INTRODUCTION
There is a great deal of information dealing with the companies of the CRA Group available to the public, and I shall therefore assume you already know the basic facts about the business. What I propose to do is to take a quick look at the year just past and then concentrate on what I regard as some of the more important changes and developments occurring within the Group which will affect is nature in the years ahead.

In view of the Federal Election result and of the devaluation which has just occurred, I should perhaps first say a word or two about these matters. As we are essentially an export business and the greater part of our revenue is derived off-shore the devaluation will have a significant effect on boosting our earnings. The timing of the devaluation is a little unfortunate in that our executives have been in Japan negotiating the coal contracts, and there will undoubtedly be pressure brought to bear from the customers to share the benefits of devaluation with them. Any such move, of course, would be counter productive from a national viewpoint.

There is no doubt in my mind that the devaluation action was necessary to stem the dramatic outflow of funds, and I believe the incoming government has acted very responsibly. I would fully expect the direction of the capital flows to be reversed.

As far as the question of a Labor Government is concerned my own view is that the mining industry can work satisfactorily with whatever party is in power. Australia as a nation is relatively middle of the road. We have the highest proportion of home ownership of any country in the world, and this tends to ensure that the bulk of the population is somewhat conservative. We look forward to working with the new government in progressing further the business that we know best—the development of mineral resources, and the building up of economically sound processing facilities, so that we may add maximum value to the export earnings which are so vital to the nation.

REVIEW OF 1982 RESULTS
The 1982 year was one that the mining industry worldwide would prefer to forget. The international recession dealt savagely with most raw material producers. As you know, CRA announced a loss of $13.6 million for the year, but this was much better than many others in the industry around the world. At the half year we had incurred a loss of $29 million so we were in profits in the second half, but not enough to completely offset the first half losses. Sales revenue for the year rose by 4.6 per cent from $1.8 billion to $1.9 billion, but our cost of sales rose by only 2.5 per cent from $1.65 billion to $1.69 billion. This was a creditable performance and says something about our costs which I shall refer to later in some detail.

Our accounting is unashamedly conservative. Our stocks of products increased in value during 1982 by $115 million, and this includes no fixed cost component all of which is charged to cost of sales each year. We revalue our assets following a regular program of engineering re-evaluation. For the 1982 year, the total additional depreciation charged against earnings from the revaluation exercises since 1979 amounted to $77 million. Most of the expenditure incurred each year on exploration and research and development is written off. For 1982 exploration amounted to $57 million, and research and development to $19 million.

Why do we revalue our assets? We believe we have an obligation to report results which are more meaningful than those presented by conventional historical cost accounting. If we do not do this our various publics will be misled into thinking we are doing better than we really are; our employees might properly think we are capable of paying them more than we can afford; governments, both state and federal, will tend to think we can bear a greater share of the burden of funding their requirements than is really the case; and shareholders may have their dividend expectations raised. One other vital effect of the revaluation program is that the targets set for our management
groups are more realistic. People are encouraged to strive harder and be more productive. Some other companies also revalue their assets from time to time, but there are very few who take into their accounts the full amount of the revaluation.

During 1982 we drew down $663 million of loans and repaid $249 million. Our interest bill rose to $149 million of which $17 million was capitalised leaving $132 million as a charge against earnings. We incurred exchange losses on overseas borrowings of $62 million and charged $32 million of this against earnings, leaving $30 million to be written off over the outstanding periods of the loans.

The current economic cycle is not quite like its immediate predecessors. We are in a strong disinflationary environment with high unemployment in most countries, and low levels of industrial output and profitability. The consequence is that many industries are undergoing structural change, the full effect of which will only be evident when we move into the recovery phase.

This means that companies that are well placed in relation to costs and access to markets should be able to look to more than average improvement in profitability and financial strength once economies begin to improve. We believe we have a strong basic position.

I shall now have a quick look at our sources and uses of funds and the capital structure of the Group, as shown in the Figures presented.

The first figure highlights the continuing high level of operating cash generation in spite of virtual break-even earnings in 1981 and 1982. This substantial cash flow has allowed lesser levels of new debt than would otherwise have been necessary to fund capital expenditure, new project and exploration expenditures.

Whilst the total level of outgoings has fallen in 1982, expenditure on capital items and exploration has increased by about 25 per cent. I should point out that these figures do not include our final payment to Kaiser for control of Comalco. This payment of $170 million was made in early January from previously arranged debt.

Debt funding during 1982 has impacted upon the balance sheet and capital structure.

---

**FIGURE 1**

**SOURCES OF FUNDS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Generation</th>
<th>Equity</th>
<th>Debt</th>
<th>Working Capital</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>699</td>
<td>187</td>
<td>88</td>
<td>396</td>
<td>594</td>
</tr>
<tr>
<td>1979</td>
<td>975</td>
<td>225</td>
<td>110</td>
<td>594</td>
<td>743</td>
</tr>
<tr>
<td>1980</td>
<td>941</td>
<td>179</td>
<td>85</td>
<td>469</td>
<td>469</td>
</tr>
<tr>
<td>1981</td>
<td>952</td>
<td>326</td>
<td>85</td>
<td>469</td>
<td>466</td>
</tr>
<tr>
<td>1982</td>
<td>1228</td>
<td>663</td>
<td>326</td>
<td>469</td>
<td>466</td>
</tr>
</tbody>
</table>

Years Ending December
CRA GROUP — CAPITAL STRUCTURE

$ MILLION

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issued Capital</td>
<td>217</td>
<td>217</td>
</tr>
<tr>
<td>Capital Reserves</td>
<td>1,231</td>
<td>1,835</td>
</tr>
<tr>
<td>Revenue Reserves</td>
<td>520</td>
<td>571</td>
</tr>
<tr>
<td>Equity in Associates</td>
<td>152</td>
<td>55</td>
</tr>
<tr>
<td><strong>Attractive to CRA Shareholders</strong></td>
<td>2,120</td>
<td>2,679</td>
</tr>
<tr>
<td>Outside Shareholders’ Interests</td>
<td>429</td>
<td>741</td>
</tr>
<tr>
<td><strong>Total Capital and Reserves</strong></td>
<td>2,549</td>
<td>3,420</td>
</tr>
<tr>
<td>Long Term Loans</td>
<td>608</td>
<td>1,345</td>
</tr>
<tr>
<td><strong>Invested Capital</strong></td>
<td>3,157</td>
<td>4,765</td>
</tr>
<tr>
<td>Long Term Debt as a percentage of invested capital</td>
<td>19%</td>
<td>28%</td>
</tr>
</tbody>
</table>

CAPITAL STRUCTURE, DECEMBER 1981 AND 1982

The 1982 figures include the consolidation of Comalco as a subsidiary with the 1981 figures including Comalco on an equity accounting basis. With Comalco’s debt thus coming on the CRA balance sheet in 1982 and the new debt during the year, the percentage of long term debt to funds employed has risen from 19 per cent to 28 per cent. Of course this figure would have been higher had it not been for the 1982 asset revaluations. However, gearing remains well below the level experienced in the early 1970s when the funding of major developments — Hamersley and Bougainville — resulted in debt comprising 50 per cent of funds employed.

With the incidence of asset revaluation, the level of gearing also needs to be evaluated in terms of interest cover. Naturally we would be happier with a higher interest cover, but it is some comfort to know that we have been able to cover interest with earnings at least once.

The foregoing gives a glimpse of the Group’s financial position at end December, 1982. More complete details will be in the 1982 Annual Report which will be available next month.

NEW DEVELOPMENTS

I shall now briefly touch on our two developing coal projects of Blair Athol and Tarong to let you know how they are progressing, and also the Argyle Diamond Joint Venture.
Blair Athol
The reserves at Blair Athol are in excess of 200 million tonnes. Construction of the project proceeded well during 1982 and it is on schedule for the first shipment of coal in April next year. Fixed plant is being constructed for a production capacity of 8 million tonnes a year, with mobile equipment having a capacity of 5 million tonnes. This will enable production to be quickly expanded should market opportunities arise.

Including financing charges and capitalised interest, the total project cost is expected to be around $600 million. So far we have spent or committed $370 million for work which was budgeted to cost $400 million. This is one beneficial effect of the current difficult economic conditions.

Contracts in place with the Electric Power Development Company and Japan Coal Development Co. Ltd. call for the delivery of 3 million tonnes in 1984, 4 million tonnes in 1985, rising to 5 million tonnes in 1986 and thereafter. Active steps are being taken in markets other than Japan to place tonnage additional to the basic 5 million tonnes on which the project was based.

It is true that the Japanese buyers have requested discussions on deliveries against these contracts, and these talks have yet to take place. There is nothing further I can say on these aspects although I would draw your attention to the fact that Blair Athol will be a low cost operation — cash breakeven will be well below an annual output of 5 million tonnes.

Tarong
Drilling at Tarong has marginally increased measured and evaluated reserves of opencut raw coal in situ to 370 million tonnes on the mining lease and authorities to prospect. Construction of Stage 1 to supply coal to the Tarong Power Station at an initial rate of approximately one million tonnes a year was substantially completed by the end of 1982, some months ahead of schedule. Planning for Stage 2 of the project which will involve construction of a washery and expansion of the mining fleet to lift production capacity to 5 million tonnes a year will start this year.

Total project cost including capitalised interest of $36 million is expected to be around $150 million. Construction costs are within budget. So far $94 million has been committed on work budgeted to cost $100 million.

All coal will be supplied to the Queensland Electricity Generating Board. The rate of return on our investment in this project will be lower than we would normally expect, but this is in keeping with the low risks involved. The project economics are most sensitive to changes in sales volume and relatively insensitive to capital or operating cost changes.

Argyle Diamonds
CRA is now a commercial producer of diamonds. Argyle Diamond Mines Pty. Limited, a wholly-owned CRA subsidiary, commenced mining and recovery of alluvial diamonds at Argyle on January 1, 1983.

The start of commercial production was the culmination of a seven year program of diamond exploration and evaluation in the Kimberley region by CRA and its joint venture partners.

Work is continuing on the large scale project for production of diamonds from the kimberlite pipe known as AK-1. This work is examining the economic viability of developing a large open-cut mine on the southern section of AK-1 to supply ore to a new treatment plant at the rate of 3 million tonnes a year. This plant would produce 25 million carats of diamonds a year. Total cost including ancillary services but excluding any financing costs is estimated at $350 million in today's dollars.

It is expected that the joint ventures will be in a position to make a go-ahead decision by the end of next June. Production from AK-1 would commence about two years after project approval.

At this stage the big project continues to look good. Marketing proposals have been agreed with the W.A. Government. These proposals include the early establishment of a pilot cutting facility in Perth to evaluate the longer-term potential of setting up a cutting industry in Australia. The 25 per cent of cheap gem and industrial stones to be produced for CRA and Ashton Mining which will not be sold through the CSO will be sold on the open market. Our objectives in this exercise will be to

- Monitor the prices for sales to the CSO
- Develop marketing expertise
- Establish a customer base independent of the CSO
- Position ourselves for possible forward integration

Further studies will be carried out over the next 18 months to determine the best way of handling these open market sales.

Aluminium
As you know, during 1982 the opportunity arose to acquire the interest of Kaiser Aluminium in Comalco and this was done in conjunction with a group of Australian institutions. This was an important transaction both for CRA and Comalco for a particular reason.
Kaiser had been associated with Comalco since its inception and played a vital role in providing technology and expertise. However, Kaiser has its own aluminium business world-wide and as opportunities developed for Comalco to become more deeply involved in downstream activities inevitable differences of opinion began to arise. The resolution of these difficulties became an essential pre-requisite to the proper development of Comalco’s business.

Comalco has a strong resource base and its processing facilities are first class. The resolution of shareholding interests will enable Comalco to build a stronger position in the world aluminium business. Over the next decade it plans to more than double its metal production from 194,000 tonnes to over half a million tonnes a year. Part of this planned increase in metal output will come from the new smelter at Boyne Island in Queensland which is based on the most up to date technology developed in Japan by Sumitomo Aluminium.

The investment in Showa Aluminium secured an outlet for Comalco metal and brought Comalco into partnership with Showa Denko. From a technological viewpoint this investment will lead to important links with a world leader in many fields of advanced technology.

**ORGANISATION**

I was asked recently what I thought was the most important development taking place in CRA. I hesitated to reply because what I wanted to say could appear vague and insubstantial.

About 3 years ago the Chairman, Sir Roderick Carnegie, and the senior executives recognised that Australia, and CRA in particular, was losing its competitive edge and what was needed was a fundamental and intensive examination of how work was performed in large organisational structures.

A team was established and started out by having a close look at successful companies overseas particularly in Japan and the United States — reviewing in detail how they were organised, how their organisations performed.

A great deal of senior executive time has been devoted to this organisational study since it began about three years ago. At a rough guess, I would say it has cost somewhere between $5 million and $8 million so far when allowance is made for senior executives’ time. This sounds an enormous sum, and what have we got to show for it? Certainly nothing on the balance sheet! But the work is bringing about some profound changes. Changes in attitudes from the top right down to the man on the shovel.

In my opinion this organisational work is the most important development taking place in CRA today. It is important because it holds the key to cost effectiveness, to unlocking the creativity of people, to providing opportunities to enable ideas to flow from people at all levels in the organisation.

I don’t want to give the wrong impression. We do not possess a magic wand which overnight is going to create a corporate Utopia. There is a huge task involved in painstakingly reviewing the organisation in all its branches. We are constantly testing and refining our ideas.

The theories underlying this work are really quite straightforward. In essence they require a clear definition of management levels and tasks. That is, a clear and precise distinction between positions and a clear hierarchy of management. This leads to fewer levels of management and the creation of more meaningful jobs with a resultant increase in output per employee. The theory permeates from the highest level of management down to the first line supervisor.

Our first experiment was at Woodlawn Mines — a relatively new operation in south-eastern N.S.W. near Goulburn. The mine came into full production in 1979. It has a complex orebody and difficult metallurgical characteristics. Zinc, lead and copper concentrates are produced.

Woodlawn was chosen because it was new and the chance of bad management practices being enshrined was quite small. Staff were considered to be willing to accept change.

Despite it being a slow process, results at Woodlawn have been very rewarding. Economies have been achieved through the need for fewer personnel and an improved rate production. Output per employee has risen significantly. We have been careful to hasten slowly in the development of the new organisation structure and culture. Workforce reduction has been achieved through natural attrition and the offer of early retirement.

We have started a review also at Sulphide Corporation, an older operation. Results to date have been quite encouraging. Our aim is to use the Woodlawn experience throughout all operations of the Group.

I must admit that good managers are already doing many of the things that our organisational team has painstakingly developed. But the real gain lies in the fact that the team is developing systematic approaches which will enable the not-so-good managers to improve their game.
I have spoken at some length on our work in the organisational development field as I regard it, as I mentioned earlier, as the most important development taking place in CRA today. Within 5 years I believe that all the operations of the Group will be extremely cost effective.

CONCLUSION
There is much more than I could say about various aspects of the Group’s activities particularly in relation to the thrust into Research and New Technology, but perhaps I should leave off at this point and you may care to raise particular aspects during question time.

PERIODICAL REVIEW
“COMPANY AND SECURITIES LAW JOURNAL”

The first two issues of the Companies and Securities Law Journal have been published. The Editor, Professor R. Baxt, heads an impressive editorial board comprising leading practitioners, academics and persons working in the securities industry.

The structure of the journal was explained in the first issue and is based on separate sections each having section editors. The titles of those sections give a good indication of the content of each:

- Takeovers and public securities
- Securities industry and Stock Exchange
- Proprietary companies
- Current developments, legal and administrative
- Overseas notes
- Library update, correspondence and book reviews

In addition, each issue will contain a general editorial and articles. Taking the first two issues as a guide it appears that contributors of articles will be given adequate space to deal in depth with the topic they have chosen.

The publishers have a difficult task of presenting each issue with a depth of treatment of the matters covered sufficient to interest those with existing legal accounting or industry expertise, while at the same time remaining readable, for a wider range of people involved with the companies and securities law areas. Particularly in the separate topic sections the editors will need to strive for concise commentary on topical matters which will enable readers to recognise matters of particular concern to them where they may need to explore legislative and case law developments more closely.

At $150.00 per annum the journal is not cheap and subscribers will expect the initial high standard to continue in order to justify the subscription.

J.R. BAILLIE