ABSTRACT

On October 2, 2002, JAL and JAS established a new holding company after obtaining the necessary approval from the government bodies. Full integration is planned to take place in April 2004.

This paper will primarily explain how JAL/JAS integration will enable JAL to compete effectively with ANA, the giant in the domestic market, and how it will reinforce JAL’s competitiveness through further cost reduction and revenue enhancement.

In addition, the paper will explain how the keener domestic competition brought about by this integration could resolve the following two issues for the first time in the Japanese aviation history. Those two issues are: (1) providing better service to domestic customers, and (2) making Japanese airlines more competitive against foreign airlines in the international market.

As a result, the paper will argue that such an integration, a logical outcome of the post-war civil aviation history of Japan, will significantly benefit customers, Japanese aviation industry and Japanese society as a whole.

Keywords: Integration, Slot Constraints, Deregulation, Competitive Market

1. JAL’S LONGSTANDING ISSUE

(1) The need for a larger domestic market share. One of the longstanding issues for JAL has been on how to compete effectively with ANA in the domestic market. In order to do so, JAL needed to obtain a larger domestic market share that would enable more revenue from stable domestic market to alleviate or supplement the vulnerability of international operations.

Between 1970 and 1972, the Cabinet approved a framework for the aviation industry in Japan, based on the three major carriers, ANA, JAS (then TDA) and JAL. The main intention of this
framework was to restrict competition among the three airlines in order to foster and strengthen the internationally weak Japanese carriers at the time.

Under the 1970/72 policy, JAL was permitted to hold a monopoly of scheduled international routes, and to fly domestic trunk routes for the purpose of supporting financially its international operation. ANA's mission was to fly all domestic trunk and local routes, with permission to operate short-haul international charters. JAS was permitted to operate in the domestic market, serving local routes, with the promise of future approval for serving domestic trunk routes.

The international aviation market is very vulnerable to volatile economic, political and other unexpected factors such as exchange rates, terrorism, war and epidemics. JAL, being heavily reliant on revenues from international operation, has been impacted from such vulnerabilities, especially in recent years since the tragic event on September 11th, 2001. Therefore, in order to survive the cut-throat competition in the international aviation market, it is essential to establish a substantial business base in the domestic market.

In the United States, Pan American Airways and Trans World Airlines, whose main operational base used to be international, faded out after the introduction of the deregulation policy in 1978. On the other hand, the present mega carriers, American, United and Delta, started as domestic carriers. Under this deregulation policy, these mega carriers entered the international market. They have strengthened their international competitiveness through the fierce competition in the US domestic market, which is virtually free of airport slot restrictions. In each case their domestic revenue accounts for 70-80% of total passenger revenue (see Fig.1).

![Figure 1.](image_url)


In Japan, 60 percent of all domestic passengers (95 million in FY01) use Haneda airport and 20 percent use Itami and Kansai airports respectively (see Fig.2). However, Haneda and Itami
airports were at full capacity. Therefore, airlines have not had the freedom to increase their competitiveness by expanding market share at these extremely congested airports. This is even after the gradual deregulation policy that was introduced to the domestic market in 1986, and the complete deregulation, at least in principle, that followed in 2000. These deregulation policies are only true in principle since the break-down of domestic market shares under these policies has been almost exactly the same as it was 30 years ago: ANA 50%, JAS 25% and JAL 25% (see Fig.3). The ratio of domestic passenger revenue to that of international in the regulated era has also remained virtually unchanged even after the deregulation policy was introduced, which is completely different from that in the United States: 3:7 in case of JAL, 8:2 for ANA and 9:1 for JAS (see Fig.1).

![Graph showing international and domestic passenger numbers.](image)

Source: Ministry of Land, Infrastructure and Transport

Figure 2.

(2) Three Measures to Address JAL's Longstanding Issue

The following three measures are expected to resolve the JAL's longstanding issue of drastically increasing its domestic market share up to the level of ANA's:

1) To obtain JAS' consent to integrate with JAL, which would make its domestic market share almost to the same level with ANA's instantaneously;

2) To have the airport capacity at Haneda airport expanded by the government through the construction of a new fourth runway so that JAL can increase its market share freely;

3) To rectify completely the substantial slot share disparity among three major airlines at Haneda and Itami by the government through the slot allotment.

JAL had worked on JAS to form some types of partnership to compete with ANA effectively since the latter half of 1980s', and JAS finally agreed to the integration this time and hence, the
The first measure was realised. This integration has created a well-balanced domestic and international structure suitable for competing effectively in the international market. Domestic passenger revenue for the newly integrated company becomes close to 50% of total passenger revenue (see Fig.1).

**FY2001**

![Diagram showing ANA Group 48%, JAL Group 25%, JAS Group 24%, Others 3%]

Figure 3.

The second measure is likely to take much more time for it to be realized than the first measure.

Regarding the third measure, as reported by the Committee for Setting Standards on Distributing New Slots at Haneda in 1997, the Japan Civil Aviation Bureau (JCAB) announced its intention to rectify the disparity of the slot share at Haneda at the time of the Haneda’s capacity expansion (see foot note).

Note: the capacity at Haneda was expanded to some extent at the time of the completion of the offshore relocation of runway C in 1997 and runway B in 2000.

However, as the government has set aside slots for new entrants since 1997 and also has adopted the evaluation-based slot allocation method since 2000, by which the government would distribute slots on the basis of each airline’s performance, the slot disparity could not be expected to be rectified drastically, even in the longer term.

2. THE REINFORCEMENT OF JAL’S COMPETITIVENESS

Following the Gulf War in 1991 and the worldwide economic recession thereafter, international passenger demand has fallen against the previous year for the first time in the world aviation history and as a result, the competition had become fiercer. Meanwhile, the growth rate of the domestic demand has also become sluggish, causing over-capacity in the market. The average yield of the international passenger fell by about 40% and that of the domestic passenger by about 30% in the last 12 years.
Under these circumstances, JAL has drastically cut costs by more than 30% per ASK (available seat-kilometres) in 12 years. In terms of the unit labour cost, the reduction is about 50% without lay-offs (see Fig.4). In Japan, layoff should be avoided as much as possible and must be considered only as the last resort. Such a practice is a prevalent in Japanese society.

![Figure 4.](image)

Although JAL finally recovered in 1998 and succeeded in recording profit, the terrorist attacks in the U.S.A in September 2001 forced JAL back to a serious financial loss.

In this unprecedented severe environment, where the need for a fundamental change in the cost and revenue structure was called for more than ever before, JAL has been forced to search for new ways to further cut costs and increase revenue. One of the main solutions to this challenge was the JAL/JAS integration.

(1) Further Cost Reduction

The shared use of equipment such as aircraft, ground service equipment, facilities and personnel contributes to the cost efficiency and reduction. JAL/JAS (hereafter JAL Group) originally planned to save ¥61 billion (=US$510 million) annually by the end of March 2006.

Estimated amounts of cost reduction of each segment are as follows: ¥19 billion (=US$160 million) reduction from reduced rental fees; ¥28 billion (=US$230 million) saving from labour efficiency improvement; ¥11 billion (=US$90 million) saving from fleet efficiency improvement and ¥3 billion (=US$25 million) saving from others (see Fig.5). The number of aircraft types is 16 at present and it is planned to decrease to 11 by FY06.

Because revenue is falling drastically due to the impact from the war in Iraq and SARS, which were not considered at the time of planning the integration, JAL Group is making utmost efforts to accelerate the pace of the cost reduction plan, aiming to complete well in advance of the original target date.
(2) Further Revenue Enhancement

As explained earlier, JAL’s domestic network is composed primarily of trunk routes and that of JAS local routes. This means both are in a mutually complimentary relationship. With the integration, the JAL Group has roughly an equal share of slots to ANA group at Haneda and Itami, resulting in a broader, nationwide network. The former “one strong + two weak airlines” structure is changed into the new one where two airline groups, JAL and ANA become real, equal, competitors. JAL Group can now offer a more competitive and, more customer oriented flight schedule, network, fares and services as a market leader. After 8 months have passed since the integration came into effect, it is quite clear that the JAL Group’s competitive position against ANA group has become much stronger. The examples of strengthening of the network and schedule competitiveness are as follows:

1) Starting flights on high-demand routes monopolised by ANA (Toyama, Yamaguchi-Ube etc.);
2) Scheduling more flights on high-demand profitable routes where ANA had a larger number of flights (Matsuyama, Hiroshima);
3) Eliminating over-concentration of flights at the peculiar peak hours on trunk and other routes to set user-friendlier timetables (system-wide).

We expect an annual ¥21.5 billion (=$/180 million) increase in revenue in FY06 because of increased competitiveness but, at the same time we expect an annual ¥11 billion (=$/90 million) decrease in revenue because of active sales promotion. Therefore, the net expected increase in revenue is ¥10.5 billion (=$/90 million).

At the bottom line, we expect the net integration gain of annual ¥56 billion (=$/470 million) in FY05 and thereafter (see Fig.6).
Figure 6.

(3) Current Progress and Short-Term Goal

With this integration, JAL Group has a well-balanced revenue structure with revenue share of international passenger 41%, domestic passenger 38%, international cargo 10%, domestic cargo 2% and others 9%. The international passenger segment also has a well-balanced revenue structure with revenue share of Pacific routes 29%, European routes 20%, long range Asian routes 21%, short range Asian routes 20%, and others 10% (see Fig.7).

It surely seems that JAL’s decision to integrate with JAS was very timely considering the unexpected outbreak of war in Iraq and SARS turmoil.

<table>
<thead>
<tr>
<th>Revenue</th>
<th>FY2002</th>
<th>FY2003</th>
<th>FY2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancement</td>
<td>0</td>
<td>12.0</td>
<td>21.5</td>
</tr>
<tr>
<td>Fall in Revenue</td>
<td>▲ 5.5</td>
<td>▲ 11.0</td>
<td>▲ 11.0</td>
</tr>
<tr>
<td>Cost Reduction Effects, etc.</td>
<td>1.0</td>
<td>18.5</td>
<td>61.0</td>
</tr>
<tr>
<td>Total Integration Effects</td>
<td>▲ 4.5</td>
<td>19.5</td>
<td>71.5</td>
</tr>
<tr>
<td>Additional Cost Increase</td>
<td>▲ 6.0</td>
<td>▲ 6.0</td>
<td>▲ 15.5</td>
</tr>
<tr>
<td>Net Integration Effects (Costs Incurred)</td>
<td>▲ 10.5</td>
<td>13.5</td>
<td>56.0</td>
</tr>
</tbody>
</table>

($1=120)

Figure 7.
The progress of integration, including computer reservation systems, is under way and controlled very well so far without any serious problems. After full integration in April 2004, JAL Group will consist of Japan Airline Domestic and Japan Airlines International (which includes cargo business at the beginning). Cargo business would become independent in the future, circumstances permitting (see Fig.8).

Within FY2003 Speeding up the reorganization of management structure in preparation for Phase 2
April, 2004 Transition to the following business structure to maximize Integration effects

![Diagram of business structure]

Figure 8.

With SARS and the aftermath of war in Iraq, we are forced to expect financial losses in FY03. However, as the effects of both events are likely to fade away by the end of this fiscal year, combined with the revenue structure change brought about by JAL/JAS integration that can partially offset the ill effect on the international business, we still expect profit in FY04 and FY05 (see Fig.9).

(Yen in billions)

<table>
<thead>
<tr>
<th>New Japan Airlines Group</th>
<th>FY2000 (Results)</th>
<th>FY2001 (Results)</th>
<th>FY2002 (Results)</th>
<th>FY2003 (Estimate)</th>
<th>FY2005 (Target)</th>
</tr>
</thead>
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<tr>
<td>Revenue</td>
<td>2,122.2</td>
<td>2,029.5</td>
<td>2,083.4</td>
<td>2,032.0</td>
<td>2,245.5</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(=120</td>
<td>(=18.7 bill.)</td>
</tr>
<tr>
<td>Operating Profit</td>
<td>96.3</td>
<td>▲1.0</td>
<td>10.5</td>
<td>▲22.0</td>
<td>122.4</td>
</tr>
<tr>
<td>Operating Profit Margin</td>
<td>4.5%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>▲1.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Net Income</td>
<td>43.2</td>
<td>▲35.8</td>
<td>11.6</td>
<td>▲43.0</td>
<td>34.9</td>
</tr>
<tr>
<td></td>
<td>15%</td>
<td>▲14%</td>
<td>5%</td>
<td></td>
<td>12.4%</td>
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<tr>
<td>Payback Period</td>
<td>9 years</td>
<td>15 years</td>
<td>12 years</td>
<td>15 years</td>
<td>7.7 years</td>
</tr>
</tbody>
</table>

Figure 9.
Notwithstanding above, as almost all airlines in the world including U.S. mega-carriers are cutting cost drastically under the severe financial situation, and are desperate to regain the international competitiveness, JAL Group is required to make further cost reduction and revenue enhancement than originally planned in the integration project.

It is noteworthy that although China is badly affected by SARS for now, in the long run, it will grow to become a giant aviation market in the world. JAL Group must be prepared to reap the benefit from this lucrative growing market with the determination to lower cost to the level of Asian airlines.

3. TWO LONGSTANDING ISSUES IN AVIATION INDUSTRY IN JAPAN

The aviation industry in Japan has had the following two longstanding issues, indirectly explained so far. Both issues are expected to be resolved simultaneously by this JAL/JAS integration;

1) **The need for improving customer services** that had been seriously hampered by the imperfectly competitive domestic air travel market in which one airline, ANA, dominated half of the market share, while the other two, JAL and JAS, with less than one-quarter of the market share each, had to compete with this “Giant Share holder” (see Fig.3).

2) **The need for reinforcing the competitiveness of Japanese airlines as a whole against foreign airlines** in order to expand the international network of the Japanese airlines and to increase Japanese airlines’ share of the international passenger market in Japan, which is now only around 40% (see Fig.10).

![FY2001 Pie Chart]

**Figure 10.**

As explained above, the integration of JAL and JAS has changed the existing structure of “one strong + two weak airlines” to a new structure where two airlines are real competitors. It is thus quite natural that the competition is stimulated more strongly than before.
The more competition Japanese airlines are exposed to in the domestic market, the more competitive they will become, especially in the area of cost reductions, which will in turn make them more competitive against foreign airlines. As has been said, the American mega-carriers boosted their competitiveness by competing fiercely in the domestic market first.

Although ANA's international passenger revenue is smaller than that of JAL group, this difference is expected to shrink rapidly if ANA makes full use of the restriction free slot situation at Narita and Kansai in the same way ANA has expanded international routes so far.

In terms of international passenger market share of Japanese airlines in Japan, it has stayed at around 40% even after ANA entered the international passenger market in March 1986, followed by JAS in July 1988. Unlike the domestic market, the slot restriction at Narita was loosened by the opening of its second provisional runway in April 2002, and strong growth is expected in the medium to long term.

Therefore, the task for Japanese airlines is to become more competitive internationally and to increase its market share through expanding the international networks. This will open ways for Japan's increased participation in the international arena in the area of economics and politics, and hence will contribute significantly to improving the lives of the people.

4. CONCLUSION: 50 YEARS OF CIVIL AVIATION HISTORY IN JAPAN A NEW FRAMEWORK IS NEEDED

Civil aviation in Japan, following Japan's defeat in 1945, resumed in October 1951 when the first Japan Air Lines took to the sky. Between 1952 and 1953, eight other domestic airlines were born.

Of these eight, four were eventually folded into ANA by 1967. The remaining four eventually merged to become Toa Domestic Airlines (TDA), renamed Japan Air Systems in 1988. Therefore, mergers like JAL/JAS integration are nothing new in Japanese aviation industry.

Protective Aviation Policy Until 1985

During the 1960's, the demand for air travel grew strongly as the Japanese economy surged and annual GNP growth soared. Although Japanese airlines struggled to increase capacity to meet the demand, they were hindered by a shortage of pilots and delays in developing airports. Circumstances demanded a clear aviation policy.

Between 1970 and 1972 the Cabinet approved a new business field demarcation of the three major carriers established, then ANA, JAS (then TDA) and JAL.

The main intention of the 1970/72 policy was to protect and nurture the airlines by avoiding the excessive competition among themselves.

JAL, the senior company, was permitted to hold a monopoly of scheduled international routes and to fly domestic trunk routes for the purpose of supporting financially its international operation. ANA's mission was to fly all domestic trunk and local routes, with permission to operate short-haul international charters. JAS was permitted the domestic market, serving local routes, with the promise of future approval for serving domestic trunk routes.

Gradual Deregulation Policy After 1986
However, in the early 1980's, as both the domestic economy and the airline business were growing strongly and being influenced to some extent by a new US-Japan aviation agreement in 1985 that permitted multi-designation of Japanese carriers to transpacific service, the government adopted a new, pro-competition policy in 1986.

Under this policy ANA and JAS gained rights to operate the international scheduled service. In return JAL got more access to the domestic market through more local routes.

At the time, there was already capacity shortage at the main domestic airports, Haneda and Itami. Regarding the capacity of the main international airport, Narita, it was opened in 1978. Its capacity was saturated in 1991 and loosened again in April 2002 by the opening of its second provisional runway.

**Total Deregulation Policy in 2000, but incomplete**

The next major policy change came in February 2000, when "total deregulation" was launched in the domestic market. The domestic restrictions on air fares were completely lifted and airlines were permitted to fly wherever they liked.

However the problem was that the persisting lack of capacity at the key airports, Itami and Haneda, prevented airlines from starting new routes on monopolised routes and increasing flight frequencies on other double or triple trucking routes where in most cases ANA enjoyed largest number of frequencies. Thus the breakdown of the domestic market shares under the new "totally deregulated" policy was almost exactly the same as it had been 30 years ago: ANA 50%, JAS 25% and JAL 25%.

Base on the strongest competitiveness of the network promised by the given “Giant Share” in the domestic market, ANA had held firmly the marketing initiative. This is because why it has been said that the competition in the domestic market is less fierce than that in the international. It could be said that the free and fair competition which is clearly stipulated by the Japanese antitrust law was appeared flawed to some extent under the reality of imperfect market conditions, aggravated by airport capacity shortages.

**The JAL/JAS Integration, The Logical Outcome Of The Japanese Aviation History**

The integration was the only one last choice left for the minor airlines in the domestic market unless the government took the necessary actions to dissolve the basic contradiction of the deregulation policy with the chronically crucial slot shortage at the main domestic airports. By this integration, the competition in the domestic market is substantially promoted and it becomes possible to solve the longstanding issues of the Japanese aviation, that are;

a) Improve customer services
b) Reinforce the competitiveness of Japanese airlines as a whole against foreign airlines