



ARMENIAN AIRLINES

PRIVATIZATION STRATEGY

September 10, 2001
International Business and Technical Consultants, Inc.





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1 EXECUTIVE SUMMARY

Armenian Airlines, the state-owned flag carrier of the Republic of Armenia, has led a troubled existence since its establishment in 1993. Plagued with a largely inefficient and ageing fleet inherited from its Soviet predecessor Aeroflot, huge debts, lack of experience in international markets and poor management and service standards, the airline's future is bleak. Unless radical measures are taken quickly to relieve the state of the burden of Armenian Airlines, it is highly likely that the carrier will have no option other than to declare bankruptcy – a decision politically unacceptable to the Armenian Government.

The findings of this report have been compiled as a result of months of due diligence and research carried out by IBTCI consultants in conjunction with specially retained Armenian and US-based aviation experts with the aim of ascertaining the optimal privatization strategy for the airline.

Airline privatizations usually take place in one of four ways: (1) privatizing the airline immediately "as-is"; (2) delaying privatization and maintaining the status quo in the hope that the incumbent management will be able to implement turn-around of the airline; (3) delaying privatization and restructuring the airline prior to sale with the assistance of international experts, rendering it more attractive to investors; and (4) extending privatization by realizing the sale process in two stages – positioning the airline by way of preparing a diagnostic analysis and business plan for the airline's future and then implementing the sale by courting international investors.

At chapter 6 of this report, we strongly recommend that Armenian Airlines apply Option (3) – pre-privatization restructuring. The airline is in such poor shape that an immediate sale "as-is" would either be completely unsuccessful or, perhaps worse, would result in a sale at a bargain basement price to an investor lacking the resources or the know-how to turn the airline around. Moreover, the international aviation industry is currently experiencing an economic lull with prime airlines concentrating on premium markets – taking risks in the Caucasus is unlikely to be high on the agenda of any reputable potential investor. Similarly, maintaining the status quo in the hope that the current management will miraculously start to deliver what is needed to save the airline is unrealistic, while the airline simply doesn't have the time or money to implement an extended privatization as described in Option 4.

We recommend that the Armenian Government appoint, without any further delay, a team of international aviation consultants with worldwide experience in pre-privatization restructurings for a term of no less than one and a half years. The chosen consultants should ideally have experience in restructuring airlines registered in the countries of the former Soviet Union. The team should be given the right to manage the airline in conjunction with the current management team and should be left alone by the Government to research, recommend and implement an emergency action plan aimed at improving all aspects of the airline's operations, including financial status, service standards, commercial contracts, network, fleet, human resources and international image. The consultants should be obliged to reach certain milestones and make specific deliverables before the sale process begins. They should equally be under a contractual obligation to use best endeavors to ensure a successful privatization on completion of their term. This would include, for example, a "road-show" geared at their contacts within the industry.

Importantly, this report calls for simultaneous reform of all aspects of the Armenian aviation sector. It became rapidly apparent during due diligence of Armenian Airlines that significant problems exist with the regulatory framework of the sector as well as at Zvartnots International Airport. A restructured and improved Armenian Airlines would be no more attractive to a serious investor than it is now if serious flaws within vital, related members of the aviation industry are not dealt with. We have therefore recommended a radical industry-wide series of reforms. Isolating Armenian Airlines for reform would only result in improving one link in a universally weak chain.

International Business & Technical Consultants, Inc.





2 INTRODUCTION

2.1. Foreword

Armenia, being a land-locked country and lacking efficient road or railway communication with other countries, heavily depends on civil air transport. Over the last ten years Armenia periodically suffered from blockades caused by political and military conflicts in the region, and air transport was often the only link to the world. Civil aviation ought to be considered a priority sector for Armenia, as it has the potential to play an invaluable role in maintaining political and economic independence, facilitating economic recovery of the country as well as the development of international trade and cultural relations.

The vast majority of the companies in the civil aviation sector of Armenia are state owned and have been performing poorly.

Armenian Airlines is the flag carrier of the Republic of Armenia. It plays a central role in the sector through the provision of regular direct air services between Armenia and 16 countries and carries over 40% of the overall air passenger traffic to and from Armenia. Since its foundation as a separate entity, it has gone through many phases of development but the problems inherited from the former Soviet airline Aeroflot, coupled with those accumulated during recent years, not only prevent the airline from further growth but also put in serious doubt the future existence of the company.

The Government of Armenia recognizes the importance of having a well-developed system of civil air transport and sees prompt privatization of certain state-owned companies operating in the sector as an essential step enabling efficient development of the sector.

By decision of the Government of Armenia #755 dated November 25, 2000, a Government Committee was established to carry out preparatory activities for privatization of Armenian Airlines Closed Joint-Stock Company. The Commission includes the Minister of Finance and Economy (Chairman), Minister of State Property Management, Minister of Justice, Chairman of the General Department of Civil Aviation, and the legal advisor to the Government. Subsequently, by decision #377 dated May 03, 2001, the Government appointed International Business and Technical Consultants (IBTCI) to act as the consultant to the Government Commission. IBTCI worked in conjunction with New York-based international aviation consultants SH&E and Armenia-based Ter-Tatchatian Legal and Business Consultants in order to complete the project objective detailed below.

2.2. Project Objective

The objective of this report is to analyze all aspects of the operations of Armenian Airlines and the civil aviation sector of Armenia in order to propose to USAID and, subsequently, the Government of Armenia the optimal strategy and course of action for the successful privatization of Armenian Airlines. Implementation of this strategy is expected to transform Armenian Airline into a professionally run, competitive and profitable airline offering efficient air transportation services and continually meeting contemporary safety and service standards. With a correct approach and willingness to submit to radical reform, there is no reason why Armenian Airlines could not become the strongest carrier in the region and Yerevan Airport could not become a regional hub.





2.3. Methodology

For the purposes of this project, the consultants have studied:

- *the status, structure and functions of the state administrative authorities responsible for the civil aviation sector,*
- *the regulations and laws related to the sector and privatization,*
- *the business environment in the sector, and*
- *the current conditions of Armenian Airlines in terms of its:*
 - ◆ legal status,
 - ◆ corporate management,
 - ◆ human resources,
 - ◆ financial management,
 - ◆ commercial strategy,
 - ◆ fleet composition,
 - ◆ assets,
 - ◆ relations with other companies.

The study was based on information made available to the project consultants. Initially little of relevance was provided. This however changed drastically once IBTCI became legally recognized as the official advisors to the Armenian Airlines Privatization Commission. Meetings were held with management and various departments of Armenian Airlines, the General Department of Civil Aviation, Zvartnots Airport, Air Fueling, Air Catering, the Aviation Medical Center, and the Aviation Training Center. Receiving the information was an arduous and unenviable task. Much of the material information needed to conduct a study of this nature is simply unavailable. When information, particularly financial data, was available it was often contradicted by other documents, leaving the consultants at a loss as to the real status of the company. Indeed, we established that even if a full audit of the company were carried out based on available documents, the auditors would be hard pushed to accurately report on the financial standing of Armenian Airlines. Therefore, although we worked closely with the documents we were given, we also spent significant amounts of time talking to heads of various departments in an effort to "read between the lines" and plug the gaps presented by the documents. The candid answers we received were on occasion alarming, but very useful in helping us compile the overall picture presented in this report.

2.4. Disclaimer

This report does not constitute an offer to sell and is not an official publication of the United States Agency for International Development (USAID) or the Government of Armenia. It has been prepared by International Business and Technical Advisors, Inc. (IBTCI) exclusively for USAID with a view to providing USAID with recommendations for the preferred privatization strategy of Armenian Airlines. USAID shall determine which portions, if any, of this report shall be made available to the Government of Armenia or the public domain.

Neither IBTCI, USAID nor the Government of Armenia assume any responsibility for or give any assurances as to the accuracy or completeness of any information given or statements made in this report. Potential investors in or new management of Armenian Airlines are wholly responsible for conducting their own due diligence and may not rely on statements made in this report.





3 CIVIL AVIATION SECTOR

3.1. Historical Overview

The civil aviation sector of Armenia was formed during Soviet times as an integral part of a centrally planned and managed system. At that time, there were no independent economic entities in this sector. All aviation related activities throughout the Soviet Union, including airline services, development and operation of airports, ground handling, air traffic control, fueling and catering, were the responsibility of a single vertically integrated state-owned company – Aeroflot. The former Soviet republics were not represented or recognized in international relations, as all international accords were entered into by the USSR. All flights originating from Armenia were considered domestic as they were operated exclusively within the Soviet Union and were subject to internal standards and regulations that differed from international norms.

In December 1991, after the break-up of the Soviet Union, the heads of the CIS countries executed an agreement “On civil aviation and use of air space” by which they established the Interstate Aviation Committee and recognized the need to uphold the Air Code, norms, procedures and regulations of the former USSR until the development and implementation of new national regulations.

In 1992, Armenia became a member of the International Civil Aviation Organization (ICAO) and started adopting international norms as the legal and structural basis of its civil air transport system.

At the same time, Armenia began the process of developing international relations and formalizing international trade regulations, and to date has initiated or signed bilateral air services agreements with over 40 countries. Agreements with over 20 countries are currently being negotiated and are pending approval in the near future.

In 1993, by its decision “On improvement of the management structure of Civil Aviation of the Republic of Armenia,” the Government created the General Department of Civil Aviation (GDCA) as the state regulatory aviation body, and the following separate economic entities in the form of state enterprises:¹

- *the national airline – Armenian Airlines,*
- *three airports – “Zvartnots” and “Erebuni” in Yerevan and “Shirak” in Gyumri,*
- *five enterprises which assumed fueling, training, medical, construction and recreation operations.*

Shortly after this decision, the Government, recognizing the need for establishing order and coordinating activities at Zvartnots International Airport, appointed an Authorized Government Representative and granted him exceptional authorities to issue mandatory orders to any government agency or commercial entity operating at Zvartnots International Airport.²

During recent years there have been numerous changes to the legal status, structure, composition and functions of all of the entities created by this decision. Since Armenia did not have a formulated strategy for development of its civil aviation sector, those changes were spontaneous and incongruous.

In 1994, the National Assembly ratified the Chicago Convention on International Civil Aviation and the Warsaw Convention for Unification of Certain Rules Relating to Carriage by Air and other aviation related international treaties. In 1996, Armenia became a member of the European Conference of Civil Aviation (ECAC).

Currently, approximately 40 carriers operate over 110 flights a week between Armenia and 50 destinations in 16 countries in Eurasia. The majority of these operators are small, unknown airlines from Russia and Ukraine performing infrequent flights and mostly serve ethnic migrations of Armenians.

¹ Decision of the Government of Armenia #89 dated March 9, 1993.

² Decisions of the Government of Armenia #125 dated March 26, 1993, and #442 dated September 3, 1993.





Only four recognized IATA carriers from outside the CIS operate regular flights to Armenia.

Armenian Airlines has maintained its position as the predominant carrier to and from Armenia and today is the only Armenian airline company of significance operating out of Yerevan³.

3.2. Regulatory Framework

The state regulatory functions for the aviation sector are the responsibility of the General Department of Civil Aviation (GDCA), which used to be part of the Ministry of Transport and Communication, and which by decision of the Government in November 2000 was reorganized into a stand-alone department reporting to the Government⁴.

In its current status, the GDCA is not a ministry and does not belong to any ministry, and therefore does not fall within the Government structure⁵.

The Charter of the GDCA defines its main objectives as:

- *development and implementation of policies, regulations, rules, norms and standards for the civil aviation sector,*
- *oversight and inspection,*
- *certification and licensing,*
- *control of use of Armenian air space,*
- *control of air carriage markets,*
- *implementation of tariff policies in the sector,*
- *cooperation with international civil aviation organizations and enforcement of their decisions in Armenia,*
- *registration of accidents and participation in their investigation.*

The regulations, procedures, norms and standards applied by the GDCA have been adopted from the former USSR or post-Soviet Russia with minor modifications. Most of them have not been submitted for state registration and cannot be considered official and legally enforceable. Armenia has adopted a Law on Use of Air Space in 1997 but it is still using the outdated Air Code of the former USSR.

According to current legislation, the Government of Armenia is responsible for managing state property.⁶ The Government may delegate management of shares of state-owned companies to one or more governing agencies. The latter, in turn, should appoint its representatives (physical persons) by general meetings and define their functions and authorities.⁷

The GDCA is appointed by the Government to manage the state-owned shares of Armenian Airlines CJSC, as well as other closed joint-stock companies created as a result of the restructuring of the former Armenian Division of Civil Aviation (Aeroflot).

Soviet-style management principles still dominate the GDCA and all of the state-owned companies in the sector are considered to be part of "the GDCA System."⁸ Directors and deputy directors of those companies are appointed by the Chairman of GDCA.⁹ In various reports the GDCA refers to "general profitability of the System" and other amalgamated parameters.

³ See comments at 3.4.1 on the only other Armenian airline in operation, a start-up called "ArmAvia".

⁴ Decision of the Government of Armenia #733 dated November 10, 2000.

⁵ Constitution of the Republic of Armenia, Article 85.

⁶ Constitution of the Republic of Armenia, Article 89, p. 3.

⁷ Article 89 of the Constitution, Article 8 p. 5 of the Joint-Stock Companies' Law.

⁸ Charter of General Department of Civil Aviation registered on December 22, 2000, Article 8.

⁹ Charter of General Department of Civil Aviation registered on December 22, 2000, Article 11, p. 11.





The Chairman of the GDCA, by his order, has reserved the authority to realize the functions of the general meeting of all state-owned companies, and beyond the functions of the general meeting has immediate involvement in all aspects of day-to-day management of those companies. This control is realized with the best intentions of "protecting the state interest" or "safeguarding Armenian aviation," but in practice they deprive the management of those companies of any operational autonomy and flexibility.

Two committees of the GDCA – the Supreme Qualification Commission (VKK) and the Air Medical Expert Commission (VLEK) – perform periodic professional and medical examinations of certain categories of employees of certain aviation companies.¹⁰ It is noteworthy that the Air Medical Expert Commission is formed by and reports to the GDCA and is not in any way associated with the Ministry of Health.

3.3. Related State Agencies

The state authorities present at Zvartnots International Airport are as follows:¹¹

- *Customs Department (Ministry of State Revenues) – responsible for customs control at the passenger and cargo terminals,*
- *Border Control Department (Ministry of Defense) together with the Department of Visas and Permits (Ministry of Interior) – responsible for passport and immigration control,*
- *Department of Visas and Permits (Ministry of Interior) – responsible for issuing visas upon arrival,*
- *Police (Ministry of Interior) – responsible for maintaining public order at the airport.*

Security services at the airport are provided by a special department of Zvartnots Airport.

Specific functions, procedures and counteractions of the officers and employees of the above mentioned state agencies are not defined in any regulation, and the Chairman of the GDCA is assigned by the President to systematize and coordinate their activities.¹²

According to the information shared by various foreign airlines operating to and from Zvartnots, these state agencies duplicate procedures. For example, the airlines and their ground handling agents are required to obtain and input a large amount of information at check-in which is irrelevant to their activities and which is primarily needed by certain state agencies.

3.4. Commercial Entities

The state enterprises established by way of Government decision in 1993 were later restructured and reorganized into the following closed joint-stock companies (CJSCs) with 100% of stock owned by the Government of Armenia:

- *Armenian Airlines CJSC,*
- *Zvartnots International Airport CJSC,*
- *Erebuni Regional Airports CJSC,*
- *Shirak Airport CJSC,*
- *Armenian Air Navigation CJSC,*
- *Air Fueling CJSC,*

¹⁰ VKK and VLEK are the commonly used abbreviations of Russian "Vysshaya Kvalifikatsionnaya Komissiya" and "Vrachebno-Letnaya Ekspertnaya Komissiya."

¹¹ Decision of the Government of Armenia #200 dated March 24, 1998.

¹² Assignment of the President number NK-761 dated January 31, 2001.





- Air Medical Center CJSC,
- Aviation Training Center CJSC,
- Reconstruction Administration CJSC, and
- Sevan-Motel CJSC.

During the last three years, as a result of several attempts at reform, some of these companies or divisions thereof were merged and at a later stage demerged or vice versa. However, the original structure was eventually reverted to, with the exception of Air Catering CJSC, which was spun off Armenian Airlines in 1998 and remains a separate company.

None of the above companies has yet been privatized.

3.4.1. Armenian Air Carriers

Apart from Armenian Airlines, there are sixteen Armenian companies that hold air operator certificates from the GDCA. However, none of these companies operate flights to/from Zvartnots and most do not have any aircraft or crew. A few companies have their aircraft registered, based and operated in other countries under "wet-lease" contracts (Yerevan Avia, Dvin Avia, Felix Avia, etc.).

ArmAvia is the only Armenian carrier, apart from Armenian Airlines, that has obtained operational licenses and recently started regular flights to Moscow-Vnukovo by Tupolev-134 aircraft.

Armenian Airlines remains the dominant carrier operating to/from Zvartnots and Shirak International Airports and carries over 50% of the overall air passenger traffic to and from Armenia. The airline's operations are presented in detail at Section 3 below.

3.4.2. Zvartnots International Airport CJSC

Zvartnots International Airport CJSC owns and operates the facilities of the primary international airport of Armenia, located 15 km west of Yerevan.

The airport is operated around the clock and in all seasons and is capable of handling almost any civil aircraft. It is prohibited from handling any military aircraft or military cargo. It has one runway, two passenger terminals and a modern cargo terminal. No hangar facilities are available for aircraft maintenance and repair.

Passenger Terminal 1 commenced operations in 1981 and was initially designed to only serve domestic flights within the former Soviet Union. It was later restructured and reconstructed to accommodate immigration and customs services for the purposes of international traffic.

Passenger Terminal 2 commenced operations in 1963 and after partial renovation in 1994 was leased to a private ground handling company, Avia Service, as a high quality service hall (VIP hall). Terminal 2 does not have separate departure and arrival halls and all passengers are served through the same area. The lounge is located on the ground side¹³.

The cargo terminal was developed under loan financing from the European Bank for Reconstruction and Development (EBRD) and commenced operations in 1997. Pursuant to the terms of the EBRD Loan Agreement, cargo handling services at Zvartnots Airport are the exclusive prerogative of Zvartnots Cargo Center. The loan was secured by a sovereign government guarantee ensuring that if the Airport fails to repay the loan, the State bears the burden of repayments.

¹³ As opposed to air side. The delimitation is marked by passport control.





The airport holds an ICAO CAT II certificate¹⁴ that will be removed unless the airport takes urgent measures to repair and rehabilitate the runway and lighting system. The ICAO inspection team recently issued a compulsory order to the airport to renovate and upgrade almost all facilities.

The information displays and announcement systems are obsolete and inappropriate. Overnight accommodation facilities for crew are poorly maintained and need to be upgraded to internationally acceptable standards.

The airport does not have efficient car parking facilities, duty-free or other non-aviation commercial services and mostly relies on charges from aviation related services. None of the services at the airport are provided under concession agreements. Neither are the service providers selected through a competitive tender process. The airport does not have common standards, rules or requirements vis-à-vis these service providers.

3.4.3. *Erebuni Regional Airports CJSC*

Erebuni Regional Airports CJSC operates the second airport in Yerevan – Erebuni – and a few smaller regional airports. Erebuni Airport¹⁵ is currently used exclusively by the Armenian air force and Armenian Airlines' Helicopter Division.

3.4.4. *Shirak Airport CJSC*

Shirak Airport CJSC operates the second largest international airport in Armenia located in Gyumri, 140 km north of Yerevan. The airport is used for the operation of infrequent flights to a few destinations in the Russian Federation. Armenian Airlines serves three destinations out of Shirak. The airport is often used as a reserve airport for flights operated to Zvartnots Airport¹⁶.

3.4.5. *Armenian Air Navigation CJSC (Hay Aeronavigatsia)*

Armenian Air Navigation CJSC provides air traffic control for the airspace of the Republic of Armenia and control over aircraft movements at Zvartnots Airport. The equipment of the company has been completely modernized and the staff retrained under loan financing from the Japanese Marubeni Bank, in cooperation with French company Thomson.

3.4.6. *Air Catering CJSC (Aviasnund)*

All aircraft catering services at Zvartnots Airport are provided by Air Catering CJSC. The company was created in 1998 from the Catering Department spun off from Armenian Airlines. It has constructed a new building with modern technology under an "investment agreement" with a private Bulgarian company and has stopped using its old facilities. The company also operates the staff canteen at Zvartnots.

3.4.7. *Air Fueling CJSC (Aviavareliqi Ltsavorum)*

The company is the only provider of aircraft fueling services at Zvartnots Airport. It buys jet fuel from a single private importer and resells it to airlines at a mark-up and uploads it into aircraft at an additional service charge. Airlines cannot procure fuel from the importers directly and are obliged to purchase fuel from Air Fueling CJSC.

¹⁴ ICAO Category II entitles air traffic control to allow take-off and landing of aircraft under certain poor weather conditions. Neither Tbilisi nor Baku airports hold such a certificate.

¹⁵ Often referred to as Yerevan South Airport ("Yuzhniy").

¹⁶ To conform with international standards each airport must also have a "reserve" which may be used in the event that the original destination cannot operate due to an emergency or sudden poor weather conditions.





The company owns all fuel storage facilities, a quality control laboratory, fuel trucks, and the land occupied by its offices and facilities. The company has plans to buy some additional land and build garages to save on fees paid to the airport.

Over the last few years the company was merged several times with and subsequently spun off from Zvartnots International Airport CJSC.

3.4.8. *Air Medical Center CJSC (Aviabuzh Bzhshkakan Kentron)*

The company provides medical examinations and preventive healthcare services to certain categories of aviation employees under agreements with their respective employers. It also provides mandatory pre-flight medical inspection of the crews.

Over the last few years the company was merged several times with and subsequently separated from Zvartnots International Airport CJSC.

3.4.9. *Air Training Center CJSC (Aviausumnakan Kentron)*

Air Training Center CJSC offers educational and training courses for certain aviation-related professions. Most of the syllabus and materials used by the Center were designed during Soviet times and have not been updated since; the trainers have not been retrained. The Air Training Center is often used simply to obtain certificates of attendance, which in turn are required to receive licenses to carry out certain industry activities.

3.4.10. *Avia Service CJSC*

Initially started as a joint venture between Zvartnots Airport and a private investor, Avia Service CJSC is now the only privately owned company that provides commercial aviation services at Zvartnots International Airport. The company provides ground handling services (except for cargo and mail handling) to almost all foreign air carriers operating to Yerevan. The company has plans to establish a ticketing office in the center of the city.

3.4.11. *Air Ticketing Agents*

There are over forty companies that have licenses for the sale of airline tickets and act as agents of various airlines operating to and from Armenia. Five agents have a widespread network of offices throughout Armenia. Some agents are affiliated with foreign offices.

Virtually all agents sell Armenian Airlines tickets. Through an arrangement with the Russian Transport Clearing House (TKP), many agents sell air carriage on a number of smaller CIS carriers that participate in TKP.

A large number of ticketing outlets operate in public places without being licensed through private arrangements with licensed agents.

3.5. Non-commercial Organizations

3.5.1. *Board of Airline Representatives (BAR)*

The Board of Airline Representatives was created in 2000 through the initiative of Swissair and British Airways and currently counts all IATA-member airlines operating to and from Armenia as regular members. Several other IATA-registered carriers participate in BAR as associate members.





The BAR meets at least once a month to discuss common problems, develop measures that would prevent unfair and unfavorable practices, and makes proposals to the GDCA in relation to possible changes at the Airport which would ensure higher safety and security standards and better quality services to all airport users.

According to the Chairman of the BAR, certain positive results have already been achieved, but cooperation with the GDCA and the Airport has been very slow and inefficient.





4 ARMENIAN AIRLINES' BUSINESS

4.1. Company Identifiers

Name: Armenian Airlines Closed Joint Stock Company
Address: Zvartnots International Airport
Yerevan 375042, Republic of Armenia
Tel.: +374 1 225444
Fax: +374 1 151393
SITA: EVNDDR3 (General Director)

Two-character airline designator: R3
Three-digit accounting code (passenger): 956
Three-digit prefix code (cargo): 956
Three-letter designator: RME

Participation in International Organizations and Agreements:

Armenian Airlines joined IATA as a regular member in 1994.

Since 1997, it is a member of the IATA Clearing House (ICH) and a signatory to the Multilateral Interline Traffic Agreement (MITA) and Multilateral Proration Agreement (MPA) for both passenger and cargo transportation.

4.2. Legal Status

Armenian Airlines was established as a separate entity in 1993. At the end of 1997, following the requirements of the new Joint-Stock Company Law enacted in 1996, it was reorganized into a closed joint-stock company.¹⁷

The latest charter of the company was registered with the State Register of Enterprises on October 4, 1999, following the reorganization of the company through its merger with Ararat Avia State Closed Joint-Stock Company.¹⁸

The name "Armenian Airlines" has been registered with the State Licensing Authority.

4.3. Shareholding Structure

According to the Charter registered with the State Register of Enterprises on October 10, 1999, the charter capital of Armenian Airlines CJSC is AMD 8,175 million, consisting of 16,350 common shares with a nominal value of AMD 500,000 each. 100 percent of the shares of the company are owned by the State.

¹⁷ Joint-Stock Company Law, adopted by the National Assembly on April 4, 1996, Article 99, p. 9. Organizational/legal forms of "state enterprises" were not recognized in the new Civil Code enacted in 1999.

¹⁸ Decision of the Government of Armenia #491 dated August 03, 1999.





According to the requirements of the law and the Charter of the company:

- *if the net assets of the company as at the end of the second and each consequent year after its creation are lower than the charter capital, the company shall declare and register a reduction of its charter capital;*
- *if such a reduction is not implemented, the creditors of the company, the shareholders and authorized state authorities shall be entitled to request liquidation of the company;*
- *the company shall inform all creditors about any reduction in its the charter capital, in which case the creditors may require early performance or termination of the obligations towards them and compensation for losses;*
- *if the net assets of the company are lower than the minimum charter capital required by the law (AMD 100,000), the company is subject to liquidation.*

As the net assets of the company are currently negative (AMD 1.8 billion), the company runs the risk of being subject to a request for liquidation by a broad class of legal and physical persons.

4.4. Operational Licenses

The company has an Air Operator's Certificate issued by the GDCA and valid until July 31, 2002. The Certificate allows the company to perform regular and charter flights on domestic and international air routes.

According to the law, certain types of aviation activities require state licensing by the GDCA (air transportation, ground handling, aircraft handling, etc.).¹⁹ This requirement does not only apply to state enterprises. After reorganization of state enterprises into (state-owned) closed joint-stock companies, they become subject to the licensing requirements as well as to other laws and regulations applicable to commercial entities, irrespective of their ownership.

Although all major types of activities performed by Armenian Airlines, including air transportation, require state licenses, the company has never applied for them and consequently has no legal right to carry out such economic activities.

Armenian Airlines has received licenses and designations from the GDCA to operate regular passenger flights on over 60 routes, but only half of them are actually used.²⁰

4.5. Management Structure

The supreme management body of the company is the general meeting of shareholders, and the executive bodies of the company are the general director and the management. The company does not have a board of directors.

The functions of the general meeting defined in the Charter of the company heavily depend on "the founder." The concept of the "founder" was defined in the Joint-Stock Company Law (1996) and was applicable only to newly established state owned companies. This concept is not supported by the new Civil Code (1999).

By Decision of the Government, the GDCA is appointed to manage the state interest in the company.²¹ By order of the Chairman of the GDCA, three representatives from the GDCA have been appointed to represent 40/40/20 percent of the state interest respectively in the general meeting of Armenian Airlines CJSC, while simultaneously reserving full authority for himself.

This dubious management structure is in conflict with the law and provides favorable grounds for the state authorities to implement administrative control over day-to-day operations of the company. The executive

¹⁹ Decision of the Government of Armenia #161 dated March 5, 1991, and Order of the Authorized Representative of the Government of Armenia #59 dated December 15, 1995.

²⁰ See Annex 9.1 for full details of these licenses.

²¹ Decision of the Government of Armenia #828 dated December 16, 2000.





bodies of the company cannot act independently, do not have operational flexibility and are obliged to obtain prior approvals from the Chairman of the GDCA for almost any decision. Thus, the functions of the executive bodies are constantly influenced and often performed by GDCA officials.

Although the Charter of the company and the law requires all joint-stock companies to hold annual general meetings, no general meetings have been called since the creation of the company.

Appointment and removal of the general director of the company should be the authority of the general meeting, but in reality the general director and his deputies are appointed and removed directly by order of the Chairman of the GDCA.

During the last five years the general director of the company has been changed eight times. Deputy directors are replaced almost as frequently. Not even the most gifted manager can achieve serious results in under a year, and instead of frequent changes in management, it would be advisable for the GDCA to develop certain standards and qualitative criteria in relation to executive and managerial positions in respect of all companies which it governs.

4.6. Organizational Structure²²

The organizational structure of the company has undergone many changes over the last few years but it is still based on old Soviet standards and subjective redistribution of functions and authorities.

The names of many departments often do not correspond to their functions and the functional relationships between various departments are awkward. For example:

- *the department that provides ground handling services is called the "Carriage Organization Department" and is part of the Passenger Services Directorate but not the Ground Services Directorate,*
- *the department that is responsible for office management, general administrative and logistical support is included in the Ground Services Directorate,*
- *the Strategic Development and Fleet Planning Department is included in the International Relations and Legal Directorate,*
- *the Computer Networking Department is included in the Financial Directorate and has limited responsibilities for various IT related problems,*
- *the cargo sales staff is included in the administration of the Passenger Services Directorate and does not report to the Sales Department or Commercial Directorate, etc.*

4.7. Human Resources²³

4.7.1. Human Resource Management

Armenian Airlines does not have a human resource management system and the functions of the Human Resources Department (HR) are limited to keeping employment records and statistics on the number of people employed by various departments and their wages. HR it is not directly involved in the process of recruiting or terminating staff and does not have accurate figures on the actual number of people employed by the company at any given time.

²² See Annex 9.2 for Organizational Chart.

²³ See Annex 9.3 for a breakdown of employees according to division.





The company is constantly implementing programs to reduce the number of staff while being simultaneously under pressure from GDCA officials to "find a job" for their preferred candidates (who often do not have appropriate training or experience).

According to the payroll approved by the management and the GDCA, 1450 people ought to be employed by the company. Certain types of employment contracts are erroneously considered to be "beyond" the payroll. For example, outstations are not included in the payroll and are not handled by HR.

Reportedly, the total number of Armenian Airlines' employees exceeds 1600. This staffing level is very high compared with the company's size of operations. For example, there are over 300 people maintained on the payroll as flight deck crew. Approximately 70 people are employed for the operation and maintenance of helicopters – an absurd amount considering annual helicopter utilization does not exceed 70 hours.

Most of the staff of Armenian Airlines received their education in aviation during Soviet times when the operations of the only airline – Aeroflot – were planned and subsidized by the state and the concepts of market economy, free competition and commercial operation were not applicable. Armenian Airlines does not plan and arrange formal training for its staff (except for the cockpit crew). Large numbers of employees receive "on-the-job" training and have no formal education in aviation.

Most of the cockpit crew is only specialized in operating Russian equipment. Only five crews have been trained to operate the company's leased A310.

Technical maintenance personnel have received some training from Sabena Technics in Belgium and have carried out maintenance on the A310 under the supervision of Sabena Technics' resident engineers.

The average age of Armenian Airlines' pilots is increasing year by year and although the airline is currently overstaffed, as the pilots retire, Armenian Airlines may soon face serious problems trying to recruit new pilots.

The old Russian aircraft currently operated require large cockpit crews (4-5 people) and as the company switches to Western equipment (which normally require no more than two people on the flight deck) certain professionals will have to be laid off.

Work in outstations is well-paid and considered prestigious. Outstation staff are usually selected after pressure from GDCA officials, irrespective of their professional qualifications.

4.7.2. Collective Agreement

The company's original Collective Agreement was concluded between "Armenian Airlines" SCJSC, "Armenian Airlines" SCJSC Trade Union Committee and "Armenian Airlines" SCJSC Flight Service Trade Union Committee. The Agreement has a one year term and the terms of the new Agreement are currently being discussed.

4.7.3. Remuneration

The Collective Agreement stipulates minimum levels of remuneration: the salary should be at least 3 times the stipulated minimum salary of the Republic of Armenia but not less than the minimum salary in force for Armenian Airlines' employees. The minimum salary does not include bonuses, premiums or promotional payments (which are governed separately by the Agreement).





4.8. Revenue, Sales and Distribution

4.8.1. Passenger Sales

Passenger sales in Armenia are organized through a fairly well developed network of over 35 sales agents as well as Armenian Airlines' own ticketing offices in the center of Yerevan and at the airport. Some of the agents operate a large number of small offices in Yerevan and other urban areas.

The sales infrastructure inherited from Aeroflot was privatized in 1995 and has become the largest air ticketing agency in Armenia, operating over 25 offices throughout the country (Aviatrans). Up to 20-25% of seats on selected CIS flights are allocated to Aviatrans for sale through its nationwide network of ticketing offices.

Passenger sales agents in Armenia receive 9.5 percent commission from their sales of Armenian Airlines' fares, including the ones based on Armenian Airlines' special prorated agreements with other carriers. Aviatrans is the only sales agent in Armenia that receives incentive commissions.

Sales in foreign countries, except for CIS countries, are organized through general sales agents (GSAs) or separate sales agents. There is a noticeable trend of periodic replacement of GSAs and it is clear that some of the new GSAs are not well known in their territory. Selection and appointment of GSAs is very often influenced by GDCA officials or driven by private interest.

GSAs receive 12 to 18 percent commission from Armenian Airlines' fares.

Sales in CIS countries are organized through sales agents, which receive 5 to 9 percent commission.

Armenian Airlines pays 6 percent commission for sales of interline tickets. Foreign agents are not allowed to sell interline tickets unless they are combined with Armenian Airlines' flights.

Currently the airline uses 2-coupon and 4-coupon manual ticket stock. Introduction of preprinted ATB2 ticket stock was scheduled for August 2001, after implementation of SITA/Gabriel's automated ticketing functionality.

Agents are normally requested to secure ticket stock provided to them with security deposits or bank guarantees. To implement stricter control over the use of its ticket stock, Armenian Airlines provides its agents with a limited number of ticket stocks (usually enough to last up to two months).

Armenian Airlines does not participate in any industry Billing and Settlement Plan (BSP) programs that would enable the airline to considerably expand its network of agents in certain territories by allowing the agents to issue Armenian Airlines' tickets on neutral IATA BSP ticket stock. This would improve sales control and revenue collection.²⁴ In 1999, Armenian Airlines became a member of the Russian Transport Clearing House ("Transportnaya Kliringovaya Palata" - TKP), which operates in a similar fashion to the IATA BSP. TKP sales reports are submitted to Armenian Airlines on a monthly basis and the funds are transferred within 15 days of the end of each month.

Armenian Airlines does not have any credit card clearance arrangements and the tickets are usually sold against cash. The airline is not properly represented on the Internet and does not exploit any e-commerce opportunities.

4.8.2. Passenger Tariffs

Armenian Airlines' fare structure is rather primitive and does not reflect the specific requirements and patterns of various market segments. Only two or three types of fares are offered to destinations in the CIS, Central Asia and

²⁴ Armenian Airlines used to participate in BSP-UK in 1998 when it was operating flights to London. Agreements with BSPs in Frankfurt and Germany were signed and entrance fees paid in 1997, but these were not executed because of resistance from the local GSAs or area managers.





Middle East. Fares to Western Europe and connecting destinations have a slightly better structure. There are no advance purchase or inclusive tour fares.

Very often changes in fares are dictated by the GDCA or other Government officials. For example, despite expectations of an increased demand for air transportation during 2001 because of the celebration of the 1700th anniversary of Christianity in Armenia, Armenian Airlines was forced to apply the winter 2000/01 season fares for the summer 2001 season. Moreover, the fare structure for the major European destinations has been "simplified" and the validity of the lowest fares has been extended for a month, thus significantly reducing the airline's yield. Decisions of this type are made under political and administrative pressure and are not justified commercially. Unfortunately, because of the nature of the airline business, the ramifications of such decisions often only become noticeable when it is too late to take any corrective measures.

Fares and capacities to almost all of the CIS destinations served by direct flights are coordinated with the competition. Fares to Western Europe and the United States are coordinated with the competition to a much more limited extent.

Registration of fares with the civil aviation authorities is not performed in a systematic order.

4.8.3. *Distribution Systems*

Armenian Airlines uses "SITA/Gabriel" as its main inventory control and information management system. The agreement was recently revised to enhance functionality and reduce costs. Under the current arrangements, Gabriel provides information about availability, allows Armenian Airlines to publish fares and disseminate this information to the global distribution systems (GDS) with which Armenian Airlines has agreements. It also allows maintenance of a database of confidential and negotiated fares and other special information within Gabriel. Automated ticketing functionality was due to have been fully configured, tested and implemented by August 2001.

Armenian Airlines has recently renegotiated its agreement with SITA and has significantly improved the schedule of charges for SITA communication services. According to the new regime, Armenian Airlines should pay a "bundled" monthly service charge of USD 3,000 plus USD 0.70 per passenger boarded. Optional and special services are charged additionally.

Armenian Airlines does not have an automated yield management system. Reservation and space control is done manually using the standard functionality of SITA/Gabriel. No-shows usually are not followed up.

There is no system for managing cargo reservations and tracking cargo movement.

Departure control system (DCS) functionality is supported by Gabriel but has not been requested by Armenian Airlines due to the absence of necessary equipment at the passenger terminals.²⁵

The airline has recently applied to join the World Tracer - a global system for tracking lost and found baggage.

The airline also has agreements with major global distribution systems (GDS) Amadeus, Galileo, Sabre and World Span, which significantly improve distribution, especially in the areas where these systems are more popular among travel agents. Armenian Airlines' general sales agents are provided with a Gabriel connection in order to have access to the most up to date fare and availability information. However, most subagents usually use other GDSs.

SITA/Gabriel is not designed as a travel agency system and does not support the advanced functionality of other GDSs. However, as it is also the host system for many other CIS carriers (including Aeroflot), it has been traditionally used by most of Armenian Airlines' agents in Armenia as their main reservations system.

²⁵ During the last several years, there have been many discussions between Armenian Airlines and Zvartnots Airport on who should pay for the installation of departure control equipment.





A few seats for almost every CIS flight are allocated to Armenian Airlines' Ground Handling Department. This seems to be a tradition continued from the Soviet Aeroflot days.

The mix of sales generated through various reservation systems in terms of booked and not cancelled segments is presented below²⁶.

Gabriel	62%
Sabre	14%
Amadeus	11%
Galileo	4%
Worldspan	3%
Sirena	6%

Sabre, Amadeus and Galileo are usually used for booking Armenian Airlines' European flights, while Worldspan is usually used for booking Middle Eastern flights. Sirena is used only for booking the CIS flights. Armenian Airlines's fares and schedules are distributed and published through Air Fare (a sub-system of SITA/Gabriel) and OAG respectively.

4.8.4. Cargo Sales

Export from Armenia is very limited. Lack of demand for export by air is exacerbated by the fact that air transportation is generally relatively expensive.

Most of the cargo originating from Armenia is sold through Armenian Airlines' cargo department located at Zvartnots Cargo Center. There are only a few cargo sales agents in Armenia that provide insignificant volumes on an occasional basis and are paid 5% commission for their sales.

Cargo sales from other territories, except for the CIS, are organized through cargo GSAs. In certain countries the same company is appointed as both passenger and cargo GSA. In Germany, Armenian Airlines has appointed two cargo GSAs without clear separation of their territories or functions. Armenian Airlines' GSAs receive 8 to 12 percent commission from such sales.

Given the low frequency of flights, instead of appointing a different GSA for each country, it would be more efficient to appoint the same company as a cargo GSA in neighboring territories.

At most of the CIS airports served by Armenian Airlines, cargo is sold by the respective airport or the ground handling company for a 5% commission.

The most successful flights in terms of cargo transportation are Paris, Amsterdam, Frankfurt, Moscow, Dubai and Istanbul.

Armenian Airlines does not exploit 6th freedom traffic opportunities²⁷ which could significantly help improve the commercial load of aircraft and cargo revenues of the company. The company can start implementing 6th freedom cargo from Amsterdam without any change to its current network of flights.

The airline does not subscribe to the Cargo Accounts Settlement System (CASS), which would help the company expand its cargo sales network and better administer the revenue collection process.

²⁶ "No-show" and "go-show" statistics were unavailable and were not taken into consideration.

²⁷ See glossary for explanation of sixth freedom traffic rights.





4.8.5. Cargo Tariffs

Armenian Airlines' inbound and outbound cargo rates for most of the routes are disproportionate and do not correspond to actual traffic. Having unutilized cargo capacity from Yerevan to most of its destinations, Armenian Airlines can offer very competitive rates for 6th freedom transit transportation. These market opportunities are not currently exploited.

The company is not focused on identifying potential or actual customers that regularly send or receive cargo and building relationships with them.

Because of its improper sales network, Armenian Airlines is forced to offer lower net-net rates to cargo general sales agents in order to motivate them to promote and market its cargo transportation services.

4.8.6. Cooperation with Other Airlines

Since joining MITA and MPA in 1997, Armenian Airlines has aggressively developed interline relationship with other carriers. It currently has over 180 interline traffic agreements on a bilateral and multilateral basis with other air carriers.

Within the framework of the interline relationship, Armenian Airlines has developed special prorate agreements (SPA) for passenger and cargo transportation with 17 and 4 carriers respectively.²⁸ An interline and SPA relationship was also developed with one railway company (Deutsche Bahn). All current SPAs forbid third party interlining.

The interline and special prorate agreements have given Armenian Airlines great opportunities to:

- o offer throughfares for passengers traveling to destinations beyond Armenian Airlines' network;
- o improve distribution and augment revenues with sales generated by the interline/SPA partners and their sales networks;
- o achieve better international recognition;
- o generate short to mid-term cash on a regular basis which may be used as working capital.

The sales and clearance statistics show that 95% of Armenian Airlines' interline revenues in year 2000 was generated by 12 airlines: KLM, Air France, Aeroflot, Northwest, Lufthansa, United Airlines, Air Canada, Delta Air Lines, US Airways, Swissair, British Airways and Austrian Airlines, and almost two thirds is generated by the first four of these airlines. Interline cargo revenues are under 1% of total interline revenues.

Traffic generated by sales of throughfares developed under the SPAs by Armenian Airlines and its SPA partners comprises an important part of Armenian Airlines loads to Amsterdam, Paris and Frankfurt.

Interline and SPA relationships are very strong with KLM/Northwest, Air France, Lufthansa and Air Canada.

United Airlines has recently terminated its interline relationship with Armenian Airlines, mostly because of continuous violation of baggage handling rules (non-collection of excess baggage charges, checking of baggage that do not belong to passengers, improper documents, etc.).

KLM/Northwest were represented in the Armenian market through an off-line GSA long before the interline relationship with Armenian Airlines was developed. During the last two years the sales network in Armenia has been significantly improved and currently KLM/Northwest throughfares are aggressively marketed in both Armenia and the United States.

Air France has a non-reciprocal bilateral interline agreement with Armenian Airlines. Reciprocity has only been negotiated for five European destinations (Amsterdam, Frankfurt, London, Marseille, Lyon). Air France has a block-space of 33 economy class seats on each direction of Armenian Airlines' Paris flights at a special prorate.

²⁸ See Annex 9.4 for a list of all interline and special prorate agreements entered into.





Air France does not have any presence in Armenia and the throughfares under the SPA are marketed only through a single consolidator based in California.

Armenian Airlines does not operate to Zurich and Vienna but has negotiated code-share and block-space agreements with Swissair and Austrian Airlines, which operate two and three weekly flights respectively on those routes. According to existing statistics, the point-to-point markets between Switzerland/Austria and Armenia are not sufficient to justify a weekly frequency on these routes. These services are operated by Swissair and Austrian Airlines primarily as feeding flights for their network of transatlantic and European flights.

Under the agreement with Swissair, a block-space of 20 economy class and 5 business class seats are provided to Armenian Airlines at very favorable special rates which can be sold separately or in combination with the connecting flights operated by Swissair at fares coordinated between the two carriers. According to the current arrangement, the deviation between Armenian Airlines and Swissair direct and throughfares should fall within a limit of 10%. The block-seat is also open for marketing in combination with other direct and throughfares offered by Armenian Airlines. The average utilization of the block is 30-35% for economy and under 4% for business class seats.

Under an agreement with Austrian Airlines, a block-space of 8 economy class and 2 business class seats are provided to Armenian Airlines free of charge. Fares offered to the market are the same for both carriers. There is no SPA with Austrian Airlines. Instead, both of the carriers receive additional commission on top of the standard interline (prorated) sales made on the other party's service. As Austrian Airlines' service to Yerevan started in summer 2001 season, there are not enough statistics to assess utilization of the block.

4.8.7. *Mail*

Armenian Airlines does not have a distinct mechanism for calculating and claiming revenues from transportation of mail. Certain improvements have been made recently and Armenian Airlines has managed to collect certain amounts accrued during the last few years, but the system is still organized very poorly.

4.8.8. *Excess Baggage*

Large portions of excess baggage charges collected from passengers are being pocketed by check-in staff and do not reach the airline. Instead of taking measures to improve the situation, Armenian Airlines has increased free baggage allowances on certain flights to "ease the financial burden on passengers." Thus, free baggage allowance of 30kg for flights to Paris, Frankfurt, Amsterdam, Istanbul, Beirut and Aleppo as well as outbound flights to the CIS, approximately 10 kg higher than the IATA standard for the same routes.

Excess baggage fees are charged at 1% of the lowest confidential one-way fare offered by Armenian Airlines.

4.8.9. *Charter Flights and Aircraft Leases*

Charter operations of aircraft leases are important sources of income for Armenian Airlines, especially given the low utilization of almost all types of aircraft in its fleet.

Charters are sporadically ordered by organizers of special events (sports championship, concerts, conferences, etc.), or on a more frequent basis, by travel agencies for their summer season tourist and leisure programs.

The large Ilyushin-86 aircraft are leased out from time to time to operate short-term charter programs for the transportation of large groups of people. One Yak-40 aircraft is "wet-leased" to an Iranian company for the operation of domestic charter flights in Iran. Armenian Airlines does not have other types of spare aircraft available for leasing.





4.8.10. *Training of Other Airlines' Crews*

Armenian Airlines has flight simulators for Tu-134/Yak-40 and Tu-154 aircraft, which are often used for training crews of other airlines in the region. Crew training programs at Armenian Airlines' training facilities are well organized and are offered at very competitive rates.

4.8.11. *In-Flight Duty-Free*

Goods sold on Armenian Airlines' flights are not typical of duty free items offered on board by other airlines. The quality of goods is very poor, the flight attendants are not trained to present the goods in an attractive manner, and overall in-flight duty-free hardly generates any revenue for Armenian Airlines. Liquor is the most popular purchase and is usually consumed in-flight.

4.9. Clearance Arrangements

Armenian Airlines' membership of the IATA Clearing House (ICH) in 1997 was an important prerequisite for the development of interline relationship with other carriers. It also helped to improve financial management of the company.

Currently, Armenian Airlines uses the ICH to clear its accounts with its interline partners (except for some CIS carriers), pay for IATA charges and services provided by all GDSs (SABRE, Amadeus, Galileo, Worldspan), Sabena Technic's technical maintenance services for the Airbus-310, Air France's catering and ground handling services at Paris Charles de Gaulle and Iran Air's ground handling services at Tehran Airport.

No interline sales are cleared through the Russian Transport Clearing House. Payments with most of the CIS interline partners (Aeroflot, Uzbekistan Airways, etc.) are made directly.

4.10. Competition

4.10.1. *Domestic Competition*

Armenian Airlines was the only carrier created in Armenia after redistribution of Aeroflot's assets among the republics of the former Soviet Union. Both air passenger and cargo transportation in Armenia during the first few years of its independence were characterized by large volumes mainly because of the blockade by Azerbaijan preventing the use of road and railway transport. High migration rates and developing trade relations with other countries also played a role.

During the mid-1990s, a few private air carriers were established in Armenia:

- *Yerevan Avia, operated Il-76 large full-freighter aircraft with a maximum capacity of 40 tons; has never been a competitor to AA and completely moved its operation to Iran when air cargo traffic to/from Armenia started dropping. It has not operated to/from Armenia since 1996.*
- *Arax, which had a small and very dynamic staff, operated two Tu-154 passenger aircraft (average configuration - 145 passengers) on weekly scheduled and charter flights to St. Petersburg, Kiev, Tashkent and Aleppo; it could have become a serious competitor to Armenian Airlines but was dissolved in 1997 mainly because of the GDCA's subjective policies protecting the flag carrier.*
- *Dvin Avia, operated an An-12 full-freighter aircraft with a maximum capacity of 12 tons, in 1996-1998; it competed with Armenian Airlines on the Dubai route; as a result of competition on the Dubai route it moved its operation to Africa in 1998 and currently does not operate any flights to/from Armenia.*





There are a few new carriers that are established and licensed in Armenia but they have no plans for operating out of Armenia. Their aircraft are registered and operated in other countries (e.g. Felix Avia).

As mentioned earlier in this report, of the sixteen private airline companies licensed and certificated by the GDCA, only one company - ArmAvia - has taken practical steps to start operating flights out of Zvartnots. ArmAvia has applied and received licenses from GDCA to operate passenger flights on twelve routes, including Vienna and Zurich, which are operated by Swissair and Austrian Airlines respectively under a code-share agreement with Armenian Airlines, and Moscow, which is one of the most profitable routes operated by Armenian Airlines.

These licenses have been granted to ArmAvia without observing the limitations stipulated in the bilateral agreements in relation to operating capacity and the number of designated Armenian carriers. Absence of clear criteria for granting route licenses creates great uncertainty, which may prevent any Armenian carrier from being able to develop a successful and feasible long-term business strategy.

ArmAvia has already received designations and operational permits for certain routes and in early August 2001 started operating flights to Moscow-Vnukovo by Tupolev 134.

4.10.2. *International Competition*

The GDCA applies a liberal policy towards foreign carriers and to date no foreign operator has been refused traffic rights or operational permits.

Armenian Airlines competes with foreign airlines on almost all of its major direct and transit markets. On 15 out of 30 routes served by AA aircraft, the airline competes with at least one foreign carrier. Armenian Airlines does not have a direct competitor on any of its European routes (Paris, Frankfurt, Amsterdam, Athens, Istanbul, Larnaca), all routes to Central Asia (Ashgabat, Tashkent), two routes to Ukraine (Kharkov, Simferopol), and four routes to the Middle East/Gulf (Dubai, Beirut, Tabriz, Cairo). Routes to and from 13 CIS destinations are operated only by foreign carriers. Flights from three European hubs - London, Vienna and Zurich - are operated by foreign carriers, with the latter two being operated under a code-share agreement with Armenian Airlines.

Armenian Airlines' main competitors are Aeroflot, Austrian Airlines, British Airways, Swissair, Syrian Airlines, Caspian Airlines, Vnukovo Airlines, Pulkovo Airlines, Ural Airlines, Siberia Airlines, Air Ukraine, Belavia and Samara Airlines. A brief description of these airlines is presented below.

4.10.2.1. *Aeroflot Russian International Airlines*

Aeroflot (SU) is the oldest competitor of Armenian Airlines. It currently operates seven weekly flights out of its hub at Moscow Sheremetyevo Airport on Il-62 and Tu-154 aircraft and offers connecting services to and from many destinations in the CIS and worldwide. The Moscow fares are coordinated with Armenian Airlines and Vnukovo Airlines. Fares to other destinations are not coordinated with Armenian Airlines or registered with the GDCA, and are usually significantly lower than those offered by Armenian Airlines or other competitors.

From time to time Armenian Airlines' management initiates discussions on closer cooperation or even a merger with Aeroflot.

4.10.2.2. *British Airways*

British Airways (BA) started its service to Yerevan in late 1997. The flights are operated by BA franchisee British Mediterranean on A-320 aircraft. Currently, the flight operates three times a week from London Heathrow Airport with a stop in Tbilisi Airport on both outbound and inbound segments, and without commercial rights between Yerevan and Tbilisi. The point-to-point market between the UK and Armenia is small. BA offers





connecting services on its own and American Airlines' flights worldwide through its membership of the "oneworld" alliance. BA systematically registers its fares with the GDCA.

Armenian Airlines' negotiations to initiate code-share cooperation with British Airways have been unsuccessful.

Increased competition may be expected if the flight operates direct or the frequency of operation increases.

4.10.2.3. *Swissair*

Swissair (SR) began its operation to Yerevan in mid 1998. The flights are operated by subsidiary Crossair's MD-83 aircraft and crew and under a code-share and block-space agreement with Armenian Airlines. Currently, it operates flights twice weekly out of Zurich. The point-to-point market between Switzerland and Armenia is negligible and most of the passengers are transit passengers.

SR offers connecting services on its flights worldwide.

By agreement, fares offered by Swissair and Armenian Airlines on the same flights should be coordinated and may vary within a 10% limit.

Increased competition may be expected if the frequency of service increases.

4.10.2.4. *Austrian Airlines*

Austrian Airlines (OS) started its service from Vienna to Yerevan in 2001. The flights are operated three times a week on F-70 aircraft under a code-share and block-space agreement with Armenian Airlines. The direct market between Austria and Armenia is small. Austrian Airlines and Armenian Airlines offer common fares on the same physical flights.

Austrian Airlines offers connecting services on its own and United Airlines' flights worldwide through its membership of the highly successful "Star" alliance.

During the short period of its operations, Austrian Airlines' flights have been highly successful and load factor has been high. The airline has asked to increase the frequency of its service. It was not known at the time of writing whether this request would be granted.

4.10.2.5. *Syrian Airlines*

Syrian Airlines began weekly services to Aleppo in 2000 and currently operates a weekly flight on Tu-134 aircraft. Most of the travelers are from the Armenian communities in Syria and Lebanon. The fares are coordinated with Armenian Airlines.

4.10.2.6. *Caspian Airlines*

Caspian Airlines operates weekly flights from Tehran on a Tu-154 aircraft. Despite its agreement to coordinate fares with Armenian Airlines, it often offers lower fares. Caspian Airlines has recently received approval to operate on routes to and from Tabriz in Northern Iran.

4.10.2.7. *Vnukovo Airlines*

Vnukovo Airlines traditionally operates four weekly flights out of Moscow Vnukovo Airport offering connecting services to and from many destinations in Russia.





In summer 2001, Vnukovo Airlines increased the frequency of its service to daily flights and together with Aeroflot will reach the maximum annual seat quota set in the bilateral agreement before the end of 2001. Armenian Airlines has drawn this fact to the GDCA's attention but the GDCA has not taken any action.

The equipment usually used on the route is the Tu-154. Although Vnukovo Airlines, Aeroflot and Armenian Airlines have an agreement to coordinate their fares to and from Moscow, Vnukovo Airlines often undercuts its competitors.

4.10.2.8. Other Competitors

Pulkovo Airlines, Ural Airlines, Siberia Airlines, Air Ukraine, Belavia and Samara Airlines operate weekly flights from St. Petersburg, Novosibirsk, Kiev, Minsk and Samara respectively and offer connections to various destinations in Central, East and North Russia, Scandinavia and Central Europe.

There is a fear that Ukrainian International Airlines may replace Air Ukraine and, drawing on its alliance with KLM, may serve Yerevan from its hub in Kiev. This would potentially offer highly competitive connections to West Europe.

There are some clear signs that Aerotrans Airlines, which used to be Armenian Airlines' GSA in Cyprus, may start flights from Larnaca to Yerevan in winter 2001/02 season if Armenian Airlines withdraws its operation because of unavailability of equipment due to an inability to comply with Eurocontrol requirements.

4.11. Operational Profile

4.11.1. Route Structure

Armenian Airlines is the dominant airline out of Yerevan, carrying approximately 52% of the overall number of passengers. Aeroflot and Vnukovo Airlines are the next largest carriers, with 12.7% and 5.3% of the market, respectively. None of the remaining 18 carriers with services from Yerevan offers more than 300 seats/week.

During the summer 2001 season, Armenian Airlines served the destinations listed below from Yerevan/Gyumri²⁹:

Table 4-1: Armenian Airlines Destinations, Summer 2001

EVN	Yerevan	Armenia	Domestic
LWN	Leninakan (Gyumri) ³⁰	Armenia	Domestic
ASB	Ashkhabad	Turkmenistan	Central Asia
TAS	Tashkent	Uzbekistan	Central Asia
AAQ	Anapa	Russia	Eastern Europe
AER	Sochi	Russia	Eastern Europe
GOJ	Nizhniy Novgorod	Russia	Eastern Europe
HRK	Kharkov	Ukraine	Eastern Europe
IEV	Kiev	Ukraine	Eastern Europe
KRR	Krasnodar	Russia	Eastern Europe
KUF	Samara	Russia	Eastern Europe
LED	St. Petersburg	Russia	Eastern Europe
MRV	Min Vody	Russia	Eastern Europe
ODS	Odessa	Ukraine	Eastern Europe
OVB	Novosibirsk	Russia	Eastern Europe
ROV	Rostov	Russia	Eastern Europe

²⁹ A more detailed schedule of summer 2001 flights including frequencies and equipment used can be found at Annex 9.5.

³⁰ Flights from Gyumri operate sporadically to various destinations in Russia.





SIP	Simferopol	Ukraine	Eastern Europe
STW	Stavropol	Russia	Eastern Europe
SVX	Ekaterinburg	Russia	Eastern Europe
VKO	Moscow Vnukovo Apt	Russia	Eastern Europe
VOG	Volgograd	Russia	Eastern Europe
DXB	Dubai	United Arab Emirates	Gulf
THR	Tehran	Iran	Gulf
TBZ	Tabriz	Iran	Gulf
ALP	Aleppo	Syria	Middle East
CAI	Cairo	Egypt	Middle East
BEY	Beirut	Lebanon	Middle East
LCA	Larnaca	Cyprus	Middle East
AMS	Amsterdam	Netherlands	Western Europe
ATH	Athens	Greece	Western Europe
CDG	Paris De Gaulle	France	Western Europe
FRA	Frankfurt	Germany	Western Europe
IST	Istanbul	Turkey	Western Europe
ZRH	Zurich ³¹	Switzerland	Western Europe
VIE	Vienna ³²	Austria	Western Europe

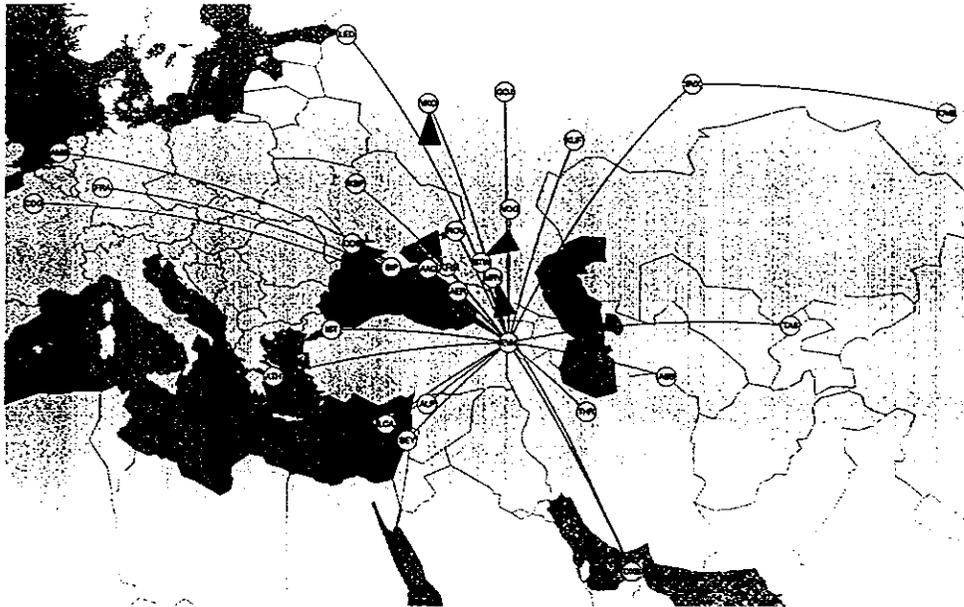


Figure 4-1: Armenian Airlines' Route Network

Although the above map implies that Armenian Airlines is a large carrier, most destinations are served infrequently. According to Armenian Airlines' schedule, 27 destinations are served from Yerevan. Of those 27, 13 are served only once per week, 10 are served twice per week, and only *four* destinations are served more frequently (they are highlighted in Figure 4-1). Whereas premier airlines offer frequent service to a select number of destinations, most state-owned carriers offer infrequent service to a large number of destinations. Such a

³¹ Operated by Swissair/Crossair under a code-share agreement with Armenian Airlines.

³² Operated by Austrian Airlines under a code-share agreement with Armenian Airlines.





philosophy is very expensive, as economics of scale cannot be achieved. Operating two weekly flights to any destination is much less expensive than twice the cost of operating a flight once a week to the same destination.

From the traffic data received it appears that the company is not exploiting 6th-freedom traffic opportunities. A cursory look at the route map indicates that the potential for 6th-freedom traffic may exist between Russia and the Middle East, South Russia and Western Europe, and, to a lesser extent, between Western Europe and Central Asia.

4.11.2. Traffic

Despite the fact that Armenian Airlines offers flights to 30 different destinations from Yerevan, over 40% of its traffic is derived from one route – Moscow. The secondary routes are all in Western Europe – Paris, Amsterdam and Frankfurt – but these destinations combined contribute only 16% of passengers.

Other gates are contributing a minimal number of passengers to the network. Anapa (AAQ) is served once a week with a Yak-40, an aircraft with only 36 seats. Although the load factor on this flight is a respectable 69%, Armenian Airlines must analyze whether the costs involved with maintaining this station can be rationalized with so few passengers – for the year 2000 only 2,650 passengers embarked on the Anapa route, compared with over 120,000 for Moscow-Vnukovo (VKO). Other destinations served weekly on aircraft with fewer than 100 seats include Aleppo (ALP), Ashkhabad (ASB), Nizhniy Novgorod (GOJ), Kharkov (HRK), Samara (KUF), Odessa (ODS), Tashkent (TAS) and Volgograd (VOG).

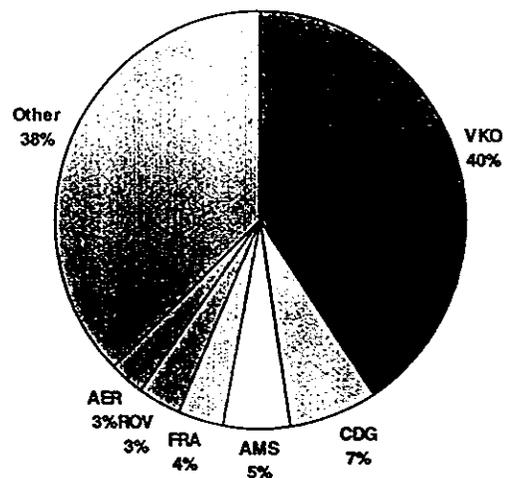


Figure 4-2: Passengers by Route, 2000 (R3)

It must be stressed that airlines have had much more success concentrating on heavily traveled and profitable routes rather than trying to cover all bases; Armenian Airlines cannot be all things to all people *and* be profitable. The savings from discontinuing service to stations that cannot be profitable with three flights per week are indisputable – overhead costs in particular will be drastically reduced. Network rationalization is imperative if Armenian Airlines is to become an attractive candidate for privatization.

4.11.3. Fleet

Armenian Airlines owns 21 aircraft and leases two aircraft. Ten of these aircraft are not operated because they require repair and maintenance or are missing engines or other parts. The only western aircraft operated by the company is the Airbus A310, which is on financial lease from Airbus Industrie Financial Services. The remaining aircraft are manufactured in Russia.

One of the two An-24 aircraft is on "dry" operational lease from a local company.



Table 4-2: Armenian Airlines Fleet³³

Code	Aircraft	Active	Seating	Newest Date	Oldest Date
ILW	Ilyushin 86	2	28J/278Y	Aug-1991	Jun-1991
310	Airbus 310-222	1	30J/164Y	Nov-1983	
TU5	Tupolev 154	2	16J/122Y	Jan-1983	Apr-1982
TU3	Tupolev 134	1	0J/72Y	Jul-1974	
AN4	Antonov 24	2	0J/42Y	May-1971	Nov-1969
YK4	Yak-40	3	0J/36Y	Apr-1977	Jul-1975

All Russian-made aircraft operated by the company are obsolete and costly to maintain and operate. The average age of narrow-bodied aircraft operated by the company is 25 years. These aircraft do not meet contemporary safety, noise, environmental pollution and customer comfort standards.

The largest aircraft in the fleet are wide-bodied 306-seater Il-86 aircraft. These aircraft are very fuel-inefficient and are difficult to operate in existing markets. These aircraft are operated on a regular basis to Moscow only. Because of the increased passenger loads in August-September 2001, associated with the Pan-Armenian Olympic Games and the celebration of the 1700 anniversary of proclamation of Christianity in Armenia, Armenian Airlines has received special permission to operate a number of flights to Paris on the Il-86. These aircraft are also leased out from time to time for mass transportation of pilgrims to Mecca or of refugees under United Nations' evacuation programs.

As none of the Russian-made aircraft are equipped with traffic alert and collision avoidance systems (TCAS), as of October 2001 they will not be permitted to operate to Eurocontrol member countries. Assuming that A310 will continue to be operated to Paris, Frankfurt and Amsterdam, this restriction will affect only Athens, Istanbul and Larnaca flights currently operated by Tu-134 and An-24 aircraft.

One of the two operational Tu-134 aircraft is used exclusively for flights by high-level Government delegations headed by the President of Armenia. The company is compensated for flights operated by this aircraft, but it assumes certain current maintenance, parking and other costs incurred while the aircraft is not operated.

All maintenance activities, except for large-scale maintenance known as "D-checks," are carried out by Armenian Airlines' Technical Maintenance Department, with specialists being invited in an as needed basis. As the airport does not have hangar facilities, maintenance activities are performed in open-air conditions.

Despite the relative size of Armenian Airlines' active fleet, most of the fleet is being used inefficiently. According to the OAG schedule, the leased Airbus A310 operates to Western Europe, but only five times per week. During 2000, the figures show that on average, it was utilized just over 5 hours per day. Although this is misleadingly low due to the fact that the aircraft was grounded for 3 months in 2000 because of engine trouble, the more accurate figure of around 7 hours per day is still below optimal utilization. Because of the higher costs involved with this leased aircraft vis-à-vis those that are owned by the company, this inefficiency in aircraft utilization is extremely expensive. Armenian Airlines is paying the leasing company a large amount of money for keeping the aircraft on the ground for most of the day. For the year, total fixed expenses for the one Airbus A310 was USD 4.9m.

Most of the flights depart from 10 to 12 am and return to Yerevan from 5:00 to 7:00 pm. The maximum number of aircraft operated at the same time during the 5 hours from 12:00 pm to 5:00 pm is 8, and the average number of aircraft operated at the same time in 14 hours from 8 pm to 10 am is 2. This illustrates the poor utilization of aircraft and absence of connections between flights that could enable 6th freedom traffic.

The figures below depict utilization by aircraft type and time of the day in the air.

³³ Fuller a more comprehensive list of fleet including explanations of grounded aircraft see Annex 9.6.





Figure 4-3: Average Daily Aircraft Utilization (Armenian Airlines)

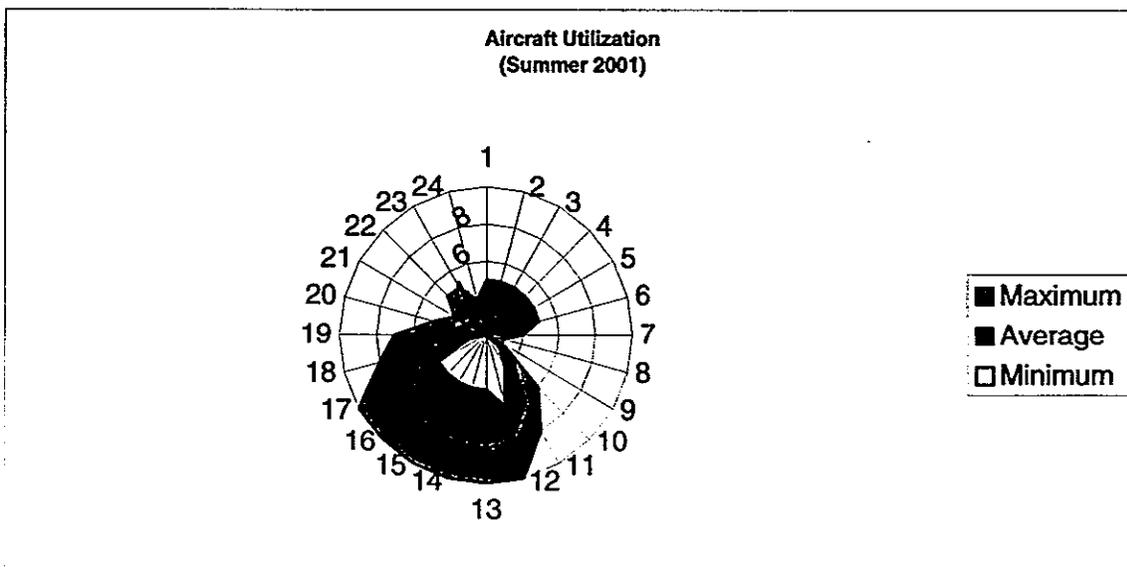
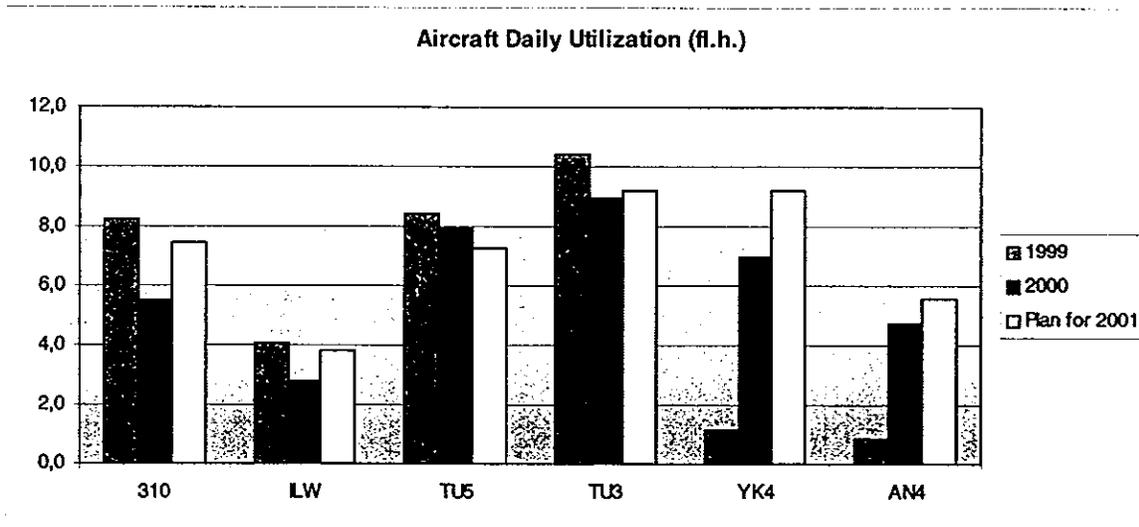


Figure 4-4: Aircraft Utilization by Time of Day (Armenian Airlines)



4.11.4. Airbus 310

The company accepted delivery of the Airbus aircraft in June 1998 under an operational lease from Airbus Industrie Financial Services (AIFS). In contrast with earlier offers where a government guarantee was requested as a precondition for leasing other types of western aircraft, the A310 was offered by AIFS against a security deposit equivalent to 6-month lease charges. The agreement was renegotiated in 1999, when it was agreed to convert the lease from an operational lease to a financial lease in order to significantly reduce the monthly lease payments.

According to the current schedule of payments, Armenian Airlines has to make monthly payments of principal and interest totaling USD 180,000. This may increase or decrease by up to USD 20,000 in accordance with seasonal revenue fluctuations.

The monthly maintenance reserves to be paid by the company to AIFS are USD 120,000.

According to the information provided by Armenian Airlines' accounting department, the monthly lease fees are paid on time, but about USD 1 million was in arrears for the maintenance reserves as at June 1, 2001.

Technical maintenance of the aircraft is provided by Belgian company Sabena Technic at a monthly fee of USD 175,000, but because of additional work or spare parts required for maintaining the aircraft, average monthly invoices vary from USD 190,000 to 200,000. Sabena Technic keeps a staff of four resident engineers in Armenia who provide maintenance services and training to Armenian Airlines' personnel. Some of Armenian Airlines' personnel have successfully completed theoretical and practical training and have been certified by Sabena to perform certain types of maintenance works and checks under its supervision. Greater involvement of Armenian Airlines' staff in the maintenance of the A310 has allowed Armenian Airlines to renegotiate its agreement with Sabena Technic.

The engines of the A310 are maintained under a separate agreement with Scemna Sabena on a "part and labor" basis.

Armenian Airlines has five crews and one instructor for the A310 who have been trained at Airbus Training Center in Toulouse and Frankfurt and are certified by the French Civil Aviation Authority. The airline has an arrangement with Aeroflot for biannual recurrent training of the A310 crews. A training session for each crew costs USD 5000, which is lower than the rate Armenian Airlines used to pay to Airbus.

4.11.5. Flight Irregularities³⁴

Armenian Airlines has reported that 86% of its flights in 2000 were performed on time. Approximately 40% of the delays were caused by weather conditions and 7% percent (less than 1% of the total number of flights) were caused by technical problems:

#	Description	# /flights	% to (1)	% to (2)
1.	Total number of flights performed	2176	100.0%	n/a
2.	Total number of flights delayed, including:	301	13.8%	100.0%
2.a.	Delays caused by weather conditions	119	5.5%	39.5%
2.b.	Delays caused by service departments:	182	8.4%	60.5%
	- Ground handling department	82	3.8%	27.2%
	- Technical maintenance department	21	1.0%	7.0%

³⁴ Proper records are not always kept for irregularities of inbound flights.





#	Description	# / flights	% to (1)	% to (2)
	- Fueling Company	16	0.7%	5.3%
	- Department of Special Transport	6	0.3%	2.0%
	- Other	57	2.6%	18.9%

4.11.6. Ground Handling

Traditionally, Armenian Airlines used to be the sole provider of all ground handling services at Zvartnots Airport.

As mentioned earlier in the report, in 1995, AviaService, a private company, started providing certain ground handling services.

In early 1998, the ground handling department of Armenian Airlines was spun off and merged to Zvartnots Airport. This resulted in an increase of Armenian Airlines' cost of operations and deterioration of service. Over a short period of time, the new ground handling department at Zvartnots Airport lost the market for serving foreign airlines to Aviaservice and was more or less confined to serving only Armenian Airlines' flights.

In late 2000, ground handling was again restructured and was remerged with Armenian Airlines. However, it is still poorly organized and service is slack and slow.

Armenian Airlines' ground handling services are provided at Passenger Terminal 2. Passenger Terminal 1 has two halls – "VIP hall" and "High Service Hall" which are operated by Aviaservice and Zvartnots Airport.

All passengers arriving in Zvartnots and economy class passengers departing from Zvartnots by Armenian Airlines' flights pass through Passenger Terminal 1. Departing business class passengers, by an agreement between Armenian Airlines and Aviaservice, may pass through the VIP hall. Other passengers can use VIP services at an additional fee payable to Aviaservice. Holders of diplomatic passports and Government delegations are entitled to be pass through the High Service Hall.

4.11.7. Catering

On June 1, 1998, Armenian Airlines signed an agreement with Air Catering CJSC and appointed the latter as its sole and exclusive provider of catering and associated services at Zvartnots Airport for a period of seven years. Upon expiration of this time-period the agreement will continue for five additional years and can be terminated by either party with 6-months written notice. The agreement does not contain any specific description of any standards that ought to be maintained by Air Catering, neither does it define any pricing mechanism – clearly dubious for such a long-term contract

4.11.8. Fueling

Fueling services at Zvartnots Airport are provided by the state owned Air Fueling CJSC. During the last few years, fueling has been merged with the Airport several times and later separated. Currently, Air Fueling CJSC owns the land, fuel tanks, mobile equipment and quality control laboratory. Air Fueling buys the fuel from a sole supplier and sells it to the companies operating to Zvartnots at a mark-up. The mark-up for Armenian Airlines is about USD 40 per ton, and for other airlines it varies from USD 50 to 150 per ton depending on the terms of payment, regularity of flights and quantity of uplifted fuel.

However, fuel is not supplied in a stable and reliable manner, and quite regularly the fueling company cannot satisfy the airlines' requests.



No hull insurance is maintained for any of the Russian aircraft unless they are leased to a third party or operate entirely outside of Armenia.

The crew and maintenance personnel are insured with ASKO-Pro and reinsured with Willis Insurance at an annual premium of USD 16,000.

According to the flight costs calculation data received from both the Accounting and Commercial departments, Armenian Airlines pays USD 2.75 per passenger carried on any CIS flight for "additional life and health insurance." Neither the agreement, nor additional information in relation to these payments, were provided for review by the project consultants.

4.12. Financial Performance

4.12.1. Revenue Sources

The primary sources of Armenian Airlines' revenues and their mix for years 1999 and 2000 are presented in the following table:

	Revenue Source	1999	2000
1	Passenger transportation	83.6%	85.7%
2	Cargo transportation	6.7%	6.3%
3	Transportation of mail	0.2%	0.4%
4	Excess baggage charges	2.3%	2.1%
5	Other:	7.2%	5.5%
	<ul style="list-style-type: none"> o charter flights, o aircraft lease, o training of pilots of other airlines, o differential between the standard commission earned from sales of interline tickets and the commission paid to the sales agents, o in-flight duty-free sales, etc. 		

An overwhelming majority of revenue is derived from passenger operations. Armenian Airlines' revenue mix is close to an average revenue mix of a typical airline of a similar size. However, the revenue generated by the company compared to the number and types of aircraft in its fleet and the number of employees is low and needs to be improved.

Particularly, the company should improve its commercial operations to increase the load factor in terms of utilization of both passenger and cargo capacity. There have been discussions of the unrealized potential of excess baggage revenue. 2.1% of revenue is derived from excess baggage revenue and this, too, appears to be an area that could be further exploited for additional revenue.

When analyzing operating revenue on a route-by-route basis, Vnukovo is the dominant route for Armenian Airlines, with over 35% of total operating revenue. Because of the relative

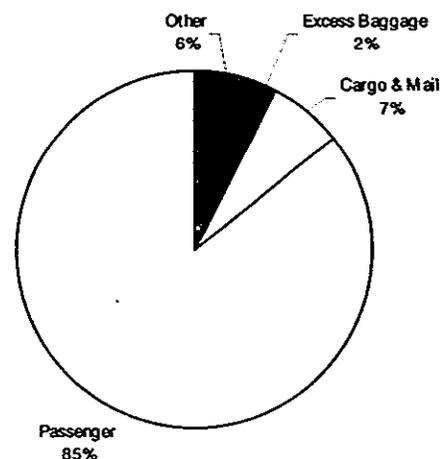


Figure 4-5: Operating Revenue Mix, 2001





proximity of Vnukovo to Yerevan vis-à-vis stations in Western Europe, fares are lower, and thus operating revenue for the route contributes a smaller portion of the total than the relevant proportion of passenger boardings. Paris, Amsterdam and Frankfurt come next in terms of operating revenue with 13%, 10% and 7% respectively. Dubai follows behind Frankfurt with 5%.

The western European destinations make up a larger portion of operating revenue than they do passenger boardings. Additionally, cargo revenue from these stations is significant. Whereas cargo comprises 5.9% of operating revenue on the Vnukovo route, it makes up 9.4% of revenue for Paris, 7.9% for Amsterdam, and 12.6% for Frankfurt. Moreover, although passenger boardings in Dubai were relatively small, cargo revenue was substantial, with almost 20% of Dubai revenue resulting from cargo operations; over 16% of all cargo revenue was derived from the Dubai route. Armenian Airlines should not discount the potential of Dubai on the cargo front. If flights were scheduled to connect through Yerevan to/from cities served by sizeable populations but with no current service to Dubai (e.g. St. Petersburg), the airline might be able to exploit cargo and even excess-baggage revenues that are currently untapped in the marketplace.

Regionally, Eastern and Western Europe contribute heavily to operating revenue, with 55% and 34% of total operating revenue respectively. Contributions from the Middle East and Central Asia are minimal, and unless these regions can be incorporated into a hubbing network they may have to be discontinued.

4.12.2. Operating Expenses

In analyzing operating expenses for the year, a number of issues jump out. First, fuel costs are very high vis-à-vis other carriers. This can be explained by Armenian Airlines' fleet, which is comprised almost entirely of Russian-built aircraft, which are less fuel-efficient than Western Aircraft.

Fuel/Oil Expense	14,484,513	27.7%
Enroute/Overfly Costs	7,489,770	14.3%
Overhead	7,057,374	13.5%
Variable Maintenance	5,462,783	10.5%
Depreciation	2,642,055	5.0%
Landing/Parking Fees	2,571,970	4.9%
Ground Handling	2,324,114	4.5%
Aircraft Operating Leases	2,160,000	4.1%
Catering	1,927,240	3.7%
Passenger Commissions	1,528,748	2.9%
Fixed Maintenance	1,440,000	2.8%
Fixed Crew Expenses	852,167	1.6%
Hull/War Insurance	806,735	1.5%
Reservations	596,130	1.1%
Pax Liability Insurance	478,958	0.9%
Variable Crew Expenses	259,509	0.5%
Dry Leases	138,499	0.3%
Total	52,220,564	100.0%

Table 4-3: Operating Expenses USD, 2000





When comparing fuel consumption with capacities, the relative fuel inefficiencies of Russian aircraft are illustrated. The A310 has a capacity of 194 passengers and consumes 2140 US gallons per hour while the Tu-134 has a capacity of 138 passengers and consumes 1710 US gallons per hour. If the Tu-134 operated with the same fuel efficiency per passenger as the A310, the fuel consumption would drop to 1520 US gallons per hour, a saving of 190 US gallons per hour, or over 500,000 US gallons annually.

Fuel availability – or the lack thereof – appears to be a large concern of Armenian Airlines. We have already explained how the IL-86 was, on occasion, flown to such proximate gates as Min Vody (only 463km from Yerevan) for the express purpose of bringing fuel back to Yerevan for other flights. This is a hugely expensive endeavor on a very large aircraft (306 seats, while average boardings at Min Vody are 27 passengers), and undoubtedly contributes negatively to the fuel situation.

Other issues of concern are enroute charges and overhead costs. Some route rationalization may improve high enroute charges, especially on flights with intermediate stops and no 5th-freedom traffic rights. High overhead expenses are not unusual for state-owned airlines, as overstaffing is endemic at most public enterprises. It is important, however, that overstaffing issues be resolved before the privatization process begins, as few investors are interested in being entangled in labor disputes.

Despite its relative fuel efficiencies, the Airbus A310 is contributing to a large percentage of operating expenses. Aircraft operating leases (USD 2.16m) and fixed maintenance expenses (USD 1.44m) are entirely the result of the A310. Moreover, USD 1.00m of depreciation costs are attributed solely to the A310. This is an extremely expensive aircraft for Armenian Airlines to operate in its fleet, particularly so considering its poor aircraft utilization (see section 4.11.3 above). Utilization of the A310 needs to be radically rethought for this situation to be turned around.

Table 4-4: Operating Results 2000 (USD m)

Operating Revenue	49.24
Variable Expenses	37.26
Fixed Expenses	7.9
Profit before Overhead	4.1
Overhead	7.1
Profit/Loss	(3.0)

4.13. Representations, Branches and Ancillary Companies

Armenian Airlines does not any have branches, subsidiaries or dependent companies. However, it has representatives at all stations served by its fleet. At many stations Armenian Airlines does not have legalized representations.

The largest representation of Armenian Airlines is its office in Moscow where it employs 12 staff.

Representatives and other staff of Armenian Airlines outstations are mostly responsible for operational issues and play a very passive role in marketing the airline in their respective territories. Often, Armenian Airlines' representatives establish their own side business in the country of their appointment and the airline work becomes a secondary occupation.





5 BENCHMARKING

Benchmarking, or comparing, one airline, or group of airlines against others is a normal practice in the airline industry. It enables airlines, industry analysts or those with a relevant interest in the industry to observe relative efficiencies and performance ratios. In this particular case, it will help demonstrate how Armenian Airlines' current financial and operating performance compares to that of airlines of similar size from a similar region of the world or to that of "world-class" airlines with significantly larger resources.

Our consultants performed two interrelated analyses to benchmark the financial and operational performance of Armenian Airlines: an analysis concentrated on typical operating and financial performance measures, as well as a more detailed operating and capital cost analysis which focused on Armenian Airlines' individual operating cost items and balance sheet structure.

5.1. Methodology, Data Sources and Data Limitations

Before proceeding with the presentation and analysis of data, it is important to present the methodology employed by our consultants and discuss the data sources and limitations.

The selection of appropriate airlines for the benchmarking analysis is based on the fundamental characteristics of the environment and general airline industry conditions under which an airline operates. Our consultants used their understanding of these factors and how they relate to Armenian Airlines' situation to determine the best criteria for selection of airlines comparable to Armenian Airlines. Three criteria were used: airlines from a similar region of the world (airlines based in the ex-Soviet Union or Eastern and Central Europe and comparable to Armenian Airlines in revenue and size of fleet), airlines of a similar size ("revenue equivalent" airlines with a comparable revenue and fleet size) and "world class" European and U.S. airlines. Given these criteria and Armenian Airlines' revenue of approximately US\$50 million and fleet of eleven aircraft, our consultants picked 11 representative airlines and formed the following sample:

Table 5-1: Airlines used for comparison with Armenian Airlines

Airline	Country	Code	Average Stage Length	Average Seats per Departure
Armenian Airlines	Armenia	R3	1,527	127
Malev	Hungary	MA	1,290	115
CSA	Czech Republic	OK	1,041	122
Estonian Air	Estonia	OV	650	95
Tarom	Romania	RO	1,359	132
Aeroflot	Russia	SU	2,829	163
Lithuanian Airlines	Lithuania	TE	979	79
Kish Air	Iran	IRK	NA	108
Continental	United States	CO	1,781	154
US Airways	United States	US	991	135
Finnair	Finland	AY	754	155
Austrian Airlines	Austria	OS	1,562	178

Naturally, the comparisons made among Armenian Airlines and airlines of a similar size and from a similar region of the world are expected to be the most instructive, but our consultants selected to also include a few "world class" airlines so as to indicate "best practices" towards which Armenian Airlines (and prospective investors) should strive. Where available, our consultants also used IATA and ICAO data averaged across the collection of their respective members.





The availability of data played an important role in the selection of airlines matching all three criteria. Data were most readily available for the U.S. and European "world class" airlines, as the majority of them are publicly traded and required to file periodic financial and operational reports. Data for the other two groups were considerably more sparse and difficult to find, so the selection of those airlines was primarily driven by the availability of data in IATA and ICAO.

The data sources for the airlines selected are as follows:

- Armenian Airlines – income statement (P&L) and operating statistics data were taken from our consultants' internal model for the calendar year 2000; balance sheet data were taken from Armenian Airlines' 2000 financial statements
- All other airlines – operating statistics, income statement and balance sheet data were taken from IATA World Air Transport Statistics (WATS) (June 2000 edition), ICAO Digest of Statistics (January 2001 edition), or occasionally and where available, carriers' annual reports – the majority of the data represent calendar or fiscal year 1999

The year 1999 was chosen because it was frequently the latest year with full financial data available (particularly full P&L and balance sheet data) for the majority of airlines which are most comparable to Armenian Airlines – airlines from the ex-CIS and Central and Eastern Europe as well as "revenue equivalent" airlines. Of course, many of the "world class" airlines have released 2000 results, but in the interest of comparability and consistency, their 1999 results were used instead. When several different data sources were available for a particular airline, priority was given on WATS and ICAO so as to preserve as much as possible data consistency, reporting and comparability. For example, ICAO's reporting format was used for many of the "world class" airlines (despite the availability of financial statements from their annual reports) as ICAO provides a standardized, industry-accepted classification of expenses, which can be used for an "apples-to-apples" comparison of airlines' financial and operating performance.

Finally, it must be noted that, despite the considerable effort which was expended in gathering and cross-checking the data, there are some natural limitations which need to be kept in mind while reading the analyses and conclusions in the rest of this section. First and foremost, the quality of data depends on the correct reporting and classification of revenues, expenses and balance sheet items by the air carriers themselves – i.e. ICAO and WATS data are only as good as the carriers report. Second, in some cases, our consultants obtained in-house financial statements which were not publicly available from other sources and attempted to reconcile these financial statements to the WATS / ICAO format – an endeavor which was sometimes difficult for lack of sufficient disclosure, thereby producing unusual ("outlier") results. Finally, some data items in IATA and ICAO can be notoriously inaccurate because of the different policies and strategies which airlines employ. In particular, employee data reported to IATA is often not a good basis for comparison because different airlines outsource certain functions (e.g. maintenance) to varying extents, which distorts their employee count and comparisons made with other peer airlines. Similarly, G&A expenses are also often suspicious as it is not clear what exactly they include.

There are a large number of standard airline industry measurements that are used to benchmark one airline, or a group of airlines, against others. Our consultants examined Armenian Airlines' financial and operating performance and operating cost structure and compared it with its peers in the following broad categories:

- size (e.g. revenue, ASKs, stage length, fleet)
- financial profitability (EBIT margin, EBITDAR margin, RASK, CASK, etc.)
- financial / operational benchmarks (revenue per aircraft, load factor, etc.)
- capital structure (debt-to-book capitalization, etc.)
- operating cost structure (fuel as % of total operating costs, insurance per ASK, etc.)

The analyses follow below.



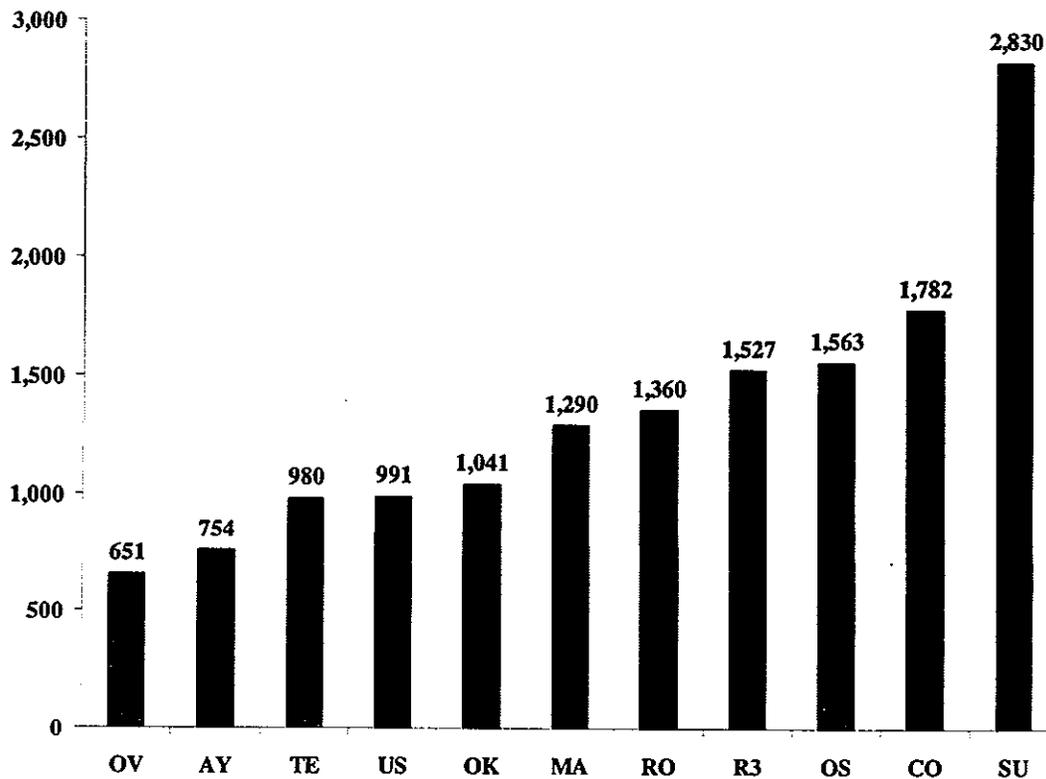


5.2. Size Comparisons

In essence, an airline is defined by where it flies, i.e. its route network. The nature of the route network (short-haul, medium-haul, long-haul, or any combination of these three) in a broad sense determines market size, traffic volumes, fleet size and type, revenue base, cost structure and profitability. A key indicator of the type of an airline's route network is average stage length, or the average distance of a flight segment. In fact, average stage length is a better (if not the best) indicator than fleet size or some other parameters when comparing unit revenues and costs across airlines, as average stage length implicitly incorporates many of these parameters. For example, an airline with a relatively short average stage length probably flies small to mid-size narrowbody aircraft while an airline with a very long average stage length (e.g. Singapore Airlines) is likely to employ long-range, widebody aircraft on its route network.

Figure 5-1 below presents Armenian Airlines' stage length in comparison with its selected peers.

Figure 5-1. Comparison of Average Stage Length (kilometers)



As can be seen from the figure, Armenian Airlines is a medium-haul airline with an average stage length of 1,527 kilometers, which is above a number of its regional and "revenue equivalent" peers but below the selected "world class" airlines. The medium-haul nature of Armenian Airlines' operations is not surprising, given Armenian Airlines' concentration on serving medium-haul and long-haul ex-CIS and European markets as well as select medium-haul destinations the Middle East. Given this stage length, we can expect that Armenian

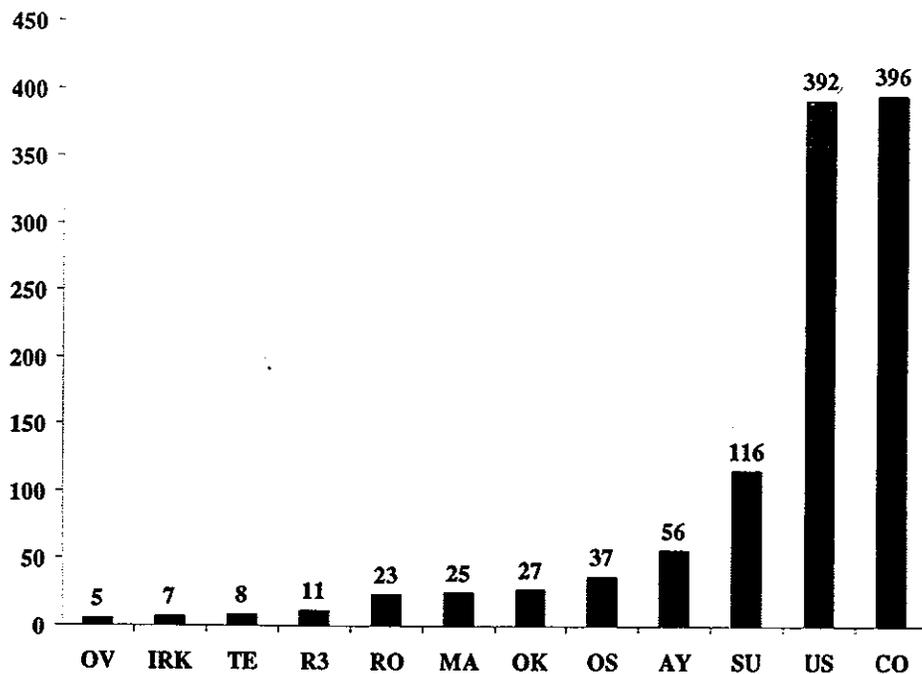




Airlines' costs, as well as its yields, will be in line with, if not slightly below, the industry average (as costs and yields typically fall as average stage length increases and rise as average stage length decreases).

Figure 5-2 below presents a comparison of Armenian Airlines' fleet with its peers. The figure shows that Armenian Airlines has a relatively small fleet compared to the majority of its regional and revenue-equivalent peers, much less with "world class" airlines (which typically have between 100 and 400 aircraft). With an undersized fleet and a medium-haul operation, one can infer that Armenian Airlines' costs should be relatively high as it is difficult to achieve economies of scale in an operation with only eleven aircraft (which are, furthermore, utilized at rates significantly below industry averages, as we will see below).

Figure 5-2. Comparison of Fleet Size



A medium-haul network structure and a small fleet (which is predominantly composed of narrow-body aircraft) imply a relatively small amount of capacity offered in the market as confirmed by Figure 5-3 below which presents ASKs (or production).

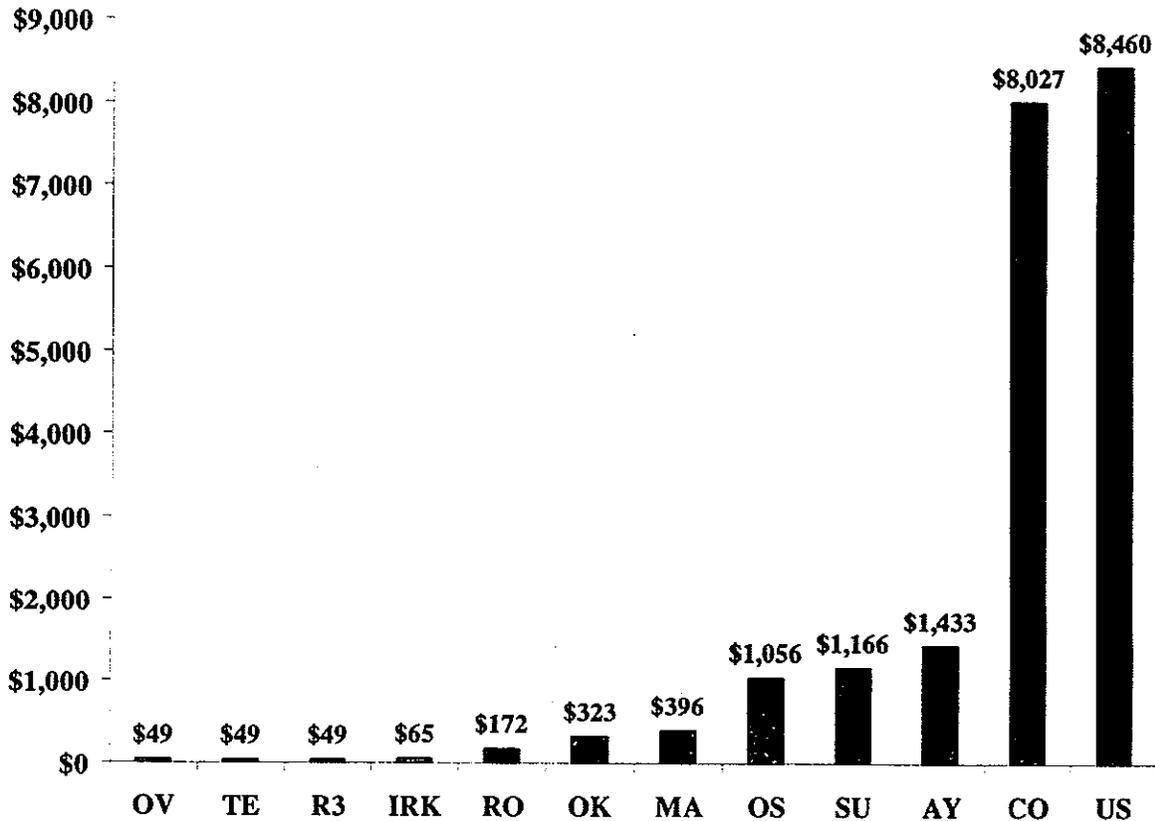


Figure 5-3. Comparison of Production (ASKs, in millions)

The combination of a medium-haul network, a small amount of capacity offered and a small fleet mean that Armenian Airlines' revenue base should also be relatively small. Indeed, as Figure 5-4 shows Armenian Airlines has one of the lowest revenues among all of its regional and "revenue-equivalent" peers – once again showing the lack of economies of scale in the current status quo.

In sum, Armenian Airlines appears to be a medium-haul airline with a considerably smaller production capacity, fleet size and revenue base than the majority of its peers. The medium average stage length and small fleet should translate into higher than average costs, which are perhaps one of the key drivers behind Armenian Airlines' recent poor financial performance (other key drivers may be revenue performance, asset utilization, etc.)

Figure 5-4. Comparison of Revenues (US\$, in millions)



5.3. Financial Profitability Comparisons

This sub-section will benchmark Armenian Airlines against its peers on several key financial and operational profitability measures, such as EBIT (earnings before interest and tax) margin, EBITDAR (earnings before interest, tax, depreciation and aircraft operating leases) margin, and unit revenues and costs. Figure 5-5 below presents

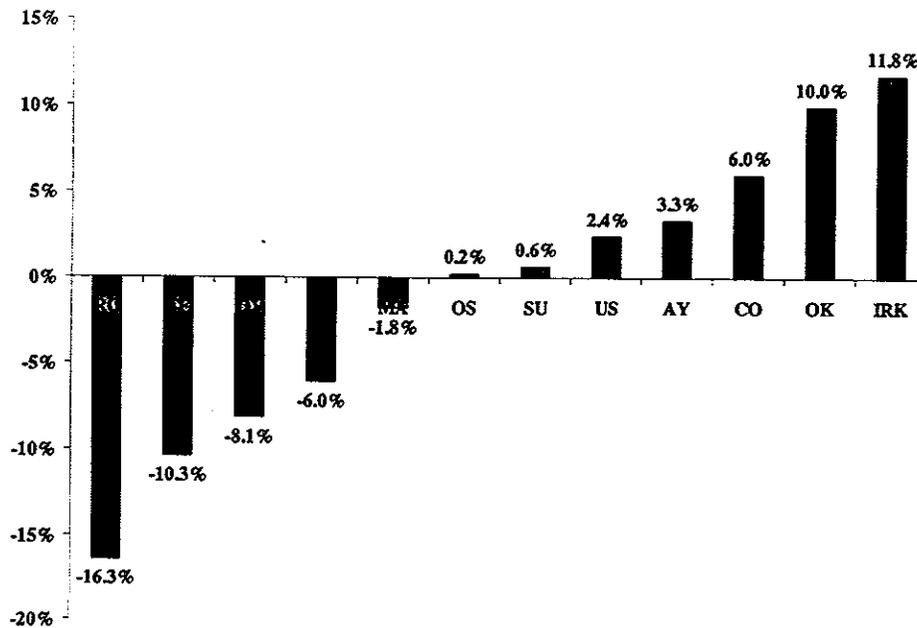




Armenian Airlines' operating margin in comparison with that of its peers. Operating margin is defined as operating income (after all operating costs, including general and administrative, but before any financial and/or exceptional income and expenses) divided by revenues.

Armenian Airlines is performing worse than the majority of its peers in both groups – only three airlines out of 11 lost more money on an operating income basis than Armenian Airlines (all three are currently experiencing severe financial difficulties, particularly Taron (RO)). Compared with the selected “world class” airlines, Armenian Airlines is also a significant underperformer as those airlines typically achieve operating margins between 2% and 6% (although some other “world class” airlines achieve operating margins as high as or higher than 10%). It should be noted that Armenian Airlines' operating margins should even be worse, as there's virtually no depreciation recorded for its aircraft fleet which has been fully depreciated (except for the leased A310).

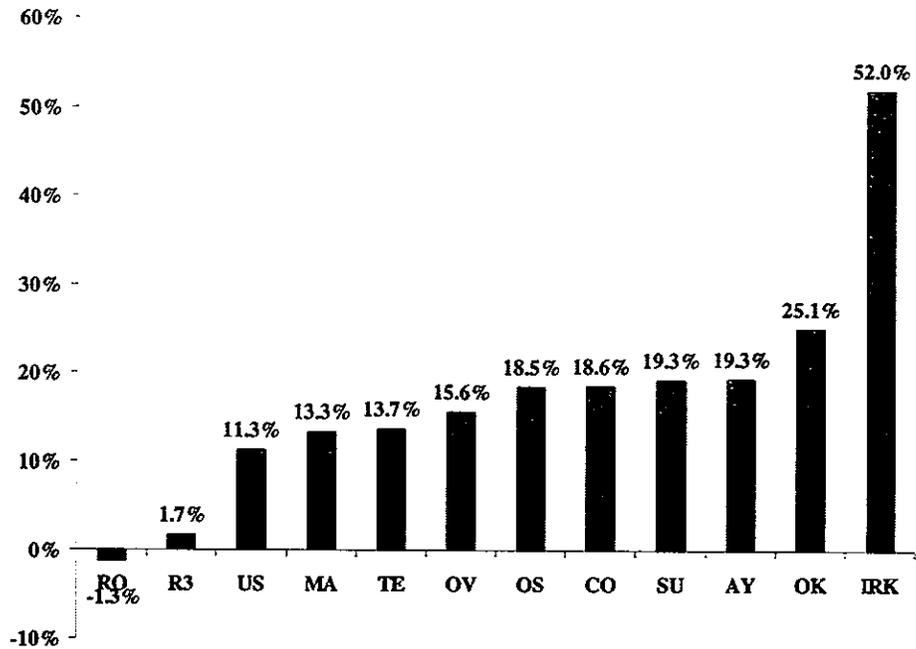
Figure 5-5. Comparison of Operating (EBIT) Margins (%)



Even more importantly, Armenian Airlines is significantly behind its peers on another commonly used measure of airline operational profitability – EBITDAR. EBITDAR essentially accounts for all cash operating costs (except for aircraft rentals) and eliminates the influence of different aircraft financing policies (leasing vs. owning aircraft) on operating income. EBITDAR is a key measure of financial performance used by most participants in the airline industry, most notably financiers. Figure 5-6 below presents Armenian Airlines' EBITDAR performance in comparison with that of its peers.



Figure 5-6. Comparison of EBITDAR Margins (%)



Again, Armenian Airlines is underperforming the industry considerably, with an EBITDAR margin of a mere 2% compared to between 12% and 20% for the majority of its peers (and typical 20%+ margins for other "world class" carriers).

Armenian Airlines' underperformance on an EBITDAR basis is particularly significant, as it eliminates distortions inherent in the EBIT measure discussed above (different aircraft financing policies and the fully depreciated state of Armenian Airlines' fleet, except the A310) and confirms that Armenian Airlines is unable to generate adequate margins from its operations.

Turning to an examination of Armenian Airlines' unit revenues and costs, Figures 5-7 and 5-8 below plot Armenian Airlines' system and passenger yields (defined as total revenue or passenger revenue divided by revenue passenger kilometers, respectively) vs. stage length as compared to that of its peers.



Figure 5-7. System Yield vs. Stage Length (US¢ per RPK)

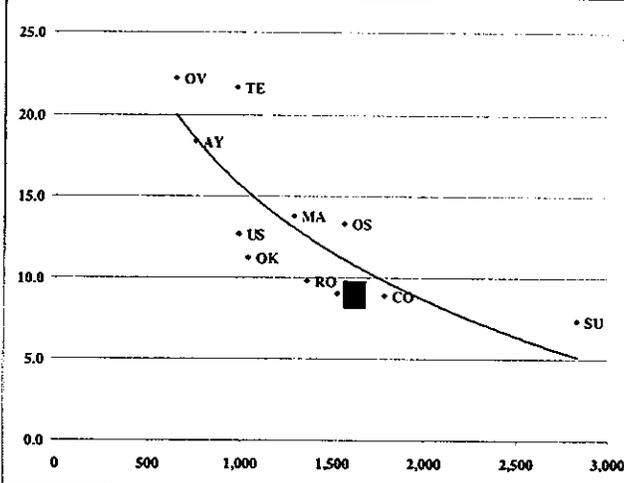
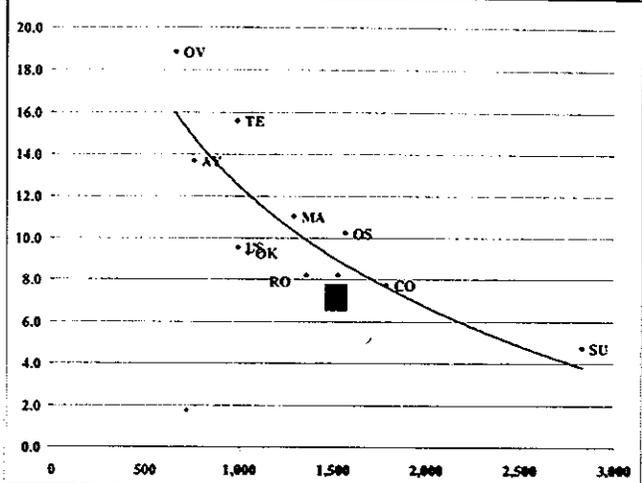


Figure 5-8. Passenger Yield vs. Stage Length (US¢ per RPK)

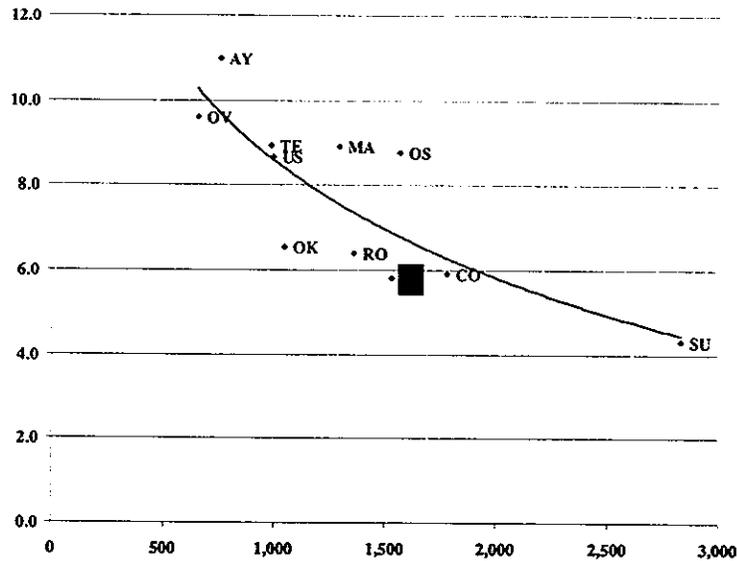


As discussed above, the standard airline industry practice is for yields to decline as average stage length increases, so the shape of the best-fit trend lines can be expected. The graphs show that Armenian Airlines' yields are generally in line with or slightly below industry averages, indicating possible room for improvement through better yield management. The fact that Armenian Airlines enjoys industry average yields but is still unprofitable points to other operational and financial areas which may be problematic - potentially load factor, unit costs, aircraft utilization, etc. In other words, Armenian Airlines does not appear to suffer from a significant "yield problem" (even though there is room for improvement) but from other problems.

One of the potential problem areas is costs and Figure 5-9 below shows unit cost (CASK, or cost per available seat kilometer). "Available seat kilometers" (ASK) is equivalent to production for an airline as it measures the capacity which the airline has on offer. The standard airline industry definition of unit costs (CASK) essentially measures the entire cost of "putting one seat in the air and flying it for one kilometer". CASK therefore includes all operational costs - fuel, maintenance, catering, sales & marketing, enroute charges, general and administrative expenses, etc. CASK is derived in practice by dividing operating expenses by ASK.



Figure 5-9. Unit Cost vs. Stage Length (cents per ASK)



Armenian Airlines' overall unit costs appear to be in line with (or even somewhat lower than) those of its peers. However, one should be careful not to draw the conclusion that Armenian Airlines does not suffer from a cost problem for several reasons: (i) Armenian Airlines enjoys a natural cost advantage over many of its peers in several specific areas (labor cost, maintenance costs, overfly charges and landing fees, etc.); (ii) many of Armenian Airlines' peers with higher relative costs (stage-length adjusted) are suffering from financial difficulties themselves and are, therefore, not an appropriate benchmark for Armenian Airlines to strive towards; and (iii) many of Armenian Airlines' individual cost items (e.g. fuel) are significantly above the industry average, indicating substantial room for cost reduction.

Given Armenian Airlines' industry average unit costs (slightly below six cents per ASK), one would expect that they would be more than offset Armenian Airlines' quite satisfactory yield performance (passenger yield above 8 cents) – yet, Armenian Airlines is losing money from operations. The initial answer lies into RASK (or revenue per available seat kilometer), which is presented in Figure 5-10 below. As shown, Armenian Airlines' RASK – 5.5 cents per ASK – is significantly worse than that of its regional peers and, most importantly, it is lower than CASK of 5.8 cents (which is logical as the airline is losing money). What has brought an 8+ cent yield to a less-than-6 cents RASK? Load factor.



Figure 5-10. Unit Revenue vs. Stage Length (cents per ASK)

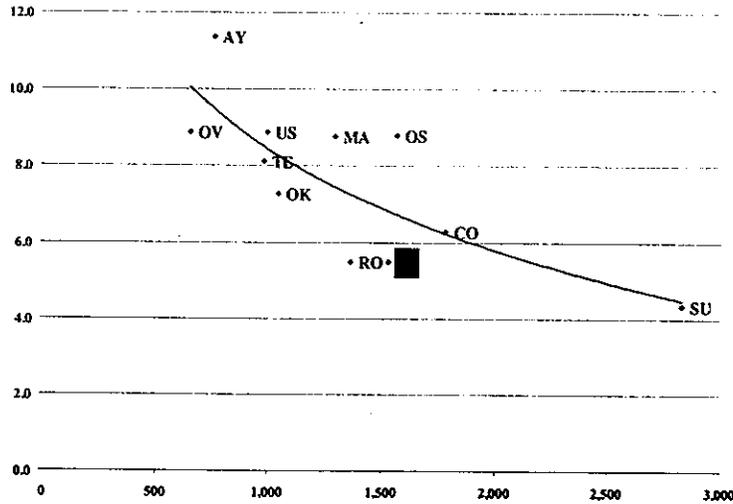
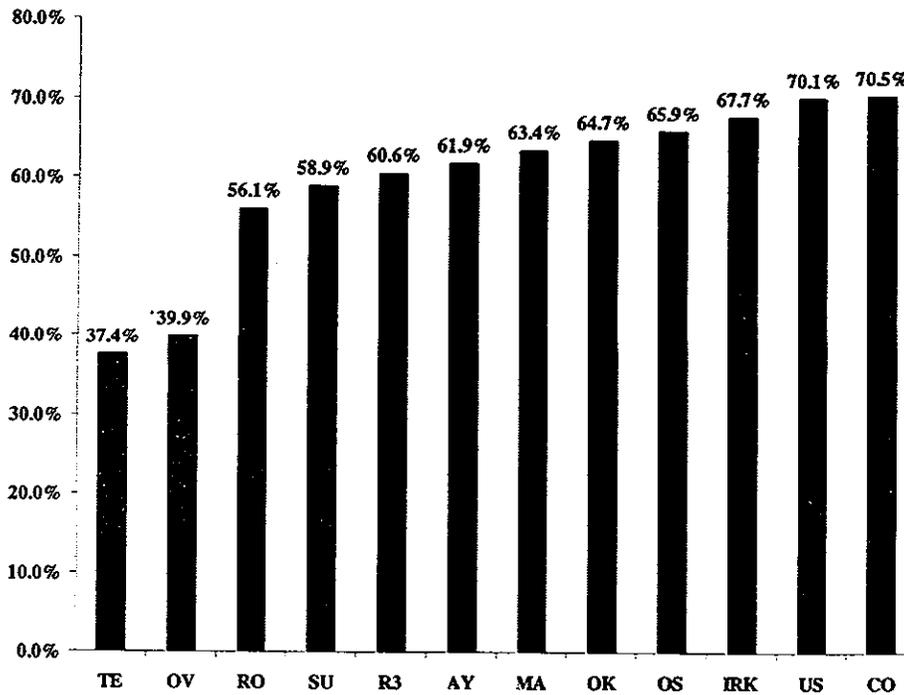


Figure 5-11 below plots Armenian Airlines' load factor against the load factors of its peers.

Figure 5-11. Comparison of Load Factors (%)



As the graph shows, Armenian Airlines' load factor is low compared to the majority of its peers and to best-practice industry standards (in the 70+%). The low load factor more than compensates for the high yields which





Armenian Airlines enjoys and drags unit revenue (RASK) below unit cost (CASK), accounting for an operating loss.

Finally, our consultants examined Armenian Airlines' aircraft utilization which is key to running an efficient operation. According to Armenian Airlines' data, the narrow-body aircraft fly flew slightly more than 7 hours a day in 2000.

The leased A310 was not operational for three months because of an engine problem and the average utilization for this aircraft was approximately 5.5 hours a day. Il-86 was used at woefully low average rate – 3 hours a day. Such utilization rates are much, much worse than industry averages (above 10 hours per day for long-haul operations) which makes it very difficult for Armenian Airlines to produce adequate revenue to cover its costs and generate adequate profitability.

In sum, according to the data collected and examined by our consultants, Armenian Airlines is a poorly performing airline among its peers on an operating income (EBIT) basis. On another key measure of airline operating profitability, EBITDAR, Armenian Airlines fares even worse – it is almost at the very bottom among all of its peers and significantly below "best-practice" industry standards. The combination of these factors indicates that the airline is in need of an operational restructuring, as well as (most likely) a financial restructuring, so as to become attractive to a prospective investor or be separated from the government and become a private company.

Additional insight into Armenian Airlines' poor financial performance can be obtained by examining its unit yields, revenues and costs as well as key performance measurements such as load factor and aircraft utilization. Armenian Airlines' yields appear to be broadly in line with (or even somewhat below) industry averages for an airline of its stage length, indicating possible room for improvement through better pricing of Armenian Airlines' product (yield management). On the unit cost side, Armenian Airlines' overall costs appear to be in line or slightly below industry averages (adjusted by stage length), but such results have to be taken in the context of Armenian Airlines' operating environment, the poor financial performance of some of the selected benchmark airlines, as well as Armenian Airlines' very high costs in certain operational areas (as discussed below). In addition, Armenian Airlines' load factor is relatively low, which turns a good yield performance into a poor unit revenue performance and potential significant operating profits into substantial operating losses; and finally, Armenian Airlines' asset (aircraft) utilization is very poor, making it extremely difficult to generate sufficient revenues and profits.

However, on the bright side, unit costs, load factor and aircraft utilization are mostly within the control of Armenian Airlines and the results of its peers show that there's substantial room for improvement on both fronts. Such improvements – (i) a reduction in costs, brought about by staff rationalization, schedule improvement, aircraft fleet right-sizing or other operational measures; (ii) an increase in load factor, brought about by aircraft right-sizing, rescheduling, increased sales & marketing, product improvement, or other measures; and (iii) an increase in aircraft utilization through better scheduling and a growth in operations – should be able to turn around Armenian Airlines' operating performance, transforming operational losses into operating profits.

5.4. Financial / Operational Benchmarks

In addition to analyzing typical industry performance measurements such as EBIT margin, EBITDAR margin, unit revenues and costs and load factors, our consultants performed a few additional benchmarks so as to gain further insight into Armenian Airlines' operational and financial performance.

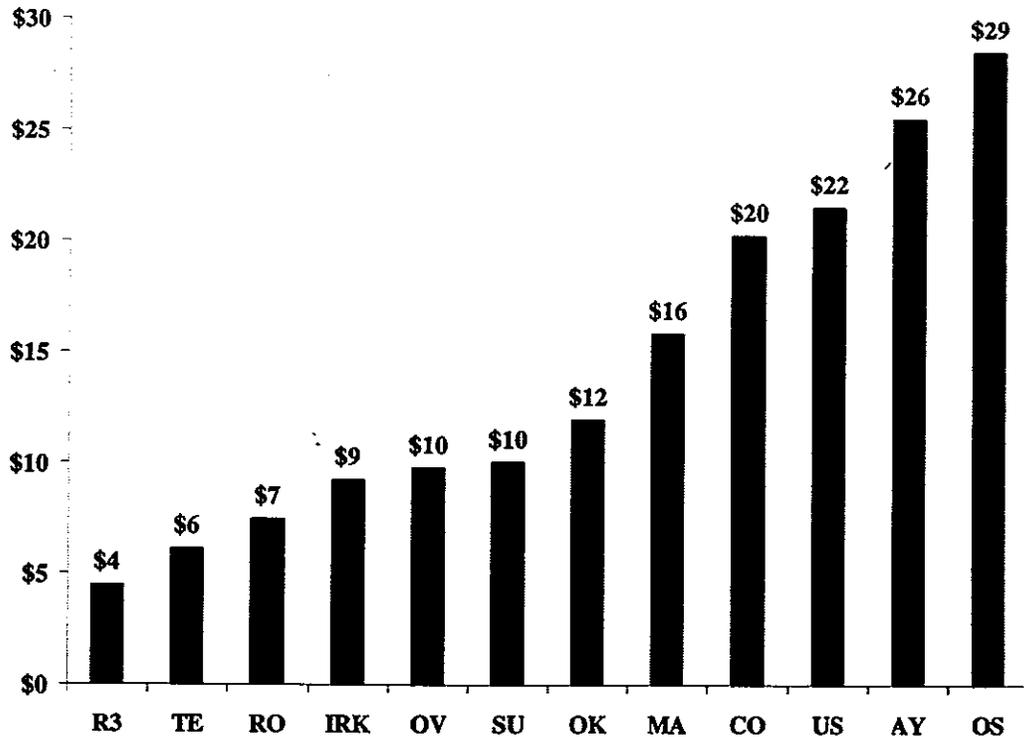
The first benchmark contrasts Armenian Airlines' revenue per aircraft with that of its peers, as presented in Figure 5-12 below, and shows Armenian Airlines to be the worst among its peers on this particular measure. While revenue per aircraft should theoretically rise with stage length (as longer stage lengths imply larger aircraft, higher aircraft utilization and higher revenues – even though the relationship is certainly not linear for a number of other factors), it was shown above that Armenian Airlines' stage length is in the middle of the group,





which is not consistent with bottom-of-the-pack (absolute) performance in this case. Armenian Airlines' low revenue per aircraft confirms some of the observations made earlier, namely, that Armenian Airlines' aircraft utilization and load factors are subpar compared to industry norms.

Figure 5-12. Comparison of Revenue per Aircraft (US\$'000s)



The next set of benchmarks (shown in Figures 5-13 through 5-15) concern Armenian Airlines' general productivity which can be measured in several different ways: revenue per employee, ASKs per employee and employees per aircraft. While all of these measures inherently suffer to varying extents from several shortcomings such as different carrier employment strategies (outsourcing vs. in-house labor), economies of scale effects, the effects of different levels of automation and different staffing policies (e.g. level of in-flight service provided), they are nevertheless a very useful and accepted measure of the level of efficiency attained by an airline and can offer valuable insight into how well Armenian Airlines is using its labor resources. The figures below present these comparisons for Armenian Airlines and its peers:



Figure 5-13. Comparison of Revenue per Employee (US\$'000s)

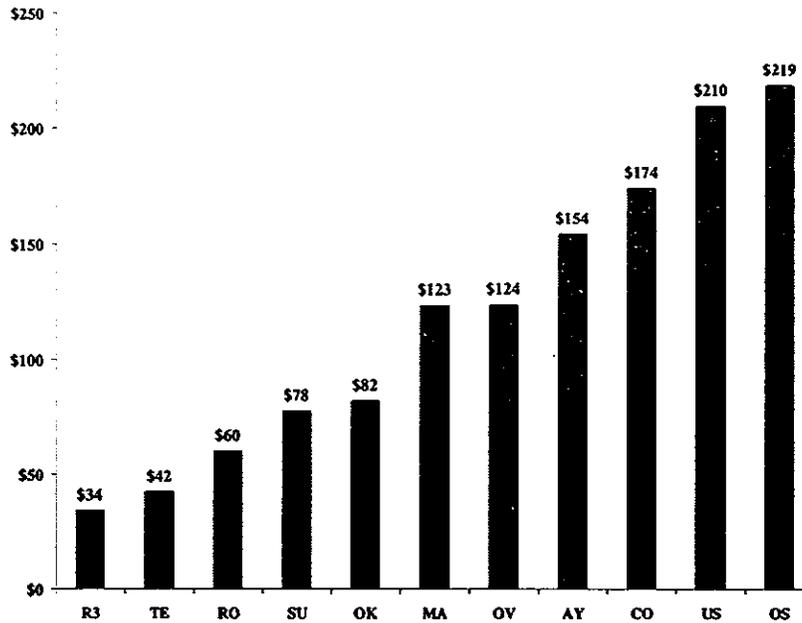


Figure 5-14. Comparison of ASKs per Employee (000s)

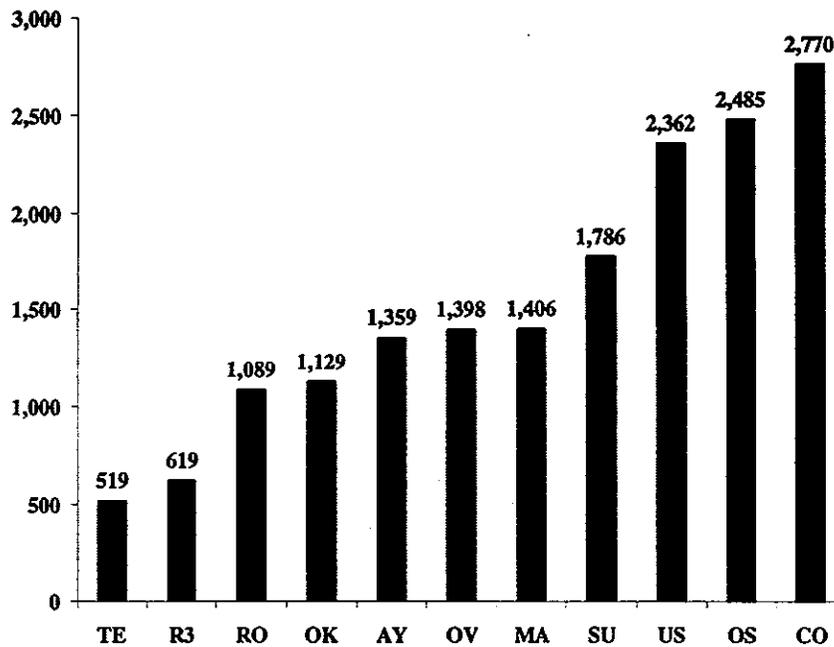
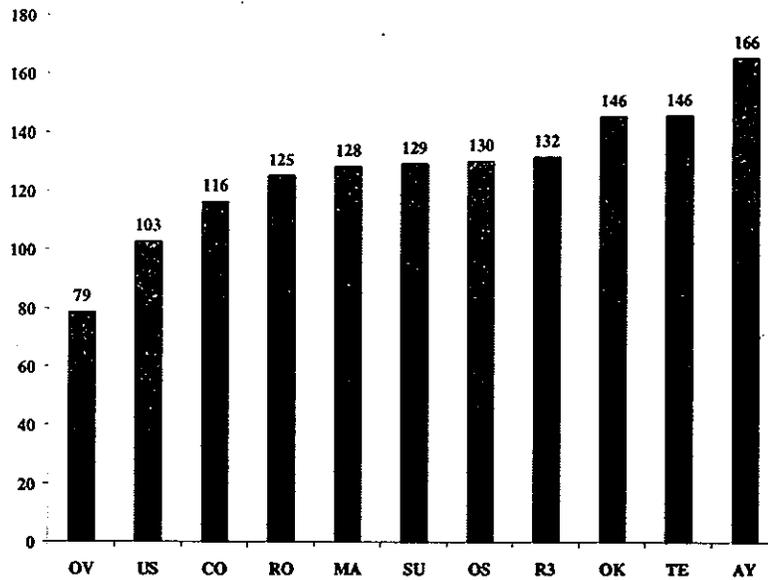




Figure 5-15. Comparison of Employees per Aircraft



In all measures, Armenian Airlines trails its peers by a significant margin with the possible exception of employees per aircraft where Armenian Airlines appears to be in the middle of the pack (but still higher than the majority of the benchmark carriers). Consequently, it appears that Armenian Airlines is not using its labor force efficiently and there may be scope for staff rationalization if the airline's operations remain at their present scale. Such a conclusion becomes more evident by comparing Armenian Airlines' figures with the best practices of "world class" airlines which are noticeably more productive than Armenian Airlines with revenue per employee in the \$150,000 - \$220,000 range and ASKs per employee in the 2,000,000-3,000,000 range.

The next set of benchmarks in Figures 5-16 and 5-17 focuses on aircraft productivity as measured by ASKs (generated) per aircraft and departures per aircraft plotted against stage length to account for (at least partially) the network differences among carriers.



Figure 5-16. Comparison of ASKs per Aircraft

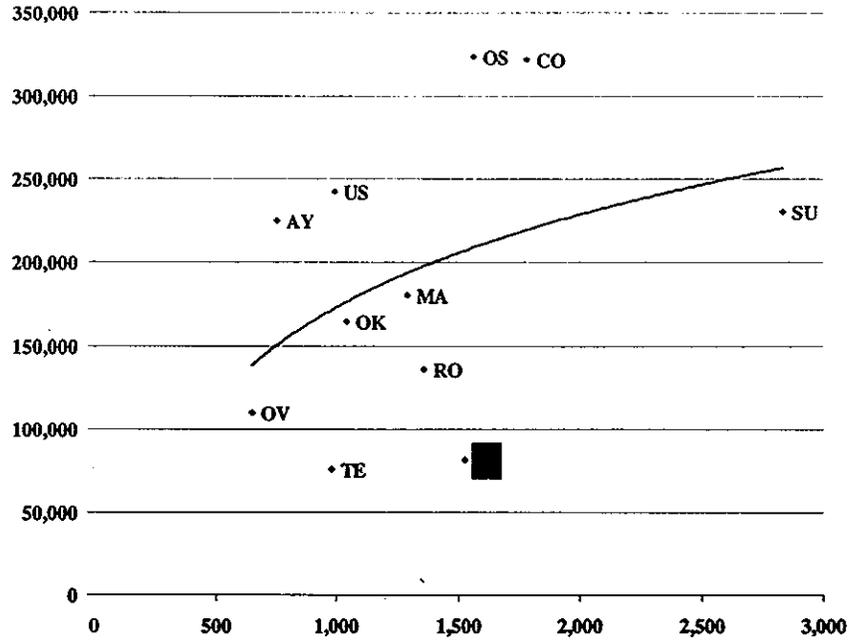
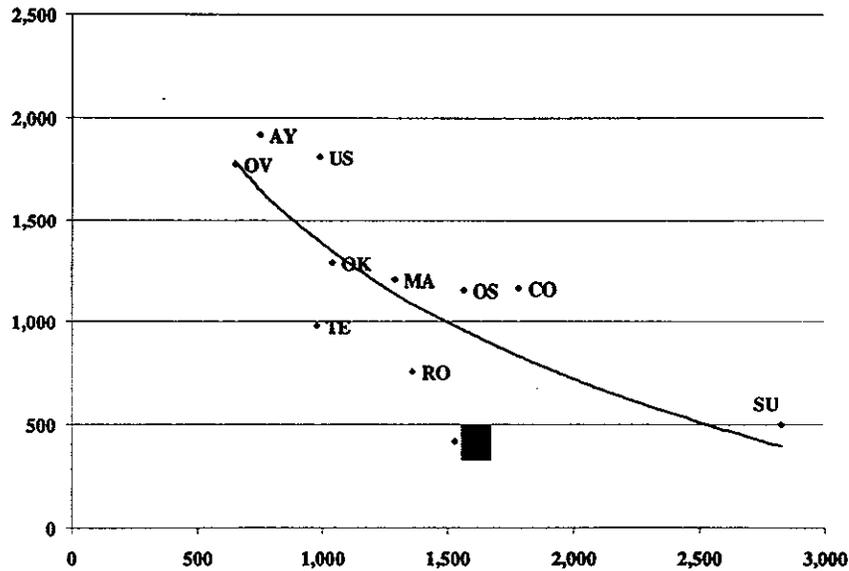


Figure 5-17. Comparison of Departures per Aircraft



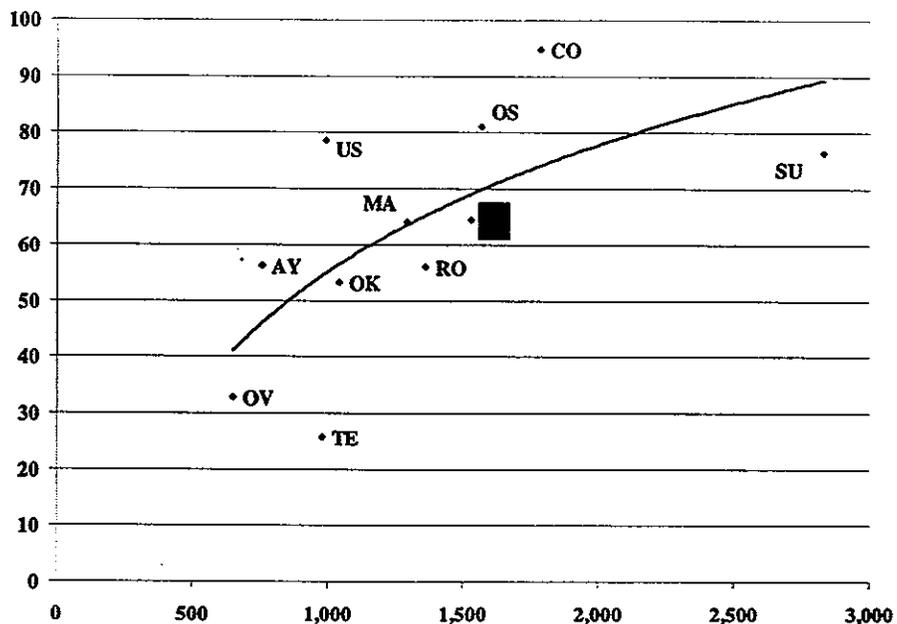
As shown on the graphs, due to the poor utilization of Armenian Airlines' equipment, Armenian Airlines significantly underperforms the rest of its peers on both of these two benchmark measures – indeed, it is almost



the absolute and relative worst performer in the group, pointing to the need to focus on improving aircraft utilization.

The last operational benchmark examined by our consultants is passengers per departure vs. stage length (once again to adjust for type of route network and aircraft size) – a measure closely related to load factor. Figure 5-18 below presents this comparison. Unsurprisingly, Armenian Airlines' performance appears to be below the normal industry relationship which is consistent with Armenian Airlines' relatively low load factors observed above, suggesting the need to focus on filling empty seats on Armenian Airlines' flights through better sales & marketing, pricing, etc.

Figure 5-18. Passengers per departure



In sum, the data in this subsection are consistent with the findings in the previous sections above, and suggest that Armenian Airlines is not efficiently using its aircraft (low load factors and / or low utilization) and its employee base (low revenue and ASKs per employee and high number of employees per aircraft).

5.5. Capital and Operating Cost Structure

In addition to the financial and operational benchmarks presented above, our consultants also performed a comparative analysis of Armenian Airlines' balance sheet, capital structure and operating costs. The airlines and data sources used in this analysis are the same as the ones used in the benchmarking analysis above and are, therefore subject to the same caveats and limitations. Our consultants also selectively used IATA and ICAO overall cost data as presented in their latest annual publications.

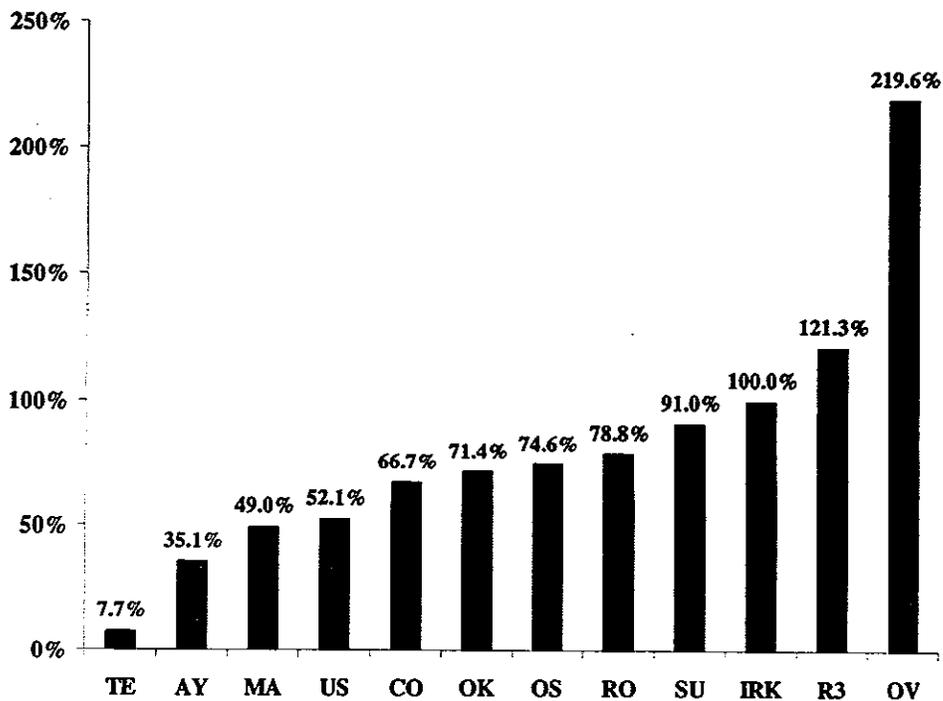


5.5.1. Capital Structure

Focusing at first on Armenian Airlines' balance sheet and capital structure, our consultants examined a key measure of an airline's financial policy – the amount of leverage it is willing to take on. Leverage is defined as the ratio of total debt (short- and long-term) to the sum of total debt and shareholders' equity, and measures the mix of financing sources (shareholders or creditors), which the company has decided to utilize in financing its business. While greater leverage enhances returns on equity, it also leads to higher financial risk (especially in a difficult economic environment), as well as a lower credit rating and decreased financial flexibility. It should be noted that leverage can be computed either on a "book" basis (i.e. with values of debt and shareholder's equity assumed to be equal to their book values as reflected on the company's balance sheet) or on a "market" basis (with market debt and equity values when the company's debt and equity instruments are publicly traded). As Armenian Airlines, as well as the majority of its regional and "revenue equivalent" peers, are not publicly traded, the comparison below utilizes book leverage (which is, anyway, the more conservative measure).

Figure 5-19 below presents a comparison of Armenian Airlines' leverage and that of its peers.

Figure 5-19. Comparison of Debt-to-Book Leverage (%)



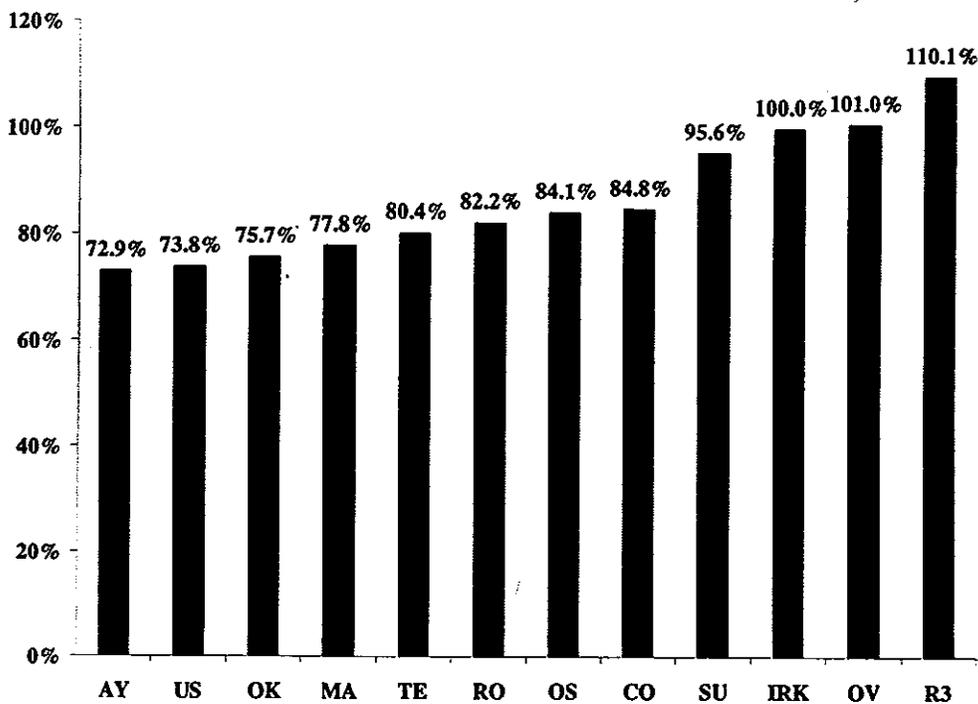
The graph indicates that Armenian Airlines is significantly over-levered compared to its selected peers and industry standards (which run anywhere from 60% to 80%). This is a result of the combination of Armenian Airlines heavy debt burden and negative shareholders equity (as a result of accumulated losses over the last several years). Given Armenian Airlines' poor operational performance and cash flow generating ability, it is unlikely that the debt burden will be reduced in the near future and it will continue to be a drag on Armenian Airlines' financial resources.





Because of the high incidence of operating leasing in the airline industry (as an alternative to buying aircraft) and the nature of leases as a de-facto obligation of the airline (even if it is off-balance sheet), another commonly used measure of leverage is lease-adjusted debt-to-book leverage defined as the ratio of the sum of total on-balance sheet debt and capitalized operating leases (rental expense times 8 – rule-of-thumb number), to the sum of on-balance sheet debt, capitalized operating leases and shareholders' equity. Such a leverage measure allows for more accurate comparisons across airlines as it eliminates the effects of the policy choice of owning aircraft vs. leasing aircraft (which effect is, for example, present in the above debt-to-book leverage calculation). Figure 5-20 below presents the results for Armenian Airlines and some of its regional and "revenue equivalent" peers.

Figure 5-20. Comparison of Lease-adjusted Debt-to-Book Leverage (%)



Even when Armenian Airlines' leverage is adjusted for off-balance sheet operating leases, the conclusion from the previous benchmark remains true – Armenian Airlines is very highly levered for airline industry standards, and such leverage is likely to prove unsustainable unless a comprehensive financial restructuring takes place in parallel with an operational restructuring designed to improve profitability.

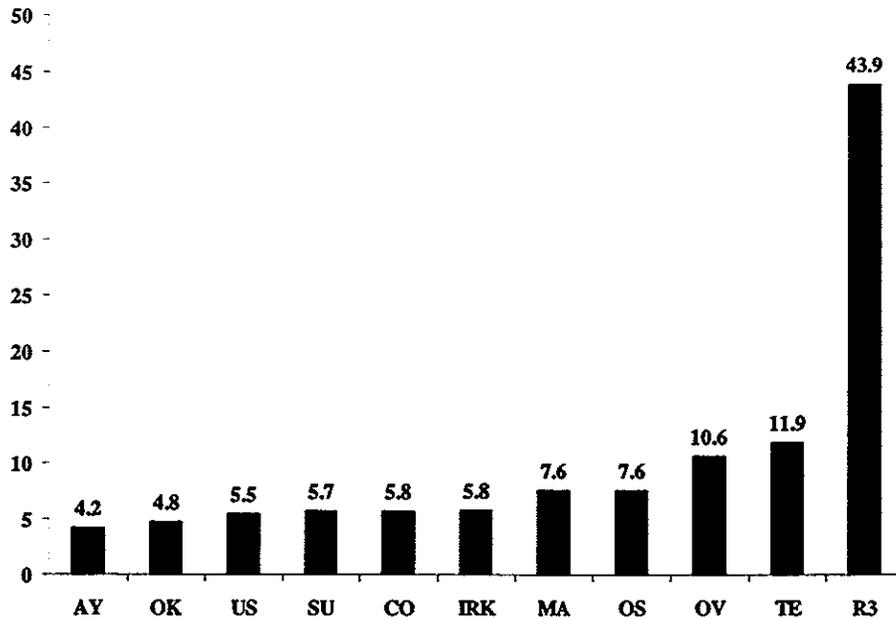
In addition to leverage ratios, our consultants also examined commonly used coverage ratios (such as Debt / EBITDA and Lease-adjusted Debt / EBITDAR) which are used in conjunction with leverage ratios to link the balance sheet of a company with its operating performance and to build a better picture of the balance sheet's strength. Unfortunately, because of Armenian Airlines' poor operating performance (negative EBITDA as well as a very small EBITDAR), its coverage ratios are meaningless (either negative or very high, as shown for the Debt / EBITDAR ratio in Figure 5-21). Again, along with the leverage ratios discussed above, this confirms the poor





overall situation of Armenian Airlines' balance sheet and indicates that there's very limited scope for improvement based on internal cash flow strength, and that an external financial and operational restructuring may need to take place. Such a restructuring will have only a limited access to Armenian Airlines' financial resources as they are already strained by most measures.

Figure 5-21. Comparison of Debt / EBITDAR Ratios (times)



The next three benchmarks focus on the structure of Armenian Airlines' assets and measure the relative magnitude of current assets and total assets, as well as accounts receivable and accounts payable. Figures 5-22, 5-23 and 5-24 below present these measurements for Armenian Airlines and all its airline peers.



Figure 5-22. Comparison of Current Assets as a % of Total Assets (%)

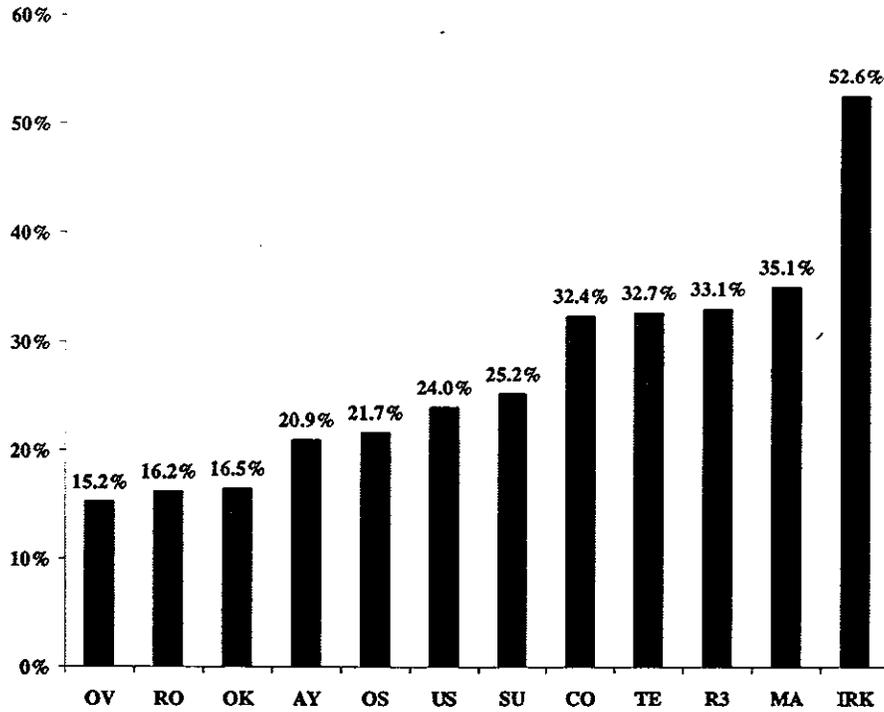


Figure 5-23. Comparison of Accounts Receivable as a % of Total Assets (%)

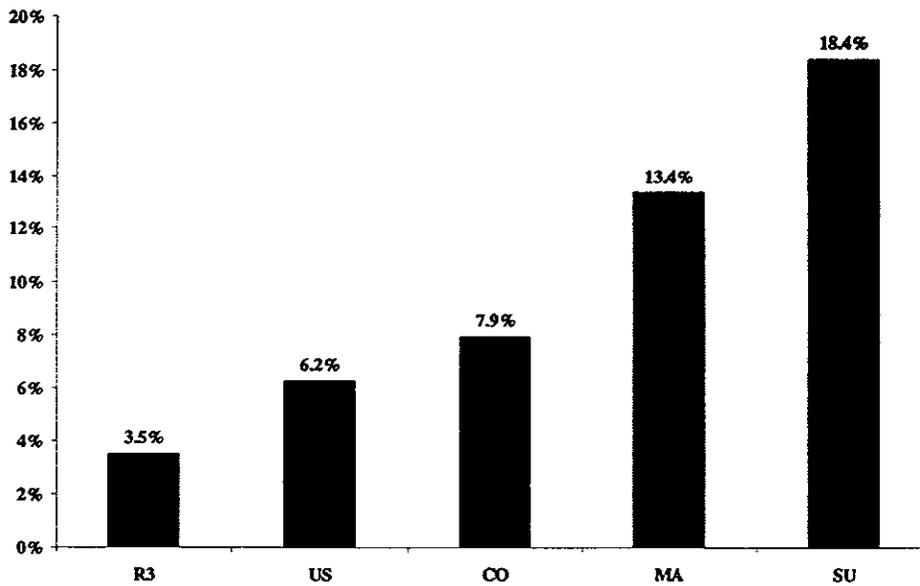
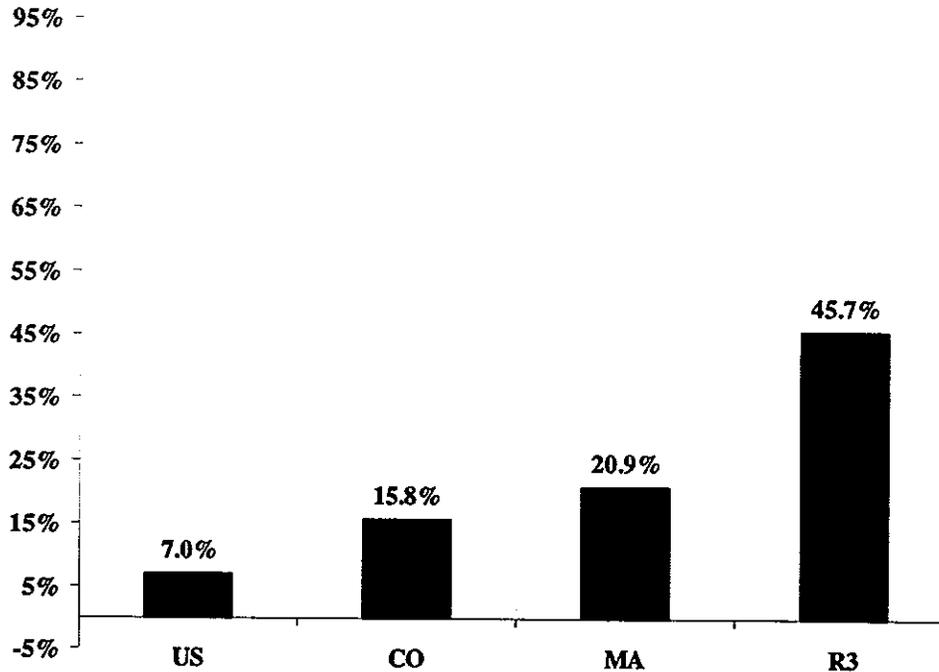




Figure 5-24. Comparison of Accounts Payable as a % of Total Liabilities (%)



As can be seen from the graphs, Armenian Airlines has a relatively high investment in current assets – at 33% of total assets – as compared to less than 25% for most of its peers. This may indicate that Armenian Airlines is not managing its balance sheet properly and has invested excessively in non-productive working capital (current assets and current liabilities) rather than in productive fixed assets or activities. While Armenian Airlines appears to be managing its receivables quite well, its payables are certainly much higher than those of its peers indicating pointing to payment and cash flow problems and raising the possibility of a credit squeeze and problems with Armenian Airlines' suppliers in the near future.

In sum, Armenian Airlines carries excessive debt on its balance sheet and has negative shareholders equity – it is, therefore, significantly over-levered (on a book basis as well as if adjusted for operating leases) compared to airline industry standards. This substantial debt burden is unlikely to be sustainable in the near future, particularly given Armenian Airlines' poor operating profitability – hence, a simultaneous financial and operational restructuring will probably be needed to improve Armenian Airlines' financial performance significantly. The airline's financial problems are also evident from its high balance of accounts payable, which indicates severe payment problems with the airline's trade creditors and suppliers.

5.5.2. Operating Cost Structure

The next set of benchmarks examines Armenian Airlines' operating cost structure and contrasts it with that of its peers, as well as ICAO and IATA averages.

The first operating cost item, which is presented in Figure 5-25, is fuel expense. Clearly, Armenian Airlines' fuel costs (the single largest operating cost item) are significantly higher than – almost double to three times – those of its peers. By way of comparison, IATA and ICAO averages are 15.4% and 11%, respectively. This unfavorable picture is confirmed when fuel is scaled according to production (i.e. on a fuel cost per ASK basis), as shown in Figure 5-26 below (note that most U.S. and European "world class" airlines incur a fuel cost of between \$0.55 and





\$0.75 per ASK, between 35% and 45% of what Armenian Airlines pays). While a further enquiry needs to be made into the ultimate causes for such discrepancy, possible reasons include government taxes, unfavorable fuel contracts, high fuel consumption (particularly for the Russian-built aircraft), and wrong tankering policies.

Figure 5-25. Comparison of Fuel Expense as a % of Total Operating Expenses (%)

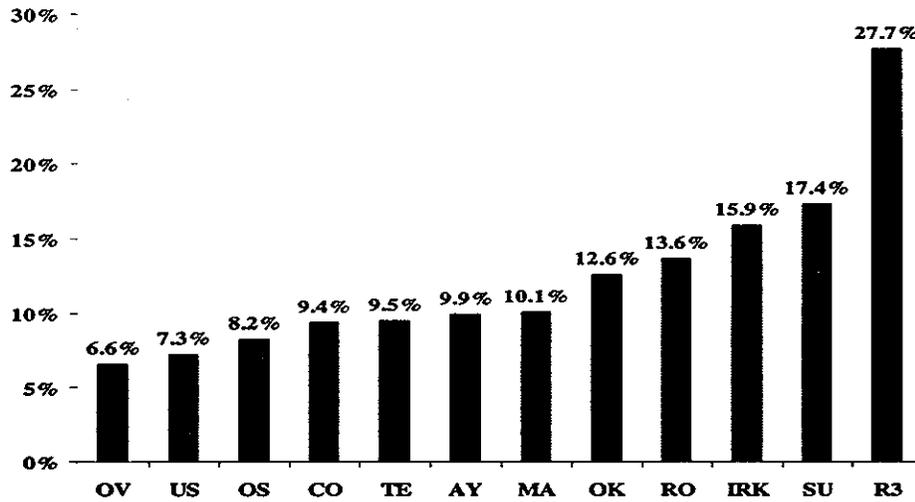
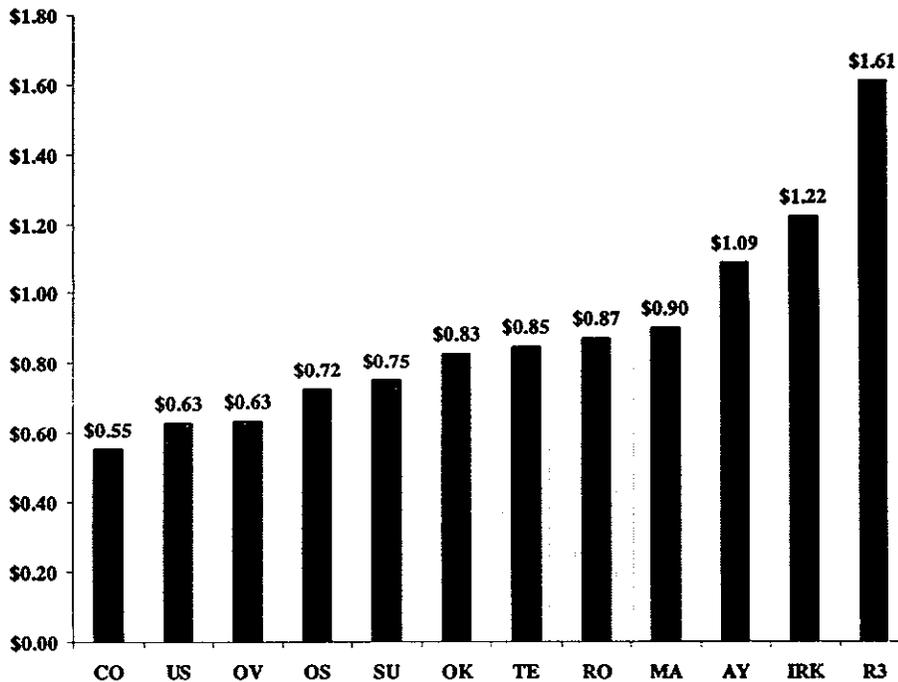


Figure 5-26. Comparison of Fuel Expense per ASK (US\$ cents)





Next, our consultants examined Armenian Airlines' aircraft rental expenses. It is certainly true that Armenian Airlines' lease rate (\$180,000 per month plus \$120,000 per month in maintenance reserves) is higher than current market rates of around \$150,000 for similar vintage aircraft. However, two factors need to be kept in mind. First, Armenian Airlines' A310 lease was signed in 1998 when the market for such aircraft was tighter than at present – market rates have naturally declined since as the availability of A310 aircraft has increased. Secondly, this was the first Western-built aircraft for Armenian Airlines which is a weak credit in a problematic area of the world – both of these factors may justify an undefined premium to current market lease rates.

Maintenance costs are another very important operating expense item for many airlines and the focus of increasing attention in the drive to reduce operating costs. Figures 5-27 and 5-28 below present a comparison of Armenian Airlines' maintenance expenses with those of its peers. As can be seen from the graphs, Armenian Airlines' maintenance expenses are somewhat higher than industry averages (IATA and ICAO members incur 9.7% and 10.9% in such charges, respectively), despite the relatively low maintenance costs incurred for the Russian-built aircraft in Armenian Airlines' fleet. Our consultants understand that the major driving factor behind these high costs is a \$175,000-per-month unfavorable maintenance contract for the A310 with Sabena.

Figure 5-27. Comparison of Maintenance Expenses as a % of Total Operating Expenses (%)

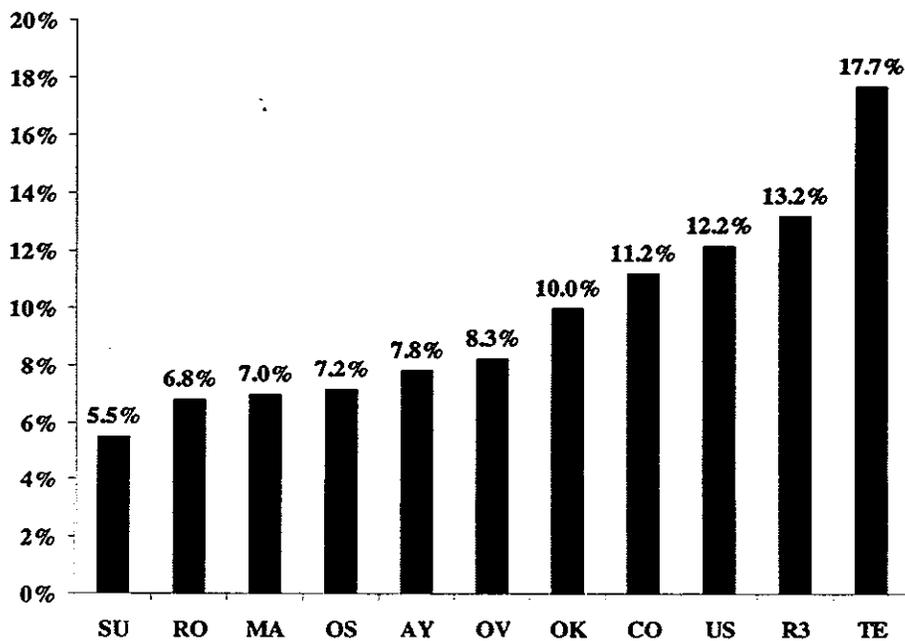




Figure 5-28. Comparison of Maintenance Expenses per ASK (US\$)

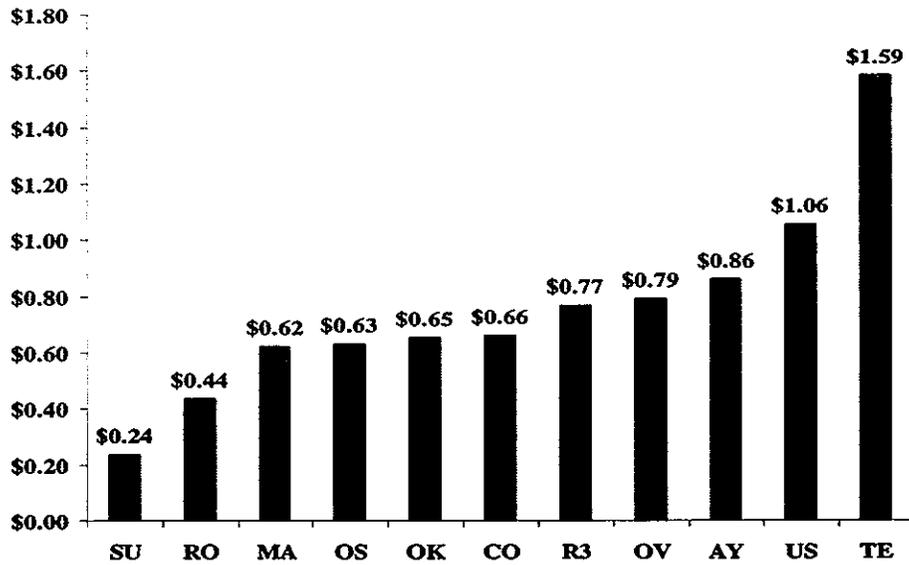


Figure 5-29. Comparison of Insurance Expenses as a % of Total Operating Expenses (%)

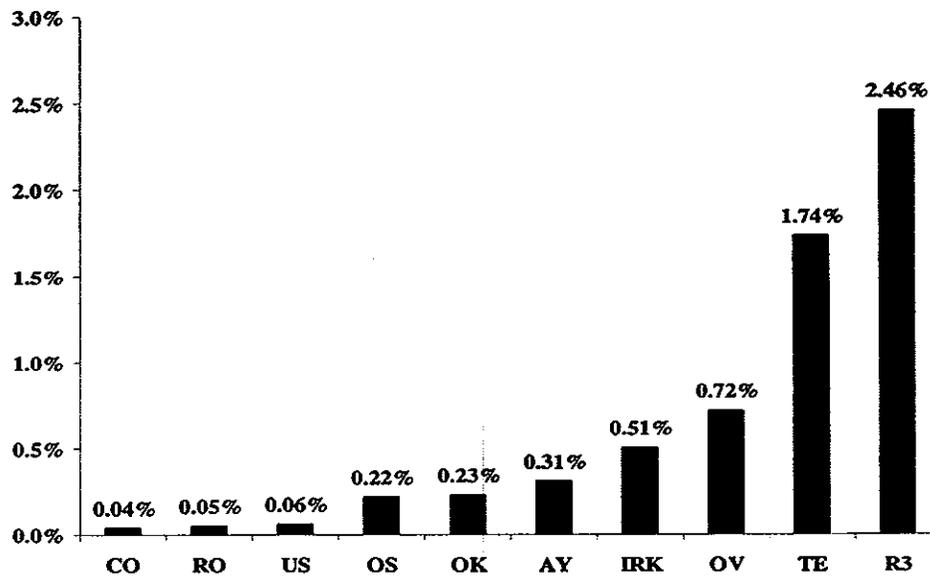
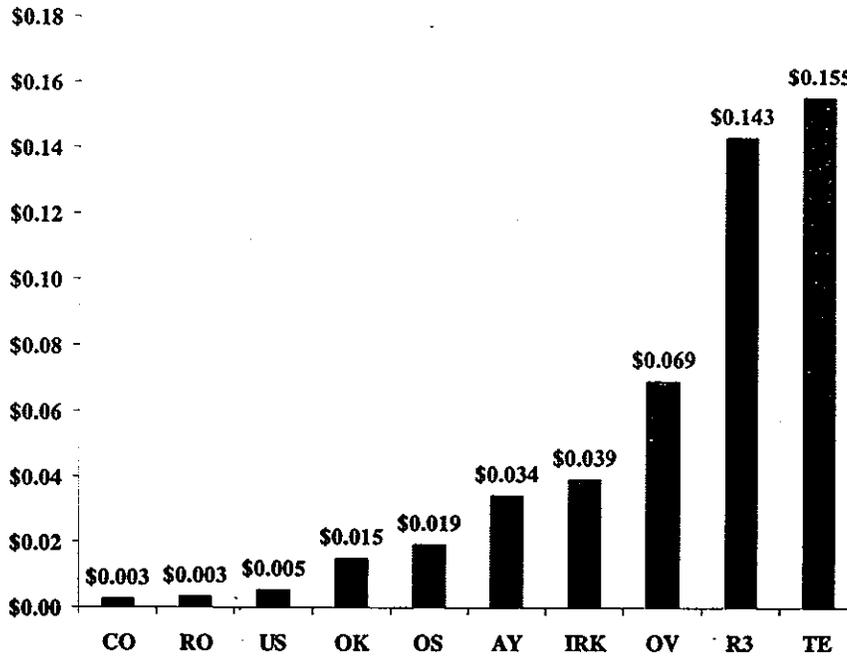




Figure 5-30. Comparison of Insurance Expenses per ASK (US\$)



Figures 5-29 and 5-30 above present a comparison of Armenian Airlines' insurance expenses with those of its peers. The graphs clearly show that Armenian Airlines pays a lot more for insurance than the industry both as a percentage of operating expenses as well as on an ASK basis. This is further confirmed by a comparison with ICAO members which record an average of about 0.2% of operating expenses in this cost category. While it is certainly true that Armenian Airlines may have a higher risk profile than other airlines and is located in a higher-than-average-risk region of the world, its costs are quite high even in comparison with regional peers, which suggests that a renegotiation of the insurance contract should be pursued, if possible.

The next set of operating costs which our consultants examined fall in the category of "user charges" and comprise landing fees, enroute/navigation charges as well as ground handling expenses. Figures 5-31 through 5-33, respectively, present these comparisons.



Figure 5-31. Comparison of Landing Fees as a % of Total Operating Expenses (%)

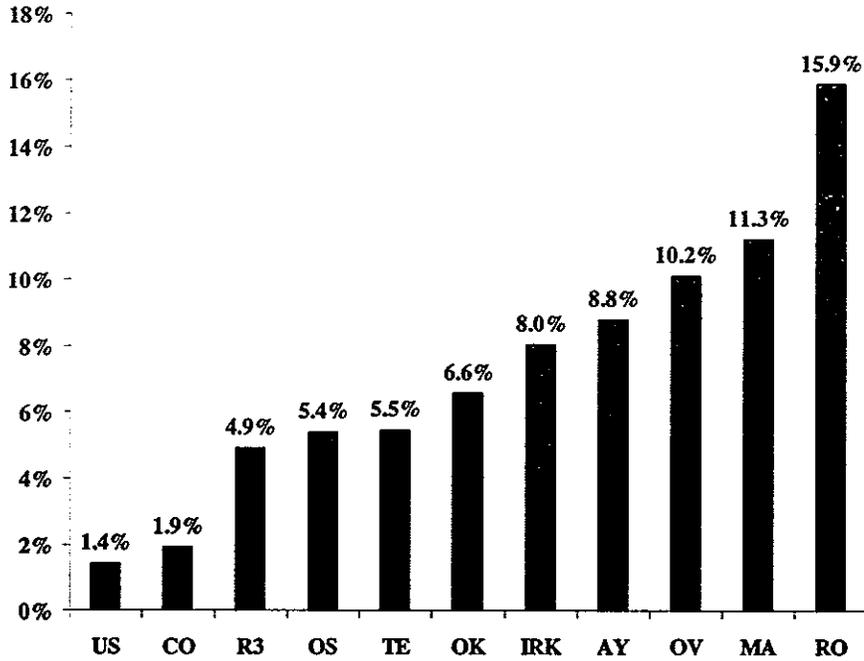


Figure 5-32. Comparison of Enroute Charges as a % of Total Operating Expenses (%)

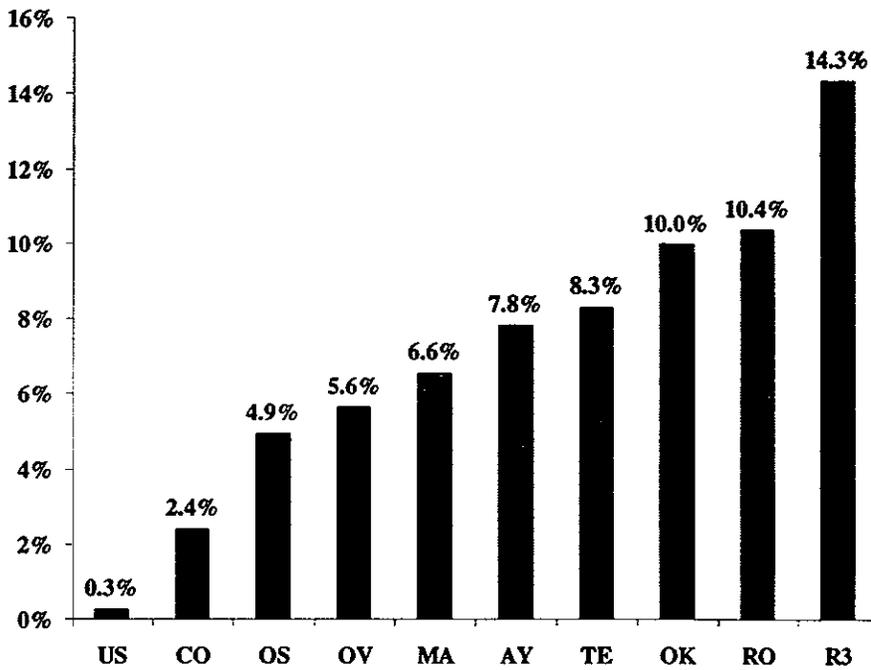
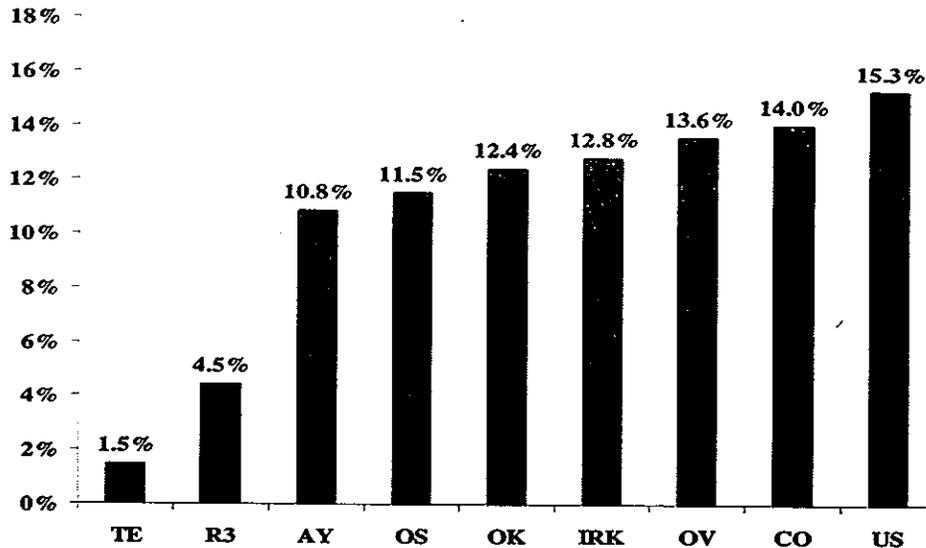




Figure 5-33. Comparison of Ground Handling Charges as a % of Total Operating Expenses (%)

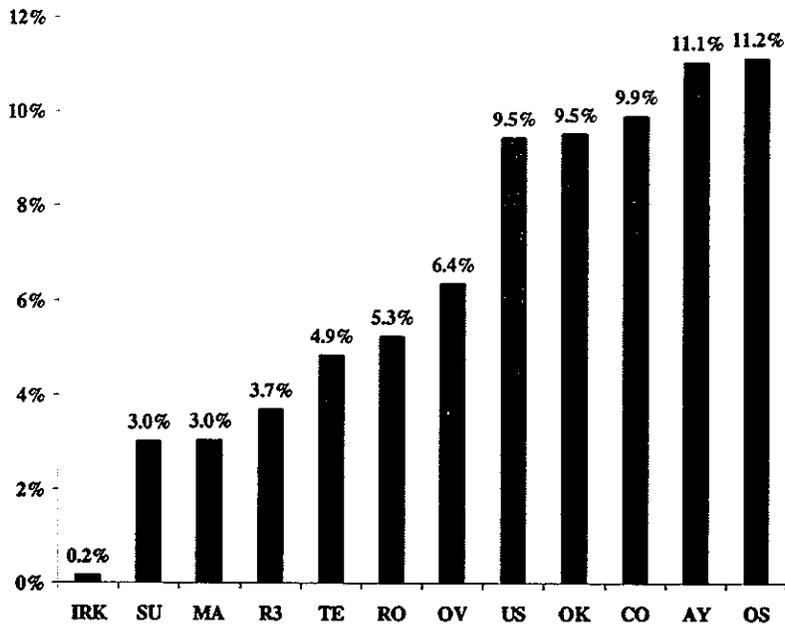


The graphs show that Armenian Airlines' "user charges" are lower than those of its peers, with the notable exception of enroute charges which are exceptionally high. This conclusion is further supported by comparisons with IATA members and ICAO members, as well as by comparisons based on US dollars per departure. IATA airlines pay an average of 5.2%, 4.7% and 11.5% of total operating expenses for landing fees, enroute charges and station costs, respectively, while ICAO members pay an average of 4.4%, 3.0% and 10.6%, respectively. Further investigation and analysis is needed to determine the causes of high enroute charges.

Turning to passenger service expenses, Figure 5-34 compares Armenian Airlines' figures with those of its peers and provides basis for drawing the conclusion that Armenian Airlines is underinvesting in its in-flight product as it spends relatively less on average than other airlines. This observation is supported by comparing Armenian Airlines with ICAO and IATA averages (10.6% and 13.1%, respectively; note, however, that the IATA figure also includes cabin crew costs, which somewhat distort comparisons), as well as by examining expenses on a per passenger basis - Armenian Airlines spends less than \$7 dollars per passenger compared to anywhere from \$15 to \$30 dollars by "world class" airlines. Armenian Airlines' underinvestment in passenger service is not surprising in light of Armenian Airlines' low load factors and needs to be an area of focus for management as Armenia opens up to more and better competition on regional and domestic markets.



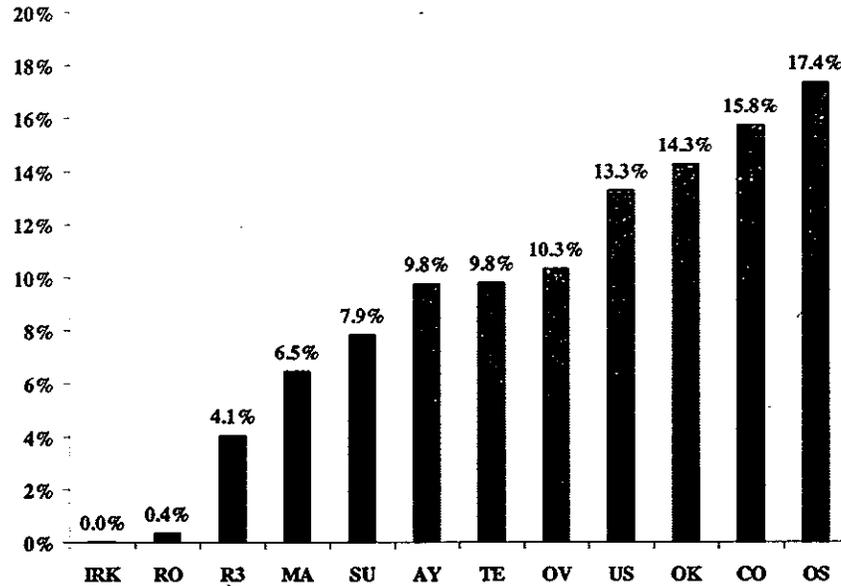
Figure 5-34. Comparison of Passenger Service Expenses as a % of Total Operating Expenses (%)



Next, our consultants examined sales & marketing expenses to compare Armenian Airlines' investment in these areas with that of its peers. Similar to the above result for passenger service expenses, the figures presented in Figure 5-35 show that Armenian Airlines is spending significantly less than the industry on sales & marketing ("world class" airlines invest between 10% and 17% of their operating expenses in this area, while IATA and ICAO members average 15.7% and 13.7%, respectively). Once again, Armenian Airlines' under-investment in this area is reflected in its low load factors, as passengers are not being attracted to the airline through appropriate sales & marketing strategies (or superior levels of in-flight service). While the status quo may be a product of the airline's financial difficulties, it will need to change if Armenian Airlines wants to improve its revenue performance and fight off rivals introducing new services.



Figure 5-35. Comparison of Sales & Marketing Expenses as a % of Total Operating Expenses (%)



Finally, our consultants focused on Armenian Airlines' general & administrative expenses (defined as all overhead charges, excluding employee costs allocated to maintenance, crew and other cost areas). As Figures 5-36 and 5-37 show, Armenian Airlines' G&A expenses (even after our consultants' cost allocation) are significantly higher than those of comparable airlines, and exorbitant if compared with IATA and ICAO member averages (5.4% and 6%, respectively). While G&A expense comparisons may suffer from data reporting and classification inconsistencies, economies of scale distortions, and differing levels of automation, Armenian Airlines still appears to be substantially overstaffed for the scale of its operations – an observation which is confirmed by the employee productivity measurements (ASKs per employee, revenue per employee, etc.) presented above. It is recommended that Armenian Airlines streamline its overhead and introduces automation throughout its operations so as to reduce overhead costs and improve profitability. Alternatively, Armenian Airlines needs to expand its operations and improve labor utilization and productivity.



Figure 5-36. Comparison of G&A Expenses as a % of Total Operating Expenses (%)

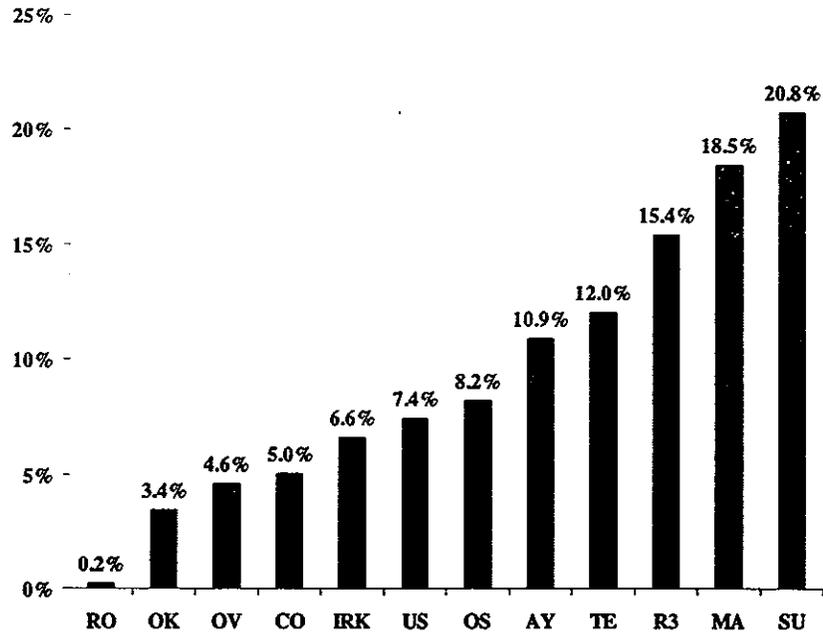
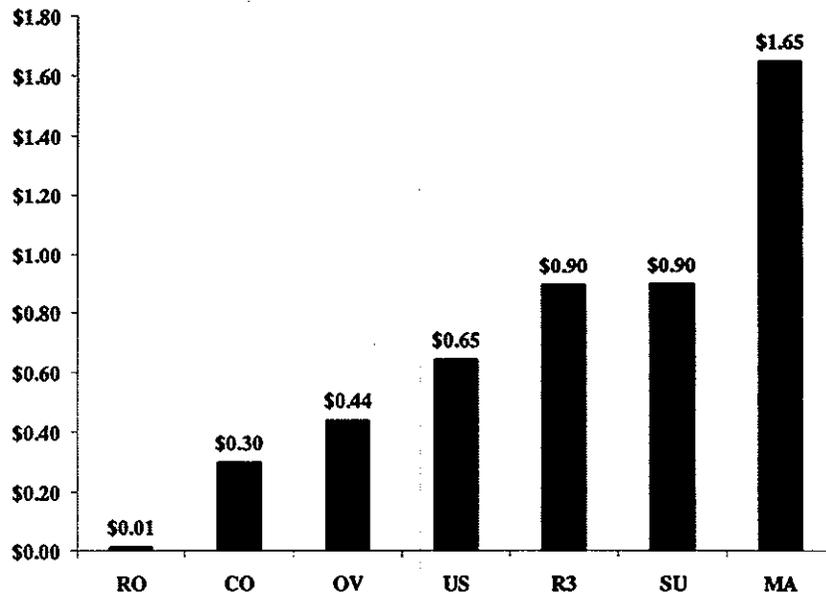


Figure 5-37. Comparison of G&A Expenses per ASK (US\$)



In sum, while it was shown earlier that Armenian Airlines' costs are high (but not significantly out of line with the industry) some individual costs appear to be higher, and others lower than industry averages. Fuel costs, insurance expenses and G&A expenses are all significantly higher than those of Armenian Airlines' peers and



exceptionally high by "world class" standards. Importantly, however, all of these costs are to a larger or a lesser extent controllable by Armenian Airlines and can be reduced with appropriate measures – for example, fuel burn can be reduced by re-fleeting, renegotiation of fuel contracts, prudent tinkering policies or lobbying the government to reduce fuel taxes, while G&A costs can be reduced through staff rationalization and the adoption of greater automation throughout Armenian Airlines' operations.

Armenian Airlines' maintenance costs appear to be higher than the industry – our consultants attribute that to the expensive maintenance contract entered into with Sabena in relation to maintenance on the leased A310 which more than offsets the low maintenance costs incurred on Russian-built aircraft. Enroute charges also appear to be exceptionally high – unfortunately those are beyond Armenian Airlines' control and further analysis must be undertaken to explore ways of minimizing them. By contrast, other user charges – landing fees and ground handling – are quite low, providing a cost advantage to Armenian Airlines over its competitors. Finally, Armenian Airlines' passenger service and sales & marketing expenses are significantly lower than industry averages, which indicates underinvestment in these particular areas of the operation. Armenian Airlines would be well served to focus on these areas as they are likely to be some of the key factors behind Armenian Airlines' poor load factor and revenue performance.





6 RESTRUCTURING AND PRIVATIZATION STRATEGY

In an effort to place our consultants' recommendations for the preferred strategy for the privatization of Armenian Airlines in a wider legal, fiscal and economic context, section 5.1 below briefly sets out some of the factors that will affect an investor participating in the Armenian Airlines privatization process. Our recommendations then follow.

6.1. Factors Affecting Privatization

6.1.1. Privatization Policy

Privatization is alienation of the state's right of ownership or other property rights in favor of physical or legal persons. The Law on "On Privatization of the State Property" stipulates that privatization in Armenia may be carried out in any of the following forms or in any combination of these:

- o *subscription,*
- o *auction,*
- o *tender,*
- o *direct sale,*
- o *issuance and allocation of new shares or bonds convertible into shares,*
- o *transfer of use rights.*

In certain cases stipulated by the law, state ownership in a company may be alienated in favor of staff of that company free of charge or for compensation.

At the initial stages of the privatization program in Armenia, it was provided that 20% shares of state-owned enterprises could be privatized to the staff free of charge.³⁶ Although this procedure was only effective until the end of 1997, the notion of partial free privatization of the state-owned aviation companies are still actively discussed by GDCA top officials and remain a dream solution for managers and staff of the companies.

In 1995, by decision of the National Assembly of the Republic of Armenia, Armenian Airlines was included in the list of large enterprises to be privatized.

By decision of the Government of Armenia #102 dated February 23, 1998, a Government Committee was established to carry out preparatory activities for privatization of Armenian Airlines but no practical results were achieved.

A string of unsuccessful reorganizations, amalgamations and demergers followed but none was successful in turning around the fortunes of the company.

6.1.2. Taxes and Duties

Value added tax (VAT) for international air transportation and associated services is set at zero percent, while the standard rate of VAT in Armenia is 20 percent. Armenian Airlines is recognized as a VAT payer.

Armenian Airlines is subject to a *profit tax* of 20% percent. If a foreign investment equivalent to at least AMD 500 mln. is made into the charter capital of the company, the investor is waived liability for profit tax for the first two years following investment and is then waived half of its liability during a further 2 years (illustrated below)³⁷.

³⁶ Privatization Law adopted by the Supreme Council on July 29, 1992.

³⁷ Law "On Profit Tax", adopted by the National Assembly on Sep 30, 1997.





Year of investment of AMD 500 mln.	Reduction in profit tax rate of the subsequent years	
	100%	50%
2001	2002, 2003	2004,2007
2002	2003, 2004	2005,2006
2003	2004, 2005	2006,2007
2004	2005, 2006	2007,2008
2005	2006, 2007	2008,2009
2006	2007, 2008	2009,2010
2007	2008, 2009	2010,2011

Income tax is withheld by the company from the remuneration of its permanent and contract staff at 10 percent for the portion of salary up to AMD 80,000 (equivalent to USD 145) and at 20 percent for the portion of the salary above AMD 80,000. It is transferred to the state budget.

Social security tax is calculated at 18 percent of the salary; 15 percent is payable by the company, and 3 percent is withheld from the salary.

Current tax legislation does not recognize aircraft as *taxable property*.

In 1998, Armenia introduced an *air departure duty* of AMD 10,000 (equivalent to USD 18). The air duty is not properly registered and no mechanism is established for charging this fee along with other taxes and duties. The air departure duty is charged against special vouchers sold through banks and currency exchanges. Part of the voucher is torn and retained by check-in agents and the other half remains with the passenger as a receipt. Transit passengers departing from Armenia within 24 hours from the time of their arrival, children under 12 years old, diplomats and certain other categories of passengers are exempt from departure duty.

Departure duty mostly affects CIS travelers as it significantly increases overall travel costs. The amount of the departure tax is equivalent to 20-25% of a one-way fare to destinations such as Sochi, Mineralnye Vody, Krasnodar, Rostov and Stavropol.

6.1.3. Competition Policy

The RoA Law "On the protection of economic competition" (the "Law") was adopted by the National Assembly of the Republic of Armenia on November 6, 2000 and was put into effect on December 15 of the same year.

The purpose of the Law is to protect and promote economic promotion, ensure an appropriate environment for fair competition, develop business and protect consumer rights in the Republic of Armenia. The Law applies to the activities and conduct of both economic entities and government and local government administrative bodies, which might cause the distortion of fair competition.

According to the Law, the following actions shall be prohibited:

- *Anti-competitive agreements: Anti-competition agreements are agreements or contracts, which might result in the restriction, prevention or prohibition of competition (such as establishment of discriminatory prices, artificial increase, decrease or maintenance of prices, etc);*
- *Abuse of dominant position: Abuse of dominant position means direct and indirect imposition of unjustified purchase or sale prices or other unfair trading conditions by an economic entity that a.) has no substantial competitor (or no competitor at all) or b.) whose consumptions volumes total at least one third of the overall consumption on the given market;*





- Unfair competition: *An act of unfair competition is any business activity or conduct, that contravenes the Law or commercial usage and impairs the good faith (i.e. honesty, fairness, verity, impartiality) principles in the relations amongst competitors or in their relations with consumers;*
- Concentration leading to the dominant position.

The State Competition Commission for the Protection of the Economic Competition of the Republic of Armenia is the government body tasked with the implementation of the state policy in this area.

6.2. Privatization Objectives

In our consultants' experience, the key to a successful privatization program lies in building an early consensus around the objectives of the transaction amongst all stakeholders in the company. The sale of Armenian Airlines to a commercially-focused strategic investor will provide opportunities and benefits inaccessible to a state-owned carrier. The relationship amongst Government officials, airline management, employees and other stakeholders will be fundamentally redefined. The transfers to private ownership will have a far-reaching long-term beneficial impact not only on Armenian Airlines but also on the Armenian air transport system and even the regional aviation industry.

We have highlighted below several objectives that could be considered for the privatization of Armenian Airlines. Some of these goals are mutually congruent, and the inherent interdependence between several of the objectives results in a highly complex range of parameters and variables impacting upon the future direction of Armenian Airlines.

6.2.1. Key Privatization Objectives

The privatization objectives of the Government of Armenia should be to:

- Attract a strategic buyer to take a substantial position, with substantial management control, in the Company;
- Bring strong management, marketing, technical competence and investment to the Company through a strategic buyer;
- Keep the Company as the national flag carrier;
- Achieve value for the Government's shares in the Company.

Other objectives might include, but not be limited to:

- Completing the transaction in an appropriate time frame;
- Increasing financial and operating autonomy;
- Removing reliance on government support and finance;
- Improving taxation revenue for the government through increase in the Airline's profitability;
- Improving Armenian Airlines' competitiveness to changing market forces;
- Expanding service levels and access to popular routes and destinations;
- Pursuing international expansionist policy and increasing level of commercialization;
- Expanding Yerevan's hub potential as a sixth-freedom transfer point;
- Promoting Armenia as a cultural, tourist and business destination;
- Stimulating domestic economic activity;
- Removing political interference in decision making so that uneconomic routes may be closed;
- Efficiently developing the Armenian air transport sector;





- Enhancing Armenian Airlines' role as Armenia's ambassador and quasi-tourism agency;
- Repositioning Yerevan and Armenian Airlines as a major link in a global airlines alliance; and
- Introducing and formulating a new regulatory air transport network.

6.2.2. Discussion of Objectives

The Government of Armenia should stipulate that the key objective of the privatization of Armenian Airlines is to strengthen the carrier's management, marketing and technical competence thereby improving its operational and financial performance through the sale of a significant stake to a strategic investor.

Allowing a strategic investor to acquire a substantial stake and control in Armenian Airlines would certainly meet the Government's objectives and secure a leading position the carrier in the region by providing the following direct benefits to the Airline, its managers and employees:

- Continuation of the fleet and facilities modernization investments;
- Knowledge transfer and introduction to most recent developments and expertise;
- Improved access to management and operational know-how;
- Reduction in operating costs through increased efficiency and joint purchasing;
- Higher revenues through expanded network presence and traffic mix;
- Increased management focus on efficient deployment of scarce resources;
- Improved training, job development and employee satisfaction;
- Increased efficiency, cost-effectiveness and customer orientation of Armenian Airlines.

In addition, previous privatizations have demonstrated that gains are not limited to the airline and its staff, but also benefit all other stakeholders. Such potential benefits include:

- Improvements for passengers and shippers:
 - *Increased customer orientation and responsiveness*
 - *Expanded network and seamless service with strategic investor*
 - *New access to global loyalty programs*
 - *Improved product development and innovation*
 - *Tailor-made solutions for key routes*
- Benefits for the Government:
 - *Realization of stake provides funds for key projects such as infrastructure and capital works programs*
 - *Improved tax and other revenue streams*
 - *Eliminated funding and subsidies to the Airline*
 - *Establishment of a successful track record of privatization and liberalization which increases foreign capital inflow*
- Benefits for the Armenian economy
 - *The airline industry is a fundamental component of the economy, as it is a representation of Armenia on the international stage. Any improvement in the national airline industry thus directly influences overseas perception of Armenia and impacts upon the development of the local economy and the well-being of the population*
 - *The success of the airline industry in Armenia will also contribute to increased support and participation in the tourist and business sectors of the economy*





In addition to selling the proposed stake in Armenian Airlines to a strategic investor, the Government will have the opportunity, in the medium to long term, to extend the ownership of the company to additional selected partners, domestic institutional investors, staff and the general public.

6.3. Global Status and Leading Trends in Airline Privatization

6.3.1. Low Market Value and Scarcity of Capital

Airline shares have historically been a low return investment. This contributes

to airlines concentrating capital allocation to investments bringing immediate and large benefits, and signaling to the markets their willingness to make dramatic moves to improve profitability. This results in the large transactions being contemplated currently among airlines. Market pressure also leads airlines to being especially risk adverse. Airlines currently prefer not to invest capital at all into others. Commercial alliances are the preferred tool to achieve consolidation, and reap the revenue and cost synergies which consolidation brings, without the risks associated to any investment.

Additionally, market pressure also pushes airlines to invest into airlines having a history of profits, and/or into airlines which bring obvious synergies or which are linked to a market perceived as strategic.

Table 6-1: European Airline stocks v Euro Stoxx 50, 1995 - Present (Datastream)



6.3.2. Unprecedented Consolidation Underway

Large airlines currently focus on an unprecedented consolidation effort, leaving little opportunity for them to allocate resources to other transactions. Recent transactions of note have included the merger of Canadian Airlines and Air Canada and the purchase by Singapore Airlines in a stake in Virgin Atlantic. Recent failed transaction attempts have included the mergers of KLM and Alitalia and that of British Airways and KLM. At one point, British Airways was reported to have started discussions with Air France for a possible tie-up, while Air France was also considering a possible stake acquisition into Alitalia.





6.4. Study Cases

The challenges facing airline management are numerous and substantial. Today's environment presents many challenges such as slowing economic growth, fierce competition enhanced by globalization, higher fuel prices, a strong and unionized labor movement, and deteriorating profitability and return on investment for shareholders.

However, during the past 5 years, the commercial aviation trend worldwide has exceeded analyst and financial institutions expectations; this is particularly striking when comparing the aviation industry to other high capital-intensive industries. In the year 2000, US domestic passenger demand increased 4.3 percent, representing the ninth consecutive year of increased demand. International traffic grew even faster, up 6.8 percent.

Despite last year's serious concerns about the jet fuel price, trend estimates indicate that world airline earnings will total almost \$14 billion. And over the past 7 years, world airline profits have totaled around \$110 billion. However, it should be noted that over the past few months, both US and European airlines have released profits warnings and have lowered their earning expectations for this year. Profitability deteriorated substantially in the second half of the year 2000 and has continued to dry up through 2001. However, pricing and revenue management strategies along with alliance memberships continue to have positive impacts in the airline business as reflected in today's competitive landscape among networks of airlines and not between airlines.

Economic worldwide growth is slowing. The growth and vitality of the airline business is one that is closely tied to the health of the world economy. Although, financial institutions and the Federal Aviation Administration (FAA) have advised of a slowdown in worldwide economies for this year, stronger growth is expected to resume in 2002 and continue through 2006. US real GDP growth is expected to average 3.1 percent per year between 2001 and 2006. World GDP is assumed to grow faster than in the US, averaging 3.5 percent per year between 2001 and 2006. Latin economies are assumed to be among the fastest growing in the world, growing by 3.8 percent in 2001 and averaging 4.6 percent growth between 2001 and 2006.

Competition in the aviation industry has been very intense, and this trend is expected to continue. The US is most likely continue its aggressive open skies' strategy, which could result in new opportunities for new entrants and stimulate more competition. Fierce competition continues to have an impact on airline ticket costs, and real prices after adjusting for inflation have declined significantly year after year while other airlines' improvement plans in areas such as cost control and productivity have resulted in lower fares as well. Moreover, many financially struggling carriers continue to seek capital infusion for the expansion and growth plans while other governments have plans to privatize their national airlines with public floatation in order to access capital markets.

Last year, fuel prices soared and impacted negatively on airlines' financial performance, resulting in lower profitability and higher fares. Fuel-hedging practices have helped airlines to counteract this issue but many airlines do not proactively hedge fuel. However, escalation of the current Middle East unrest and renewed OPEC pressure to cut production in order to increase oil prices represent a threat.

Recently, airlines have been negotiating with their employees and unions regarding pay raises. This, too, has impacted carriers' financial performance in the form of higher labor and operating costs as well as passengers lost to competitor.

Many airlines continue to review their corporate strategies, as the only constant in the airline business is change. For example, many carriers are considering new strategies in order to improve profits and to face tough competition; Lufthansa has faced recent losses after years of profitability, while Air France has recently succeeded after years of losses. Other carriers, such as United Airlines and British Airways, have decided to take a piece of the fastest aviation market – corporate aviation – in order to attract again high-yield business travelers and stop fractional ownership providers from luring their premium passengers.

On the other hand, recent experiences have shown that mergers and acquisitions can offer more problems than benefits, cost savings and synergies. For example, today The SAirGroup is under a major restructuring plan aimed at consolidating operations and disposing of a number of non-core activities due to its financial problems





last year. The SAirGroup was formed in order to bring together the various divisions of the airline (SAirLines, SAirServices, SAirLogistics and SAirRelations) and its supporting areas under a single umbrella. Swissair's previous corporate strategy of building equity stakes in other carriers (Sabena, AOM/Air Liberté and Air Littoral) around the world has not derived the expected benefits the airline had anticipated over the years. Moreover, the decision to invest in the French regional airlines is widely seen as a mistake given the strong competition from Air France. Swissair restructuring process seeks to divest itself of its French interests and may well follow a similar strategy with Sabena. The strategy calls for an overhauled and simplified corporate structure and includes cost-cutting and efficiency programs aimed at bringing the company back to profitability and sound business health.

In addition, airline privatizations and initial public offerings (IPO) during volatile economic conditions can only guarantee uncertainties and inadequate market and value recognition from the financial community. For example, Iberia Airlines' delayed its floatation in order to try to sell stakes to key shareholders and poor industrial relations during volatile stock market period. This resulted in lower than expected stock prices early this year. Due to the lack of investors' interest and demand, the Spanish carrier decided to lower the fixed price well below its earlier estimates while British Airways, American Airlines plus many other financial institutions have confirmed that they will receive rebates from Iberia following poorer than anticipated pricing of the Spanish carrier's IPO launched on April 1st, 2001.

But change continues to be a constant in the airline industry and those who do not adapt to evolving needs in the marketplace are expected to fail and exit the industry. In the end, passengers needs continue unchanged: a hassle-free travel experience, lower fares and a global reach airline provider.

The following are examples of failed privatization efforts in year 2000 of airlines in Romania (TAROM Airlines), Hungary (MALEV Airlines), Cape Verde (TACV Airlines) and Bangladesh (Biman Bangladesh Airlines).

6.4.1. TAROM Airlines

- Uncertain strategic future for major airlines due to recent failure of large mergers and the formation of new alliances had left airlines unwilling to invest.
- Increased competition from low cost carriers had made European airlines cautious with their capital investment.
- Significant competition for investment capital with the privatization of MALEV and Turkish Airlines diluted the availability of capital in the market.
- TAROM's financial condition was significantly more dire than expected.
- The airline's management strategy, particularly in route and fleet planning, was not fully developed.
- The marketing period of the privatization overlapped with coming elections, which stifled interest as the political climate was uncertain.

6.4.2. MALEV Airlines

- A well-publicized ownership venture with Alitalia failed due to lack of synergies and Alitalia's own internal problems, and no other alliance could be established.
- Relative weakness in traffic demand in Eastern Europe.
- Strategic Investors have little appetite for debt-laden carriers like MALEV if they cannot have a total management control.

6.4.3. TACV Airlines

- Elections placed uncertainty on the future direction of the government's privatization initiatives.





- Repeated delays in decision-making on expressions of interest and sell-off dates caused investors to lose interest.
- New government wanted restructuring of the airline before public sale.

6.4.4. Biman Bangladesh Airlines

- Marketing campaign did not produce strategic investor bids.
- Regional political instability dampened investor interest.

6.5. Review of Options

Armenian Airlines privatization strategic options are shown on the Chart below.

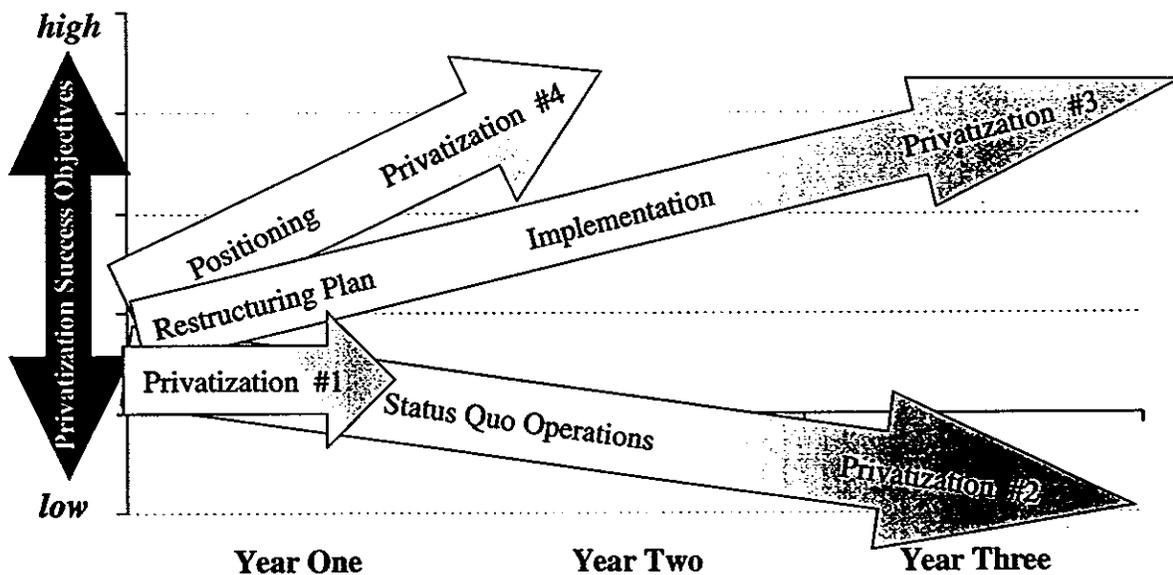


Figure 6-2: Privatization Options

Privatization 1: Privatization of the airline "as-is"

This option is ideal when there is an attractive and profitable airline, the industry is on an up-trend, and potential strategic airlines have expressed interest for cooperation/acquisition. The privatizations of AirLanka and LOT were pursued in this manner. Unfortunately, none of these requirements are currently present for Armenian Airlines. Not only is the company unprofitable, but the airline industry as a whole is currently in a downtrend and airlines are looking inward to shore up their own operations rather than looking for expansion. Moreover, no major airline has shown strategic interest in at the company at the commercial, service or operational level. Any attempt at privatization now would be extremely unlikely to succeed, and may hinder the success of a privatization at a later date.



Privatization 2: Delay Privatization

Rather than risk an unlikely privatization, the airline could continue with current management practices and delay privatization until industry interest picks up again. For profitable and growing airlines, this is a feasible option if the industry is not in an upswing. However Armenian Airlines is not profitable. Because there is no financing available for upgrading the fleet, maintenance, IT and sales, recent trends are likely to continue – declining passenger boardings, contracting operations, and worsening cash flow problems. Thus, the financial health of the company will worsen and the airline will be less attractive for future privatization in 2-3 years. This is the case with Balkan Bulgarian Airlines and Air Afrique, both of which appear to be in an unsalvageable financial position.

Privatization 3: Delay privatization and restructure

In this scenario, a troubled airline begins restructuring to become more attractive to investors when the time is right for privatization. This is the way in which British Airways and Air Canada were privatized. Most airlines that aborted failed privatizations have taken this approach. The airlines immediately start to create a Restructuring Plan, formulate an Action Plan and, in short period of time, begin Implementation of the Action Plan. The aim of an airline choosing this option should be to attain profitability as soon as possible – preferably within one year. The timing for a successful privatization could return in such a period of time, and the airline must be ready for it because other airlines are waiting for the same moment. The healthiest airlines will find the most suitors. Malev, BIMAN, TAROM and TACV have taken this route after failed privatizations, and are currently restructuring operations. MEA has also taken this route, but without having attempted privatization first. In the long run this delay will make MEA a much better candidate for finding a future investor as it does not have a past privatization failure to mar its future marketability.

Privatization 4: Extended Privatization

In this option the airline realizes the privatization process in two stages: Preparation (Positioning) and Implementation. This option can be explored by an airline in good financial standing. During the Preparation Stage, the airline is preparing Diagnostic analysis that is a base for the formulation of the Business Plan and valuation as a part of the privatization process. Additionally, the Diagnostic study becomes an outline for a short term restructuring plan. The Preparation period is no longer than a year. The second stage – Privatization Implementation – begins after the completion of this preparation. Privatization implementation includes approaching strategic and financial investors, road shows, due diligence from the interested investors. There is no implementation of the restructuring by the airline. The airline is marketed with the intention of the strategic or financial investor implementing the restructuring after the privatization. This is the current strategy with Saudi Arabian Airlines. If the airline fails to succeed in privatization with this scenario they return to Option 3 and restructure.

6.6. Recommended Privatization Strategy

We believe that the restructuring approach prior to privatizing Armenian Airlines (Option 3) is the most suitable and advantageous for the company. Based on our consultants' experiences and observations in many airlines' privatization processes, financial problems are the primary obstacle to a successful privatization. MALEV, TAROM, and Air Afrique were all experiencing heavy losses at the time privatization was launched, and all three privatizations failed. We expect Armenian Airlines to experience the same results should privatization be attempted.

Another factor that has influenced privatization processes is the political uncertainties of government-owned airlines. This is especially true during elections periods. As mentioned previously, the less optimistic Worldwide Economic outlook from financial institutions as well as regulators has negatively affected investors' appetite and participation in airlines privatization initiatives. Furthermore, the current situation of many of the major global





airlines towards lowering as well as revising their expected revenues this year indicate that global airlines are unwilling to use scarce capital for equity investments and that they are more willing to align and strengthen relationships with other carriers through commercial cooperation.

Having in mind the current situation in the airline business we recommend that Armenian Airlines opt for Scenario 3: Restructuring prior to privatization, described in section 5.5. Armenian Airlines should begin immediate operational and financial restructuring as a first step and to be prepared for privatisation in 2 to 3 years.

Armenian Airlines must address its restructuring efforts at the following areas:

- Financial Restructuring
 - *Alternatives to Improve Balance Sheet Results*
 - ◆ Potential Source of Funding
 - ◆ Size and Structure of Refinancing
 - ◆ Changes of Debt to Equity Relationship
 - ◆ Sales and Leaseback of Assets
 - ◆ Rescheduling Creditors and Lessors
 - ◆ Revalue and Disposal of Surplus Assets
 - *Alternative Long Term Commitments*
 - ◆ Overall Debt Structure, Terms and Interest Rates
 - ◆ Aircraft Financing Structure
 - ◆ Ground and Facilities Term Debt
 - ◆ Working Capital Structure and Terms
 - ◆ Long Term Facility and Property Lease Commitments
- Commercial Restructuring
 - *Route, Schedule and Fleet Optimisation*
 - *Revenue Performance and Cost Reduction*
 - *Sales, Marketing, Distribution and Pricing Optimisation*
 - *Custom Service*
 - *Operation Costs and Productivity*
 - *Improved Processes and Work Practices*
 - *Alliance Options*
- Operational Restructuring
 - *Flight Operations and Safety*
 - *Engineering and Maintenance*
 - *Fleet Acquisition and Leasing*
 - *Information Technology*
 - *Operations Cost and Productivity*
- Management, Human Resources and Communications
 - *Organisational Structure Optimisation*
 - *Staff Optimisation*
- Legal Review of the Impact of Restructuring





6.7. Specific Near-Term Recommendations for Restructuring

The following recommendations propose a specific course of immediate action the Government of Armenia or other respective authorities would have to take to improve the situation and prepare the airline for future privatization.

a. Regulatory Framework

- ◆ We recommend restructuring the General Department of Civil Aviation and placing it within the structure of the Government either as part of the Ministry of Transport and Communication (or another ministry) or as a separate ministry.
- ◆ It would be advisable to physically separate the government agencies from the commercial entities to stop the traditional practices of exercising Government control over activities of commercial companies, even if the shares of the company are entirely owned by the state. It is recommended to remove the GDCA from the territory of Zvartnots International Airport.
- ◆ A new Civil Aviation Authority (CAA) should be assigned to formulate the goals and objectives of the sector and develop a concept for long-term development of civil aviation of Armenia.
- ◆ The CAA should review, standardize and systematize the *de facto* applied regulations and provide their state registration in accordance with the requirements of the law.
- ◆ The CAA should establish more active working relationships with ICAO, ECAC, IATA and other international organizations. In particular, it should work closely with ICAO consultants in relation to reform of the regulatory framework. ICAO can place its consultants with the CAA for a period of time. It is essential that ICAO consultants work alongside the airline's management contractor to ensure that restructuring of the airline and the regulatory framework takes place simultaneously and logically. Healthy reform of the airline is based on sensible reform of the regulatory framework and vice versa.
- ◆ The CAA should be more active in analyzing existing and potential market opportunities and initiating bilateral air service relationships with the respective states. It is not advisable to sign agreements with countries to which it is unlikely to expect air services to commence in the near future (as is currently the practice). The CAA should make a special effort to sign bilateral agreements or improve existing bilateral agreements with the countries to which Armenian Airlines currently operates or is likely to operate in the near future.
- ◆ The CAA, in cooperation with other relevant state agencies, should propose simplification of formalities at Zvartnots taking into consideration the recommendations of Annex 9 to the Chicago Convention.
- ◆ The Air Medical Expert Commission should be removed from within the CAA and should be placed within the authority of the Ministry of Health.
- ◆ Those companies that are not involved in air transportation related activities, namely Air Training Center CJSC, Air Medical Center CJSC, Reconstruction Administration CJSC, Sevan Motel CJSC, should not be controlled or managed by the CAA and should be privatized by the Government of Armenia.
- ◆ The CAA should be impartial and should not have a stake in the companies of the sector. It should not be delegated the authority to manage state-owned shares. It would rather be advisable to appoint a few state agencies to represent the state interest in the companies.
- ◆ The CAA should establish a system for registration of fares (including throughfares) offered by Armenian Airlines and foreign carriers.

b. Airport Infrastructure and Services

- ◆ Operators and service providers at Zvartnots International Airport should be granted rights to render aviation and non-aviation services within the territory of the airport under concession agreements only. Such operators and service providers, wherever possible, should be appointed through a competitive tender process.
- ◆ The airport should pay special attention to developing non-aviation services.
- ◆ Air Fueling CJSC should merge with Zvartnots International Airport CJSC. A concessionaire should be appointed to operate the fueling facilities and provide fueling/defueling services. Airlines should have freedom in selecting a fuel supplier.





- ◆ The Airport should not operate Passenger Terminal 2 as non-compliant with the standards applicable to international airports. Revise the rules of use of the hall for high official delegations, as it is currently abused by many mid-ranked government officials, their relatives and friends who enjoy lenient procedures at customs and immigration control.
- ◆ Subject by legislation state or commercial agencies operating at the airport to the authority of the relevant authorities of Zvartnots International.

c. Government Commitments

- ◆ Armenian Airlines should be granted exclusive rights to operate on all routes. Other Armenian carriers should not receive designation and rights to operate scheduled international flights for at least 10-15 years.
- ◆ The Government should guarantee that the state administration and regulatory authorities will not interfere in the operations of the company.
- ◆ The Government should establish a procedure obliging state employees to use Armenian Airlines' services for trips financed by the state budget, unless travel on Armenian Airlines' direct or connecting services is unreasonable in terms of price or convenience.
- ◆ The Government should provide support for obtaining financing from international financial institutions.

d. Improve the Structure and Operations of Armenian Airlines

- ◆ Obtain licenses for the appropriate activities of the company.
- ◆ Improve the organizational structure of the company so that functions performed by departments correspond to their name and purpose in order to avoid the current practice of assigning tasks according to tradition, personal relationships and subjectivity.
- ◆ Spin off or sell resort facilities in Tsaghkadzor and Sevan.
- ◆ Spin off or sell the helicopter division operating out of Erebuni Airport. The Government may consider transferring it to the Ministry of Interior or the Ministry of Defence.
- ◆ Develop and launch a program for downscaling the staff.
- ◆ Improve in-flight and ground handling services.
- ◆ Improve the tariff structure and introduce modern yield-management practices.
- ◆ Develop service standards, start building a common corporate image.
- ◆ Consider appointing supervision agents for handling the operational issues at outstations, assigning broader promotion and marketing functions to GSAs, and reducing the number of staff in other countries.
- ◆ Improve excess baggage collection at all stations. Collection of excess baggage fees at outstations should be the responsibility of the ground handling agents, not the area managers.
- ◆ Concentrate on increasing numbers of frequencies instead of adding additional destinations to the route network.
- ◆ Consider joining BSP-France and BSP-Germany.
- ◆ Provide training to the accounting department with the aim of introducing new accounting standards and modern accounting practices.
- ◆ Restructure the network of on-line and off-line cargo agents in Europe and improve cargo tracking system.
- ◆ Initiate 6th freedom cargo sales.

The first three sets of recommendations (a), (b) and (c) above ought to be preconditions to any serious investment in Armenian Airlines.

It is hard to believe that Armenian Airlines' management would be capable of implementing the improvements detailed above. It is behind contemporary standards in terms of strategy, industry know-how, efficient management and ability to penetrate international markets. We would strongly advise appointing a professional





airline manager/operator of international repute to run the company for a reasonably long period of time with an assignment to achieve turnaround of Armenian Airlines' operations and activities prior to privatization. A short-term management contract would not allow enough time for accomplishing real change and achieving any results. We suggest that the Government should appoint the manager for a period no less than 1-1.5 years while, at the same time, remaining open to proposals from potential investors. The management agreement should allow for early termination should an appropriate, quality investor be found unexpectedly early³⁸.

The effect of most of the projects implemented by the manager would not become visible immediately. Therefore the Government should receive periodic reports from the manager on the actions and projects being undertaken, their expected effect and their progress. At the same time the Government should not interfere with the activities of the manager and should grant freedom for the professional handling and implementation of all projects undertaken. The manager should receive strong support from the Government in resolving problematic issues with other state owned companies and Government authorities and should maintain regular contact with a high-level Government counterpart in this regard.

Both the manager and the ultimate investor should be companies that have proven, successful, international experience in airline management. Affiliation of the manager or potential investor with a major airline may be preferable, as it may allow Armenian Airlines to benefit from the existing infrastructure and various contractual arrangements of that airline (in particular ultimate access to the benefits enjoyed by members of the main global airline alliances).

During negotiation of a possible acquisition, investment or share purchase agreement with the potential investor, the Government should take into consideration that most of the bilateral agreements impose serious restrictions on "substantial ownership and/or effective control" of airlines by foreign nationals, whether they are legal or physical persons. This is common practice throughout the world. To avoid any complications of possible refusal of designation, it is recommended selling up to 49% of Armenian Airlines' shares to the foreign investor while granting the investor 100% operational management authority. The retained 51% (or more) shares would remain state owned and may be privatized to nationals of the Republic of Armenia at a later stage.

³⁸ However we believe that a quality investor would be unlikely to purchase the airline before completion of the restructuring process.





7 ROUTE PROFITABILITY RESULTS, 2000

<u>OPERATING RESULTS, USD</u>	<u>AAQ</u>	<u>AER</u>	<u>ALP</u>	<u>AMS</u>	<u>ASB</u>
REVENUE					
Passenger Revenue	218,278	671,657	456,245	4,323,028	316,869
Cargo Revenue	42	3,104	7,840	378,070	6,549
Excess Baggage Revenue	3,461	5,651	4,466	18,770	3,678
Mail/Courier Revenue	394	889	855	40,496	1,005
Code-Share	189	402	244	4,754	260
Total Operating Revenue	222,364	681,703	469,650	4,765,118	328,361
EXPENSES, VARIABLE					
Fuel/Oil Expense	82,433	159,173	132,712	1,481,002	146,019
Variable Maintenance	12,143	37,581	24,382	763,575	24,075
Landing/Parking Fees	14,477	47,456	36,686	152,953	28,645
Ground Handling	13,356	32,385	78,561	164,758	16,800
Enroute/Overfly Costs	57,936	77,814	72,177	868,601	91,894
Catering	7,826	35,906	11,631	139,329	11,856
Variable Crew Expenses	4,047	5,152	2,697	19,279	4,359
Wet/Dry Leases	7,005	6,000			20,150
Passenger Commissions	7,458	22,950	15,590	147,715	10,827
Pax Liability Insurance	1,959	4,135	2,925	51,820	2,601
Reservations & Marketing	5,300	16,944	6,974	31,980	4,702
Total Variable Expenses	213,940	445,496	384,333	3,821,011	361,928
EXPENSES, FIXED					
Aircraft Operating Leases				674,375	
Fixed Maintenance				449,583	
Depreciation		3,787	378	363,078	
Fixed Crew Expenses	9,971	14,010	8,128	68,857	11,646
Hull/War Insurance	17,755	20,898	10,402	52,050	12,785
Total Fixed Expenses	27,726	38,695	18,908	1,607,944	24,431
TOTAL OVERHEAD	11,852	26,723	25,707	1,217,902	30,223
TOTAL OPERATING EXPENSES	253,519	510,914	428,948	6,646,857	416,583
PROFIT/LOSS (ex-overhead)	(19,303)	197,513	66,409	(663,837)	(57,999)
per roundtrip	(378)	1,995	1,302	(7,903)	(1,137)
PROFIT/LOSS	(31,155)	170,789	40,702	(1,881,739)	(88,222)
per roundtrip	(611)	1,725	798	(22,402)	(1,730)
AVERAGE FARE (ONE-WAY)	82.37	79.28	130.84	270.36	134.78
OPERATING STATISTICS					
Total Passengers	2,650	8,472	3,487	15,990	2,351
Total Enplanements	2,650	8,472	3,487	15,990	2,351
Avg Roundtrips per Week	0.98	1.90	0.98	1.62	0.98
Total Block Hours	286	325	147	736	282
Average Passengers	26	43	34	95	23
Average Seats	38	56	69	187	54
RPKs (millions)	2.09	4.44	2.70	52.53	2.87
ASKs (millions)	3.03	5.76	5.46	103.02	6.70
RTKs (millions)	8.09	19.30	28.82	1,015.17	27.59
ATKs (millions)	66.12	149.09	143.42	6,794.80	168.62
Seat Factor	68.80%	77.07%	49.50%	50.99%	42.87%
Load Factor	12.24%	12.95%	20.09%	14.94%	16.36%
Yield, Cents per RPK	10.46	15.13	16.90	8.23	11.03





OPERATING RESULTS, USD	ATH	BEY	CDG	DXB	FRA
REVENUE					
Passenger Revenue	1,098,731	564,505	5,587,126	2,065,700	3,116,655
Cargo Revenue	28,070	6,445	586,072	519,336	455,144
Excess Baggage Revenue	18,946	11,419	21,877	33,397	13,790
Mail/Courier Revenue	2,923	1,599	46,639	7,496	25,626
Code-Share	919	364	6,314	1,011	3,050
Total Operating Revenue	1,149,589	584,333	6,248,028	2,626,940	3,614,266
EXPENSES, VARIABLE					
Fuel/Oil Expense	404,588	241,205	1,754,919	801,129	956,413
Variable Maintenance	79,632	41,263	915,298	249,256	496,712
Landing/Parking Fees	100,733	40,939	266,295	74,725	136,219
Ground Handling	92,073	61,495	403,277	98,105	320,322
Enroute/Overfly Costs	195,213	93,821	1,011,776	250,350	514,686
Catering	34,007	32,668	278,761	33,288	83,894
Variable Crew Expenses	7,490	3,828	24,241	13,191	12,869
Wet/Dry Leases					
Passenger Commissions	37,543	19,289	190,908	70,583	106,494
Pax Liability Insurance	8,922	4,392	61,922	21,114	34,285
Reservations & Marketing	11,242	7,546	40,882	11,506	22,558
Total Variable Expenses	971,443	546,446	4,948,278	1,623,248	2,684,451
EXPENSES, FIXED					
Aircraft Operating Leases		11,531	717,499		417,098
Fixed Maintenance		7,687	478,333		278,066
Depreciation	3,250	5,847	392,474	40,779	237,540
Fixed Crew Expenses	23,238	11,471	86,374	43,952	46,026
Hull/War Insurance	27,517	14,907	65,875	42,179	34,613
Total Fixed Expenses	54,006	51,444	1,740,555	126,909	1,013,342
TOTAL OVERHEAD	87,915	48,100	1,402,679	225,429	770,709
TOTAL OPERATING EXPENSES	1,113,364	645,990	8,091,512	1,975,586	4,468,502
PROFIT/LOSS (ex-overhead)	124,141	(13,557)	(440,805)	876,783	(83,528)
per roundtrip	1,881	(266)	(4,239)	8,596	(1,369)
PROFIT/LOSS	36,225	(61,657)	(1,843,484)	651,354	(854,236)
per roundtrip	549	(1,209)	(17,726)	6,386	(14,004)
AVERAGE FARE (ONE-WAY)	195.47	149.62	273.33	359.06	276.32
OPERATING STATISTICS					
Total Passengers	5,621	3,773	20,441	5,753	11,279
Total Enplanements	5,621	3,773	20,441	5,753	11,279
Avg Roundtrips per Week	1.27	0.98	2.00	1.96	1.17
Total Block Hours	389	211	931	596	489
Average Passengers	43	37	98	28	92
Average Seats	76	74	177	104	185
RPKs (millions)	10.15	4.03	69.76	11.17	33.70
ASKs (millions)	18.12	8.07	125.87	41.34	67.38
RTKs (millions)	103.15	33.33	1,558.34	1,379.38	1,196.00
ATKs (millions)	490.49	268.36	7,825.69	1,257.69	4,299.86
Seat Factor	56.03%	49.91%	55.43%	27.02%	50.02%
Load Factor	21.03%	12.42%	19.91%	109.68%	27.81%
Yield, Cents per RPK	10.82	14.02	8.01	18.49	9.25





<u>OPERATING RESULTS, USD</u>					
	<u>GOJ</u>	<u>HRK</u>	<u>IEV</u>	<u>IST</u>	<u>KRR</u>
REVENUE					
Passenger Revenue	458,752	36,658	771,380	944,169	669,155
Cargo Revenue	24,918	231	32,439		289
Excess Baggage Revenue	23,428	1,317	17,072	2,484	7,392
Mail/Courier Revenue	1,808	91	1,915	2,832	1,028
Code-Share	617	38	830	895	518
Total Operating Revenue	509,522	38,335	823,636	950,380	678,382
EXPENSES, VARIABLE					
Fuel/Oil Expense	202,266	16,916	269,114	399,216	210,727
Variable Maintenance	48,122	1,965	50,488	68,756	28,969
Landing/Parking Fees	28,553	1,543	43,697	60,827	42,826
Ground Handling	14,889	2,349	26,314	76,938	50,026
Enroute/Overfly Costs	110,625	11,326	147,403	182,864	154,526
Catering	18,624	1,051	29,344	32,195	49,205
Variable Crew Expenses	4,198	556	4,986	8,329	9,363
Wet/Dry Leases		3,930		20,708	21,532
Passenger Commissions	15,675	1,253	26,357	32,262	22,865
Pax Liability Insurance	5,174	177	5,814	7,996	4,398
Reservations & Marketing	7,592	664	11,652	14,934	16,330
Total Variable Expenses	455,717	41,730	615,170	905,024	610,767
EXPENSES, FIXED					
Aircraft Operating Leases					
Fixed Maintenance					
Depreciation	2,943		1,353	14,981	
Fixed Crew Expenses	13,122	1,370	15,398	24,126	23,100
Hull/War Insurance	15,223	1,390	18,462	26,833	39,128
Total Fixed Expenses	31,288	2,760	35,214	65,941	62,228
TOTAL OVERHEAD	54,372	2,724	57,587	85,172	30,916
TOTAL OPERATING EXPENSES	541,377	47,214	707,970	1,056,136	703,911
PROFIT/LOSS (ex-overhead)	22,518	(6,155)	173,253	(20,585)	5,388
per roundtrip	577	(1,026)	3,397	(214)	37
PROFIT/LOSS	(31,854)	(8,879)	115,666	(105,756)	(25,529)
per roundtrip	(817)	(1,480)	2,268	(1,102)	(175)
AVERAGE FARE (ONE-WAY)	120.85	110.42	132.40	126.45	81.95
OPERATING STATISTICS					
Total Passengers	3,796	332	5,826	7,467	8,165
Total Enplanements	3,796	332	5,826	7,467	8,165
Avg Roundtrips per Week	0.75	0.12	0.98	1.85	2.81
Total Block Hours	215	39	261	483	661
Average Passengers	49	28	57	39	28
Average Seats	79	42	75	69	38
RPKs (millions)	6.81	0.42	9.17	9.89	5.72
ASKs (millions)	11.03	0.64	11.97	17.52	7.83
RTKs (millions)	93.17	2.70	107.89	17.67	19.80
ATKs (millions)	303.35	15.20	321.28	475.18	172.49
Seat Factor	61.78%	65.87%	76.58%	56.47%	73.07%
Load Factor	30.71%	17.75%	33.58%	3.72%	11.48%
Yield, Cents per RPK	6.73	8.72	8.42	9.55	11.69





<u>OPERATING RESULTS, USD</u>	<u>KUF</u>	<u>LCA</u>	<u>LED</u>	<u>MRV</u>	<u>ROV</u>
REVENUE					
Passenger Revenue	914,535	328,750	1,117,940	530,968	748,586
Cargo Revenue	19,530	70	33,267	411	3,436
Excess Baggage Revenue	37,873	2,027	47,544	3,176	13,427
Mail/Courier Revenue	2,991	776	5,106	644	1,451
Code-Share	1,087	231	1,686	311	744
Total Operating Revenue	976,015	331,855	1,205,543	535,510	767,644
EXPENSES, VARIABLE					
Fuel/Oil Expense	297,662	114,211	443,860	128,112	219,036
Variable Maintenance	108,017	20,862	171,304	18,469	38,041
Landing/Parking Fees	41,568	12,224	70,326	35,842	46,295
Ground Handling	25,482	18,817	77,938	58,732	60,751
Enroute/Overfly Costs	147,406	52,490	223,954	95,778	177,077
Catering	35,073	16,191	60,710	44,842	56,455
Variable Crew Expenses	5,640	3,329	7,739	5,909	9,037
Wet/Dry Leases		18,414		1,192	18,704
Passenger Commissions	31,249	11,233	38,199	18,143	25,579
Pax Liability Insurance	9,099	1,886	13,629	3,415	5,133
Reservations & Marketing	15,932	4,548	15,556	14,830	18,710
Total Variable Expenses	717,128	274,205	1,123,216	425,263	674,817
EXPENSES, FIXED					
Aircraft Operating Leases					
Fixed Maintenance					
Depreciation	17,901	1,587	31,985	3,521	863
Fixed Crew Expenses	18,831	8,775	26,483	14,694	23,079
Hull/War Insurance	17,949	8,944	23,302	28,834	36,877
Total Fixed Expenses	54,681	19,305	81,769	47,049	60,819
TOTAL OVERHEAD	89,952	23,329	153,572	19,365	43,637
TOTAL OPERATING EXPENSES	861,761	316,839	1,358,558	491,677	779,273
PROFIT/LOSS (ex-overhead)	204,206	38,344	558	63,198	32,008
per roundtrip	3,927	913	11	455	241
PROFIT/LOSS	114,254	15,016	(153,015)	43,833	(11,630)
per roundtrip	2,197	358	(3,123)	315	(87)
AVERAGE FARE (ONE-WAY)	114.80	144.57	143.73	71.61	80.02
OPERATING STATISTICS					
Total Passengers	7,966	2,274	7,778	7,415	9,355
Total Enplanements	7,966	2,274	7,778	7,415	9,355
Avg Roundtrips per Week	1.00	0.81	0.94	2.67	2.56
Total Block Hours	254	219	329	414	615
Average Passengers	77	27	79	27	35
Average Seats	105	53	116	38	44
RPKs (millions)	12.01	2.56	18.63	3.43	8.22
ASKs (millions)	16.47	5.02	27.33	4.94	10.37
RTKs (millions)	93.45	7.73	141.94	11.72	35.03
ATKs (millions)	501.85	130.15	856.80	108.04	243.46
Seat Factor	72.95%	50.94%	68.16%	69.51%	79.23%
Load Factor	18.62%	5.94%	16.57%	10.85%	14.39%
Yield, Cents per RPK	7.61	12.86	6.00	15.46	9.11





<u>OPERATING RESULTS, USD</u>	<u>SIPODS</u>	<u>STW</u>	<u>SVXOV6</u>	<u>TAS</u>	<u>THR</u>
REVENUE					
Passenger Revenue	922,224	351,881	1,391,111	745,828	502,264
Cargo Revenue	9,608	1,016	25,188	15,393	1,269
Excess Baggage Revenue	19,424	6,985	45,103	24,098	1,417
Mail/Courier Revenue	4,178	578	13,022	2,343	1,570
Code-Share	833	265	2,261	718	396
Total Operating Revenue	956,266	360,725	1,476,685	788,382	506,916
EXPENSES, VARIABLE					
Fuel/Oil Expense	573,618	86,538	973,350	291,178	197,540
Variable Maintenance	153,484	13,985	475,514	54,885	43,187
Landing/Parking Fees	207,337	30,534	192,776	34,082	57,640
Ground Handling	67,785	30,944	36,912	17,273	108,929
Enroute/Overfly Costs	324,277	87,636	668,360	148,406	49,881
Catering	37,103	30,568	73,999	25,835	28,095
Variable Crew Expenses	10,217	4,371	17,530	6,169	4,064
Wet/Dry Leases	2,804	2,664		2,922	876
Passenger Commissions	31,512	12,024	47,533	25,484	17,162
Pax Liability Insurance	14,186	2,352	36,046	6,603	5,064
Reservations & Marketing	15,710	10,116	16,938	7,606	11,234
Total Variable Expenses	1,438,033	311,731	2,538,959	620,443	523,670
EXPENSES, FIXED					
Aircraft Operating Leases			11,658		9,142
Fixed Maintenance			7,772		6,095
Depreciation	19,592	321	120,060		13,506
Fixed Crew Expenses	32,769	10,831	62,526	18,659	12,365
Hull/War Insurance	34,323	20,784	47,510	22,626	15,124
Total Fixed Expenses	86,684	31,935	249,526	41,286	56,231
TOTAL OVERHEAD	125,654	17,369	391,636	70,480	47,229
TOTAL OPERATING EXPENSES	1,650,372	361,036	3,180,121	732,209	627,130
PROFIT/LOSS (ex-overhead)	(568,451)	17,058	(1,311,800)	126,653	(72,986)
per roundtrip	(5,573)	164	(20,497)	2,483	(1,106)
PROFIT/LOSS	(694,105)	(311)	(1,703,436)	56,172	(120,215)
per roundtrip	(6,805)	(3)	(26,616)	1,101	(1,821)
AVERAGE FARE (ONE-WAY)	117.41	69.57	164.26	196.12	89.42
OPERATING STATISTICS					
Total Passengers	7,855	5,058	8,469	3,803	5,617
Total Enplanements	12,223	5,058	13,065	3,803	5,617
Avg Roundtrips per Week	1.96	2.00	1.23	0.98	1.27
Total Block Hours	499	307	672	335	218
Average Passengers	39	24	66	37	43
Average Seats	90	37	142	70	79
RPKs (millions)	9.20	2.93	24.98	7.94	4.37
ASKs (millions)	24.06	4.51	65.07	14.95	8.16
RTKs (millions)	74.36	16.18	160.68	73.89	10.75
ATKs (millions)	701.04	96.91	2,184.98	393.22	263.50
Seat Factor	38.24%	64.95%	38.39%	53.08%	53.62%
Load Factor	10.61%	16.70%	7.35%	18.79%	4.08%
Yield, Cents per RPK	10.02	12.02	5.57	9.40	11.48





<u>OPERATING RESULTS, USD</u>	<u>VKO</u>	<u>VOG</u>	<u>Grand Total</u>
REVENUE			
Passenger Revenue	15,378,289	408,964	44,740,434
Cargo Revenue	1,008,944	2,332	3,169,218
Excess Baggage Revenue	645,752	9,730	1,050,339
Mail/Courier Revenue	65,129	875	234,660
Code-Share	19,716	375	49,176
Total Operating Revenue	17,117,830	422,277	49,243,826
EXPENSES, VARIABLE			
Fuel/Oil Expense	3,743,138	122,917	14,484,513
Variable Maintenance	1,487,249	23,848	5,462,783
Landing/Parking Fees	728,463	31,896	2,571,970
Ground Handling	342,793	20,021	2,324,114
Enroute/Overfly Costs	1,574,025	75,830	7,489,770
Catering	695,646	16,192	1,927,240
Variable Crew Expenses	56,401	3,687	259,509
Wet/Dry Leases		10,062	138,499
Passenger Commissions	525,465	13,974	1,528,748
Pax Liability Insurance	160,151	2,741	478,958
Reservations & Marketing	243,216	8,712	596,130
Total Variable Expenses	9,556,549	329,880	37,262,233
EXPENSES, FIXED			
Aircraft Operating Leases	318,696		2,160,000
Fixed Maintenance	212,464		1,440,000
Depreciation	1,364,174	443	2,642,055
Fixed Crew Expenses	209,654	10,151	852,167
Hull/War Insurance	135,240	12,662	806,735
Total Fixed Expenses	2,240,229	23,256	7,900,957
TOTAL OVERHEAD	1,958,752	26,327	7,057,374
TOTAL OPERATING EXPENSES	13,755,531	379,463	52,220,564
PROFIT/LOSS (ex-overhead)	5,321,051	69,140	4,080,636
per roundtrip	13,785	1,330	1,768
PROFIT/LOSS	3,362,299	42,813	(2,976,738)
per roundtrip	8,711	823	(1,290)
AVERAGE FARE (ONE-WAY)	126.46	93.89	150.10
OPERATING STATISTICS			
Total Passengers	121,608	4,356	298,065
Total Enplanements	121,608	4,356	307,029
Avg Roundtrips per Week	7.42	1.00	44
Total Block Hours	1,912	229	12,098
Average Passengers	158	42	65
Average Seats	199	58	102
RPKs (millions)	217.83	4.15	543
ASKs (millions)	274.61	5.75	897
RTKs (millions)	3,239.94	20.72	9,505
ATKs (millions)	10,928.08	146.88	39,374
Seat Factor	79.32%	72.17%	60.56%
Load Factor	29.65%	14.10%	24.14%
Yield, Cents per RPK	7.06	9.86	8.23





8 GLOSSARY OF TERMS

ASK	Available-seat-kilometer, or the total number of seats available on a route over a fixed period of time multiplied by the distance of the route. RPK divided by ASK results in seat factor of the route.
ATK	Available-tonne-kilometers, or the total available cargo tonnage flown on a route over a fixed period of time multiplied by the distance of the route. RTK divided by ATK results in load factor of the route.
BSP	Billing and Settlement Plan – IATA plans that are established in many countries worldwide to simplify and centralize ticket stock distribution, agents' reporting and transfer of sale proceeds.
CASK	Cost per ASK.
Confidential fare	Fares marketed by an airline only through its agents in a specific territory. These fares are not officially published through distribution systems and are distributed to the sales agents directly. Confidential fares are also known as "cut" or "market" fares.
Code-share	Agreement between two or more airlines by which they agree that a flight operated by one of them will be announced and marketed as if it was operated by each of them separately. The airline operating a code-share flight is usually referred as operating partner, and the other airline(s) are referred as marketing partner(s).
EBIT	Earnings before interest and tax.
EBITDA	Earnings before interest, tax and depreciation.
EBITDAR	Earnings before interest, tax, depreciation and aircraft operating leases.
Fifth-freedom traffic	Traffic carried from A to B on the same flight, where there are no stops between A and B in the home country of the airline. For example, Singapore Airlines has 5 th -freedom traffic rights on the route Singapore-Frankfurt-JFK from Frankfurt to JFK. Armenian Airlines operates Yerevan-Simferopol-Odessa, but does not have traffic rights Simferopol-Odessa.
GDCA	General Department of Civil Aviation of the Republic of Armenia. The regulatory authority for civil aviation.
GDS	Global Distribution System also known as computer reservation systems.
GoA	Government of Armenia.
GSA	General Sales Agent – agents that have exclusive rights to market the airline they represent in a certain territory. A GSA would normally operate through a subagent network.
IATA	International Air Transport Association.
ICAO	International Civil Aviation Organization.
Interline Agreement	A form of agreement signed between airlines, by which airlines agree to accept each other's transportation documents, including air tickets, excess baggage tickets, air waybills, etc.





MPA	Multilateral Proration Agreement – a standard agreement that describes how the amount of a single tariff is distributed among the various airlines that participate in the transportation of a passenger, his excess baggage or cargo. Airlines participate in this agreement by agreeing to its terms.
MITA	Multilateral Interline Traffic Agreement – a standard interline agreement. Two airlines party to this agreement can concur to establish interline relations.
Published fares	Fares published by the airlines in global distribution systems.
RASK	Revenue per ASK
RPK	Revenue-seat-kilometer, or the total number of passengers flown on a route over a fixed period of time multiplied by the distance of the route. If Yerevan-Paris passenger boardings in 2000 were equal to Yerevan-Vnukovo passenger boardings, RPK's for Yerevan-Paris would be higher because of distance.
RTK	Revenue-tonne-kilometers, or the total number of cargo tonnage flown on a route over a fixed period of time multiplied by the distance of the route.
Sixth-freedom traffic	Traffic carried from A to C on the same flight or on different flights where there is an intermediate point B in the home country of the airline. For example, Armenian Airlines should pursue 6 th -freedom traffic from St. Petersburg to Dubai which connects at Yerevan.
TCAS	Traffic Alert and Collision Avoidance System. Special autonomous equipment on board aircraft that monitors traffic in proximity of aircraft and prevents aircraft from colliding.
Throughfares	Special fares offered by one airline for transit passage from the origin to final destination via one or more transit points. Throughfares are normally lower than the sum of individual fares for each segment of travel.





9 ANNEXES

9.1. Route Licenses

See table overleaf.



ARMENIAN AIRLINES' ROUTE LICENSES AS AT MAY 01, 2001

#	Origin	Destination	Type of Flight	Weekly Frequency		Aircraft types						Effective date	Expiry Date	Date of Issue	
				Granted	Operated	ILW	310	TU5	TU3	YK4	AN4				
001	EVN	ATH	Athens	Reg / Pax	2	1	+	+	+	+			01/01/01	31/12/01	26/12/00
002	EVN	AMS	Amsterdam	Reg / Pax	3	2	+	+	+	+			01/01/01	31/12/01	26/12/00
003	EVN	ASB	Ashkhabad	Reg / Pax	3	1					+	+	01/01/01	31/12/01	26/12/00
004	EVN	BEY	Beirut	Reg / Pax	2	1	+	+	+	+			01/01/01	31/12/01	26/12/00
005	EVN	DXB	Dubai	Reg / Pax	3	2	+	+	+	+			01/01/01	31/12/01	26/12/00
006	EVN	TBS	Tbilisi	Reg / Pax	7	0					+	+	01/01/01	31/12/01	26/12/00
007	EVN	SVX	Ekaterinburg	Reg / Pax	1	1	+	+	+	+			01/01/01	31/12/01	26/12/00
008	EVN	THR	Tehran	Reg / Pax	3	1	+	+	+	+	+	+	01/01/01	31/12/01	26/12/00
009	EVN	IEV	Kiev	Reg / Pax	2	1	+	+	+	+			01/01/01	31/12/01	26/12/00
010	EVN	ALP	Aleppo	Reg / Pax	3	1	+	+	+	+			01/01/01	31/12/01	26/12/00
011	EVN	MSQ	Minsk	Reg / Pax	1	0		+	+	+			01/01/01	31/12/01	26/12/00
012	EVN	MOW	Moscow	Reg / Pax	11	7	+	+	+	+			01/01/01	31/12/01	26/12/00
013	EVN	GOJ	N. Novgorod	Reg / Pax	1	1	+	+	+	+			01/01/01	31/12/01	26/12/00
014	EVN	OVB	Novosibirsk	Reg / Pax	1	1	+	+	+				01/01/01	31/12/01	26/12/00
015	EVN	KUF	Samara	Reg / Pax	2	1	+	+	+	+			01/01/01	31/12/01	26/12/00
016	EVN	SIP	Simferopol	Reg / Pax	2	1	+	+	+	+	+	+	01/01/01	31/12/01	26/12/00
017	EVN	LED	St. Peterburg	Reg / Pax	2	1	+	+	+	+			01/01/01	31/12/01	26/12/00
018	EVN	AER	Sochi	Reg / Pax	5	3	+	+	+	+	+	+	01/01/01	31/12/01	26/12/00
019	EVN	SOF	Sofia	Reg / Pax	2	0		+	+	+	+		01/01/01	31/12/01	26/12/00
020	EVN	IST	Istanbul	Reg / Pax	3	2	+	+	+	+	+	+	01/01/01	31/12/01	26/12/00
021	EVN	VOG	Volgograd	Reg / Pax	3	1			+	+	+	+	01/01/01	31/12/01	26/12/00
022	EVN	TAS	Tashkent	Reg / Pax	2	1		+	+	+			01/01/01	31/12/01	26/12/00
023	EVN	PAR	Paris	Reg / Pax	3	2	+	+	+				01/01/01	31/12/01	26/12/00
024	EVN	ODS	Odessa	Reg / Pax	2	1	+	+	+	+			01/01/01	31/12/01	26/12/00
025	EVN	FRA	Frankfurt	Reg / Pax	2	1		+	+	+			01/01/01	31/12/01	26/12/00
026	EVN	SVX / OVB	Ekaterinburg / Novosibirsk	Reg / Pax	1		+	+	+				01/01/01	31/12/01	26/12/00
027	EVN	LCA	Larnaca	Reg / Pax	3	1		+	+	+	+	+	01/01/01	31/12/01	26/12/00
028	EVN	MRV	Min. Vody	Reg / Pax	5	4	+	+	+	+	+	+	01/01/01	31/12/01	26/12/00
029	EVN	ROV	Rostov	Reg / Pax	5	2	+	+	+	+	+	+	01/01/01	31/12/01	26/12/00
030	EVN	SIP / ODS	Simferopol / Odessa	Reg / Pax	2		+	+	+	+	+	+	21/02/01	31/12/01	26/12/00
031	EVN	BOJ	Bourgas	Reg / Pax	2	0		+	+	+	+	+	01/01/01	31/12/01	26/12/00
032	EVN	TLV	Tel Aviv	Reg / Pax	2	0		+	+	+	+	+	01/01/01	31/12/01	26/12/00
033	EVN	HRK	Kharkov	Reg / Pax	3	1		+	+	+	+	+	01/01/01	31/12/01	26/12/00
034	EVN	KRR	Krasnodar	Reg / Pax	5	4	+	+	+	+	+	+	01/01/01	31/12/01	26/12/00
035	EVN	RTW	Saratov	Reg / Pax	3	0			+	+	+	+	01/01/01	31/12/01	26/12/00
036	EVN	DOK	Donetsk	Reg / Pax	1	0			+	+	+	+	01/01/01	31/12/01	26/12/00
037	EVN	TBZ	Tabriz	Reg / Pax	2	1			+	+	+	+	01/01/01	31/12/01	26/12/00
038	EVN	OZH	Zaporozhye	Reg / Pax	1	0			+	+	+	+	01/01/01	31/12/01	26/12/00
039	EVN	LWO	Lvov	Reg / Pax	1	0			+	+	+	+	01/01/01	31/12/01	26/12/00
040	LWN	MOW	Moscow	Reg / Pax	2		+	+	+	+			01/01/01	31/12/01	26/12/00
041	LWN	KUF	Samara	Reg / Pax	1			+	+	+	+	+	01/01/01	31/12/01	26/12/00
042	LWN	ROV	Rostov	Reg / Pax	2			+	+	+	+	+	01/01/01	31/12/01	26/12/00
043	LWN	KRR	Krasnodar	Reg / Pax	2			+	+	+	+	+	01/01/01	31/12/01	26/12/00
044	LWN	AER	Sochi	Reg / Pax	2			+	+	+	+	+	01/01/01	31/12/01	26/12/00
045	EVN	MRS	Marseille	Reg / Pax	2	0	+	+	+				01/01/01	31/12/01	26/12/00
046	EVN	LON	London	Reg / Pax	3	0	+	+	+				01/01/01	31/12/01	26/12/00
047	LWN	MRV	Min. Vody	Reg / Pax	2			+	+	+	+	+	01/01/01	31/12/01	26/12/00
048	EVN	VSG	Lugansk	Reg / Pax	1	0			+	+	+	+	01/01/01	31/12/01	26/12/00
049	EVN	Maikop	Maikop (RF)	Reg / Pax	1	0				+	+	+	01/01/01	31/12/01	26/12/00
050	EVN	CEK	Chelyabinsk	Reg / Pax	1	0	+	+	+				01/01/01	31/12/01	26/12/00
051	EVN	VOZ	Voronezh	Reg / Pax	1	0				+	+	+	01/01/01	31/12/01	26/12/00
052	EVN	ZRH*	Zurich	Reg / Pax	3	2	+	+	+				01/01/01	31/12/01	26/12/00
053	EVN	VIE*	Vienna	Reg / Pax	2	3	+	+	+				01/01/01	31/12/01	26/12/00
054	EVN	DEL	Delhi	Reg / Pax	3	0	+	+	+				01/01/01	31/12/01	26/12/00
055	EVN	ASF	Astrakhan	Reg / Pax	2	0			+	+	+	+	01/01/01	31/12/01	26/12/00
056	EVN	REN	Orenburg	Reg / Pax	1	0			+	+	+	+	01/01/01	31/12/01	26/12/00
057	EVN	UFA	Ufa	Reg / Pax	1	0	+	+	+	+			01/01/01	31/12/01	26/12/00
058	LWN	GOJ	N. Novgorod	Reg / Pax	1			+	+	+	+	+	01/01/01	31/12/01	26/12/00
059	EVN	STW	Satropol	Reg / Pax	3	3		+	+	+	+	+	08/02/01	31/12/01	08/02/01
060	EVN	AAQ	Anapa	Reg / Pax	3	1		+	+	+	+	+	08/02/01	31/12/01	08/02/01
061	LWN	STW	Stavropol	Reg / Pax	1				+	+			06/05/01	31/12/01	05/05/01

Abbreviations:

ILW	Ilyushin-86	EVN	Yerevan
310	Airbus 310	LWN	Gyumri
TU5	Tupolev-154		
TU3	Tupolev-134	Reg	Regular
YK4	Yakovlev-40	Pax	Passenger
AN4	Antonov-24		

* Code-share flights operated by a foreign carrier.

Note:

Most frequently operated equipment for each destination is shadowed.

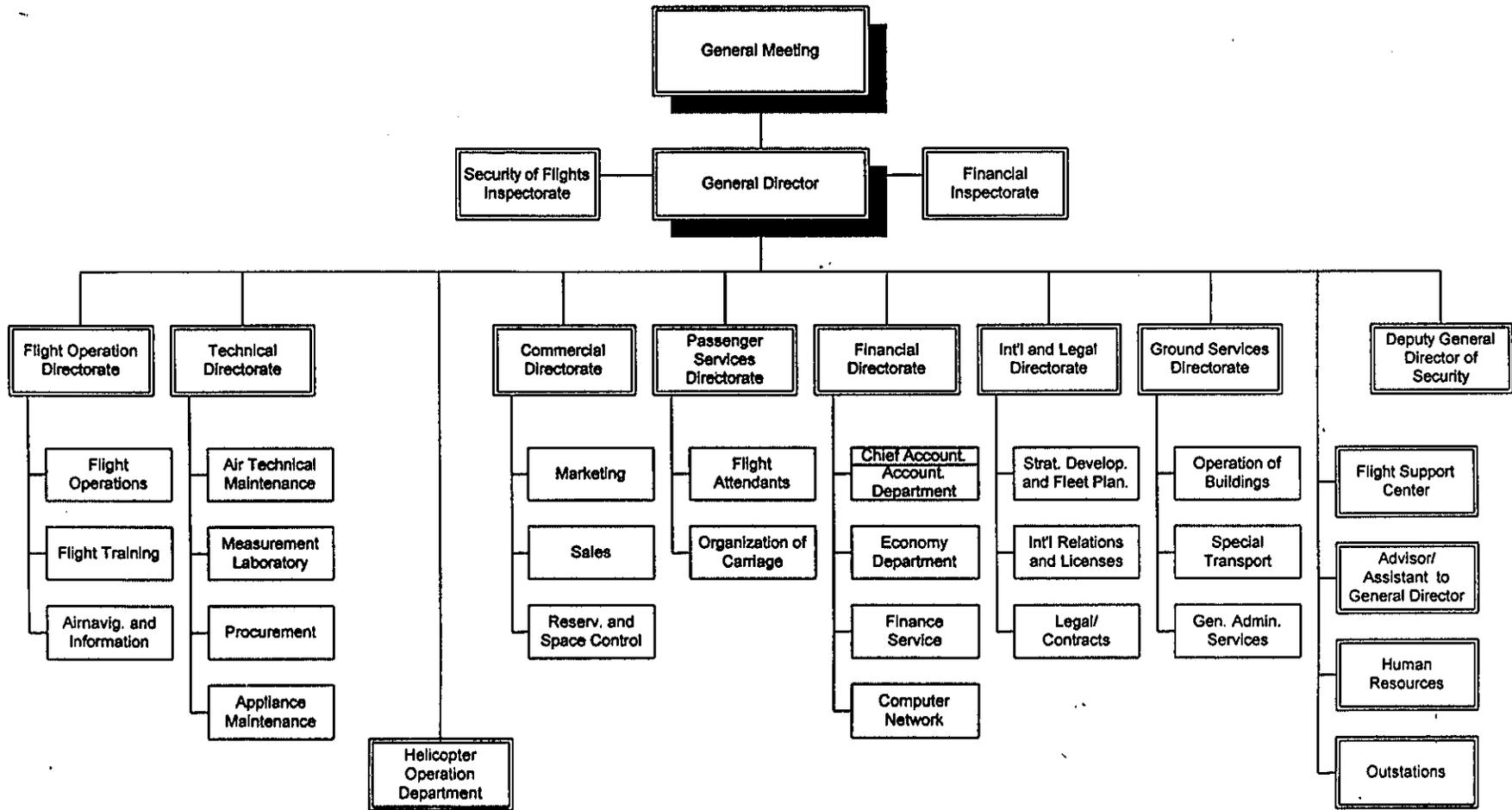
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9.2. Armenian Airlines Organizational Chart (2001)

See table overleaf.





9/a



9.3. Armenian Airlines Personnel (Summer 2001)

STAFFING OF ARMENIAN AIRLINES AS PER APPROVED PAYROLL			
##	DESCRIPTION	EMPLOYEES	NOTES
1	Management Team	11	
2	Commercial Directorate	45	
	Marketing	13	
	Sales (incl. Town Office)	23	
	Reservations and Space Control	9	
3	International Relations and Legal Directorate	13	
	Legal/Contracts	9	
	Strategic Development and Fleet Planning	2	(A)
	International Relations and Licenses	2	
4	Finance and Economy Directorate	102	
	Chief Accountant	1	
	Accounting	74	
	Economy	9	
	Finance	10	
	Computer Networking	8	(B)
5	Flight Operation Directorate	322	
	Administration	8	
	Navigation Group	3	
	Engineering Group	5	
	IL-86 and A310 Escadrille	38	
	Tu-154 Escadrille	100	
	Tu-134 and An-24 Escadrille	87	
	Yak-40 Escadrille	81	
6	Flight Support Center	17	
	Administration	1	
	Charter Flights	4	
	Flights Support	5	
	Operations	8	
7	Helicopter Operation Dept.	71	
8	Technical Directorate	377	
	Air Technical Maintenance	273	
	Procurement	18	
	Measurement Laboratory	8	
	Appliance Maintenance	78	
9	Ground Services Directorate	187	
	Operation of Buildings	49	(C)
	Special Transport	126	
	General Administrative Services	12	(D)





STAFFING OF ARMENIAN AIRLINES AS PER APPROVED PAYROLL (continued from previous page)			
##	DESCRIPTION	EMPLOYEES	NOTES
10	Passenger Services Directorate	283	
	Administration	10	(E)
	Organization of Carriage	148	(F)
	Flight Attendants	125	
11	Human Resource Dept.	8	
12	Flight Safety Inspection	15	
13	Financial Inspection	5	
TOTAL NUMBER OF EMPLOYEES		1 456	(G)

NOTES:

- (A) Strategic Development and Fleet Planning should be placed within the Commercial Directorate.
- (B) As part of the Financial Department, the Computer Networking Dept has limited responsibility for broader IT related issues.
- (C) This figure includes staff of Armenian Airlines' Tsaghkadzor and Sevan Resorts.
- (D) It is inappropriate for the General Administrative Support Team to be in the Ground Services Directorate.
- (E) There are five Cargo Managers in this department and it is not clear why they are part of the Passenger Services Directorate.
- (F) This department actually provides what is normally called "ground handling services" and logically should be part of the Ground Services Directorate.
- (G) Reportedly about 150 people are employed beyond this schedule.





9.4. Interline and Special Prorate Agreements

ARMENIAN AIRLINES' INTERLINE AND SPECIAL PRORATE AGREEMENTS WITH OTHER CARRIERS AS AT APRIL 01, 2001

NN	Name of Carrier	Code	Numeric	Country	Type	PAX	CGO	SPA
1	AIR FRANCE	AF	057	France	BN	+	+	P
2	DEUTSCHE BAHN (RAILWAY)			Germany	BN	+		R
3	AEROFLOT	SU	555	Russia	B	+		
4	BRITISH AIRWAYS	BA	125	U.K.	B	+	-	
5	DELTA AIRLINES	DL	006	USA	B	+	-	P
6	DEUTSCHE LUFTHANSA	LH	220	Germany	B	+	n/a	P
7	SAHARA AIRLINES	S2	705	India	B	+	+	P
8	UNITED AIR LINES	UA	016	USA	B	+	-	P
9	UZBEKISTAN AIRWAYS	HY	250	Uzbekistan	B	+	-	P
10	ADRIA AIRWAYS	JP	165	Slovenia	M	+	+	
11	AER LINGUS	EI	053	Ireland	M	+	+	
12	AERO ZAMBIA	Z9	509	Zambia	M	+	+	
13	AEROLINEAS ARGENTINAS	AR	044	Argentina	M	+	-	
14	AEROLINEAS CENTRALES DE COLOMBIA (ACES)	VX	137	Colombia	M	+	n/a	
15	AEROMAR AIRLINES	BQ	926	USA	M	+	+	
16	AEROPOSTAL ALAS DE VENEZUELA	VH*	152	Venezuela	M	+	-	
17	AEROSERVICIOS CARA BOBO, ASERCA	R7	717	Venezuela	M	+	-	
18	AEROSWIT AIRLINES	VV	870	Ukraine	M	+	+	
19	AEROVIAS DE MEXICO (AEROMEXICO)	AM	139	Mexico	M	+	-	
20	AEROVIAS NACIONALES DE COLOMBIA (AVIANCA)	AV	134	Colombia	M	+	+	
21	AIR AFRIQUE	RK	092	Ivory Coast	M	+	+	
22	AIR ALGERIE	AH	124	Algeria	M	-	+	
23	AIR BOTSWANA	BP	636	Botswana	M	+	+	
24	AIR CALEDONIE	SB	063	Caledonia	M	+	+	
25	AIR CANADA	AC	014	Canada	M	+	+	P
26	AIR CHINA	CA	999	China	M	+	+	
27	AIR EUROPA	UX	996	Spain	M	+	n/a	
28	AIR INDIA	AI	098	India	M	+	+	P
29	AIR LIBERTE	IJ	718	France	M	+	-	
30	AIR MACAU	NX	675	Macao	M	+	+	
31	AIR MALAWI	QM	167	Malawi	M	+	+	
32	AIR MALDIVES	L6	900	Maldives	M	+	+	
33	AIR MALTA	KM	643	Malta	M	+	+	
34	AIR MAURITIUS	MK	029	Mauritius	M	+	+	
35	AIR MOLDOVA	RM	283	Moldavia	M	+	+	
36	AIR NAMIBIA	SW	186	Namibia	M	+	+	
37	AIR NEVADA	LW	568	Hawaii	M	+	n/a	





NN	Name of Carrier	Code	Numeric	Country	Type	PAX	CGO	SPA
38	AIR NEW ZEALAND	NZ	086	New Zealand	M	+	-	P
39	AIR NIUGINI	PX	656	New Guinea	M	+	+	
40	AIR OSTRAVA	8K	183	Czech	M	+	-	
41	AIR SEYCHELLES	HM	061	Seychelles	M	+	+	
42	AIR TAHITI	VT	135	Polynesia	M	+	n/a	
43	AIR TANZANIA	TC	197	Tanzania	M	+	+	
44	AIR UK LTD. DBA KLM	UK	130	UK	M	+	+	
45	AIR UKRAINE	6U	891	Ukraine	M	+	+	
46	AIR VANUATU	NF	218	Vanuatu	M	+	+	
47	AIRLANKA (SRI LANKAN)	UL	603	Sri Lanka	M	+	+	
48	ALBANIAN AIRLINES	LV	639	Albania	M	+	+	
49	ALITALIA	AZ	055	Italy	M	+	+	
50	ALL NIPPON AIRWAYS	NH	205	Japan	M	+	+	
51	ALOHA AIRLINES	AQ	327	USA	M	+	+	
52	AMERICA WEST	HP	401	USA	M	+	-	
53	AMERICAN AIRLINES	AA	001	USA	M	-	+	
54	AMERICAN TRANS AIR	TZ	366	USA	M	+	-	
55	ANGEL AIRLINES	8G	958	Thailand	M	+	+	
56	ANSETT AUSTRALIA	AN	090	Australia	M	+	+	
57	AOM-MINERVE	IW	646	France	M	+	-	
58	ARIAN AFGAN AIRLINES	FG	255	India	M	+	+	
59	ARKIA-ISRAELI	IZ	238	Israel	M	+	n/a	
60	ASIANA AIRLINES	OZ	988	Korea	M	+	+	
61	AUSTRALIAN AIR EXP.	XM*	524	Australia	M	n/a	+	
62	AUSTRIAN AIRLINES	OS	257	Austria	M	+	-	
63	AVIATECA	GU	240	USA	M	+	+	
64	AXON AIRLINES	XN	304	Greece	M	+	+	
65	AZZURA AIR	ZS	864	Italy	M	+	-	
66	BAHAMASAIR HOLDINGS	UP	111	Bahamas	M	+	-	
67	BALKAN BULGARIAN A/L	LZ	196	Bulgaria	M	+	+	
68	BELLVIEW AIRLINES	B3	208	Nigeria	M	+	+	
69	BIMAN BANGLADESH	BG	997	Bangladesh	M	+	+	
70	BRAATHENS ASA	BU	154	Norway	M	+	+	
71	BRITISH MEDITERRAN.	KJ	436	UK	M	+	+	
72	BRITISH MIDLAND	BD	236	England	M	+	-	P
73	CAMEROON AIRLINES	UY	604	Cameroon	M	+	+	
74	CHALLENGE AIR CARGO	WE	307	USA	M	n/a	+	
75	CHINA EASTERN	MU	781	China	M	+	-	
76	CHINA NORTHERN	CJ	782	China	M	+	-	
77	CHINA NORTHWEST	WH	783	China	M	+	+	
78	CHINA SOUTHWEST	SZ	785	China	M	+	-	
79	CROATIA AIRLINES	OU	831	Croatia	M	+	+	
80	CROSSAIR	LX	724	Switzerland	M	+	-	





NN	Name of Carrier	Code	Numeric	Country	Type	PAX	CGO	SPA
81	CSA CZECH AIRLINES	OK	064	Czech	M	+	+	
82	CUBANA DE AVIACION	CU	136	Cuba	M	+	+	
83	CYPRUS AIRWAYS	CY	048	Cyprus	M	+	-	
84	DEUTSCHE BA	DI	944	Germany	M	+	-	
85	DNIEPROAVIA AVIATION	Z6	181	Ukraine	M	+	+	
86	DRAGONAIR	KA	043	Hong Kong	M	+	+	
87	ECUATORIANA DE AVIAC.	EU	341	Ecuador	M	+	+	
88	EGYPTAIR	MS	077	Egypt	M	+	+	
89	EL AL ISRAEL	LY	114	Israel	M	+	-	
90	ESTONIAN AIR	OV	960	Estonia	M	+	+	
91	ETHIOPIAN AIRLINES	ET	071	Ethiopia	M	+	+	
92	EUROWINGS AG	EW	104	Germany	M	+	-	P
93	EVA AIRWAYS CORP.	BR	695	Taiwan	M	+	+	
94	FINNAIR OY	AY	105	Finland	M	+	+	
95	FLIGHT WEST AIRLINES	YC	060	Australia	M	+	-	
96	FRONTIER AIRLINES	F9	422	USA	M	+	n/a	
97	GARUDA INDONESIA	GA	126	Indonesia	M	+	-	
98	GHANA AIRWAYS CORP.	GH	237	Ghana	M	+	+	
99	GILL AVIATION LTD.	9C	786	UK	M	+	n/a	
100	GULF AIR	GF	072	Bahrain	M	+	+	
101	HELI AIR MONACO	YO	747	Monaco	M	+	n/a	
102	INTER-AVIATION	D6	625	South Africa	M	+	n/a	
103	INTERIMPEX-AVIOIMPEX	M4	743	Macedonia	M	+	-	
104	IRAN AIR	IR	096	Iran	M	+	+	
105	JAPAN AIRLINES	JL	131	Japan	M	+	-	
106	JERSEY EUROPEAN	JY	267	UK	M	n/a	+	
107	JET AIRWAYS (INDIA)	9W	589	India	M	+	+	
108	JUGOSLOVENSKI AEROTRANSPORT (JAT)	JU	115	Yugoslavia	M	+	+	
109	KENYA AIRWAYS	KQ	706	Kenya	M	+	+	
110	KLM ROYAL DUTCH A/L	KL	074	Holland	M	+	-	P
111	KOREAN AIRLINES	KE	180	Korea	M	+	+	
112	KUWAIT AIRWAYS CORP.	KU	229	Kuwait	M	+	+	
113	LAM - LINHAS AEREAS DE MOCAMBIQUE.	TM	068	Mozambique	M	+	-	
114	LAUDA AIR	NG	231	Austria	M	+	-	
115	LINEA AEREA NACIONAL-CHILE, LAN-CHILE	LA	045	Chile	M	+	+	
116	LINEAS AEREAS COST-ARRICENSES (LACSA)	LR	133	USA	M	+	+	
117	LITHUANIAN AIRLINES	TE	874	Lithuania	M	+	+	C
118	LLOYD AEREO BOLIV.	LB	051	Bolivia	M	+	+	
119	LTU INTERNATIONAL	LT	266	Germany	M	+	+	
120	LUXAIR	LG	149	Luxembourg	M	+	+	
121	MAERSK AIR	DM	349	Denmark	M	+	-	
122	MALAYSIAN AIRLINE	MH	232	Malaysia	M	+	+	
123	MALEV	MA	182	Hungary	M	+	-	





NN	Name of Carrier	Code	Numeric	Country	Type	PAX	CGO	SPA
124	MANDARIN AIRLINES	AE	803	Taiwan	M	+	+	
125	MARTINAIR HOLLAND	MP	129	Netherlands	M	+	n/a	
126	MIDDLE EAST AIRLINES - AIRLIBAN	ME	076	Lebanon	M	+	+	
127	MIDWAY AIRLINES	JI	878	USA	M	+	n/a	
128	MIDWEST EXPRESS	YX	453	USA	M	+	+	
129	MOLDAVIAN AIRLINES	2M	860	Moldova	M	+	-	
130	NATIONAL AIRLINES	N7	007	USA	M	+	+	
131	NICARAGUENSE DE AVUACION, (NICA)	6Y	930	USA	M	+	+	
132	NIPPON CARGO	KZ	933	Japan	M	n/a	+	
133	NORTHWEST AIRLINES	NW	012	USA	M	+	+	P
134	OLYMPIC AIRWAYS	OA	050	Greece	M	+	+	
135	PHILLIPPINE AIRLINES	PR	079	Philippines	M	+	-	
136	POLISH AIRLINES (LOT)	LO	080	Poland	M	+	+	
137	PORTUGALIA AIRLINES	NI	685	Portugal	M	+	+	
138	PRIMERAS LINEAS URUGUAYAS DE NAVEGACION AEREA (P.L.U.N.A.)	PU	286	Uruguay	M	+	+	
139	QATAR AIRWAYS	QR	157	Qatar	M	+	-	
140	REGIONAL AIRLINES	VM	982	France	M	+	n/a	
141	RIGA AIRLINES	GV	248	Latvia	M	+	-	
142	ROYAL AIR MAROC	AT	147	Morocco	M	+	-	
143	ROYAL BRUNEI A/L	BI	672	Brunei	M	+	+	
144	ROYAL JORDANIAN	RJ	512	Jordan	M	+	+	
145	ROYAL NEPAL	RA	285	Nepal	M	+	+	
146	SATA-AIR ACORES	SP	737	Portugal	M	+	n/a	
147	SAUDI ARABIAN A/L	SV	065	Saudi Arabia	M	+	+	
148	SHANGHAI AIRLINES	FM	774	China	M	+	+	
149	SOCIETE NOUVELLE AIR GUADELOUPE	TX	427	Guadeloupe	M	+	n/a	
150	SOUTH AFRICAN AIRW.	SA	083	South Africa	M	+	+	
151	SPANAIR	JK	680	Spain	M	+	+	
152	SWISS AIR TRANSPORT	SR	085	Switzerland	M	+	+	P
153	SYRIAN ARAB A/L	RB	070	Syria	M	+	+	
154	TACA INTERNATIONAL	TA	202	USA	M	+	+	
155	TAM TRANSPORTES AEREOS DEL MERCOSUR	PZ	692	Paraguay	M	+	+	
156	TAM TRANSPORTES AEREOS MERIDIONAIS	JJ*	957	Brazil	M	+	+	
157	TAM TRANSPORTES AEREOS REGIONAIS	KK	877	Brazil	M	+	+	
158	TAME LINEA AEREA DEL EQUADOR	EQ	269	Ecuador	M	+	+	
159	TAP-AIR PORTUGAL	TP	047	Portugal	M	+	+	
160	TAROM ROMANIAN	RO	281	Romania	M	+	+	
161	TAVREY AIRCOMPANY	T6	204	Ukraine	M	+	+	
162	THAI AIRWAYS INT'L	TG	217	Thailand	M	+	+	
163	TIE AVIATION	5B	336	USA	M	+	+	
164	TRANS MEDITERRANEAN	TL	270	Lebanon	M	n/a	+	C
165	TRANS STATES A/L	9N	414	USA	M	+	n/a	





NN	Name of Carrier	Code	Numeric	Country	Type	PAX	CGO	SPA
166	TRANS WORLD A/L	TW	015	USA	M	+	+	C
167	TRANSAERO AIRLINES	UN	670	Russia	M	+	+	
168	TRANSAVIA AIRLINES	HV	979	Netherlands	M	+	n/a	P
169	TRANSBRAZIL	TR	653	Brazil	M	+	+	
170	TRANSPORTES AEREOS DE CABO VERDE	VR	696	Cape Verde	M	+	+	
171	TRANSPORTES AEREOS EJECUTIVOS (TAESA)	GD	838	Mexico	M	+	+	
172	TUNIS AIR	TU	199	Tunisia	M	+	+	
173	TURKISH AIRLINES	TK	235	Turkey	M	+	-	
174	UGANDA AIRLINES	QU	673	Uganda	M	+	+	
175	UKRAINE INT'L	PS	566	Ukraine	M	+	n/a	
176	US AIRWAYS	US	037	USA	M	+	-	P
177	VARIG, (VIACAO AEREA RIO-GRANDENSE)	RG	042	Brazil	M	+	-	
178	VIACAO AEREA SAO PAULO (VASP)	VP	343	Brazil	M	+	+	
179	VIRGIN ATLANTIC	VS	932	UK	M	+	+	P/C
180	WIDEROE'S FLYVESEL	WF	701	Norway	M	+	+	
181	YEMEN AIRWAYS	IY	635	Yemen	M	+	-	
182	ZIMBABWE EXPRESS	Z7	247	Zimbabwe	M	+	+	

Legend:

- B Bilateral reciprocal agreement
- BN Bilateral non-reciprocal agreement
- M Multilateral agreement
- P Passenger
- C Cargo
- R Railway
- * Controlled duplicate

- PAX Passenger
- CGO Cargo
- SPA Special prorate agreement





9.5. Armenian Airlines' Flight Schedule (Summer 2001)

See table overleaf.



Schedule of flights to/from Yerevan Zvartnots International Airport
(Summer 2001)

##	Armenian Airlines				City/Airport	Foreign Carriers				Notes
	Code	Freq.	Day of operation	Aircraft Type		Code	Freq.	Day of operation	Aircraft Type	
1	R3	1	6	YK4	AAQ	E6	1	7	YK4	
2	R3	3	2,5,7	YK4	AER	xx	1	3	TU3	1
3	R3	1	1	YK4	ALP	RB	1	5	YK4	
4	R3	2	3,7	310	AMS					
5	R3	1	6	AN4	ASB					
6					ASF	OB	1	3	AN4	
7	R3	1	5	TU3	ATH					
8	R3	1	1	TU3	BEY					
9					CEK	H6	1	1	TU5	
10					DNK	xxx	1	3	YK2	
11					DOK	7D	1	6	AN4	
12	R3	2	3,6	TU3 / TU5	DXB					
13	R3	1	6	310	FRA					
14	R3	1	3	TU3	GOJ	xx	1	6	TU5	
15	R3	1	7	AN4	HRK					
16	R3	1	1	TU3	IEV	6U	1	5	TU3	
17	R3	2	2,5	AN4	IST					
18	R3	4	1,3,7,5	AN4 / YK4	KRR	xx	1	6	YK2	
19	R3	1	3	TU5	KUF	E5	1	6	TU5	
20	R3	1	3	AN4	LCA					
21	R3	1	6	TU5	LED	Z8	1	2	TU5	
22					LON / LHR	BA	3	2,4,6	320	2
23	R3	1	6	TU5	LWN					
24					LWO	5V	1	5	YK2	
25					Maykop, RF	xx	1	7	AN4	3
26					MOW / SVO	SU	4	1,3,5,6	TU5	
27					MOW / SVO	SU	4	1,3,5,7	TU5	
28	R3	7	daily	310 / ILW / TU5	MOW / VKO	V5	3	3,5,7	TU5	
29	R3	4	1,4,7,3	YK4	MRV	KV	1	5	TU3	
30					MRV	xx	3	2,3,6	YK4	
31					MSQ	B2	1	7	TU3	
32	R3	1	4	TU3	ODS	V4	1	6	TU3	
33	R3	1	5	TU5	OVB	S7	1	1	TU5	
34					OZH	xx	1	5	YK4	
35	R3	2	1,4	310	PAR / CDG					
36					PRG	OK	1	4	737	4
37					REN	xxx	1	7	TU3	
38	R3	2	2,6	TU3	ROV	D9	2	3,7	TU3	
39					RTW	6W	1	5	YK2	
40	R3	1	4	AN4	SIP					
41	R3	3	6,1,3	YK4	STW	xx	1	4	YK4	
42	R3	1	4	TU5	SVX	U6	1	6	TU5	
43	R3	1	6	TU3	TAS					
44	R3	1		YK4	TBZ					
45	R3	1	2	YK4	THR	xx	1	4	TU5	
46					UFA	V9	1	4	TU3	
47	*R3	3	1,3,5	F70	VIE	OS	3	1,3,5	F70	5
48	R3	1	7	TU3	VOG	xx	1	3	TU3	
49					VOZ	xx	1	5	TU3	
50					VSG	xx	1	7	AN4	
51	*R3				ZRH	SR	2	2,5	M83	6

Notes:

1. Russian-letter codes of carriers whose IATA designators could not be identified are replaced with XX or XXX.
2. Maykop does not have a three-letter city/airport code.
3. BA flights Between LHR and EVN are operated by KJ with a stop in TBS, no commercial rights between EVN and TBS.
4. OK started its flights in April 2001 as a scheduled charter. After two first flights the service has been temporarily suspended.
5. Code-share flight between R3 and OS operated by OS.
6. Code-share flight between R3 and SR operated by LX.

99a



9.6. Armenian Airlines' Fleet (Summer 2001)

See table overleaf.



Fleet of Armenian Airlines

##	Aircraft Type	Tail Number	Manufacturer's serial number	Manufacture Date	Configuration		Book Value	Flying hours		Comments
					Business	Economy		2000	By type	
1	IL-86	86076	51483205045	24/10/85	-	-		0		Missing engines, missing parts, has not been operated for many years and requires maintenance. Estimated amount required for alleviating the aircraft is \$6 mln.
2	IL-86	86117	51483209085	24/06/91	28	278		590		
3	IL-86	86118	51483209086	16/08/91	28	278		434	1024	
4	A310-222	F-OGYW	276	19/11/83	30	164		2019	2019	On financial lease from Airbus Industrie Financial Services at a fixed monthly rate of \$180,000. Maintenance reserves at \$120,000 per month. Technical maintenance at \$175,000 per month plus engine maintenance on "material and labor" basis.
5	Tu-154 B-1	85166	76A166	18/08/76	16	122		0		Life limit needs to be extended, missing engines.
6	Tu-154 B-2	85279	78A279	30/05/78	16	122		751		Life limit needs to be extended, engines are Ok.
7	Tu-154 B-2	85403	80A403	14/03/80		161		108		Convertible into a combi with 57 seats.
8	Tu-154 B-2	85442	80A442	09/09/80	16	122		162		Life limit needs to be extended.
9	Tu-154 B-2	85536	82A536	22/04/82	16	122		937		
10	Tu-154 B-2	85566	82A566	07/01/83	16	122		935	2893	
11	Tu-134 A-3	65044	49450	20/12/76		72		2261		Prepared for a capital maintenance and repair at the manufacturers site. Missing engines.
12	Tu-134 A-3	65072	49972	30/07/77	-	-		136		Dedicated for flights chartered by the Office of the President or the Government of Armenia. ("Presidential Aircraft")
13	Tu-134 A-3	65822	09071	31/05/74		72		0		Life limit needs to be extended, missing engines.
14	Tu-134 A-3	65831	17102	30/07/74		72		879		
15	Tu-134 A-3	65848	23136	11/12/74		72		3	3279	Just after capital repair by the manufacturer, awaiting for engines to be delivered from Russia.
16	Yak-40	87316	9331529	31/07/73		36		0		Life limit needs to be extended, missing engines.
17	Yak-40	87536	9522041	07/07/75		36		237		
18	Yak-40	88157	9611146	06/03/76		36		348		
19	Yak-40	88167	9610147	07/04/76		36		789		Missing engines.
20	Yak-40	88199	9630249	16/08/76		36		331		Leased out to Iran an ACMI bases. Currently holds Iranian registration.
21	Yak-40	88262	9711752	06/04/77		36		633	2338	Convertible into combi.
22	An-24RB	47812	17307004	31/05/71		42		1062		
23	An-24B	46711	99902109	04/11/68		42		426	1488	On dry lease from an Armenian company at \$200 per actual hours flown.

100a



9.7. Armenian Airlines' Fuel Consumption (2000)

**ARMENIAN AIRLINES' FUEL CONSUMPTION AND AIRCRAFT UTILIZATION
STATISTICS FOR 2000 BY DESTINATION AND AIRCRAFT TYPE**

Destination	Aircraft Type	Fuel Consumption (t)		Flying Time (hours)
		Outbound	Inbound	
MOW	310	737	704	307
	ILW	3522	3271	700
	TU5	3310	2963	1056
	TU3	92	85	66
SVX	310	15	18	7
	TU5	616	569	213
OVB	ILW	43	48	9
	TU5	390	420	136
MRV	ILW	13	12	3
	TU3	5	4	2
	AN4	7	7	14
	YK4	228	222	378
KUF	TU5	398	377	132
	TU3	210	212	147
ROV	TU5	22	15	6
	TU3	121	100	67
	YK4	198	192	337
	AN4	97	86	208
KRR	TU3	5	6	3
	YK4	241	224	407
	AN4	114	98	240
IEV	TU5	31	29	11
	TU3	403	387	274
VOG	TU5	11	0	2
	TU3	155	150	96
	YK4	20	20	34
	AN4	46	39	99
AER	TU5	92	79	26
	TU3	98	87	52
	YK4	108	100	179
	AN4	28	24	60
LED	TU5	700	628	226
	TU3	173	159	127





Destination	Aircraft Type	Fuel Consumption (t)		Flying Time (hours)
		Outbound	Inbound	
GOJ	TU5	64	55	22
	TU3	304	301	214
SIP / ODS	TU5	257	223	84
	TU3	309	273	194
	AN4	7	7	17
AAQ	YK4	92	88	159
	AN4	32	28	70
STW	TU5	8	8	2
	AN4	20	17	35
	YK4	180	170	299
TAS	TU3	375	400	277
	AN4	14	16	35
ASB	TU3	133	134	86
	AN4	83	92	211
HRK	AN4	19	18	43
PAR	310	1658	1521	679
	ILW	46	46	10
	TU5	957	839	315
FRA	310	926	847	381
	ILW	85	79	17
	TU5	360	307	117
AMS	310	1496	1349	613
	ILW	92	95	19
	TU5	425	367	139
BEY	310	27	26	11
	TU5	12	10	4
	TU3	233	226	153
	YK4	27	27	51
THR	310	18	24	10
	ILW	29	33	6
	TU3	266	271	161
	AN4	5	4	10
	YK4	21	19	33
DXB	TU5	805	902	295
	TU3	488	517	348
IST	ILW	42	38	9
	TU5	13	12	4
	TU3	425	409	273
	AN4	98	92	231





Destination	Aircraft Type	Fuel Consumption (t)		Flying Time (hours)
		Outbound	Inbound	
	TU3	588	540	377
LCA	TU5	37	34	12
	TU3	38	37	25
	AN4	98	94	238
ALP	TU5	9	10	3
	TU3	225	216	137
	YK4	17	15	26
Lease:	ILW	0	0	219
	TU5	0	0	22
	YK4	0	0	566
Other:	310	26	26	11
	ILW	155	155	32
	TU5	122	122	42
	TU3	299	299	200
	AN4	92	92	218
	YK4	42	42	77
	MI8	19	18	67
TOTAL		24536	22985	13557

