are discussed below:

(a) During October 1987, one aircraft from Middle East Airlines (MEA) was taken on lease at a total payment of Rs. 191.50 lakhs. It was used to operate 13 flights during the period from 12th October, 1987 to 23rd October, 1987. This wet leased operation resulted in a net loss of Rs. 32.47 lakhs.

(b) During July 1988, one aircraft was leased from Egyptian Airlines (ZAS) along with the operating crew to operate only one service (London/Bombay/Riyadh) at a hire charge of Rs. 15.10 lakhs. The total cost of operation with the leased aircraft was to the order of Rs. 24.50 lakhs whereas the revenue earned was only Rs. 10.00 lakhs. Thus, the leasing of aircraft resulted in a net loss of Rs. 14.50 lakhs to the Corporation.

(c) During July 1988, one aircraft was leased from Indian Airlines along with operating crew to operate five services to Muscat and another five services to Jeddah. Lease charges were to the order of Rs. 52.55 lakhs. This operation yielded a revenue of Rs. 125.09 lakhs with the operating cost of Rs. 89.28 lakhs. This operation resulted in an overall profit of Rs. 35.81 lakhs.

7.2 A comparison and scrutiny of the above three lease transactions revealed the following aspects:

(a) According to provision 7(2)(h) of the Air Corporation Act, 1953, previous approval of the Central Government should be obtained before entering into any agreement to obtain air transport services from other airlines. In the case of lease from MEA, the Ministry of Civil Aviation has been fully apprised of the developments and the leasing was done with the permission of Ministry, whereas in the case of leasing from ZAS, no papers were available with the Management to show that the Ministry has been informed of the leasing.

(b) In the case of MEA and Indian Airlines leasing, the operation with the leased aircraft had been well planned and organised whereas the leasing from ZAS was used to operate only one service and this leasing was not planned in advance.

(c) In the case of MEA lease, the lease charges were US $ 5000 per block hour for a capacity of 460 seats whereas in the case of ZAS leasing, the lease charges were also US $ 5000 per block hour but the seating capacity was limited to 170 only, i.e., 37 per cent of the capacity of the MEA aircraft for the same charge.

(d) Payment of lease charges at Rs. 15.10 lakhs for transportation of 170 pasengers from London to Bombay and 168 passengers from Delhi to Riyadh was exorbitant. Transfer of passengers to other airlines would have been more economical than operation of this leased aircraft.

7.3 Apart from the above three lease operations, it was seen that during the month of June 1988 one aircraft was taken on lease with operating crew from Quantas to operate one service in the Singapore-Sydney-Singapore-sector. In the absenc of details rgarding costs and revenue of this operation, no scrutiny could be conducted.

8. Charter Price for VVIP Movement

8.1 Whenever an aircraft is chartered by the Government of India for the movement of a VVIP, the Air India charges a fixed charter price. Under the existing procedure, since the itinerary of the VVIP cannot be disclosed in advance, the charter agreement is signed by the two parties on the conclusion of the visit. The payment by the charterer includes the actual cost incurred by the airlines on various items and payable by the charterer.

8.2 According to Article 3 of the Charter Agreement, the charter price includes all normal expenses of operations—repairing and maintaining the aircraft, remunerating the crew, landing, parking and hangaring fees, costs of ground services and dispatch of the aircraft and appropriate meals and/or light refreshments in flight during the period of the charter. It was seen from study of cases of charter hire, that in practice, the airline while working out the charter price includes the cash cost of operations, direct fixed costs, cost of additional crew, cost of exclusive additional inputs as well as the net loss as a result of charter operations. The net loss denotes the loss of revenue due to cancelled flights reduced by the cash cost which would have been incurred on such flights.

8.3 It was seen that during October 1987, one B-747 Aircraft was leased along with the operating crew from Middle East Airlines to operate 13 proposed cancellation of flights on account of capacity constraints created by VVIP movements. Since the aircraft on lease was obtained solely due to above reasons, the entire amount towards lease charges should have been recovered as a part of charter price, irrespective of the result of operations by the leased aircraft. However, while working out the charter price, the Air-India recovered only a sum of Rs. 32.47 lakhs by way of loss on account of leasing operations as against the hire charges amounting to Rs. 191.50 lakhs.

8.4 Realising the drawbacks in their method of computation, the Corporation has changed the method of computing the charter price during the year 1988-89 which is expected to give them higher compensation. The major features of the new method are as follows :

(a) Direct fixed costs (salaries and allowances of operating crew, cabin crew, engineering staff, insurance, depreciation and obsolescence on spares) are now proposed to be charged on the basis of every day of hire at the rate of Rs. 2,50,000 for B-747 and Rs. 2,08,000 for A-310, instead of on the flown hour basis as in the past.

(b) Indirect fixed cost (publicity, sales and tourist promotion, depreciation of other assets, salaries other than crews and engineering staff and other fixed costs) are proposed to be charged at the rate of Rs. 3.19 lakhs per day for B-747 and Rs. 1.39 lakhs per day for A-310. These were not charged in the past.

(c) Interest charges at the rate of Rs. 16,090 per flown hour for B-747 and Rs. 8,045 per flown hour for A-310 are also to be charged. These were also not included in the previous cost computation.

(d) For three cases where aircrafts were chartered for VVIP movement during 1988-89 (till October 1988), the cost of the hire charges of leased aircraft were recovered as a part of charter price, irrespective of the results of operations with leased aircrafts.

8.5 Above changes in the method of computation of charter price has resulted in enhanced revenue to the Corporation. Charter prices fixed under the old formula and the new formula for three VVIP movements in 1988-89 are as follows :

Period	Charter Price under old formula	Charter price under new formula
1. June 1988	Rs. 168.87 lakhs	Rs. 211.30 lakhs
2. July 1988	Rs. 157.78 lakhs	Rs. 201.01 lakhs
3. July 1988	Rs. 172.21 lakhs	Rs. 188.45 lakhs

9. Delayed Flights and consequential costs

9.1 Delay in flights can be of two types—primary and consequential. The delay at the originating station or at any stage of the flight for the first time is termed as primary delay and the delay at subsequent stages as a result of the delay at an earlier stage is termed as consequential delay. Since the primary delays are more controllable, their comparison with the total number of single flights will reveal the punctuality with which the schedule is implemented.

9.2 The table below gives the details of delays of more than 30 minutes and above

Season	No. of delays			No. of Flights operated	Percentage of primary delays to flights
	Primary	Consequential	Total		
1. Summer 1986	936	1590	2526	4174	22.4
2. Winter 1986	676	1136	1812	3154	21.4
3. Summer 1987	1025	1836	2861	5210	19.6
4. Winter 1987	838	1237	2075	3936	21.2
5. Summer 1988	1349	1897	3246	5321	25.3

As shown above, the primary delays were around 21 per cent of total flights operated during the first four seasons of the table. In other words, the number of primary delays increased as the number of flights increased. But during summer 1988, there was significant increase in the number of primary delays and it had reached as high as 25 per cent.

9.3 Whenever a flight is delayed, it becomes the responsibility of the airline to take all reasonable steps in mitigating the hardship experienced by the passengers and in creating positive impression towards the airline. To achieve this end, in the case of protracted delays, the airline is required to incur expenditure on account of hotel accommodation of the passengers, serving food and beverages, transportation expenses in transferring them to hotels and back, sending messages to friends and relatives, crew layover allowance, etc.

9.4 Till April 1987, no statistics was being maintained by the Corporation of any expenditure incurred on the extended delays of the flights. However, during the period from April 1987 to October 1988 an amount of Rs. 366.53 lakhs had been spent on extended delays. Out of this an amount of Rs. 149.24 lakhs had been spent only during the month of October 1988.

9.5 The table below shows the number of flights which were delayed for more than three hours and the amount of hotel expenditure during the last five seasons :

Season	Engg.	Bomb scare	Weather condition	Misc.	Total delay	Hotel Expenditure (Rs. in lacs)
Summer 1986	59	6	8	12	85	44.47
Winter 1986	48	2	34	13	97	75.64
Summer 1987	61	4	4	18	87	[illegible].13
Winter 1987	19	1	26	9	55	40.96
Summer 1988	108	12	4	18	142	201.23
						418.43

9.6 To sum up, delays of more than three hours substantially increased during summer 1988 as compared to the previous four seasons. Engineering reasons were responsible for more than 75 per cent of the delays during the season. Apart from inviting adverse publicity and criticism from the passengers, the delays also meant a considerable cost of Rs. 418.43 lakhs during the last five seasons, 48 per cent of which (Rs. 201.23 lakhs) was incurred only during one season of summer 1988.

10. Reply of the Ministry

The mini-review was issued to Air India Management and the Ministry of Civil Aviation in December 1988 and January 1989 respectively. Their reply has not been received. (May 1989)

2. HINDUSTAN TELEPRINTERS LIMITED—FAILURE OF ELECTRIC TYPEWRITERS PROJECT

2.1 Introduction

The Hindustan Teleprinters Limited, incorporated in 1960, is manufacturing teleprinters and ancillaries. Diversification of its production was under contemplation since 1969 and one of the possibilities that was considered was manufacture of electric typewriters, as the techniques of manufacture and assembly of electric typewriters were similar in many respects to those of electromechanical teleprinters. The electric typewriter project, based on the design developed entirely by the company envisaging an ultimate capacity of 4000 typewriters per annum was approved by Government in September 1973. The project was implemented and commercial production started in February 1975. However, in 1979, further production was stopped and the project abandoned. The failure in this regard was gone into in detail by Committee on Public Undertakings (COPU) in their 27th Report (December 1981). At that time the Ministry of Communications informed the committee as follows :—

"The nature of deficiencies and their causes were studied by HTL in detail and the company came to the conclusion in early 1979 that there was no absolute certainty that the HTL with its limited R&D background and infrastructure would be in a position to achieve results and go out with a satisfactory design which would be functionally efficient and would be cost effective. The HTL, therefore, came to the conclusion that it was necessary to acquire know-how from an established manufacturer of electric typewriters in order to have a viable project with a proven design, which is appropriate to the Indian Market and which is also cost effective. The feasibility Report for manufacture of electric typewriters in collaboration with M/s. Olivetti was prepared in August 1979 in this background. While approving the Project for the manufacture of the new model of the electric typewriter, Government had taken note of the proposal for stopping manufacture of the indigenous model of the electric typewriters."

2.1.1 On the above new project, the projections given to the committee were indicated as under in their Report.

"A feasibility report for new Electric typewriters project of HTL entailing capital cost of Rs. 395 lakhs with foreign exchange component of Rs. 155 lakhs which envisaged production of 10,000 typewriters per annum in collaboration with M/s. Olivetti of Italy was prepared by HTL in August 1979. The project Report envisaged attainment of maximum capacity of 10,000 nos. at the end of 4th year from 'go on' date. The production programme was as follows :

1981-82	2000 nos. from SKD
1982-83	3000 nos. from SKD
1983-84	5000 nos. from SKD
1984-85	10000 nos. from SKD

The feasibilty Report was submitted by HTL to the Ministry in October 1979. It was approved by Government only in July 1981. As a result of delay in approval, the initial production of electric typewriters which was to start in 1981-82 was now expected to start in 1982-83."

2.1.2 The Company could commence production only in March 1987. The production activities have come to a stop based on a Board's decision in March 1989 that a stage has come where the project should be closed forthwith. However, the scope for revival of the Project is under examination (September 1989).

An analysis by audit of the developments subsequent to 1981 is given in the succeeding paragraphs.

2.2 Collaboration Agreement

The Company entered into a collaboration agreement with M/s. Olivetti, Italy in October 1981. The effective date of the agreement was 18th January, 1982. The documents relating to products, production tools and process were received from the collaborator in 1982. The agreement expired in January 1987. The payments made to M/s. Olivetti consisted of lumpsum payments and annual fees from 1984, free of Indian Income Tax. Totally, they were paid Rs. 92.61 lakhs including Indian Income Taxes upto the expiry of the agreement.

2.3 Planning for production

2.3.1 In July 1982 the Government approved a phased manufacturing programme of 1,000, 2,000, 3,000, 5,000, 10,000 units during the first 5 years of production and stipulated progressive reduction in the import content from 30.31 per cent in the first year to 2.98 per cent in the fifth year. The Government also agreed to the company importing 400 sets in the semi knocked-down (SKD) condition in the first year and 250 sets in SKD and 2350 in completely knocked down (CKD) conditions in the second year, within the import content mentioned above. The phased maufacturing programme commenced from April 1982. The company began placing orders on indigenous manufacturers of components from August 1982 onwards, against which supplies commenced from April 1983. As for imported components, orders were placed on M/s. Olivetti in May and June 1985 and supplies received in July 1985 and March 1986.

2.3.2 The 400 typewriters whose import in semi-knocked down condition was approved in July, 1982 were received in January, 1983. A fine of Rs. 2 lakhs was imposed by the customs authorities since they found that the imported typewriters were in fully assembled form whereas the import licence was for import in SKD condition. As regards import of 2600 sets in SKD/CKD condition, the company could obtain the import licence for 2000 sets only in March 1984 by which time the prices of CKD sets had gone up. As this meant considerable increase in the cost of import and consequent increase in the cost of assembled units from imported CKD/SKD sets, the company gave up the proposal for the import of CKD/SKD sets and accelerated the process of indegenisation to achieve reduction in cost of production.

2.3.3 A firm of marketing consultants appointed in October 1984 to obtain expert opinion on the status of manufacture of electric typewriters without resorting to import of CKD sets, reported (Feb. 1985) that the main threat to electric typewriters was the electronic typewriter and that the price and time factor were the most important factors for the viability of the project. The firm recommended evolving a good marketing/sales promotion strategy. It is seen that no concrete action was taken in this direction.

2.4 Capital expenditure

The project cost of Rs. 395 lakhs approved in November 1981 was ordered to be limited to Rs. 200 lakhs by the Board of Directors in November 1987. The actual expenditure till 31st March, 1989 amounted to Rs. 184.12 lakhs. The downward revision of the estimated cost was attributed (March 1988) by the Management to its decision not to invest too much to promote a product which had been overtaken by more sophisticated products like electronic typewriter word processor and personal computer. The actual expenditure was less due to utilisation of existing land, building and other facilities, purchase of majority of components from suppliers instead of the company making them and exchange rate fluctuations in foreign know-how payment.

2.5 Production and Sales

2.5.1 Although it was projected before COPU that production of electric typewriters would start in 1982-83, the company could commence production only in March 1987 due to delay in ordering imported components and machines and delay in receipt of imported/indigenous components.

2.5.2 Since the quality of production left much to be desired, the Company obtained the services of an engineer from the collaborator in May 1987 at a cost of US $ 4900 plus Rs. 0.37 lakh towards air fare and hotel expenses (Rs. 1 lakh totally). The Management stated (February 1989) that the expert was invited to ensure that the quality of typewriters produced left nothing to be desired and that his recommendations covered aspects like operators' training, availability of documents/tools to operators, use of proper fixtures for grouping matching surfaces and finishes required for parts, which were not known to the Company's engineers from the training at collaborators works or from the technical documents.

2.5.3 Meanwhile, the Company engaged (April 1987) another firm of marketing consultants to improve the marketing of electric typewriters. The consultants recommended that —

(i) a steady, limited advertising campaign (as carried out by other typewriter manufactures e.g. direct mail) against an extensive one would be necessary to restore the company's credibility in the trade and to provide cost-effective "reach" to the relevant target audiences;

(ii) experienced dealers/distributors/agencies could be appointed to take care of marketing and after-sales service; and

(iii) concentration on sales to Government Departments/public sector undertakings.

2.5.4 The Management stated (Feb. 1989) that further marketing efforts were directed only towards salvaging as much of the investments made as possible, following the strategies recommended by the consultants in April 1987 and that action taken consisted of (i) improving the quality of the machines produced based on feed-back complaints; (ii) rectifying faulty machines supplied to customers' satisfaction; and (iii) appointing dealers as per the recommendations of the consultants.

2.5.5 The table below indicates the licensed capacity, targets and actual production and sales during the years 1986-87 to 1988-89 :—

Year	Production				
	Licensed Capacity	Company's target	Actual	Sales	Closing stock
	(Nos.)	(Nos.)	(Nos.)	(Nos.)	(Nos.)
1986-87	15,000	2000 (reduced to 600)	84	34	50
1987-88	15,000	2000 (reduced to 1200)	1214	265	999
1988-89	15,000	2000 (reduced to 1200)	421	353	1059*

*Excludes 8 Nos. taken for own use and issued as gifts.

2.5.6 It can be seen from the table that the original targets were reduced and actual production fell short of targets each year. The salient aspects noted were as under—

(i) 1986-87 :

As against the target of 2000 nos. for 1986-87, which was reduced to 600 nos., subsequently, the actual production was 84 nos. only. This production was achieved after spending Rs. 0.72 lakh on overtime payments. Out of the total labour hours of 8099 booked in March 1987, overtime booking was to the extent of 5517 hours. The low production was attributed (February '89) by the management to (i) deviations in the specification of components supplied by vendors; (ii) lack of experience on the part of operators; (iii) non-availability of proper welding fixtures to be used for grouping; and (iv) lack of training for personnel.

(ii) 1987-88 :

Reduction of target from 2000 to 1200 numbers was stated (Feb. 1989) to have been made owing to lack of orders.

Despite the offers of 'money back guarantee', 'hire purchase', 'leasing', 'buy now and pay later', 'exchange of old with new ET' etc., sales did not pick up. Even the scheme of bulk purchase discount attracted sale of 71 machines only.

(iii) 1988-89 :

Reduction of the target from 2000 to 1200 nos. was attributed to lack of orders in this year also.

The lower production was attributed to failure on the part of vendors in supplying components.

2.5.7 As per the company, the standard hours required both in the workshop and assembly areas for manufacturing an electric typewriter is 16.234. As against this, the actual hours were much more as per details for 1987-88 and 1988-89 given below :—

Year	No. of typewriters manufactured	Total operative hours spent	Operative hours spent per typewriter
1987-88	1214	91366	75.26
1988-89	421	85272	202.54

NOTE : Actual hours in the Electric Typewriter workshop and assembly areas have been computed on the basis of No. of operatives employed in the year. The figures include hours spent in Teleprinter workshop also for electric typewriters work.

2.5.8 No separate records were maintained for idle hours, for rework, rectifications and adjustments on the bought-out components. Hence, the actual hours given above have exceeded the standard hours considerably. As the operatives of the electric typewriter project were not deployed elsewhere and the number of typewriters manufactured in 1988-89 was much less as compared to 1987-88, the actual hours in 1988-89 have shot up still further.

2.5.9 The management attributed (Feb. 1989) the poor sales mainly to the following:—

(a) the company was trying to enter a satisfied market where customers preferred to buy the earlier models of manual typewriter; and

(b) the poor image of the company due to its earlier indigenously designed and sold electric typewriter still continued.

2.5.10 A review of overall production and sales performance during the years 1986-87 to 1988-89 revealed the following :—

(i) No installed capacity was fixed despite building up an infrastructure for 10,000 electric typewriters against a licensed capacity of 15,000 numbers.

(ii) No annual sales target was fixed.

(iii) Despite an investment of Rs. 88.20 lakhs on specialised machinery & Tooling upto 31-3-89, the company did not have any system of reporting plant hours available/lost on acount of shutdown for preventive maintenance, breakdowns, power problems, labour trouble, want of raw materials etc.

(iv) Sales to Government Department/Public Sector Undertakings were 35,148 and 136 numbers only out of 55,291 and 353 numbers (including imported typewriters in SKD condition) sold in 1986-87, 1987-88 and 1988-89 respectively. A circular was issued by Government to all Government Departments in June 1988 for considering the purchase of electric typewrites of the Company in different languages as per their needs to further the sales.

2.6 Cost of production versus selling price

2.6.1 The cost of production (excluding excise duty @ 20%) of the typewriter (carriage size 18") manufactured was Rs. 6346, out of which the material cost alone came to Rs. 5547 per unit. The net selling price of these (exclusive of excise duty at 20%) was fixed in March 1987 at Rs. 6634 after allowing a discount of 20% (Rs. 7962 including excise duty). But buyers were not attracted as electronic typewriters with superior technology were available at a cheaper price of Rs. 7500 per machine. Therefore, the Company brought down the basic price to Rs. 5500 (Rs. 6600 including excise duty) in December 1987 and offered a further discount of 5% to 10% to bulk purchasers. Despite this offer to sell below cost, only 652 typewriters could be sold out of 1719 manufactured up to March 1989.

2.7 Loss in production and sale

2.7.1 With reference to the computation done on an estimated basis (taking the value of components on actuals and direct labour, works and administration overheads on 'Standard' rates—excluding cost of packing selling and distribution overheads) for valuation of closing stock as at 31st March 1987, 1988 and 1989, the Company had incurred a loss of Rs. 13.71 lakhs on the indigenous production and sale of 652 typewriters.

2.7.2 Presuming the present sale price as realisable in the case of unsold stocks as well, the estimated loss of the entire production of 1719 numbers upto March 1989 would come to Rs. 36.36 lakhs as indicated below :—

Year	Units produced	Cost of production per unit	Selling price per unit	Profit(+)/Loss(—) per unit	Total Profit(+)/Loss(—)
		Rs.	Rs.	Rs.	Rs.
1986-87	84	4783.00	6300.00	(+)1517.00	(+)127428
1987-88	1214	7801.88	5500.00	(—)2301.88	(—)2794482
1988-89	421	7801.88	5500.00	(—)2301.88	(—)969091
NET LOSS					(—)36,36,145

2.7.3 The Management stated (Feb. 1989) that the loss had to be compared to the loss which the Company would have 'incurred' had the inventory of parts held not been utilised to assemble full machines which worked out to Rs. 102 lakhs for the period ended 30th September 1988 and that Progressive assembly and selling even on a marginal loss basis alone would have resulted in salvaging as much of this inventory as possible, which would otherwise have been scrapped.

2.8 Advances to suppliers

With a view to bring down the final cost of electric typewriters, the Company placed orders for components on indigenous suppliers during 1982-83 to be supplied over a period of 5-6 years, involving a total financial commitment of Rs. 401.94 lakhs. An advance of Rs. 198.11 lakhs was paid to them upto 31st March 1989 to enable them to purchase parts and acquire tools. Out of this advance, a balance of Rs. 148.91

lakhs still remained unadjusted as on 31st March 1989.

2.9 Dormant Status of the Project

2.9.1 In July 1987, the Board of Directors decided to set up a committee of two Company officers and one officer to be nominated by the Government Director to investigate the various aspects of the project implementation, poor performance and 'non-fulfilment' of the target for 1986-87 and to fix responsibility. The Management reported (Feb. 1989) that the Committee was constituted in August 1988. The Committee's report is awaited (August 1989).

2.9.2 In March 1989, while reviewing the various Projects, the Board of Directors taking note of the production and sales trends and other allied aspects, decided that the Project should be closed forthwith without incurring additional expenditure in view of the poor performance of the Project and inability to sell the machines manfactured. The production activities thereafter have come to a stop. However, the scope for revival of the Project with all its implications, after further detailed study, was envisaged to be undertaken by the Board in September 1989.

2.10 Summing Up

2.10.1 The feasibility report for the project submitted by the Company in October 1979 was approved by Government of India (July 1981). Apart from this delay, the performance of the project was also poor compared to the phased manufacturing programme approved by Govt. of India in July 1982. As against 21,000 typewriters to be manufactured in 5 years, the total production was 2119 nos. (including 400 typewriters assembled from imported SKD sets during 1982-83) upto March 1989.

2.10.2 Out of 1719 units produced during 1986-87 to 1988-89, only 652 nos. could be sold.

2.10.3 In producing the 1719 units during 1986-87 to 1988-89, the Company incurred a loss of Rs. 36.36 lakhs (includes loss on the unsold stock held as on 31st March 1989).

2.10.4 At the juncture, production activities were stopped after March 1989—

(i) Capital expenditure of Rs. 180.81 lakhs on machinery and tooling and on know-how had been incurred.

(ii) 1059 typewriters valued at Rs. 49.51 lakhs were lying unsold as on 31st March 1989.

(iii) Unassembled imported and indigenous components valued at Rs. 48.68 lakhs were left with the Company as on 31st March 1989.

(iv) Advances amounting to Rs. 148.91 lakhs given to suppliers of indigenous components were pending recovery as on 31st March 1989.

(v) About 65 employees were engaged on the Project.

K. Tyagarajan

(K. TYAGARAJAN)
Deputy Comptroller and Auditor General
cum-Chairman, Audit Board

New Delhi,

Dated : 22 मार्च MAR 1990

countersigned

T N Chaturvedi

(T. N. CHATURVEDI)
Comptroller & Auditor General of India

New Delhi,

Dated : 22 MAR 1990