RE: Insurance Proposal Analysis December 11, 1996

Good morning Ms. Litton,

Our team has conducted an analysis of the given data to make our best recommendation for an insurance policy to protect your fleet. Our goal was two-fold:

1) Minimize your firm's losses exceeding $37 million in the first year
2) Obtain the insurance policy at the lowest cost over the entire five-year period to maintain high-revenue levels

To guide our analysis, we made the following assumptions:

- Although only the policy on the Airbus A340s is due to expire, our optimal plan insures the entire fleet of A340s and Boeing 757s.
- The option to buy 28 more Boeing 757 aircraft is a proposal that has yet to materialize, thus will not be considered in our insurance analysis.
- Incidental damages will vary year-to-year over a uniform distribution from $1 million to $5 million.

The simulations that we conducted outline the optimal insurance plan, taking into account the size of your fleet, current and future operational risk, and the sensitivity of accident probability.

The policy that we found to be the most cost-effective is proposed by the Canadian Trust Company (CTC). Through their insurance plan: your firm would pay $13 million annually. CTC would then cover 90% of losses up to $80 million of annual aircraft losses. Losses in excess of $80 million would not be covered, and your firm would be responsible.

In our analysis, we conducted simulations to assess the overall cost for year one through five, and the risk associated with each plan.

1) We rejected the plan RCNC2 because the probability of exceeding $37 million in cost in the first year borders 2.5%, and we deemed this as too high of a risk for us to consider. In addition, we found that while the RCNC2 plan exhibited the lowest total cost, the plan had the highest standard deviation, roughly $8.17 million, when compared to the other plans. The high standard deviation translates into a possibility of much higher potential cost associated with RCNC2 than the seemingly low $49.7 million over five years, making it the riskiest option. The remaining 3 options are safer overall for your firm.

2) While RCNC1 has a considerably low probability of exceeding $37 million in cost in the first year, 0.029%, the yearly cost is the highest of the four proposals, with a first year cost of $27.2 million and a total cost of $136.3 million. This proposal is twice as expensive as the CTC plan which has the same probability of exceeding $37 million. For this reason, we decided to rule out RCNC1 and focus our decision on the last two proposals, CTC and HIC.

3) At first glance, the HIC policy has a slightly lower total cost of about $2 million. However, when taking into consideration the difference in standard deviation of cost between the CTC and HIC plans, we see that the HIC plan would be a riskier option because of the higher standard deviation, which is about $1.5 million higher than CTC. Over time there is a higher cost risk associated with HIC and as a result we recommend that you follow through with the CTC insurance proposal. Compared to the other proposals, CTC minimizes the risk of exceeding $37 million in the first year and facing bankruptcy.

Furthermore, our team conducted a sensitivity analysis that took into consideration the fact that, with your newer fleet and only two variations of aircraft, the probability of an accident would be an estimated 25% less likely than competitors. Evaluating the results of the analysis, our team found that there was not any significant disparity that would lead us to modify or reverse our recommendation and we advise you to continue on with accepting the CTC proposal.

Kind regards,

Day Group 4

Without sensitivity

PLAN	Mean > 37M	Standard Deviation	Yr. 1 Cost	Total Cost
RCNC1	0.029	1.015142	27.269	136.345
RCNC2	2.4658	8.170173	9.9455	49.7273
CTC	0.029	1.838411	13.512	67.5631
HIC	0	3.450431	13.349	65.6379

With Sensitivity

PLAN	Mean > 37m	Standard Deviation	Yr. 1 Cost	Total Cost
RCNC1	0.0173	0.9079294	27.237	136.187
RCNC2	1.9761	7.344765	9.6895	48.4474
CTC	0.0173	1.56068	13.467	67.3389
HIC	0	3.138233	13.246	65.1071