Turkish Airlines' Strong Wings Crash in Amsterdam

Emine Çobanoğlu and Irem Erdoğmuş*

On a sunny Sunday morning in March 2009, Dr. Temel Kotil, the Chief Executive Officer (CEO) of Turkish Airlines (THY), leaned back in his chair and thought of the sad, unfortunate events that had happened in the previous month, the month that had been the most challenging in his career. He thought back over the years, of his academic career as an air navigation engineer which started with his PHD at the University of Michigan and continued as a lecturer at Istanbul Technical University, one of the most distinguished universities in Istanbul. In 2003, he had a new start in his life when he was offered the position of vice CEO of Turkish Airlines and, afterwards, he was promoted to CEO in 2005. Since then, he had been working day and night for the global growth of THY to become the leading European air carrier. Working hard was never an obstacle in his professional life, as long as he and THY succeeded in reaching their objectives. However, the past month had been a real challenge when a THY plane crashed in Amsterdam resulting in fatalities, injuries and a tainted reputation of the company worldwide. As the crisis cooled down, for the first time in weeks Dr. Kotil had the time to think back, and reconsider the incidents that led to the crisis, and also how the crisis was managed. On Monday, as a new week was starting, he knew that there had to be changes in THY management. New strategic thinking and planning was required to avoid such problems in the future; and when they cannot be avoided, a crisis management plan should be developed. As a first step of this new era, Dr. Kotil thought that an objective story of the recent crisis was needed so that problems could be detected.

* Emine Çobanoğlu, Associate Professor, T.C.Marmara University, Faculty of Economics and Administrative sciences (IIBF), Department of Management, Istanbul, Turkey

Email: ecobanoglu@marmara.edu.tr

Irem Erdoğmuş, Associate Professor, T.C.Marmara University, Faculty of Economics and Administrative sciences(IIBF), Department of Management, Istanbul, Turkey Email: ireme@marmara.edu.tr

History of the Company

THY was founded in Ankara in 1933 as the "State Airlines Administration." In 2006, the share of the government in the firm fell below 50% and this was the end of THY's legal status as a state-owned corporation. The firm, however, still carries on its mission as the flag carrier¹ of the Republic of Turkey in the civil air transportation industry. It flies to 33 domestic and over 109 international destinations. Operating a fleet of 127 aircrafts, THY also has sales/station units and agencies serving the customers in its destinations. According to figures in 2008 (presented in Exhibit 01), the load factor is 73.9%. The number of revenue passengers² increased by 13% from 2007 to 2008.

THY is the corporate brand; however, it owns or has shares in three other airlines besides THY. Anadolu Jet is a sub-brand, flying and competing mostly in the domestic economy flight segment. THY also owns 50% of the shares of Sun Express and has 49% shares of Air Bosnia. The firm follows an integration strategy and owns companies in maintenance and repair, catering, airport ground services, and fuel sales.

THY was rewarded several times by prominent authorities in the aviation industry for its young fleet, top quality catering, friendly personnel, care for high security and safety standards. The firm competed with 350 airlines around the world in the area of aircraft and aircraft engine financing and received the "2008 European Deal of the Year" award from the Aircraft Finance Journal. It was also recognized as having the best financial applications in Europe by Jane's Transport Finance Journal in 2006 and 2008. Finally, it was selected as the best airline in its region, receiving the title of "Southern Europe's Best Airline Company" in 2009 by Skytrax (THY Annual Report, 2009). Finally, following an evaluation of the service records of its fleet's A320 family of aircrafts, Turkish Airlines received Airbus' "Operational Excellence" award (THY Annual Report, 2009).

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¹ Flag carrier: A flag carrier is a transportation company, such as an airline or shipping company which, being locally registered in a given country, enjoys preferential rights or privileges, accorded by the government, for international operations. It may be a state-run, state-owned or private but state-designated company or organization. Flag carriers may be known as such due to maritime law requiring all aircraft or ships to display the state flag of the country of their registry (http://www.businessdictionary.com/definition/flag-carrier.html). 2 Revenue passenger: A revenue passenger is someone who has paid the transport operator for her or his trip. That excludes non-paying passengers such as airline employees flying on free or nearly-free passes, babies and children who do not have a seat of their own, and so forth. (http://en.wikipedia.org/wiki/Revenue_passenger)

Growth During Crisis

The aim of THY is to become a leading network carrier and maintain a global brand status. THY carried on its plans by improving its services, increasing its fleet, number of flights, and frequencies. The company added a "First Class" service level to some of its long-distance flights, and started to give catering services with DO & Co.³. Internet services, self-check-in, call center services, and the Miles and Smiles frequent flyer program were also other activities that THY invested in to accomplish its goal of global airline service quality. As Dr. Kotil put it, "The customer is the patron of us all. If one passenger says 'I do not want to fly with THY', the next day, we will lose our business. That is why we do not compromise on quality and continuously increase it."

The global economic crisis also became an advantage for THY, especially with regards to purchasing planes, which increased its fleet capacity as part of its growth plan. The demand for planes decreased due to the economic downturn, as most airlines backed down from the planes they ordered. THY took this as an opportunity and bought these planes with considerable discounts. As the number of carriers in the fleet increased to 127, the number of pilots rose to 1,600 in 2008, up from 640 in 2003. The cabin crew number also increased from 1,700 to over 3,000 in the same period. Five new routes were added in 2008, increasing the total number of destinations to 142. Moreover, THY increased the frequency of flights to high potential destinations. As a result, positive performance results were achieved. THY became the fastest growing airline company in Europe for 2008, with a growth rate of 15.1%, while the other European airline companies reduced their capacity by 1.5%. THY shrugged away the global financial crisis in 2008, while the total number of passengers among the 32 members of the Association European Airlines decreased by 5.4 million in 2008, down to 366 million. As the airline industry shrank, THY grew at a noteworthy rate. Thus, THY became the seventh largest airline in Europe.

 $^{^3}$ DO & Co. is the international caterer which supplies gourmet meals to airlines. The company is a subsidiary of THY.

The aim of the company was to achieve a global airline status, carrying transit passengers to different locations. Dr. Kotil declared to the press that "28% of the passengers to Europe are transit passengers. We want to increase this number to 50%. Transit passengers are very important to us. Istanbul is the center at the North-South, and East-West directions. We want to combine the European market with the Middle Eastern market. North Africa is next. Our aim is to achieve a strong position among the first 15 global airline companies that hold most of the aviation traffic in their hands." Turkish Airlines' membership in the Star Alliance in 2008 had been an important stepping stone in this goal. The Star Alliance was established in 1997 as the first truly global airline alliance, including its 26 members to offer customers a worldwide reach and smooth travel experience with approximately 20,000 daily departures to more than 1,000 destinations in 171countries and 954 lounges. Membership in Star Alliance was believed to increase the number of transit passengers so that the full capacity of Istanbul would be realized as an international hub. Another means to expand destinations was making mergers and acquisitions with local airlines in international markets.

Together with the Star Alliance, THY also took additional steps to enhance and improve its regional and global place with communications strategies. On 31st of January, 2009, THY started to run its commercial movie, "Feel like a Star", starring Kevin Costner, in 70 different countries.

Even though positive news about the growth and global branding strategies of THY filled the newspapers, THY's management and human resources strategies had been under severe criticisms by the Aviation Workers' Union and several columnists. A statement released by the Aviation Workers' Union read "THY disregards flight maintenance, while blocking the collective agreement⁵ efforts." There was an almost 30% increase in the number of planes, but new technicians with official licenses were not employed. The union claimed that trainee

⁴ A transit passenger is a passenger at an airport who is there to change flights and therefore does not have to go through customs or immigration. THY uses Istanbul as a hub. Passengers fly to Istanbul and catch other flights to go to their destinations.

⁵ A collective agreement is an agreement between employers and employees which regulates the terms and conditions of employees in their workplace, their duties and the duties of the employer. It is usually the result of a process of collective bargaining between an employer (or a number of employers) and a <u>trade union</u> representing workers.

pilots flew in the cockpit, where only the captain and his assistant should be present. The President of the Aviation Workers' Union, Mr. Ayçin, also claimed that THY became the third riskiest airline in the world after this sudden growth and bad human resources management.

Global Trends in the Airline Industry

Airway transportation has become one of the major modes of transportation with very rapid, technological and structural modification. Economical growth, increasing world trade, tourism, and international investment put the airline industry at the center of globalization. This global industry has impressing numbers with 1,600 million passengers per year, 3.9 million jobs, 260 billion US dollar turnover, 18,000 aircrafts, 15 million kilometer network, 10,000 airports, and 30 million tons of freight. These impressing numbers are due to an increasing number of both leisure and business travelers, mail and freight transport. The flight schedules are important for business travelers while tourists are more price sensitive. Freight and mail transportation account for 15% of total airline revenue. Historically, the annual growth in air travel had been twice the growth in gross domestic product (GDP). The main players in the industry, according to number of revenue passengers/kilometers, are Air France, closely followed by British Airways and Lufthansa. There are more than 200 airlines in the world but the number of main players which control the industry is limited to 15. THY ranks as 20th in this list.

After privatization, there is freedom for a company to enter and exist in the airline industry; however, the initial investment costs are rather high due to prices of planes, which constitute a barrier to entry. The suppliers in the airline industry are mainly limited to Boeing and Airbus. The other major operating expenses of airline industry are ticketing, sales and promotion (16.4%), general administrative expenses (12.2%), fuel/oil (12%), station expenses (10.8%), passenger expenses (10.5%), maintenance (10.1%), and flight crew (7.4%). Fuel/oil prices, pollution control, personnel cutbacks, global economic crisis, recurring safety lapses like terrorism, war, SARS (severe acute respiratory syndrome) and accidents are major threats to the airline industry. As the airline customers, especially the tourists, are rather price sensitive, the global economical crisis has had a major negative impact on airline ticket sales. Moreover, major safety lapses and accidents refrained some of the consumers from air travel.

Air transportation is not the only option for today's consumer: telecommunications, video conferencing, and high-speed railroads are powerful substitutes. For the customers of airlines, they have easy access to information through the Internet to make comparisons among airlines, or substitute products. Finally, regarding pollution control, there is pressure from citizen action groups to take precautions and effective measures for environmental protection.

The airlines are competing for growth and market share but at the same time forming strategic alliances in order to improve the flight schedules and to provide competitive benefits. These alliances are Star Alliance, Sky Team and Oneworld. The number of passengers, destinations, participant airlines and global market share for the year 2008 are given in Exhibit 02.

The Crash in Amsterdam

The THY plane, a Boeing 737-800 named Tekirdağ, left Istanbul on time at 8:11am for Amsterdam, Schiphol Airport on 25th February 2009 with 127 passengers and seven crew members. The weather at Schipol was moderately windy with a light drizzle that day; and the plane was expected to land at 11:55. Instead, the first news regarding the plane and its photographs were shared on Twitter, informing the public that the plane crash-landed in a field 3 kilometers away from Schipol Airport at 11:31 am. The aircraft's fuselage split in three upon impact and there was heavy damage visible to the cockpit and the tail. There was neither fire nor an explosion in the plane. Three minutes after the crash, a passing driver called 112 to inform the authorities about the plane crash. Coincidentally, an ambulance was passing by the field where the crash happened and arrived there at 11:34. At 11:40, six ambulances arrived at the scene of the accident. As the rescue started, the channels of communication were also activated. The news hit the headlines in the Turkish news channels on TV and the Internet.

What Happened Right After the Crash?

At 12:18: a team of THY officials flew from Istanbul to the Netherlands to form a crisis center to help people trace those who were on board and to fly friends and relatives of passengers

to and from Amsterdam. It was declared that there were 135 passengers, of which eight were crew members on board.

At 12:36: the Directorate General of Civil Aviation formed a crisis center in Turkey.

At 12:38: the Minister of Foreign Affairs, Mr. Ali Babacan, informed the press that all related authorities were concerned about the issue, including the Minister of Transport, THY, a team from the Turkish Embassy in the Netherlands, and the Turkish Consulate General in Rotterdam. He also mentioned that he was informed simultaneously with the press and had no further information about the accident.

At 12:41: the Minister of Transport, Mr. Binali Yıldırım, said "It is good that this accident passed away without loss of lives."

At 12:52: the Deputy Undersecretary of Ministry of Transport, Mr. Suat Hayri Aka, reported that there were no fatalities in the plane crash.

At 12:55: the THY CEO Dr. Kotil and THY chief executive Mr. Candan Karlıtekin held a press conference stating that there were no fatalities in the crash, but about 20 were wounded. Mr. Karlıtekin said that they went through every type of document, information, and maintenance report about the plane, and found no problem. He also informed the press and the public about the crisis centers. Dr. Kotil said that the captain of the plane, Mr. Hasan Tahsin, was very experienced, with a Turkish Air Force background, and that there was as yet no information about the health conditions of the crew.

At 13:06: Mr. Karlıtekin once again declared that, until now, there were no death reports and added "The happiest thing is that there was no loss of lives."

At 13:33: the same information was once again confirmed by Mr. Aka. He informed the press that the plane was a very modern plane and that it went through technical maintenance in December, 2008, and was clear for all the flights until the end of 2009. At the end of his speech, he received a note and added "According to the latest information I received, all the passengers left the plane and there were no fatalities."

At 13:41: the Prime Minister, Mr. Recep Tayyip Erdoğan, told the press that he was informed "there were three fatalities, but Mr. Yıldırım spoke of one fatality." He expressed his sympathies to all the passengers and wished a quick recovery, God's blessings to the survivors and patience for families. He said "It is really a very big accident and could have been a tragedy."

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Meanwhile, the Netherlands Prime Minister, Mr. Jan Peter Balkanende, called Mr. Erdoğan and presented his condolences for the losses. Balkanende also visited the scene and the hospital with one of the Ministers of State, who was the only minister with a Turkish origin in the Netherlands.

At 13:42: the Dutch national television asserted that there were five fatalities.

At 13:45: the passenger list was shared on the THY website and the relatives of the passengers were asked to call a toll-free number in order to get information about their relatives.

At 13:53: THY declared that they did not have any definite information regarding the accident and the number of deaths.

At 14:13: the Dutch national television reported that five people were dead, while the German N24 television reported that there might be seven fatalities and the pilot might also be among the dead.

At 14:22: Mr. Aka said that they received information revealing seven dead people in the accident.

At 14:27: Mr. Yıldırım said "There is no precise information yet. We will inform you when there is."

At 14:38: the Dutch authorities declared in a press conference that nine people were killed in the accident, and that 50 people were wounded and hospitalized. The authorities also told that they were unable to provide information on the cause of the accident, and that the inspectors were continuing the investigation.

At 14:41: Mr. Aka said "According to the latest information we received from the Dutch civil aviation officials, the number of fatalities increased to seven."

At 14:50: Dr. Kotil and Mr. Karlıtekin confirmed the death of nine passengers and expressed their condolences.

At 15:14: Dutch radio announced that three of the dead people were members of the crew and six of them were passengers.

At 15:18: Mr. Aka said that they were informed that the number of dead was nine.

At 15:31: the Directorate General of Civil Aviation informed that, according to the information received from the Dutch Civil Aviation officials, nine of the wounded in the hospitals had died. Meanwhile, dead people near the plane were shown on the news.

At 15:41: Mr. Yıldırım said "I received the news that seven people are dead."

At 16:40: it was reported on the Internet that two of the pilots lost their lives trapped in the cockpit.

At 17:54: the final and official declaration was made by the Dutch authorities, stating that nine fatalities was the final and accurate number. The officials told that there were also six people in a serious condition, and five severely wounded.

At 18:16: Mr. Aka also confirmed the receipt of this information from the Dutch authorities.

At 21:30: THY announced that a plane was prepared for the relatives of the passengers who would like to go to Amsterdam.

At 22:48: THY stopped the advertising campaign, "Feel like a Star" with Kevin Costner.

At 23:52: the plane that carried the relatives of the passengers took off for Amsterdam.

As the first day of the crisis was over, it was seen that THY had established a crisis desk in the Netherlands, and transported the families of the victims to Amsterdam, stopped the "Feel

Like a Star" advertising campaign, and started communications with the Dutch authorities.

Meanwhile, theories regarding the reasons for the crash were released in the newspapers.

Theories Regarding the Cause of the Crash

Most of the news in the Turkish press blamed the Schiphol Tower, whereas the Dutch authorities and the European press blamed THY. Turkish Aviation Pilots Association (TALPA)'s theory was that a large plane had landed on the runway just before the Tekirdağ plane, and the Schiphol Tower let the Tekirdağ plane come too early to the runway, causing it to get in to wake turbulence and crash-land as a result. Another theory, inspired by the latest plane accident at the Hudson River, said that a herd of birds was responsible for the crash by getting into the engine. Some also thought that the right-hand engine split from the jetliner at 2,000 feet and fell down, causing the jetliner to make an emergency landing. Turkish theories were related to external factors, like the tower's inattentiveness, or a catastrophic event, like a herd of birds.

European-based theories were related to mismanagement and inattentiveness of THY. Most of the news about the cause of the accident was related to a trainee pilot who was assumed to be in control during landing when the plane crashed. One German pilot spoke on NTV channel, commenting that he thought the whole accident was because of the "Eastern" way of thinking since there should not be three pilots in the cockpit, but only two official ones. Still another theory was about the maintenance of the Tekirdağ plane. A flight of the plane was cancelled just a few days before in Madrid; it returned back from the runway because of an unsolved technical problem and, as a result, the passengers were transferred to another plane. Thus it was claimed that the plane should be under maintenance rather than on duty. Another theory related to the causes of the crash was that the plane had run out of fuel, and made an emergency landing.

Blame Game

TALPA regarded the European accusations of the "trainee pilot", "maintenance" and "lack of fuel" as negative word-of-mouth campaigns against Turkish aviation to hinder the increasing market share of THY. The President of TALPA, Mr. Ali Ziya Yılmaz, held a press conference

and said that it was too early to arrive at conclusions about the reason of crash-landing: there could be a thousand different reasons, and a detailed investigation was needed in plane crashes so the early comments were meaningless. Regarding the trainee pilot, Mr. Yılmaz said that THY was very cautious, and had the new pilots fly with a trainer pilot. Regarding the accusations of lack of fuel, Mr. Yılmaz reminded about the international aviation rules for holding half an hour's worth of extra fuel in cases of emergency. The Second President of TALPA, Mr. Ahmet İzgi, also said that the landing was successful and one of a kind in aviation history, since there was no fire. The captain was mentioned as a very experienced one, and if there was no warning of emergency landing to the passengers, it was because, Mr. İzgi said, there was no time to do so.

On the other hand, the Turkish Aviation Trade Union made a contradictory declaration, and said that they had warned THY about the possibility of accident due to maintenance problems and technical insufficiencies, but that nobody cared. The President, Mr. Ayçin, drew attention to the pressure on the workers, and that the pilots were penalized if they could not land due to bad air conditions or technical error.

The international press placed great emphasis on the crash. The Dutch newspapers *DeVolkskrant*, *De Telegraaf*, and *Depers* gave details about the accident. The THY crew was accused by *DeVolkskrant* for not warning the passengers about emergency landing. *De Telegraaf*, on the other hand, was concerned about the little information provided about the accident, and claimed that the media provided more information about the accident than the Turkish authorities. The spokesperson for Schipol Airport, Ms. Marianne Debiy, said "we have no idea why Turkish authorities said that there are no fatalities. They made their announcements without contacting us. Even in our first announcement we said that there were fatalities."

The English newspapers *The Independent*, and *The Daily Telegraph* wrote about the accident history of THY, and claimed that THY had the worst airline safety record in Europe. The American *Wall Street Journal*, on the other hand, emphasized the decreasing safety of European flights, making reference to the statistics of the International Air Transportation Association (IATA). Regarding the safety record of THY, the newspaper claimed that THY had

good records in general, and performed well in on-the-spot inspections at airports based on the declarations of a European Union aviation safety official.

There were also immediate reactions from civil organizations and civilians after the accident. The European Airlines Union, European Aviation Security Agency, and European Civil Aviation Organization all put forward that THY should be under proper control of their European flights. The experts declared that THY was not regarded well in terms of fatal accident statistics, and that it was normal to have these extra precautions. THY also lost its prestige among European consumers. As a Turkish journalist reported in her column, most of her Dutch friends started to say "You are flying with KLM (Royal Dutch Airlines), right? Please do not fly with THY."

Both THY and the Ministry of Transport were the targets of accusations by angry relatives and friends of those on board. The misinformation released by THY and the Ministry of Transport had caused false relief for the relatives and friends of the victims for a short while, but it was followed by news of an increasing number of fatalities, causing even more sorrow. Mr. Yıldırım gave a press conference at the crisis center of the Directorate General of Civil Aviation and told that every declaration made was in coordination with the Dutch civil aviation authorities. Regarding questions about the misinformation, he said that, during the first hours, there was no information about any deaths from the Dutch authorities, but with time, some of the severely wounded were dead.

What Went on...

THY handled the crisis from the Hilton Hotel in Amsterdam. A journalist, who went to Amsterdam on the second day of the accident to check the situation of a close friend, reported that both the Dutch and the Turkish authorities worked their best. She said that the Dutch authorities were discreet, taking everything very seriously, and not declaring anything to the Turkish authorities unless they had the consent of the families of the victims. The THY crisis management team also worked hard, welcoming the relatives of the victims at the gates and dealing with them one by one, organizing their tickets, passport controls, continuously asking whether they needed anything more. On the following days, THY had

obituary notices for the dead, and get well notices for the wounded. There were 44 seriously wounded victims taken care of in 13 hospitals in the Netherlands.

Two days after the accident, THY announced that they would be paying €50,000 to the families of those who died, €5,000–10,000 to those wounded, and €5,000 to all the other passengers. The airline spokesman, Ali Genc, told that, even though a passenger did not suffer any physical injuries, he probably suffered a mental trauma, and that they had taken that into account as well. However, the Dutch victims gathered together to sue THY for greater compensation. One of the mildly injured passengers declared in the press "I need you to think thoroughly. You have lost an arm or a leg. THY gives you €10,000. Is that the right compensation for a horrible accident?" He also said that they would sue THY for informing them so late as well.

In order to achieve objectivity, a team of 40 experts from three different countries started to examine the wreck and got testimonies from the eyewitnesses and passengers. The black box was sent to Paris for analysis. Meanwhile the Dutch Minister of Transport, Mr. Carniel Eurlings, held a press conference, paying his condolences to the Turkish public and summarizing the situation "more than 60 are injured, 15 in a serious condition, nine passed away. We are doing our best to get the wounded better. Schiphol Airport is one of the safest airports in the world. There are speculations regarding the reasons of the accident. In order to find out the underlying reasons of the accident we have to wait for the reports."

On 4th March 2009 the black box recording of the plane was shared with the media. The investigators said a malfunctioning altitude indicator together with pilot inattentiveness resulted in the fatal crash. The plane was making a routine approach to the field from an altitude of 2,000 feet using autopilot and automatically controlled throttles. Due to a problem in radio altimeters, the autopilot of the plane perceived itself at a lower attitude and directed the engines of the plane to slow down into landing mode. At an altitude of 450 feet, the pilots received a stall warning. Even though the captain took over the controls and got the throttles to full power, it was too late: the jetliner was too low and slow to recover. Thus the plane crashed into a field with its tail hitting first, about half a mile short of the Schiphol runway. Investigators also said that a co-pilot was at the controls as part of a "training flight," but they did not elaborate. Since the black box had recorded the same

problem twice previously, the Dutch authorities believed that the captain should be in full charge rather than the autopilot. The authorities also said that the manufacturer of the jetliner, Boeing, was to be warned because of the altimeter problem in their planes. Actually, five of six plane crashes in THY's last 33 year history was from the American Boeing company. Forty-four of the most fatal 100 plane crashes in world aviation history were also Boeings. The 737-800 model was named as "next generation," but, in January 2008, the same model jetliner belonging to British Airways had a similar accident at London, Heathrow Airport. The two accidents had many common grounds.

Mr. Yıldırım reacted to the declarations of the Dutch authorities and said that the Turkish authorities were also breaking down the black box. Mr. Çetingüç, the president of the Aviation Medical Association, also backed up Mr. Yıldırım, saying that the Dutch authorities tried to give false declarations not to pay compensation. He believed that an experienced captain, such as Hasan Tahsin, would not let this accident happen because of an altimeter. The blame game, in other words, continued after the black box recordings were released.

What Lies Ahead?

This was the 18th accident in THY history, and the second fatal one in the past 10 years. There were many unanswered questions, especially on the first day of the accident such as: how many people were there in the plane? How many people on board were from the crew? How many people were dead? How many were wounded in total, and how many were in a serious condition? How many of the pilots were dead, how many were alive? Why was THY management so late in establishing communication with Dutch authorities? Who was in charge as the spokesperson of the crisis?

In five years, THY increased the number of planes from 64 to 130, the number of passengers from 10 million to 20 million . . . but did it also support the growth with infrastructure, training and motivation of the employees, and technical maintenance of the planes? Is this accident a result of the vertigo of the top management because of rapid growth? Are the top management of THY experts in sales, advertising, and profits, but lack knowledge of aviation and safety?

Still the questions remain as what happened to THY's sales and growth figures, reputation, service quality, human resources problems, and crisis management approach after the crisis at Amsterdam . . .

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Exhibit 01

Past Four Year Performance of THY

	2005	2006	2007	2008
Number of Flights	127,137	152,536	168,89	189,328
			9	
Kms Flown	168,902	207,202	232,14	262,124
			7	
Available Seats-	29,805	36,934	41,619	46,343
kms(million)				
Revenue Passangers-	21,317	25,383	30,251	34,265
kms(million)				
Revenue Passangers (000)	14,134	16,947	19,636	22,597
Load factor (%)	71.5	68.7	72.7	73.9

Source: THY Annual Report 2008

Exhibit 02

Strategic Airline Alliance Figures

	Star Alliance	Sky Team	Oneworld
Passengers per year	455.5 million	428 million	319.7 million
Destinations	975	841	692
Global market share	25.1%	20.8%	14.9%
Number of participant	25	14	10
airlines			

Source: Button, 2008