

APPENDIX 1

EXTRACTS OF 1994 EVA FINANCIAL STATEMENTS OF AIRWAYS CORPORATION OF NEW ZEALAND.

ECONOMIC VALUE ADDED FINANCIAL STATEMENTS

GUIDANCE NOTES

INTRODUCTION

In our 1993 - 94 annual report we published a brief introduction to Economic Value Added (EVA) and printed a summary of Airways economic results from inception in 1988 through to 1994. This year we are presenting a more comprehensive set of EVA accounts. These notes are designed to help the reader better understand these EVA financial statements.

GLOSSARY OF TERMS

OPERATING CAPITAL	The capital invested in productive assets. Non operating capital includes work in progress.
CAPITAL INVESTED	The total capital, debt and equity, invested in the business.
ECONOMIC VALUE ADDED (EVA)	The difference between the net operating profit after tax (NOPAT) and the cost of the capital employed to produce NOPAT.
NET OPERATING PROFIT AFTER TAX (NOPAT)	The profit derived from the operating activities after tax but before the cost of financing.
COST OF CAPITAL	An amount - expressed as a percentage - that represents an appropriate return to the providers of capital.
CHARGE ON OPERATING CAPITAL	The result of multiplying the cost of capital by the amount of operating capital.
CHARGE ON EQUITY CAPITAL	The result of multiplying the cost of equity capital by the amount of equity capital invested.
NON INTEREST BEARING CURRENT LIABILITIES (NIBCLS)	Liabilities that are due for payment within two months.
RELATED BUSINESS	A business that is not a monopoly activity. It may be directly related to the monopoly activity or a separate stand alone business unit.
OPPORTUNITY COST OF DEBT	The rate at which the business should expect to be able to borrow money.
OTHER ECONOMIC EQUITY	Money belonging to the shareholder that is not represented by share capital. It includes earnings that have not been returned to the shareholder.

WHY PUBLISH EVA ACCOUNTS?

The Corporation's primary financial objective for its monopoly air navigation services is to maintain the value of the shareholders' investment. EVA provides the best method of measuring whether this objective is being achieved.

HOW DOES EVA REPORT BUSINESS PERFORMANCE?

An EVA statement reports the net operating profit after tax (NOPAT) less a charge for the use of operating capital. The result is EVA. In a competitive environment there should be no limit to the amount of EVA a business should aspire to earn. When EVA equals zero the business produces a return that fairly compensates the providers of capital for the nature of risks they bear from their investment. Negative EVA means the providers of capital are not receiving sufficient compensation for the risks they bear from investing in the business.

The bottom line of the economic statement is the actual EVA earned that year, which is a combination of the result of trading activity and the effective use of capital. On page 25 of the EVA accounts is a statement titled 'Economic Value Added' that shows Airways generated \$2.557m positive EVA for the year ended June 1995.

WHAT DOES AIRWAYS DO WITH ITS EVA?

In this respect Airways is different from most businesses. Most businesses operate in a competitive environment where prices are set by the market. If a business generates positive EVA in a competitive environment then the shareholders, quite rightly, enjoy the benefits of that EVA. Airways is primarily in the business of providing air navigation services and for some parts of this business it is possible to have only one provider of the service. Under these circumstances the prices are set by the single supplier and not by market forces. The appropriate price for a monopoly service is that which in the long term produces zero EVA. When EVA equals zero the return fairly compensates the providers of capital for the nature of risks they bear from investing in Airways.

On page 25 of the EVA accounts is a report titled the 'Allocation of Economic Value Added'. This shows the allocation of EVA between the shareholders' account and the customers' account. The EVA earned on the non-monopoly activities is available for distribution to the shareholder whereas the EVA on monopoly activities is returned to the customers via reduced prices.

WHAT IS NOPAT?

NOPAT stands for net operating profit after tax. There are no costs associated with the financing of a business in NOPAT. All interest after tax on loans, including the inherent interest cost embedded in lease payments, is omitted, as is interest earned on money invested.

There are no provisions in NOPAT. By definition, a provision means that the actual cash has not yet been spent. The cash is still available for use in the business until the time the bill is actually paid.

It would be incorrect to say that NOPAT contains only cash income and cash expenses. Depreciation and the principal repayment on any lease is included in NOPAT, as are changes in the value of some assets such as land and buildings which may have increased or decreased in value during the period. Any change in value should be passed through NOPAT as it affects the value of the shareholders' investment in the business.

Tax appears in NOPAT. The tax charge in NOPAT is the tax that is actually paid to the IRD after allowing for the tax effect of income and expenditure in the financing costs of the business.

Thus, NOPAT is a measure of the after tax operating performance of the business. Page 26 of the EVA accounts shows the calculation of NOPAT for Airways businesses.

WHAT IS THE CAPITAL CHARGE?

Having established that NOPAT is the measure of the operating performance of the business, it is then necessary to determine the cost of satisfying the providers of capital for the business. This is the capital charge.

There are two parameters in the capital charge. The cost of capital and the amount of capital invested. When multiplied together they produce the capital charge.

The cost of capital is a percentage that represents an appropriate rate of return for investing in a particular business. The cost of capital formula is a topic receiving a lot of attention among academics. The formula that Airways has chosen to apply is that which strikes the appropriate balance between the interests of the shareholder and its customers.

To calculate the cost of capital it is necessary first to identify the return available from investing in Government stock. This is called 'the risk free rate'. Airways chooses five year Government stock as the risk free rate on the basis that the shareholder is making a long term investment decision. The risk free rate is reduced to an after tax return by deducting tax at the current tax rate. A percentage premium is then added to the after tax risk free rate to compensate for investing in a business rather than risk free Government stock. The amount of the premium depends upon the level of risk of each business.

To determine the premium, a risk factor is calculated for each business. This risk factor is known as the asset beta and it represents an assessment of the risk attached to the operating assets of the business. Airways monopoly activity is considered a low risk and has an asset beta of 0.3. Airways' other business units each have their own asset betas.

Empirical evidence demonstrates that an investor should expect to receive an average premium above the risk free rate of 9% after tax by investing in a diverse portfolio of shares in the New Zealand market, as measured over a long period of time.

Therefore a shareholder in Airways with its asset beta of 0.3 should expect to receive a premium of 2.7% ($0.3 \times 9\%$) above the risk free rate for choosing to accept the operating risks of Airways.

Having identified the cost of capital, it is necessary to determine the actual amount of capital invested. The cost of capital is multiplied by the capital invested to arrive at the capital charge.

WHERE IS THE CAPITAL CHARGE APPLIED?

NOPAT is derived from the use of operating capital. The capital charge deducted from NOPAT to arrive at the EVA is calculated by multiplying the cost of capital by the operating capital. Operating capital is the capital invested in productive assets.

Not all capital is used to produce NOPAT. Some capital is invested in non operating assets, eg work in progress. This non operating capital also receives a capital charge. That charge is capitalised as part of work in progress, until it becomes operational. In this way a return is provided on the total capital invested.

On page 25 of the EVA accounts the capital charge is \$9.180m for the year. This is an accumulation of the capital charges on operating assets for all the business units within Airways.

IS THE RATIO OF DEBT AND EQUITY IMPORTANT?

Nowhere in the calculation of the capital charge is it necessary to distinguish between the amount of debt and equity in the business. The capital charge is a charge for the total capital invested and the amount of debt and/or equity is irrelevant.

However, the ratio of debt to equity is relevant for the shareholder. This is best illustrated by an example:

For two businesses with identical asset values the capital charge would be the same, but if one of the businesses was financed by debt and equity, then its equity provider would expect a higher return per dollar of equity invested than the business with all equity. Debt introduces new risks for the shareholder, partly because the equity provider in the business with debt will not receive any return until the interest cost on the debt is satisfied. This debt risk is called financial risk and the shareholder is entitled to be compensated for financial risk. To achieve this the shareholder receives the difference between the cost of capital and the cost of debt. Perhaps a numeric example will make it clearer.

Company A is financed by 100% equity - say \$100,000 and the cost of capital is calculated at 10% (7% for risk free rate plus 3% for operating risk). The capital charge is therefore \$10,000 ($\$100,000 \times 10\%$).

Company A decides to repay \$50,000 of its equity and replace it with debt at an expected interest cost of 8% (after tax shield). The capital charge does not change. The business is still operating in exactly the same way with the same assets. However the equity providers now have financial risk. Therefore the 2% difference between the cost of capital and the cost of debt (10% - 8%) is passed to the equity holders as a reward for the financial risk. Therefore the equity holders will receive a 12% return (based on 50% equity), 10% for the cost of capital plus an extra 2% for financial risk.

ADDITIONAL INFORMATION ON THE NOTES TO THE EVA STATEMENTS

As in traditional financial statements it is important to state the basis upon which the results have been calculated. There are as yet no economic accounting standards.

The charge is applied to the average operating capital employed. The average is a simple average of the opening and closing capital. In the future we expect to calculate the charge monthly on the actual capital employed.

For the related businesses the cost of capital reported is a weighted average of all the individual business units and their respective amounts of operating capital. The total of all these businesses is quite small and therefore reporting the average is acceptable. When an individual business unit assumes some significance then it will be reported separately.

The cost of equity capital includes the cost of capital and the additional premium for financing risk. For Airways shareholders the financial risk premium is the difference between the 8.12% consolidated cost of capital shown in note 2 and the 10.25% shown in note 3. Although a business can increase its return to shareholders by introducing debt it must be remembered that the additional return - in Airways' case 2.13% - is what the shareholder is entitled to expect for additional risk. It is not EVA.

This is a summary of the parameters used to calculate the cost of capital. It is intended to be as non technical as possible. However for completeness a technical section is included at the end of the EVA accounts. It is not necessary - thankfully - to understand this technical section before you can use EVA.

This is the balance of accumulated EVA earned on the monopoly activity that is still to be returned to the customers through planned price adjustments. This account is unique to the monopoly activity.

The actual income tax paid to the Inland Revenue is the amount that will appear in the EVA accounts.

Having stated that the EVA accounts contains the actual income tax paid - and it does - things can get complicated when tax is involved. It is quite common for a group of companies to find that some of the companies are profitable while others are not. For tax purposes the whole group is consolidated and therefore the timing of the tax paid by each individual company can be influenced by the other companies within the group. This can be confusing for the individual company managers trying to manage their own business. Therefore to avoid this confusion Airways treats each business unit separately for tax purposes on the basis that the parent company is paying tax. Any difference between the result of this assumption and the actual group tax paid is shown as a tax timing adjustment in other movements in equity.

NOTES 4. UNREALIZED GAINS

A subtlety of the financial risk premium calculation is that the interest cost is the opportunity cost of debt and not the actual cost of debt. The difference between the opportunity cost of debt and the actual cost of debt multiplied by the actual amount of debt is the treasury gain or loss. This result either increases the return to the shareholder because of low cost debt financing or reduces the benefit if the interest cost paid is too high. The result may depend upon the treasury policies with regard to interest rate management.

NOTES 5. DIVIDENDS PAID

Only when the dividend is actually paid is the capital invested reduced. To reduce capital invested by a dividend that is proposed, would reduce the capital charge and therefore incorrectly increase the EVA. The timing of actual cash flows is important. If retained earnings cannot be used to earn a return equal to or greater than the cost of capital, it is better to return the cash to the providers of capital.

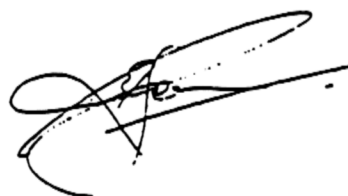
AIRWAYS CORPORATION OF NEW ZEALAND
FINANCIAL SUMMARY
FOR THE YEAR TO 30 JUNE 1995

	1995 \$000	1994 \$000	Notes
Operating Profit			
Net operating profit after tax	11,737	11,104	
Less charge on operating capital	9,180	9,546	
Economic Value Added	<u>2,557</u>	<u>1,558</u>	

Opening equity capital	59,677	61,536	
Charge on equity capital	6,072	6,104	3
Other movements in equity capital	<u>553</u>	<u>1,537</u>	7
	6,625	7,641	
Dividends paid	(7,300)	(9,500)	9
Closing equity capital	<u>58,802</u>	<u>59,677</u>	

Customers - monopoly activity	2,455	1,092	
Shareholder - non monopoly activities	102	466	
	<u>2,557</u>	<u>1,558</u>	

FOR AND ON BEHALF OF THE BOARD



CHAIRMAN
REX LOACH



DIRECTOR
JOHN ERRINGTON

AIRWAYS CORPORATION OF NEW ZEALAND

ECONOMIC VALUE ADDED STATEMENTS

FOR THE YEAR TO 30 JUNE 1995

	1995	1994
	\$000	\$000
Revenue		
Airways charges	88,569	83,510
Other revenue	<u>2,226</u>	<u>2,491</u>
	90,795	86,001
Labour costs	49,816	45,889
Other operating costs	15,071	17,023
Depreciation	13,070	11,481
Tax charge	<u>1,464</u>	<u>1,314</u>
	79,421	75,707
Net Operating Profit After Tax (NOPAT)	<u>11,374</u>	<u>10,294</u>
Less charge on operating capital	<u>8,919</u>	<u>9,202</u>
Economic Value Added	<u>2,455</u>	<u>1,092</u>

Revenue	2,813	3,087
Labour costs	655	351
Other operating costs	1,644	1,596
Depreciation	36	33
Tax charge	<u>115</u>	<u>297</u>
	2,450	2,277
Net Operating Profit After Tax	<u>363</u>	<u>810</u>
Less charge on operating capital	<u>261</u>	<u>344</u>
Economic Value Added	<u>102</u>	<u>466</u>

AIRWAYS CORPORATION OF NEW ZEALAND

CAPITAL INVESTED

AS AT 30 JUNE 1995

	1995 \$000	1994 \$000
Long term assets	106,094	116,582
Short term assets	14,629	13,848
Non interest bearing current liabilities	13,392	11,521
Net working capital	1,237	2,327
Operating capital	107,331	118,909
Non operating capital (work in progress)	5,101	-
	<u>112,432</u>	<u>118,909</u>
Capital invested is made up of:		
Equity	58,802	59,677
Debt	53,630	59,232
	<u>112,432</u>	<u>118,909</u>

ANS business

- Operating capital	105,495	115,808
- Non operating capital	5,101	-
Related businesses - operating capital	1,836	3,101
	<u>112,432</u>	<u>118,909</u>

AIRWAYS CORPORATION OF NEW ZEALAND
NOTES TO THE EVA FINANCIAL STATEMENTS

1. ACCOUNTING POLICIES

a) General Principles

- Income and expenditure is recorded at - or close to - the time it is received or paid at the actual monetary value, except where noted below
- All expenditure is included in the calculation of Net Operating Profit after Tax (NOPAT) on a basis that reflects the periods over which related economic benefits are realised. See note 12
- The financial objective of the monopoly activity is to provide the shareholder with a return equal to the capital charge on equity invested. For all other businesses the objective is to add value to the shareholders' investment.

b) Financing Costs

No financing costs are included in the calculation of NOPAT.

c) Charge for capital employed (capital charge)

- The capital charge in the EVA Financial Statements is calculated on the average operating capital
- A cost of capital - which represents an appropriate return for operating risk - is calculated for each business unit
- A capital charge is applied to work in progress.

d) Cost of capital

The risk free rate used in the cost of capital, is set at the beginning of the financial year.

e) Taxation

The total tax cost in the EVA Financial Statements (NOPAT and the charge on operating capital) is the actual income tax paid.

f) Trade Accounts Receivable

Accounts Receivable are stated at their realisable value.

g) Stock

Stock is stated at weighted average cost except where the value of inventory changes significantly. Any change in value is recognised through NOPAT.

h) Leases

All significant lease arrangements are discounted at the inherent interest rate to determine the cost of the assets.

The cost of the leased asset is included in financing (capital employed) and operating assets (operating capital).

The asset in operating capital is depreciated through NOPAT.

i) Land and buildings

Land and buildings with a commercial value are included in operating capital at their market value. Any change in market value is recognised through NOPAT.

j) Cumulative EVA - monopoly activity

The monopoly activity has a financial objective of $EVA=0$, over time. Positive or negative EVA is accumulated in an account. The prices for our services are adjusted to return the balance of this account to zero, over time. This account is treated as a current liability and therefore does not attract a capital charge.

k) Comparative figures

Last year's figures have been restated to aid comparison.

l) Changes in policies

Policy changes this year include:

- Work in progress - is classified as non operating capital and attracts a capital charge
- Capital charge - is based on the average operating capital. Previous years were calculated on the opening operating capital.

Comparative figures have not been adjusted for these changes.

	1995	1994
	\$000	\$000
Air Navigation Services (ANS)		
Average operating capital	110,652	123,028
Cost of capital	<u>8.06%</u>	<u>7.48%</u>
Charge on operating capital	<u>8,919</u>	<u>9,202</u>
Related businesses		
Average operating capital	2,469	3,655
Cost of capital - average	<u>10.57%</u>	<u>9.41%</u>
Charge on operating capital	<u>261</u>	<u>344</u>
Consolidated		
Average operating capital	113,121	126,683
Cost of capital - average	<u>8.12%</u>	<u>7.54%</u>
Charge on operating capital	<u>9,180</u>	<u>9,546</u>

Average equity capital	59,240	61,536
Cost of equity capital	<u>10.25%</u>	<u>9.92%</u>
Charge on equity capital	<u>6,072</u>	<u>6,104</u>

Charge on equity capital is made up of:

Charge on operating capital	9,180	9,546
Charge applied to work in progress	198	0
Less interest on debt (at opportunity cost)	<u>3,306</u>	<u>3,442</u>
Charge on equity capital	<u>6,072</u>	<u>6,104</u>

	Abbreviation	1995	1994
Summary of parameters for cost of capital:			
Risk free rate - 5 year Government Stock	RFR	8.00%	7.13%
Market risk premium	MRP	9.00%	9.00%
Company tax rate	Td	33%	33%
Business risk factor (Asset Beta)	Bu		
ANS business		0.30	0.30
Related businesses (weighted average)		0.58	0.51
ACNZ consolidated		0.31	0.31
Equity risk factor (Equity Beta)	Be	0.54	0.57

A more detailed definition of these terms appears in the Technical Section.

Cost of capital is calculated using the following formula:

Required return on a risk free investment		Premium for business risk		Premium for financing risk
$(RFR * (1 - Td))$	+	$(Bu * MRP)$	+	$(Be - Bu) * MRP$

Cost of capital

Cost of equity



	1995 \$000	1994 \$000	Notes
Opening balance	6,314	5,222	
EVA current year	<u>2,455</u>	<u>1,092</u>	
Closing balance	<u>8,769</u>	<u>6,314</u>	11



Income tax payable includes:

NOPAT tax charge	1,464	1,314
Tax on net financing cost	<u>(1,464)</u>	<u>(1,314)</u>
Income tax paid	<u>-</u>	<u>-</u>

Accelerated allowances for tax purposes on Air Navigation Services assets have created Income Tax losses for ACNZ and therefore no tax has been paid this year. Indications are that Income Tax will next be paid in 1997.

	1995	1994	Notes
	\$000	\$000	
Related business EVA	102	466	
Related businesses - tax timing adjustments	115	297	
Treasury gains	336	774	8
	<u>553</u>	<u>1,537</u>	

To more accurately measure the financial performance of related businesses their tax charge is calculated as though ACNZ is paying tax. The difference between their tax charge and actual tax paid is the tax timing adjustment.

Interest on debt:

- at opportunity cost	3,306	3,442
- at actual cost	2,970	2,668
	<u>336</u>	<u>774</u>

Opportunity cost of debt is based on the rate for five year Government Stock plus an expected borrowing margin of 0.75%.

	1995	1994
	\$000	\$000
Final previous year - paid October	5,000	7,000
Interim current year - paid February	2,500	2,500
	<u>7,500</u>	<u>9,500</u>

The proposed final dividend for 1995 is \$4.125 million.

Equity includes:

Share capital (41,100,000 shares)	41,100	41,100
Other economic equity	<u>17,702</u>	<u>18,577</u>
	58,802	59,677

Debt includes:

Short term borrowing	5,050	-
Bonds	21,000	21,000
Long term loan	65,000	65,000
Long term deposits	(45,500)	(32,500)
Capitalised leases	8,080	8,408
Short term cash deposits	-	(2,676)
	<u>53,630</u>	<u>59,232</u>
	112,432	118,909

Current assets

Trade accounts receivable	8,882	8,786
Other current assets	<u>5,747</u>	<u>5,062</u>
	14,629	13,848

Non interest bearing current liabilities

Trade accounts payable	1,523	1,473
Other current liabilities	3,100	3,734
EVA available for return to customers	<u>8,769</u>	<u>6,314</u>
	13,392	11,521
Net working capital	<u>1,237</u>	<u>2,327</u>

Refer note 1 (a).

Analysis of periods over which costs are included in NOPAT.

	Policy	Actual Average Period
Operating costs	1-5 years	1.0 year
Business development costs	1-5 years	5.0 years
Significant employee recruitment programmes	4 years	4.0 years
Business goodwill (which has a sustainable value)	not depreciated	not depreciated
Land	not depreciated	not depreciated
Buildings		
Freehold	13-40 years	27.0 years
Leasehold	8-40 years	21.5 years
Administration computers and furniture	5-10 years	5.0 years
Plant and equipment	4-15 years	13.8 years
Motor vehicles	5 years	5.0 years
Work in progress	not depreciated	not depreciated

Analysis of capital by class

	1995 \$000	1995 \$000	1995 \$000
	Cost	Accumulated Depreciation	Capital Value
Business development costs	827	99	728
Land	1,388	-	1,388
Buildings	37,550	12,074	25,476
Plant & equipment	118,213	43,601	74,612
Motor vehicles	1,260	443	817
Administration computers & furniture	9,154	6,081	3,073
	<u>168,392</u>	<u>62,298</u>	<u>106,094</u>

Known liabilities which amount to \$10.4 million (1994 \$9.4 million).
Under present business conditions these liabilities are not expected to affect
ACNZ's cashflow in the foreseeable future.

AIRWAYS CORPORATION OF NEW ZEALAND
TECHNICAL SECTION



			1995 ANS	1995 Related businesses	1995 Consol.
Preferred method					
Rf	Risk free rate	5 year Government stock	8.00%	8.00%	8.00%
MRP	Market risk premium		9.00%	9.00%	9.00%
Td	Corporate tax rate		33%	33%	33%
Bu	Asset Beta		0.3	0.57889	0.30556
C	Cost of capital	$(Rf \cdot (1 - Td)) + (MRP \cdot Bu)$	8.06%	10.57%	8.11%
Alternative method					
Dm	Debt margin		0.75%	0.75%	0.75%
	Debt / Capital		0.48748	0.48748	0.48748
	Equity / Capital		0.51252	0.51252	0.51252
Be	Equity Beta	$Bu + ((Bu - Bd) \cdot \text{Debt/Equity})$	0.53224	1.07639	0.54308
Bd	Debt Beta	$(Dm / MRP) \cdot (1 - Td)$	0.05583	0.05583	0.05583
Re or	Cost of equity	$(Rf \cdot (1 - Td)) + (MRP \cdot Bu)$ $+ (MRP \cdot (Be - Bu))$	10.15%	15.05%	10.25%
Re	Cost of equity	$(Rf \cdot (1 - Td)) + (MRP \cdot Be)$	10.15%	15.05%	10.25%
Rd	Cost of debt	$(Rf + Dm) \cdot (1 - Td)$	5.86%	5.86%	5.86%
C	Cost of capital	$(Re \cdot \text{Equity/Capital}) + (Rd \cdot \text{Debt/Capital})$	8.06%	10.57%	8.11%