Chapter 4: Aircraft Availability

4.1 Acquisition of aircraft

Erstwhile Air India Limited had executed a purchase agreement (30 December 2005) with M/s Boeing and M/s General Electric (GE) for supply of 50 Boeing aircraft (with GE engines) at an estimated cost of ₹33197 crore consisting of 8 B-777-200 LR[13], 15 B-777-300 ER[14] and 27 B-787-800. At the same time, erstwhile Indian Airlines Limited (IAL) had also executed a purchase agreement (February 2006) with M/s Airbus/CFM for supply of 43 Airbus aircraft (with CFM engines) at an estimated cost of ₹8399.60 crore consisting of 19 A-319 aircraft, four A-320 aircraft and 20 A-321 aircraft. Both the companies, Air India Limited and Indian Airlines Limited merged in the year 2007.

The results of review in audit of acquisition of aircraft by the two companies were discussed in the Report of the Comptroller and Auditor General of India no.18 of 2011-12 on Civil Aviation. The impact of the acquisition on AIL and the present aircraft availability with the airline is discussed below for wide body (primarily Boeing) and narrow body (Airbus) fleet.

Wide Body fleet

4.2 Fleet of Wide Body aircraft

As per Turnaround Plan (TAP), the fleet size as on March 2016 was to be 41 aircraft against which the actual fleet size was 40 aircraft as shown in the table below:

Table 4.1 TAP target of Fleet size vis-a-vis actual fleet of wide body

Sr.No.	Type of Aircraft	Fleet envisaged in TAP		Actual Fleet March 2015	As per TAP March 2016	Actual Fleet March 2016
		September 2011	March 2015			
1	B-777-200 LR	08	08	03	08	03
2	B-777-300 ER	12	12	12	15	12
3	B-787-800	-	14	19	16	21
4	B-747-400	05	-	05	-	04
5	A-330-200	02	-	-	-	-
6	A-340	-	02	-	02	-
	Total	**27**	**36**	**39**	**41**	**40**

Source: SBI Cap Information Memorandum (Feb 2012) and information received from AIL

[13] *LR-Long Range*
[14] *ER-Extended Range*

As seen in the table 4.1, there is a reduction in B-777-200 LR aircraft (from envisaged eight in TAP to three) which was offset by additional B-787-800 aircraft (an increase of five vis-à-vis TAP). The specific issues noticed in acquisition, disposal and operation of these aircraft are detailed below.

4.2.1 B-777-200 LR: Over provisioning of aircraft

The C&AG of India had reported in Report No. 18 of 2011 on Civil Aviation in India that the purchase order for 50 wide body aircraft was much higher than the original plan of AIL (which was to procure 35 aircraft on firm basis and 15 on optional basis). It was also pointed out in the Report that the assumption that the acquisition of eight Ultra Long Range (ULR) aircraft would result in a further one-time yield increase of 10 *percent* for non-stop service to New York and Chicago, was unduly optimistic.

Subsequently, M/s SH&E, United Kingdom, a network consultant, appointed by AIL, post-merger (2009), also pointed out that the wide body fleet was oversised. The consultant suggested that the overall goal of the fleet plan should be to consolidate only two wide body types (B-777-300 ER and B-787-800) and recommended sale/lease out of B-777-200 LRs consequent to induction of B-787-800.

AIL had planned to acquire eight B-777-200 LR aircraft. These aircraft had a maximum range of 7400 nautical miles (nm). Operations planned for these eight aircraft were to New York, Chicago, Dubai, Singapore and Kuala Lumpur. As against the scheduled delivery by June 2009, the actual delivery could be completed by August 2009.

Audit observed the following with regard to procurement and utilisation of B-777-200 LR aircraft:

- In September 2009, a month after the last B-777-200 LR aircraft was delivered to AIL, the Company decided (22nd Board meeting held in September 2009) to lease out three B-777-200 LR aircraft as surplus capacity of wide body aircraft was likely after receipt of the B-777-300 ER aircraft.

- The proposed lease out of the three aircraft did not materialise and the airline deployed the B-777-200 LRs for operations. The aircraft were initially deployed for nonstop flights to Newark and New York. The operation of B-777-200 LRs on these non-stop services contributed to losses of the airline. With progressive delay in delivering of B-787-800, AIL continued to operate B-777-200 LR on medium haul routes like Frankfurt, London, Paris, Tokyo, Toronto (since 2009-10) to maintain the network, which added to losses.

- The network consultants, SH&E had recommended that operation of B-777-300 ERs, with re-despatch[15] method, for non-stop operations to USA would lead to a much lower unit cost compared to B-777-200 LRs. This rendered the B-777-200 LRs redundant as the prime justification for their induction was non-stop operations to US.

[15] Redespatch method: *The contingency fuel from the origin to the initial destination is essentially used to fly to the destination from the Redespatch point (RP). Hence determination of the initial destination and RP decides the quantum of benefit in terms of payload or fu*el saving achieved for the *flight*.

- It was also seen that B-777-200 LR aircraft was unviable due to higher unit cost (per ASKM[16]), the number of seats on this aircraft being less by 104[17] seats as compared to B-777-300 ER.

These facts indicated that procurement of B-777-200 LR aircraft was ill advised. In November 2011, AIL decided (41st Board meeting) that five B-777-200 LRs would be leased out/sold outright.

Management in their reply (02 February 2016) stated the following:

(i) The detailed techno-economic feasibility report prepared by a panel of internal experts at the time of procurement had stated that AIL should introduce ultra-long range type of aircraft to fly non-stop to destinations in US from India to match the competition and to capture traffic which was moving away to the Gulf and Middle East carriers as also to South East Asian carriers like Singapore Airlines.

(ii) Acquiring B-777-200 LRs was a conscious decision and there was no over provisioning at the time of initial ordering since these aircraft were to replace old aircraft i.e B-747-200 /300/400, then deployed on India-USA sector.

(iii) Though these aircraft failed to achieve the expected 10 *percent* increase in yield, this was on account of global recession and competition from other airlines which carry 6th freedom traffic over their hubs from India.

(iv) The attempt to lease out these aircraft after acquisition was made mainly due to the recession (2008). The LRs were now being deployed for operations to San Francisco due to the steep fall in fuel prices, the product per se was good and due to changes in the circumstances and the high cost environment, the operations with LR became unprofitable.

The reply of the Management's was not tenable in view of the following:

1. The original plan of AIL arising from the techno-economic feasibility quoted in response, was to acquire 35 aircrafts on firm basis and 15 on optional basis. The order for fifty aircrafts was finalised only later.
2. Though the B-777-200 LRs were acquired for non-stop operations to US, they have actually been utilised in short haul routes as well. Besides M/s SH&E had recommended that B-777-300 ER be operated on US route for better viability which was implemented by the airline and which rendered the B-777-200 LR aircraft excess.

MoCA (30 August 2016) accepted the fact that volatility in fuel prices was not considered at the time of the Project report. The Ministry stated in addition that EGOM has obtained additional concession of ₹1800 crore from Boeing/GE at the time of changing the order of aircraft in the form of construction of MRO facility, supply of Simulators, Aircraft Training Institute, setting up of GE Engine overhaul facility and concessions for engines.

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[16] *ASKM-Available Seat Kilometres*

[17] *B777-300ER-342 seats, B777-200 LR 238 seats*

The reply was not tenable as the additional concession in the form of MRO facility had not materialised since this facility was not fully operational even after 9 years. The GE facility was not operational till date. In addition, the company suffered a loss of ₹671.07 crore in the sale of five B-777-200 LR aircraft towards payment of interest of ₹324.67 crore and incurred operational losses of ₹1214.49 crore. Company also incurred additional expenditure of ₹163.31 crore due to grounding of B-777-200 LR aircraft.

4.2.2 Sale of five B-777-200 LR aircraft

The Company issued Request for Quote (RFQ) for leasing out three B-777-200 LR aircraft in November 2009. The RFQ was re-issued in January, February and April 2010. Though four offers were received, the aircraft were not leased out, reasons for which could not be ascertained from the records made available to Audit. RFQ was again issued (February 2012) against which offer of Air Canada for a lease rental of USD 7.5 million per month per aircraft was approved (March 2012). However this deal did not materialise as Air Canada asked for terms and conditions which were not acceptable to AIL. In a subsequent tender, (November 2012) the offer of Alfaco Aviation Lease and Finance Company, Kuwait to sell the aircraft for an average net sale price of USD 68 million per aircraft was approved. However, ALAFCO later withdrew their offer.

Two parties, namely, Etihad Airways of UAE and German Aviation Capital, Frankfurt responded to the open tender of May 2013. The offer of Etihad for a sum of USD 336.5 million for five aircraft (₹2071 crore) was highest and was approved by Board (October 2013). The aircraft have been delivered to Etihad Airways, during the period from January 2014 to April 2014.

Audit observed that the price (of USD 67.3 million per B-777-200 LR aircraft) at which the five aircraft were sold to Etihad Airways was significantly lower than the indicative market price of USD 86 to 92 million per aircraft obtained by the Company from two parties, M/s AVITAS and M/s ASCENT before initiating the sale process. These reports were not made available to Audit, despite request. After opening the financial bid on 3 October 2013, Air India obtained another valuation of the aircraft from Aviation Specialist Group (ASG) who estimated the then market value at USD 93 million to 96 million and the realisable value to be between USD 65 million to USD 72 million per aircraft (5 October 2013). Considering that the price offered by Etihad Airways (USD 67.3 million) was within this range of realisable value, AIL accepted the offer. However, it needs to be appreciated that the basis of acceptance was a valuation exercise carried out after opening the financial bids and that the market value of the aircraft could not be realised in the sale.

Management replied (02 February 2016) that:

(i) The valuation carried out by the outside experts was mainly with a view to find out the current values of B-777-200 LR. However the valuers had themselves indicated that there were no sale and purchase of these aircraft in the market since a limited number of LR aircraft were produced by Boeing and if any airline wanted to sell these aircraft, then the value could be much lower than the current market value since there was no market price established or benchmark price available in respect of sale of these aircraft.

(ii) After much deliberation it was decided that it was "in order" to sell five B-777-200 LR aircraft so that the outstanding loans on these aircraft could be repaid out of the sale proceeds of the aircraft. By doing so, AIL was able to save not only on interest and repayment obligations but also avoided the cost of maintenance of these aircraft in the future.

(iii) The future savings of the Company on the sale of these aircraft substantially outweighed the shortcomings of the sale process.

MoCA (30 August 2016) elucidated and reiterated the views of the management on the offers received on the sale of B-777-200 LR aircraft

The reply is not acceptable in view of the following;

i. Reports of M/s AVITAS and M/s ACCENT Aviation had fixed a market value of USD 86-92 million per B-777-200LR aircraft. The report of M/s Aviation Specialist Group which estimated a lower realisable value and on the basis of which the aircraft were sold to Etihad Airways was obtained only after opening of the financial bids. Audit has commented on the aberration in the process of sale where the valuation on the basis of which the sale was finalised was obtained only after completing the tendering process.

ii. While Audit appreciates the savings realised in maintenance cost and interest payments, such savings cannot justify the shortcomings of the sale process. It is pertinent to note that the TAP envisaged continued use of B-777-200 LR aircraft and Government had already committed to equity infusion for repayment of the loans taken for purchase of aircraft.

4.2.3 Impact of procurement of eight B-777-200 LR on AIL

Procurement of the B-777-200 LR aircraft added to the losses of AIL as summarised below:

- AIL incurred a book loss of ₹671.07 crore on the sale of five aircraft to Etihad, the valuation[18] of these aircraft in the books of AIL being higher than the sales receipts by this amount.

- The utilisation of these aircraft during 2010-11 to 2015-16 remained very low compared to the target. Besides, in operating these aircraft, AIL incurred a deficit over variable cost of ₹1214.49 crore and deficit over total cost of ₹4746.25 crore over the five year period from 2010-11 to 2015-16.

- AIL had to pay interest amounting to ₹324.67 crore on loans availed for the purchase of the five B-777-200 LR aircraft which were sold subsequently.

[18] *WDV-VT-ALA-₹550.92 crore,VT-ALV-₹540.89 crore, VT-ALC-₹547.08* crore, *VT-ALD-₹555.95 Crore, VT-ALE-₹547.05 Crore* , Total of five aircraft was ₹*2741.*90 *crore*

Management stated (02 February 2016) that these aircraft had now been deployed on the Delhi-San Francisco (SFO) route which had earned surplus over its variable cost of operations at PLF of 80-85 *percent* and that it had been proposed to re-configure these aircraft with 300 economy seats. Purchase of these aircraft was based on certain assumptions which did not materialise due to change in circumstances.

MoCA (30 August 2016) stated that the assumptions made in the project report could not be termed as flawed as they were based on the circumstances prevailing at that point of time.The aircraft was being used in the Delhi SFO route. Further while the management stated that the B-777-200 LR would be reconfigured, MoCA claimed that the decision to reconfigure may not go through due to cost factors.

The reply may be viewed against the following facts:

1. India-USA sector has been historically a loss making sector which was pointed out in our earlier Audit Report no. 18 of 2011-12 and still continued to be so as detailed in Para 7.4.1.1.

2. The subsequent operation compounded the losses of the Company on account of sale of five aircraft. Besides, AIL had deployed the remaining B-777-200 LR aircraft on the Delhi – San Francisco route in December 2015 after a lapse of six years from their last induction in August 2009.

3. While DEL-SFO route covered the variable cost (₹2785.14 lakh), its deficit over total cost was ₹4374.45 lakhs.

4.2.4 Over provisioning of B-777-300 ER aircraft

AIL had planned (9 December 2005) to acquire fifteen B-777-300 ER aircraft having a maximum range of 5300 nautical miles. These aircraft were intended to be used for operations to USA/Canada via an intermediate point and for services to London from Mumbai and Delhi.

M/s SH&E suggested deployment of these aircraft for the US sector.

Considering the prevailing global economic conditions, AIL estimated that only nine aircraft (against the 15 ordered) would be essential and decided to cancel the order for the balance six B-777-300 ER aircraft (August 2009).

However, cancellation of order was not possible in the absence of any cancellation clause in the purchase agreement with M/s Boeing. In fact, M/s Boeing demanded additional payment of USD 56 million (₹257 crore) as cancellation liability and informed that three aircraft were already in production and, hence, they could not be cancelled. By July 2010, AIL received 12 B-777-300 ER aircraft and deferred the receipt of the three balance aircraft. A supplemental agreement signed by AIL (22 January 2010) deferred the deliveries of the balance three B-777-300 ER aircraft to August 2012, January 2013 and 3rd quarter of 2013 respectively. M/s Boeing had further deferred the delivery of these aircraft to June 2014, October 2014 and July 2015. These three aircraft were yet to be received by AIL (March 2016).

With three aircraft already in excess, the airline requested GoI to take them over for VVIP operations. GoI has agreed to the proposal of AIL. It was accordingly decided to transfer two B-777-300 ER aircraft with effect from 1 October 2015 to Indian Air Force.

Audit observed changes in decision on acceptance of the three balance B-777-300 ER aircraft. A senior level inter-departmental committee of AIL had initially recommended (October 2010) swapping of ten B-737 aircraft for three B-777-300 ER aircraft, subject to the commitment that M/s Boeing would not levy charges for cancelling the order of these three B-777-300 ER aircraft. Subsequently (June 2011), the same committee recommended induction of these three units.

Management stated (02 February 2016) that with at least one or two aircraft in maintenance, 10 out of 12 aircraft have been utilised extensively with a standby aircraft. It was further stated that progressively two aircraft will be transferred to Defence Ministry in the year 2015-16 leaving only ten for operations. Management also informed that the Board had decided to continue with the order for delivery of the three balance aircraft in the last quarter of 2017-18.

MoCA stated (30 August 2016) that two of the B-777-300 ER aircraft in the fleet have been earmarked for VVIP and remaining for non-stop operations to USA and UK.

Reply of MoCA points to the fact that ten B-777-300 ER aircraft are adequate for present operations. It was also noticed that the utilisation of these aircraft were less than optimum as pointed out at Para 5.3 in Chapter 5. The utilisation of these aircraft reduced further during the period 2015-16, as compared to 2014-15.

4.2.5 Effect of deferment of three B-777-300 ER aircraft

AIL had placed an order (03 November 2006) on M/s. Thales (Thales) for purchase of In-flight entertainment (IFE) equipment for 23 aircraft (8 B-777-200 LR and 15 B-777-300 ER aircraft). As AIL deferred the delivery of three B-777-300 ER aircraft, these could not be supplied to M/s Thales for fitting of IFE systems. M/s Thales served a termination notice (21 March 2014) to AIL for breach of the contract for short fitting Thales IFE equipment on three deferred B-777-300 ER aircraft. During the negotiations (January 2015), it was agreed that AIL would make a one time lump sum payment of USD 4,089,852 (₹22.49 crore[19]) as full and final settlement and reimbursement of proportionate credits for non-delivery of these three aircraft. Thus, deferment of the three aircraft led to avoidable additional expenditure of ₹22.49 crore.

In reply Management stated (02 February 2016) that AIL had signed an agreement with M/s Thales according to which M/s Thales would reimburse the amount, in the event AIL takes delivery of the three balance B-777-300 ER aircraft.

MoCA (30 August 2016) concurred with the reply of AIL that M/s Thales would reimburse the amount in the event AIL take delivery of the three balance B-777-300 ER aircraft.

[19] *INR-USD Exchange rate of 1US$=₹55.*

The reply would be verified in future audits as the agreement with M/s Thales for the three B-777-300 ER is yet to be signed.

4.2.6 Inordinate delay in delivery of B-787-800 aircraft

The B-787-800 aircraft were medium capacity long range aircraft, having a maximum range of 5100 nm. These aircraft were to be used in the hub and spoke configuration connecting domestic airports and long haul services to USA/Canada/UK. It was anticipated that B-787-800 aircraft would take over most of the B-777 routes (except non-stop India-USA routes) and deliver better efficiency and lower costs. As per the procurement agreement, the scheduled delivery period was September 2008 to December 2010. The actual delivery was delayed due to defects in design and problems encountered by M/s Boeing during the production and flight testing of these aircraft. The delay ranged between 1368 days to 1643 days. AIL had acquired 21 B-787 aircraft till March 2016.

Delay in induction of the B-787-800 aircraft led to AIL operating existing inefficient aircraft on the routes earmarked for B-787-800 aircraft. AIL estimated the financial impact of the delay at ₹6937 crore for the period from 2008-09 to 2011-12. AIL lodged an initial compensation claim of USD 710 million (₹3390.96 crore) [20]on M/s Boeing, considering the actual days delayed and the average lease rate (@USD 30,000 per day). The claim was substantially lower than the estimated loss.

Audit noticed that the contract provided for liquidated damages (LD) subject to a cap of 180 days of delay which amounted to USD 148 million. M/s Boeing initially agreed to pay USD 148 million which was raised to USD 328.12 million following several rounds of negotiation. The matter was considered by a Group of Ministers (GoM) on 25 July 2012. GoM recommended that AIL be allowed to accept the compensation of USD 328.12 million and take delivery of aircraft under the revised schedule, since the need to induct new aircraft was undeniable. The recommendation of GoM was approved by the Cabinet Committee on Economic Affairs (CCEA) on 03 August 2012. Thus, AIL received a compensation nearly half of its claim which was much lower than the actual losses incurred by the airline due to delayed delivery.

Management stated (02 February 2016) that AIL was unaware of any delay in delivery of the B-787 aircraft at the time of signing the purchase agreement. Management also added that the Company had been successful in getting enhanced compensation of USD 322 Million.

MoCA (30 August 2016) explained that AIL negotiated extensively with M/s Boeing, and was able to raise the compensation amount. MoCA further stated that the delay in supply of B-787-800 was beneficial to AIL. In the exit meeting of the Performance Audit on 'Turnaround Plan and Financial Restructuirng Plan of Air India' held on 26 October 2016, MoCA stated that AIL was able to negotiate higher compensation than what was indicated in the Agreement.

Ministry's reply should be viewed in the light of the fact that AIL received a compensation lower than the estimated actual losses incurred by the airline due to delayed delivery.

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[20] *Based on USD average rate of 2009-10*

Delayed delivery also resulted in sub optimal utilsation of B-777-200LR on medium haul operations.

Further, as discussed by the Board of AIL, the delayed delivery of B-787 aircraft also led to loss of profitability due to usage of old aircraft vis-a-vis new aircraft by competitors, payload penalties resulting in boarding being denied to passengers and baggage being left behind and scaling down of the operations.

Narrow Body Aircraft Fleet

4.3 Shortage of Narrow Body Aircraft

The fleet plan in TAP included induction of narrow body aircraft primarily for expanding the domestic and short haul routes to medium haul routes. It envisaged increase in narrow body fleet from 62 in September 2011 to 74 in March 2016 as indicated in the table below:

Table 4.2: TAP target of fleet size vis-a-vis actual fleet of narrow body aircraft

Sr.No.	Type of Aircraft	September 2011	March 2015		March 2016	
		Fleet size envisaged in TAP	Fleet size envisaged in TAP	Actual Fleet size	Fleet size envisaged in TAP	Actual Fleet size
1	A 319	24	19	22	19	22
2	A 320	18	19	20	18	24
3	A 321	20	20	20	20	20
4	A 320(IS)	-	14	-	17	-
	Total	**62**	**72**	**62**	**74**	**66**

Source: SBI Cap Information Memorandum (Feb 2012) and information received from AI

The above table indicates that the fleet size remained unchanged at 62 (as on March 2015). The network consultant, M/s SH&E appointed by AIL (2009) had pointed out that the AIL fleet was undersized in terms of narrow body aircraft. The consultant had, inter alia, recommended sourcing ten new A-320 aircraft along with disposal of old A-320 fleet. However, as on 31 March 2016, the fleet size consisted of 66 aircraft, against target of 74 aircraft.

Management replied (02 February 2016) that as per TAP fleet plan, all inductions were under A-320 Indian Shuttle (IS) type. However, in the Board meeting held in March 2011, the then Commercial Director had stated that there was no intention to create a separate Indian Shuttle (IS) brand for the domestic market. Management also stated that as part of TAP implementation they had pursued the achievement of target profits rather than target capacity. As a first step towards this, replacement of old A-320 fleet was pursued and approvals were obtained from Board intending a higher daily utilisation of 12 hours with new aircraft.

MoCA stated that replacement of the old classic fleet could not be completed despite several attempts for leasing and it was only in 2015 that the first leased A-320 aircraft was delivered. Therefore, it was decided not to withdraw these old aircraft so as to maintain existing capacity deployment, otherwise withdrawal would result in a further loss of market share. Further, AI has now signed lease agreement with three lessors for additional 20 new A-320 aircraft, delivery of which would commence from 2017.

The reply needed to be viewed against the fact that replacement could not be accomplished even by March 2016 although the Board had decided to replace the ten old classic A-320 aircraft in September 2010. Moreover, utilisation of old classic aircraft had adversely affected the daily utilisation and neither targeted acquisition nor daily utilisation could be achieved.

4.3.1 Delay in replacement of old classic fleet of A-320 aircraft

M/s. SH&E (network consultant) (May 2010), observed that the 1989-1994 vintage A-320 with V2500-A1 engines were uneconomical and needed to be phased out urgently as maintenance cost of these aircraft was USD 4 million per year per aircraft. M/s. SH&E, recommended immediate leasing of ten A-320/B-737 aircraft to replace these classic aircraft. During July 2010, the Board considered and approved (March 2011) the recommendation of M/s. SH&E, for dry leasing of 10 new A-320 aircraft. The Board was apprised (March 2012) that turnaround plan (TAP) envisaged aggressive fleet induction; however, the same would involve incremental lease charge which was risky keeping in view the financial position of Air India. Therefore, pending Government approval for FRP and financial constraints of AI, aircraft induction had not progressed. Board approved (May 2013) the fleet renewal plan envisaging leasing of 19 A320 units as replacement capacity to maintain network and authorised management to issue RFP for the same.

The Company took more than three years (May 2010 to August 2013) to float the global tender after recommendation of the consultant. M/s China Aircraft Leasing Company (CALC) was the sole qualified bidder. M/s CALC submitted its bids through e-mail which was in contravention of the general terms and conditions of tender. However, M/s CALC was given a chance to furnish bids as per tender requirements and tender closing dates were extended twice. Audit noticed that two of the other shortlisted bidders (viz., Bank of China and AWAS, Singapore) had withdrawn their bids.

AIL executed a lease agreement with M/s CALC for inducting five A-320 aircraft in June 2014. The Company has also signed a lease agreement for 14 A-320 aircraft in March 2016 delivery of which would commence from 2017. Though the consultant pointed out urgent need for the aircraft, AIL could induct only five aircraft till March 2016 i.e. even after five years.

The inordinate delay in the process of leasing 19 A-320 aircraft defeated the objective of reducing maintenance costs through replacement of A-320 aircraft.

Management stated (02 February 2016) the following in reply:

Though concerted efforts were made to replace the old classic fleet, no suitable aircraft was available in the market for which the deal could be concluded. Therefore, AIL concluded the deal in two parts with CALC and ALAFCO[21].

The amount spent on maintenance cost of old aircraft would be more or less equal to the amount AIL would have contributed towards maintenance reserve of new aircraft. AIL did not incur any additional cost except on schedule interruptions. Besides, due to Company's financial situation, induction of these aircraft on lease was postponed.

Extension of tender was allowed to encourage and ensure sufficient participation. Bids received from CALC were not rejected due to logistic reason. Further, it has been AIL's experience that in view of lengthy tender process and time taken to comply with all tender conditions, bidders often withdrew their bids as was the case of two bidders withdrawing their bids after technical evaluation. Moreover, the tender was awarded with the approval of Board.

MoCA replied that the leasing activities could not be completed due to weak financial position of the Company, high cost of operations in view of the steep increase in fuel prices leading to a number of domestic routes also not meeting the operating costs, etc.

The reply was not tenable in view of the following:

Despite approval of the Board for leasing ten aircraft in September 2010, the tender was issued only in August 2013, after 34 months. Such a long delay points to inefficiency of the procurement process given the urgency of the requirement.

The contention that maintenance cost of old aircraft would be equal to contribution required for maintenance reserve for new aircraft was not tenable as the Management had informed the Board of the high maintenance costs of the old aircraft emphasising the need to replace these uneconomical old classic aircraft urgently. Besides, continued use of old fleet led to poor deployment and utilisation of narrow body fleet as detailed in Para 5.4 and 5.5.2.

Audit pointed out the flaws in the tendering process and highlighted the fact that there was no competitive discovery of price even after the prolonged tendering process carried out by the airline.

4.3.2 Non-fulfilment of commitments by manufacturer in respect of Maintenance Repair and Overhaul (MRO) and warehouse facilities by Airbus

As highlighted in Performance Audit Report on 'Civil Aviation in India' (AR 18 of 2011-12), the minutes of the meetings of Empowered Group of Ministers for the AIL aircraft acquisition from Airbus inter-alia reflected the commitment of Airbus to assist the creation of MRO facilities in India in association with the promoters. The estimated investment was of the order of USD 100 million. AIL entered into a JV agreement with EADS (the parent company of Airbus Industries) in October 2008, however there had been no progress till date (March 2016) in setting up the facility.

[21] *Air India Board in May 2013 approved the fleet renewal plan envisaging leasing of 19 A320 units as replacement capacity to maintain network and authorized management to issue RFP (Request for Proposal) for the same. In August 2015, ALAFCO was selected to lease 14 A320 aircraft with NEO engines for a lease term of 12 years. Remaining 5 aircrafts were leased from CALC.*

In response Management stated (September 2015) that though efforts were made by the Company during the period from 2007 to 2013, it failed to reach any agreement with Airbus on the terms of MRO. The Company (November 2012) requested MoCA to take a final view on the matter and advise AI on further course of action.

MoCA replied that this matter was being investigated by another Government agency and hence no comments were offered.

All the aircraft have since been delivered (last aircraft delivered in May 2010) though the commitment of Airbus regarding setting up of a MRO facility had not been fulfilled. In the absence of any enabling clause in the purchase agreement, no specific action in this regard had been taken by AIL. Though Airbus did not fulfil its commitment regarding investment in MRO facility, AIL paid the agreed sale price for the A-320 aircraft to M/s Airbus.

4.3.3 Disposal of old aircraft

Audit noticed considerable delay in disposal of old aircraft as discussed below.

(A) Disposal of A-320 vintage aircraft

AIL Board (May 2009) approved disposal of five[22]old A-320 aircraft of 1989 and 1990 vintage. MoCA conveyed its approval in February 2010 for sale of these A-320 aircraft. Subsequently Board approved (15 March 2011) disposal of another three A-320 aircraft.[23].There was a delay of 21 months (November 2011) in completion of cannibalisation process and delay of another eight months was noticed in finalisation of tender. The tender was floated only in August 2012. The bids were opened on 30 August 2012 but due to disagreement between Material Management department (Engineering) and Finance department (January 2013) regarding the highest bid, it was decided to retender. After seven rounds of tendering, six aircraft could be disposed off at a total value of ₹1.27 crore after delay of 31 months (from August 2012 to March 2015). Besides, two aircraft were still lying un-disposed as on July 2016 due to non-removal of mounted engines. AIL had to pay insurance premium of ₹3.56 crore for the period that the aircraft remained un-disposed against which it could realise only an amount of ₹1.27 crore from disposal of six aircraft.

Management replied (February 2016) that after receipt of initial bid, several attempts were made by MMD & Engineering Department to approve the sale, but the Finance Department had not agreed. Moreover, the matter was also referred to Headquarters of the Company but no firm decision was taken inspite of having legal opinion to clear the files as per tender terms. Resultantly the tender was cancelled and bids invited again with higher reserve price. However, due to receipt of a price lower than the reserve price and non compliance with the reserve price conditions, attempts to retender were made.

MoCA has substantiated the reply given by the management.

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[22] *Five A-320 aircraft identified for disposal in May 2009 were VT-EPD, VT-EPL, VT-EPM, VT-EPO and VT-EPQ.*

[23] *Three A-320 aircraft identified for disposal in March 2011 were VT-ESA, VT-ESG and VT-ESK.*

The reply of the Management points to lack of coordination between various departments involved in the disposal of scrapped aircraft. With delay in disposal, AIL continued to incur insurance cost while the aircraft occupied hangar space unnecessarily.

(B) B-737-200 freighter aircraft

Board of Directors of AIL approved (September 2010) the disposal of six B-737-200 freighter aircraft for which approval of MoCA was conveyed on 8 February 2011. As these aircraft were in a fly-worthy condition, the Board decided to dispose them preferably in serviceable condition.

By the time the tender for making them servicable was floated (December 2011), the certificate of airworthiness of five of the six aircraft had expired. The reserve price for the aircraft were however fixed at ₹3.26 crore (USD 725,000) per aircraft considering them to be airworthy.

The company received the highest bid from M/s Aerothrust (March 2012) for a total value of USD 516500 (₹2.64 crore @ ₹51.15 per USD) which was much lower than the reserve price and hence the same was not considered. It was therefore proposed (15 May 2012) to invite fresh bids. Subsequently after three more rounds of tendering, the aircraft were disposed at a total value of ₹1.15 crore (May 2015), three years later. The value obtained in the sale was lower than the bid received earlier by ₹1.49 crore.

The Company stated (February 2016) that efforts were made to request the highest bidder to meet the reserve price. Decision making at the vendor's end took considerable time on one hand and on the other hand, the vendor cited a closure date of 15 February 2013, which the Company was not able to meet as requisite approvals were not in place. Thereafter, the vendor claimed time bar and also stated that the preservation status of the aircraft was not in an acceptable form. Resultantly, the tender was cancelled and fresh bids invited.

MoCA stated that the minimum reserve price for the 6 freighter B-737 aircraft was based on the book value as on 1st April 2012, which was high as the Company had spent large sums in 2007-08 for converting the aircraft into freighter aircraft.

As the Company was unable to estimate realistic reserve price for old aircraft which were not airworthy; it fixed a higher reserve price for disposing B-737-200 freighter aircraft which resulted in loss of ₹1.49 crore and an additional expenditure of ₹55.95 lakh on payment of insurance premium (during the period 2010-2015).

AIL has a mismatch of wide and narrow body aircraft. While wide body aircraft have been over-provisioned, it does not have adequate number of narrow body aircraft.

Over-provisioning has cost the airline on procurement and sale of B-777-200 LRs, and indecision regarding delivery of three B-777-300 ER aircraft. Besides, late delivery of B-787 aircraft compounded the airline's losses. Owing to infirmity in the contract, AIL could recover from Boeing only a fraction of its actual loss due to delayed delivery.

Though the Company was aware of the acute shortage of narrow body aircraft as early as May 2010, AIL delayed leasing of A-320 aircraft. As against a requirement of 19 aircraft, the Company has managed to induct only five aircraft till March 2016.

Disposal of old aircraft was also delayed considerably. This resulted in realisation of lower value for these aircraft, and extra costs due to additional insurance premium.