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## AIRLINE BUSINESS CHALLENGE

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### PRELIMINARY SCENARIO AND AIRCRAFT DATA

#### Background

Five domestic airlines in Taronga have been taken over by external corporations who have very limited experience in the management and operation of airlines. Each corporation has appointed interim management teams in an effort to maximise profits and, therefore, returns to shareholders. The airlines are:

ASPIRING AIR	(Team 1)
FEDERAL EXCESS	(Team 2)
CITY WHOPPER	(Team 3)
NEVERLATE AIRWAYS	(Team 4)
VIRGIN TARONGA	(Team 5)

The airline managers appointed to the team have limited knowledge of the Tarongan market and need to make both tactical and strategic decisions on the future direction of their respective airlines with regard to aircraft type, routes, scheduling, pricing and marketing.

All airlines have their Head Office in Buderim and compete with road and rail modes for available traffic to and between cities Amborga (City A), Buderim (City B), Caxtus (City C) and Dram (City D). A fifth city, Engleflook (City E) is served by ferry crossing from Amborga.

#### City characteristics

**Buderim**, the capital of Taronga, is the largest city in the country. Most companies have their headquarters in the city, which also houses the Government and all Ministries. Approximately 35% of the population lives in Buderim.

**Amborga** has traditionally had strong links to Buderim, with many residents of the capital being born there. Road links between the two are relatively poor. Amborga is also the only link with the small island on which the city of Engleflook is built.

**Caxtus** is a commercial centre, with much of the country's manufacturing base located around the city. A large network of service industries has built up as a consequence of the economic activity, including law firms, accountancy practices and others.

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**Dram** was the previous capital city of Taronga and retains special historical relationships with most cities in the country.

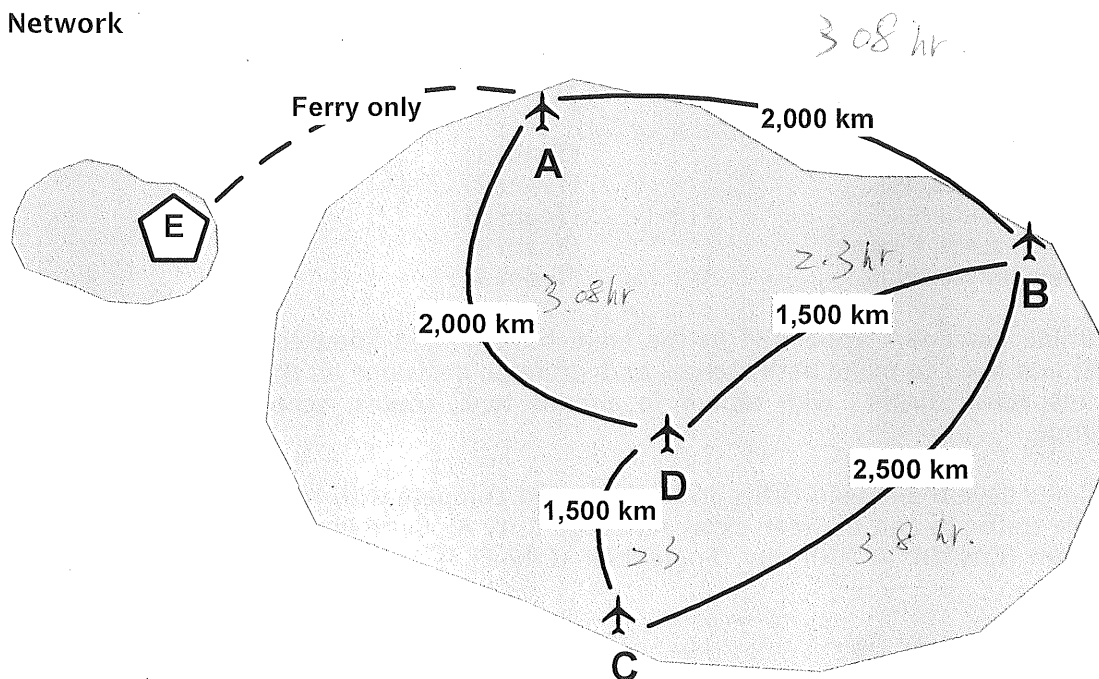
**Engleflook** is a resort location, based on the idyllic small island. The hotel industry has established a range of facilities, catering to all price tastes, and has encouraged travel throughout the year by innovative pricing schemes to fill the rooms.

### Market size

Market size will be advised and may vary each month. Traffic distribution across the network is estimated to be approximately:

A-B:	20%
B-C:	40%
C-D:	14%
D-A:	13%
B-D:	13%

### Network



At the time of take over all airlines have two aircraft, based at city B, operating a circular service calling on all four cities. One aircraft operates in a clockwise direction (CW) and the other anti clockwise (A/CW). Due to government regulation additional alternatives are; Hub and Spoke (H&S) service to **all three** outports centered on City B, and/or Shuttle (Shuttle) services between B and **one** other city.

Note that if an airline has an aircraft flying a circular route in only one direction, it would not be able to pick up returning passengers wishing to fly in the opposite direction. Passengers require the most direct route, also the least expensive. Competition for traffic exists with the road and rail networks.

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### Fares

Fares within Taronga are set by reference to distance and mode of transport. At the time of take over, the fare structure in place is:

	<u>Road</u>	<u>Rail</u>	<u>Air</u>
Fare per 1,000km (Economy)	\$ 60	\$ 80	\$ 120
Fare per 1,000 km (Business Class)			\$ 200
Fare per 1,000 km (First Class)		\$ 120	\$ 250

### Aircraft

Each airline owns 2 x Dakota 100 aircraft each with a maximum capacity of 115 seats and currently configured F20/Y72. Both are less than 12 months old.

### Staffing

Dakota 100s carry a flight crew of 2 and a cabin crew that varies with configuration – 3 if all economy; 5 if FY or JY and 6 if in a three class configuration. You have support ground staff adequate for current schedules. Wage costs per aircraft per month are:

Per aircraft	All Economy	Two class - FY or JY	Three class
Flight crew and Cabin crew	\$87,400	\$104,000	\$112,300
Ground support staff	\$70,000	\$70,000	\$70,000

### Airport and Other Charges

<b>Airport Landing Costs (Dakota 100)</b>	\$ 200 per touchdown
<b>Fuel Costs (all sectors)</b>	\$2,100 per 1,000kms
<b>Catering Costs: First Class</b>	\$ 30 per passenger
<b>Business Class</b>	\$ 20 per passenger
<b>Economy Class</b>	\$ 10 per passenger

### Company Finances

Your predecessor company was profitable, with retained earnings of \$9,500,000 as at the take-over date.

The company has long-term debt, secured against its aircraft assets of \$35,200,000. As a condition of the take-over, only interest is payable against this debt for the first twelve months.

The company has \$1,500,000 in liquid assets; \$500,000 in cash and \$1,000,000 in the short-term money market.

Cash can be invested on the short-term money market to earn 10% interest per annum and withdrawn monthly. If you fail to have a positive cash balance at any stage, you will incur interest charges and penalty fees based on the under provision.

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### General Data

- Dakota 100s average 650kms/hr flying speed for all flights.
- Turn-round times for all cities average 1 hour, which includes taxiing, refuelling, re-provisioning and crew changes.
- Maximum daily operating hours are 17 (0600 to 2300).
- Cost of each Dakota 100 is \$22,000,000; depreciation is 1% per month, on the original purchase price. Interest on aircraft loans is 10% per annum. A principal repayment 'holiday' of six months is granted on all current and future loans.
- Current aircraft servicing/maintenance costs are \$180 per block hour plus \$225 per take-off and landing cycle.
- An administration charge of 5% of total sales is levied to cover Head Office costs.
- New Dakota 100 aircraft are available for lease at a cost, currently, of \$320,000 per month. Leased aircraft are contracted for 12 months unless returned off lease (without replacement) in which case a one-off penalty of 50% of the monthly lease cost applies. You cannot cancel a lease and replace it with a purchased aircraft in the same month.
- The airlines operate on a 28 day month.
- All passengers' book return flights the majority of which are made through travel agents who charge commission at 10%.

### The Task

You have been appointed as the management team of your nominated airline. While familiarising yourselves with the industry and operational aspects, your immediate initiatives are to make decisions on:

**Route Patterns.** Specify the cities that will be serviced and the pattern. On **circular** routes the minimum is 4 cities, the response can only be B/C/D/A and back to B or the reverse. All flights commence from Buderim on 1st of the month. **Hub and Spoke** serves all outports, in turn, from Buderim and **Shuttles** operate from Buderim to any individual outport.

The input sheet needs to specify the route pattern selected and the routes served.

The options for the initial months are:

Pattern	Input sheet	Routes served
Clockwise	CW	BCDAB
Anti clockwise	A/CW	BADCB
Hub and Spoke	H&S	From B to each of A, C, and D (ACD)
Shuttle	Shuttle	BAB or BCB or BDB

As the month progresses, an aircraft may have to terminate overnight at a port other than Buderim because of insufficient time to complete a further sector. In this case, the next day's flight will commence from the city of termination. At the end of the month, aircraft located at a city other than Buderim are deemed to be flown overnight back to Buderim (at no cost) ready to commence the next month's service pattern.

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**Aircraft Configuration.** Select the seat mix of First Class, Business and Economy from the seat configuration matrix.

**Advertising.** Advertising campaign costs are paid in full the month the decision is made. The options available are:

- Campaign 1 – Cost \$100,000. Your anticipated market share increase (if competitors do not counter) is 2%
- Campaign 2 – Cost \$200,000. Your anticipated market share (if competitors do not counter) is 4%

**Commercial Credit (Passengers).** Decide on the percentage of companies to which you will extend credit facilities. At present, 25% of large corporate customers deal directly with the airlines, by-passing the travel agencies. Industry practice is to allow 10% discount to such organisations. For trading purposes, select the percentage of total passenger tickets you will supply on credit. The percentage can be varied from 0% to 50% each month. Your existing administration can cope with this new facility at no extra cost. Commercial credit allowed to large organisations is a strong driver for attracting traffic.

**Capacity.** You can lease additional aircraft capacity (Dakota 100s only) if you wish but bear in mind it is a long term lease and there is a penalty for cancellation. You cannot buy additional aircraft yet. Should you elect to sell OWNED aircraft, the highest price obtainable is 90% of book value. You can also sell an aircraft, and, if required lease that same aircraft back. Note however that the loss arising to your company from the sale will be attributed to the trading profit or loss that month, thereby affecting your cumulative profit situation.

### Reports

At the end of each month you will receive:

- Trading Profit Report
- Profit and Loss Statement
- Cash Flow report
- Aircraft Operational Data
- Passenger Loadings Report
- Market Share Report

Additional market intelligence will be made available as the game progresses. Note in this respect that the economic fortunes of Taronga tend to vary considerably. Careful planning is therefore required.

Plans and strategies can be adjusted each month. Seating configurations and route changes can be made at the beginning of each trading period with no time or cost penalties.

At the end of month 2 you will receive data regarding further market development opportunities.

Underlying Assumptions and Objective

- All teams start from a common base
- Money is a limited resource and has a cost
- The airline market is competitive with other airlines, road and rail operators
- Two aircraft types are available in both passenger and cargo roles. There are no dedicated freighters
- Factors that directly impact revenue, market share and profits (or losses ) are:
  1. Aircraft frequency and capacity
  2. The range of services offered
  3. Price
  4. Advertising and promotional activities
  5. Operational decisions impacting staff costs
- Advertising and promotional activities will increase the total market size
- Contract staffs cover ticketing, baggage handling, airport transport and administration
- There is a risk factor in every business activity but planning will minimise the risk
- There is no perfect solution to the exercise – the winning team is the one who makes the best business and operational decisions
- **YOUR OBJECTIVE IS TO HAVE THE HIGHEST ACCUMULATED PROFIT BEFORE TAX**

***Good Luck!***