SBCC 2012 Preliminary Round:

Case: SQ006

Preliminary Round Assignment

A Singapore Airlines passenger aircraft crashed on takeoff in Taiwan, with

significant casulties. Your team is assigned to SIA's Rick Clements as his advisor and

assistant during the post-accident crisis, and now are tasked to shape SIA's

responses to issues raised by the ASC report noted in the following document.

Specific Issues to address:

1. SIA has asked you to identify the stakeholders affected by the SQ006 crash, to clarify their interests, then to prepare a set of communications to each of these stakeholders,

and identify the channels SIA will use to deliver the messages. Although these messages

need not be identical, they should not in any way be contradictory.

2. Supported by Rick Clements, you will present the results of your work at the next

meeting of SIA's top management team.

You are to submit your recommendations to address these (and other key issues

found in the following document), in the form of a 1-2 page executive summary

accompanied by a 3-6 slide Powerpoint handout, to support Rick's upcoming

meeting with the Press, and the Board meeting to follow later in the month.

Submission details:

Please submit the above as a <u>single</u> PDF file, named with your assigned registration

code (example: SGC0199.pdf). To facilitate a level judging field, this document must

NOT contain or refer to either your personal names or that of your School.

Due: 13 February 2012, 2359 hrs

Email your file to our faculty advisor: algilbert.91210711@e2f.sugarsync.com

Please send an IDENTICAL backup copy to competition@sqbcc.com.sq

Thank you, your SBCC 2012 Organizers.

Singapore Airlines Flight SQ006: Communicating bad news to good people

Introduction

Singapore Airlines Flight SQ006 flew from Singapore Changi Airport to Chiang Kai Shek International Airport (CKS), Taiwan and from there, was scheduled onward to Los Angeles International Airport. At 2317 Taipei local time on October 31, 2000, the Boeing 747-400 attempted take off during a typhoon from CKS. The craft taxied to runway 05R (which had been closed for repairs) instead of its assigned runway 05L (which parallels 05R) for takeoff. With poor visibility due to heavy rain, the flight crew did not see heavy machinery parked on 05R until the aircraft was too close for avoiding action. The 747 collided into construction equipment and broke into pieces. A massive fire followed. 79 of 159 passengers and 4 of 20 crew members died in the accident.

In press conferences the day after the crash, SIA stated that the families of those who died would receive an immediate payout of USD 25,000, while those who survived would receive USD 5,000. However, SIA did not then accept that there was evidence of pilot error and stated that an experienced pilot should not have made the mistake of using the wrong runway. The pilot of SQ006 "had more than 10,000 hours of flying time, was familiar with the airport and had been with SIA for 21 years." Singapore Airlines eventually accepted all responsibility for the SQ006 accident, citing pilot error and effectively absolving Air Traffic Control (ATC) in Taipei of blame.

The accident was the first with fatalities in the 28-year history of the airline, although in a crash three years prior, everyone on board a plane of its wholly owned subsidiary (SilkAir) died. Following the release of the Taiwan Aviation Safety Council report, the airline faced the challenges of adverse publicity damaging to its image and reputation.

History of Singapore Airlines

SIA was formed in 1972 with the split of the joint Malaysian-Singapore Airlines (MSA) into Malaysian Airlines (MAS) and SIA. MAS took over the domestic routes within Malaysia and Singapore, with only Paya Lebar International Airport and three military bases at the time, had nowhere to go but international.

Well before the split, the Singapore management had already started securing landing rights to international destinations. Rights to Hong Kong were obtained in 1966, Tokyo and Sydney in 1977, Jakarta and Bangkok in 1968. A key destination was London but the British dragged their feet and only relented with the threat of a go-slow in servicing BOAC aircraft at Paya Lebar. Once landing rights in London were secured, SIA began flying on one of the main trunk routes – the Kangaroo route: London-Singapore-Sydney and boosted SIA's position as an international carrier. Now, SIA flies to 64 cities in 35 countries.

Although SIA had been formed as a result of aggressive Singapore state enterprise and started out 100 per cent owned by the Singapore Government, it has always operated on pure

Data in this case is derived from public sources and does not in any way reflect either correct or incorrect decisions or actions on the part of management or other parties.

commercial principles. The need for SIA to be competitive and self-supporting was understood from the beginning – it would not be a subsidized national airline. Its survival hinged on being profitable.

SIA Brand Positioning

SIA has been regarded as one of the world's most successful airlines, remaining profitable even in the face of severe international turmoil, e.g. Gulf War (1991), Asian Economic Crisis (1997-1998) and the 9/ll terror attacks. It earned many awards and accolades – including "best airline", "most preferred airline", "best managed company of the decade", and "Asia's Most Admired Company" among others. The "Singapore Girl" with her *sarong kebaya* in *batik*, has become an icon for Singapore and SIA.

It has the youngest fleet in the industry with a reputation for good maintenance and an excellent safety record. SIA has been associated with product innovation, in-flight and ground service quality and using technology to transform the flying experience. It was the first to provide a choice of meals, complementary drinks and free headsets in economy – actions considered radical in the early 1970s but have now become standard features on most international airlines. Since then, SIA regularly came up with innovations such as a 48-hour pre-flight phone check-in service, a new generation entertainment system with the world's first global in-flight email system, the SpaceBed (the biggest business class bed on planes) and in 2004, the first 18 hour non-stop flight from Singapore to LA, on which business class passengers had an extra 15 cm to stretch out and economy passengers an extra 12.5 cm, with a snack bar available to all passengers throughout the flight. SIA was also likely to be the first airline to fly the world's largest plane the double-decker Airbus A380.

SIA focused on coming up with new things regularly, on giving customers what they did not know they wanted (yet), with the aim of being a little better all the time, a little better than the competitors. SIA positioned itself an airline offering a premier service to passengers for entire the journey from check in to arrival, for which it charged premium airfares. It created a reputation based on service, high and consistent quality, innovation and most importantly, for passengers, care, comfort and attention on board to create a distinctive flying experience.

Industry trends

The global air transport industry suffered greatly since the tragic events of 11 September 2001, with continuing public apprehension over terrorist attacks in the air. Other factors that dampened demand for air transport include the slowdown in world economic activity resulting from a series of economic crises; the political tension and the resulting rise in energy prices associated with the Iraq crisis and its aftermath; and reduced tourism and business travel following the feared spread of SARS (Severe Acute Respiratory Syndrome).

As airline industry economics is essentially a fixed-cost model, any decline in demand brings a disproportionate decline in profitability. For premium carriers such as SQ, the entry of new low-cost carriers, offering much reduced prices, brings about an entirely new market

situation. There are many reasons why low cost carriers can offer the prices they do. Cabin crew and pilots may work for less money. More rotations, or round-flights, are possible in a single day, as the staff often help to clean the aircraft between flights thereby saving time (and reducing costs). Low-cost carriers normally offer few or no frills. Landing fees at the airports used are often lower. Now, as demand has weakened considerably, overcapacity in the industry is increasingly evident. The collapse of companies such as Swissair and Sabena were early indicators of this, and further restructuring in the industry may yet occur.

Regarding terrorism, the airline industry and regulators are chiefly concerned with:

- 1. Control of access to sensitive areas of airports and aircraft;
- 2. Control of passengers and their hand luggage;
- 3. Control and monitoring of hold luggage;
- 4. Control of cargo and mail;
- 5. Training of ground staff;
- 6. Definition of specifications for the equipment for the above controls;
- 7. Classification of weapons and other prohibited items which people can bring onto aircraft or to sensitive areas on airports.

The immediate problem is how to address this set of concerns without unduly increasing costs or damaging the travel experience and thus depressing demand.

The SQ006 Crash: Findings by Taiwan Aviation Safety Council (ASC)

The ASC conducted an investigation into the accident. Its final report was issued on 24 April, 2002. The report's 'Findings Related to Probable Causes' highlighted factors which played a major role in the circumstances leading to the accident. It stated that despite having all relevant charts, the flight crew did not review the taxiing route, and thus did not realize the aircraft had entered the wrong runway. Upon entering runway 05R, the flight crew had neglected to check the Para Visual Display (PVD) and the Primary Flight Display (PFD), which would supposedly have indicated the runway that their craft was on. Coupled with Typhoon Xangsane's imminent arrival and the difficult ambient conditions, the flight crew lost situational awareness and attempted to take off from the wrong runway. However, the report's 'Findings Related to Risk' - risky or unsafe elements emerging from investigation that may or may not have contributed to the accident - noted damage to the first series of taxiway lights leading to 05L.

SIA spokesman Rick Clements said SIA was "shocked and sorry" that the Taiwanese officials had reached such a conclusion but would continue to cooperate with them.

Controversy

The ASC report was deemed controversial by Singapore Airlines; Singapore's Ministry of Communications & Information Technology (now Ministry of Transport), and the International Federation of AirLine Pilots' Associations (IFALPA), among others.

Singapore protested that the report did not present a full account of the incident and was incomplete as responsibility for the accident appeared to have been placed mainly on the flight crew of SQ006 while other equally valid contributing factors had been played down. The Singapore team that participated in the investigation felt that lighting and signage at CKS airport did not meet international standards, with certain critical lights missing or not working. No barriers or markings had been placed at the start of the closed runway, to alert the flight crew that they were on the wrong runway. The Singapore team felt that as another flight crew had almost made the same mistake of using Runway 05R to take off just eight days before the accident, these 2 factors were given insufficient weight.

Runways that are closed are normally unlit to help make it clear they are not in use. But this is not the case at Chiang Kai Shek airport, where a single switch controls green lights on the common taxiway to both runways and down the middle of 05R. Further, 05R was not blocked by barriers as part of the strip was used as a taxiway to the terminal. While the pilot confirmed twice to the control tower that he was on Runway 05L, CKS officials did not know the plane was actually on 05R because the airport does not have ground radar and the plane was out of sight of the control tower at the time of its attempted takeoff.

Taiwan's Civil Aeronautics Administration Deputy Director Chang Kuo-cheng said Runway 05L was fully lit that Tuesday night by white/yellow lights and only the central green lights were lit on the parallel runway. On the taxiway to the runways, four large signs pointed the way to 05L, he added. But he refused to state explicitly that pilot error was the primary cause of the mix-up.

Aftermath

After the release of the ASC report, Taiwanese public prosecutors called upon the flight crew of SQ006 to return to Taiwan for questioning, and the 3-member crew complied. Rumors abounded during that period that the pilots might be detained in Taiwan and charged with negligence. IFALPA had previously stated that it would advise its members of the difficulties of operating into Taiwan if the flight crew of SQ006 were prosecuted. However, the prosecutors did not press charges and the flight crew was not detained.

A statement by Taiwan's Aviation Safety Council managing director Kay Yong implied that pilot error played a major role in the crash of the flight, and led to the death of 83 passengers and crew on board.

Discussion

While aircraft engineering must meet the most exacting standards, the human factor is harder to control. The proportion of aircraft accidents and incidents due to human factors steadily increases while those due to mechanical factors decline.

Shifting of blame to the pilot is part of airline culture - all responsibility for a flight ultimately rests with the captain. In reality, an airline flight is a complex system, with interdependencies between all flight crew, cabin crew, ATC, flight operations staff, ground

staff and flight planning personnel. Blaming the captain solely may reduce PR problems, in this case exacerbated by basic PR mistakes early on such as the statement by LA SIA officials that there were no casualties, and the release of a passenger list with concurrent poor advice on the status of casualties. But it rails against the major principle of Crew Resource Management, which places shared responsibility on all in the system.

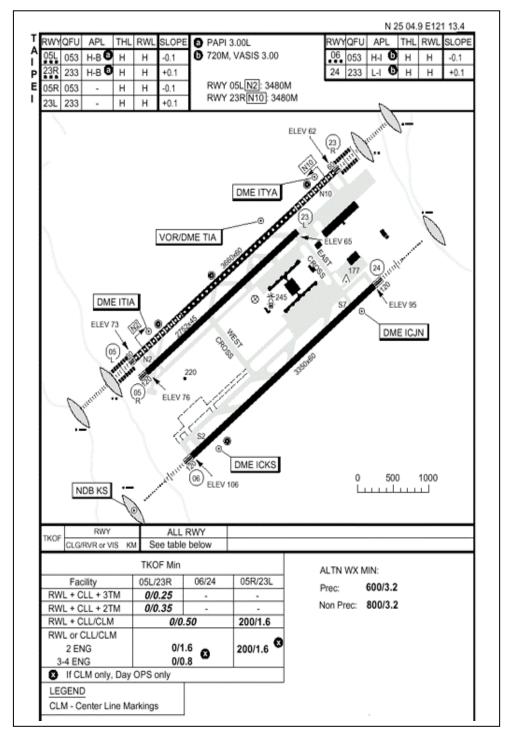
Assignment (2006)

- 1. Four years have passed since your last presentation to SIA management. The industry now faces the perception that air travel is at worst terrifyingly dangerous due to the potential for onboard terrorism, and at best incredibly uncomfortable due to the countermeasures taken to combat this new threat.
- 2. SIA management has asked you to identify specific recommendations for simultaneously improving the passenger's travel experience while reducing the risk of onboard terrorism.
- 3. You will have no more than 15 minutes to present your recommendations. (You should provide both your Powerpoint slides and a short briefing paper for evaluation.)

Sources:

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- 3. Mark Hosenball and Brook Larmer, "A Tragic Wrong Turn-Amid a fierce storm, a pilot makes a mistake," Newsweek | Nov 13, 2000 http://www.keepmedia.com/pubs/Newsweek/2000/11/13/319249?extID=10026
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Appendix A: Taipei airport layout



Appendix B: Economist.com (Aug 14th 2006)

After security forces in Britain apparently foil a largescale terrorist attack, it may be that air-travellers are the worst affected in the long run

THE delays at most of Britain's airports have eased a little since Thursday August 10th, when Britain's home secretary, John Reid, announced that the country's security services had foiled a plot to blow up about ten planes bound for America. Passengers, who were initially anxious, are slipping back into their normal state as fear subsides into irritation. Britain's government has downgraded its assessment of terrorist threats by a notch from "critical", which suggested a terrorist attack was imminent, to "severe", the second-highest grade.

Twenty-three people, all apparently British citizens and mostly from families of Pakistani origin, are being questioned. The suspects were arrested in London, Birmingham and High Wycombe, a town close to Heathrow airport. Another person who was detained has now been released. They were, reportedly, planning to detonate liquid explosives in mid-flight. They are all young—the oldest is 35 years—and the group contains at least one recent convert to Islam. On Monday Mr Reid said that police had detained the "main players" suspected of plotting this attack, but he gave warning that other would-be attackers may be at large.

The security services say that the detained men have links to Pakistan, and add that they have been working closely with police there. This co-operation seems to have led to the tip-offs that prevented, in the language of Britain's police, "mass murder on an unimaginable scale".

Mr Reid has looked dynamic in the past few days, praising the police and security services (who he says have prevented four similar attacks since the July 7th bombs in London last year) and taking charge in the absence of Tony Blair, who is on holiday. Political types, always quick to weigh up winners and losers even where attempted murder is involved, reckon that Mr Reid will have boosted his chances of success if he decides to run as Labour leader when Mr Blair eventually goes.

Winners and losers in the transport business are harder to determine. After several days of cancellations and delays at Britain's big airports many flights are beginning to run normally again. But the extra measures introduced in Britain and America could be a foretaste of heavier security at airports around the world.

It is unclear how long the ban on taking liquids and large pieces of hand luggage, including electrical equipment, into the cabins of planes will remain in place. Already authorities in Britain and America have eased some restrictions. But the ongoing security arrangements—and fears of a possible attack—may yet deter some business travellers from crossing the Atlantic in particular. Video-conferencing, telephone calls and e-mails may take the place of some trips abroad, at least temporarily.

Low-cost airlines in Europe are likely to suffer, too. Many are considering or have begun, like Ryanair, to charge extra for hold luggage. This encourages flyers to travel only with

hand luggage, thus speeding up the turn-around time for their heavily-worked aircraft and boosting profits. Such a strategy will not work if tough restrictions remain in place for long.

It will take time for airports to introduce new devices to detect liquid explosives. The technology exists but does not yet work perfectly and is expensive: it will need refinement before commercial application is possible. And it will not do much good if smaller airports that feed larger and more secure hubs lack the necessary equipment. This could be bad news for lesser regional airports, which may not be able to afford to update security and remain profitable.

On the other hand, rail services in Europe could prosper. The extra new security procedures will add to costs and the overall time for taking flights in Europe, so making trains more competitive. Already trains using the Channel Tunnel between Britain and France have experienced a surge of bookings. Niche airlines that offer only business-class services and smaller planes may prove more reassuring for rich passengers. Businesses that charter or sell executive jets could also expect a boost.

Overall, the heightened security and added fears of terrorism come at a tricky time for airlines. Rising fuel costs have lifted ticket prices and eaten into profits. Environmental concerns over the disproportionate effect on global warming of flying as a means of transport are at the fore. This latest scare, even if it proves to be temporary, is an unwelcome one for airlines only just recovering after some difficult years.