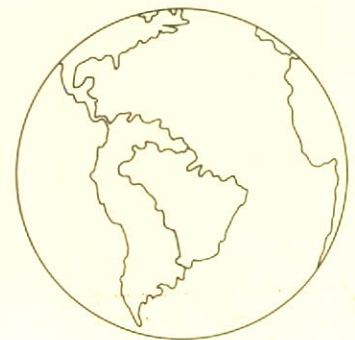


Corporate profile

Spar Aerospace Limited is a Canadian-owned company engaged in the design, development, manufacture and servicing of systems and products for the aerospace, aviation, communications, defence, manipulator and mapping markets. The company employs about 2,000 people, including approximately 600 engineers and technicians – one of the largest technological groups in the private sector in Canada.

In 15 years, annual sales have grown from \$5 million to \$178 million and Spar has gained international recognition as a diversified technology company. It has achieved financial stability by balancing the steady sales base of its gears and transmissions and aircraft repair and overhaul operations with businesses serving the fast-growing markets of communications and aerospace.

Approximately half of Spar's sales are in international markets and about 20 per cent are with the Canadian government.



Vous pouvez vous procurer cette brochure en français.

COVER: This view of the earth from an Apollo spacecraft includes the area to be covered by the Brazilian communications satellite system for which Spar is the prime contractor.

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Financial Highlights

(\$000s)

Canada's first commercial direct broadcast satellite was launched from NASA's space shuttle in November.

	1982	1981	Change
Revenues	\$177,775	\$122,567	+ 45.0%
Net income	8,580	2,167	+ 295.9%
Working capital from operations	11,731	6,037	+ 94.3%
Working capital	17,096	11,758	+ 45.4%
Long term debt	6,926	20,655	- 35.0%
Cash dividends on			
Common shares	1,248		
Preferred Shares - Series A	177	366	
Shareholders' equity	25,635	17,463	+ 46.8%
Basic earnings per share	(in dollars)		
	\$2.87	\$0.73	+ 293.2%
Shareholders' equity per Common share fully diluted	5.62	4.22	+ 33.2%

Report to the shareholders

Spar Aerospace Limited achieved new levels of sales and profitability in 1982.

Results

For the year ended December 31, 1982 Spar had revenues of \$178 million compared to \$123 million in 1981. Net income was \$8.6 million (\$2.87 per share) compared to \$2.2 million (\$.73 per share) a year earlier. Working capital at year-end was \$17.1 million, an increase of \$5.3 million over 1981. Shareholders' equity was \$25.6 million and was \$17.5 million in the previous year. Long term debt decreased from \$10.7 million to \$6.9 million.

These results reflect a continuing improvement in Spar's operating margins, the start of a major satellite program for Brazil, incentives earned from the *Anik D1* satellite and a major contribution from the gears and transmissions business. Seven of the company's nine operating divisions were profitable in 1982, the exceptions being the Communications Systems Division and The Copter Shop.

The company invested \$4.0 million in research and development, which represented an increase of \$.5 million over 1981. Of this amount \$2.8 million (\$2.2 million in 1981) was charged to income and the balance of \$1.2 million (\$1.3 million in 1981) was funded by government grants and assistance.

All outstanding Preferred Shares – Series A were converted or redeemed during 1982.

Operations

Space-related activity played a significant role in the company's success in 1982. *Anik D1* was launched from Cape Canaveral, Florida, in August and started commercial operations in record time. In November, *Anik C3*, for which Spar was a major subcontractor, was placed in orbit – the first commercial payload launched from the Space Shuttle.

In addition, several large communications satellite contracts have given the company a substantial backlog of business.

In June, Spar signed the largest value satellite prime contract in its history – \$125 million (U.S.) – with EMBRATEL, the Brazilian government-owned telecommunications company, to provide two satellites and a related ground control system. The project, scheduled to be completed in 1985, consists of two satellites similar to *Anik D*, each with a capacity to carry 16,000 two-way voice communications or 24 television channels. It will be the first domestic communications satellite system in Latin America.

Hughes Aircraft Company of California awarded Spar a \$33 million contract in December to supply subsystems for five of the new generation of *Intelsat VI* satellites, with options to produce systems for an additional 11 satellites. The first *Intelsat VI* is scheduled for launch in 1986.

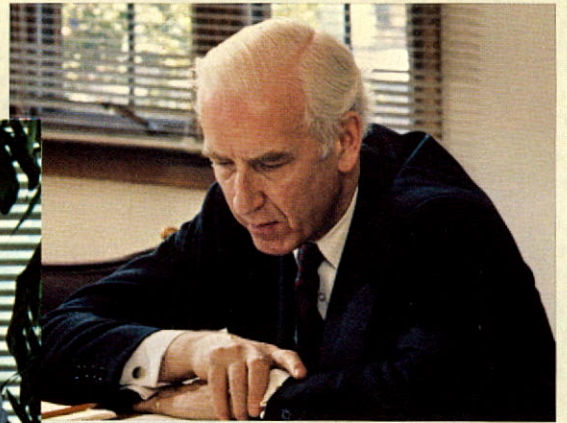
Work on the European Space Agency's (ESA) *L-Sat* satellite and a \$9 million contract from RCA Corporation to design and construct antennas for the *G-STAR* satellite program is proceeding as planned.



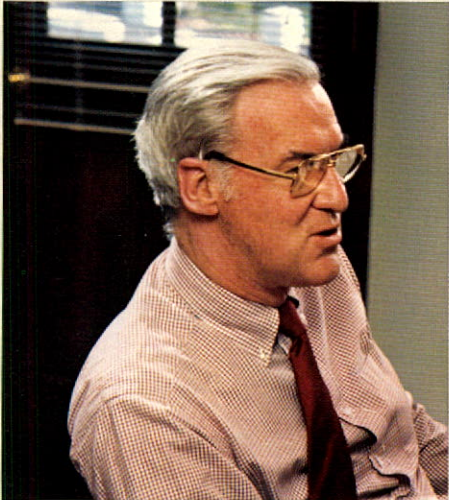
Philip A. Lapp



Earl H. Orser



David A. B. Steel



Larry D. Clarke



Robert A. Basil



John D. Houlding



Camille A. Dagenais



Roland B. Dodwell



Barbara L. Steele



David S. Beatty



William H. Jackson



The Spar-built Canadarm, the first Remote Manipulator System to be tested in space by the National Aeronautics and Space Administration (NASA), continued to perform efficiently in shuttle flights. Spar delivered the first of three additional arms to NASA in January, 1983 and the others are scheduled for delivery through 1984. Work continued on the contract with Ontario Hydro for the preliminary design of a remote manipulator control system for specialized tasks in nuclear reactors.

Negotiations continued throughout the year with the Canadian and U.S. governments on the development phase of Spar's passive infrared surveillance system. This program, which is expected to continue for about five years, will be managed by the Defence Systems Division. In December, 1982, Spar reached an agreement with British Aerospace Public Limited Company, Dynamics Group, to collaborate on the promotion of the Seawolf Naval Air Defence System in Canada.

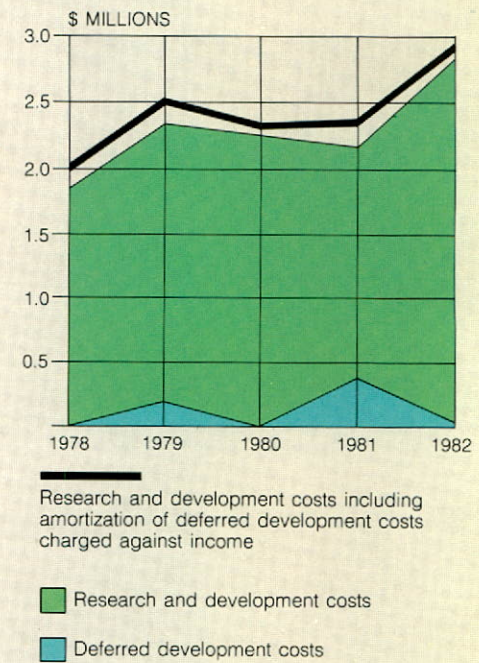
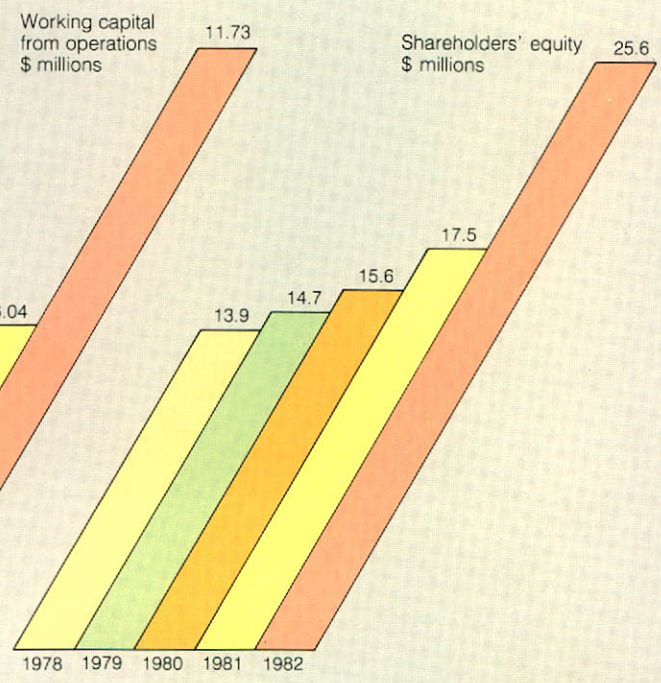
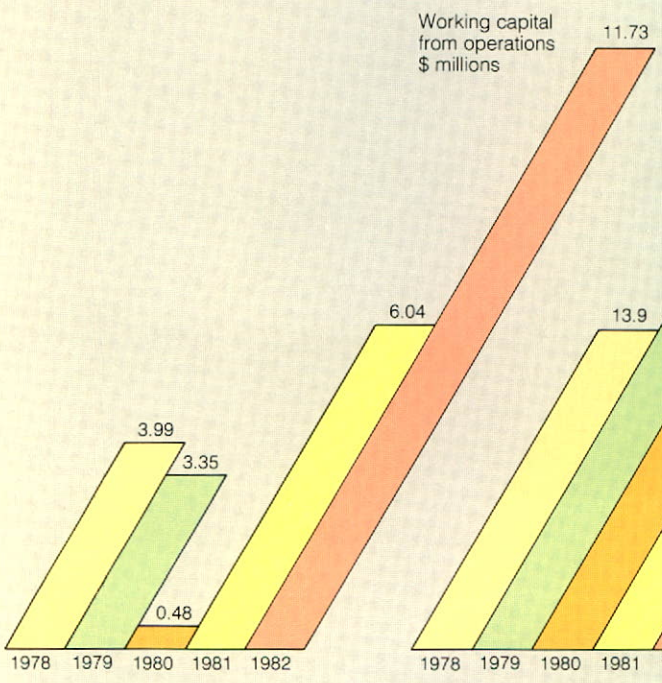
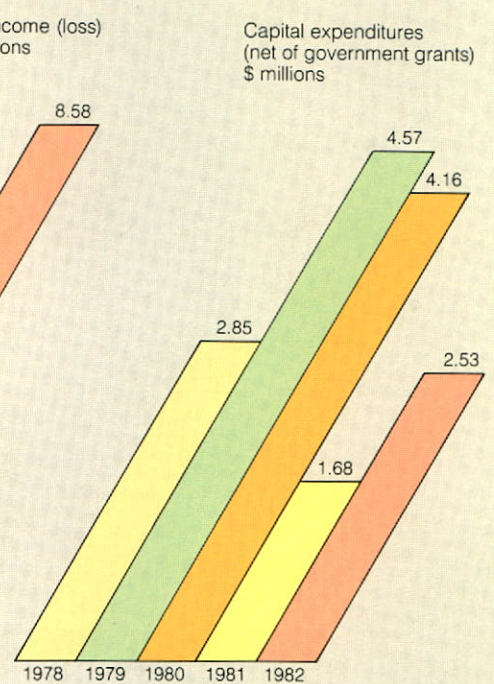
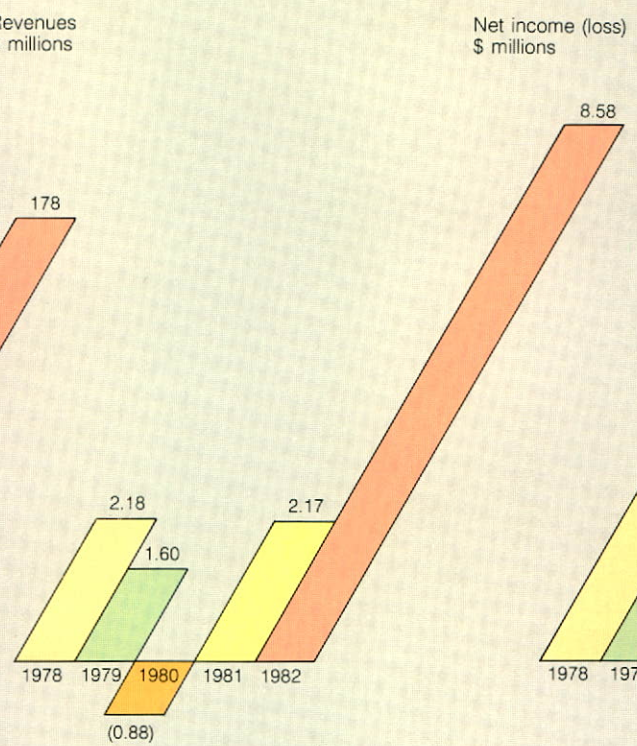
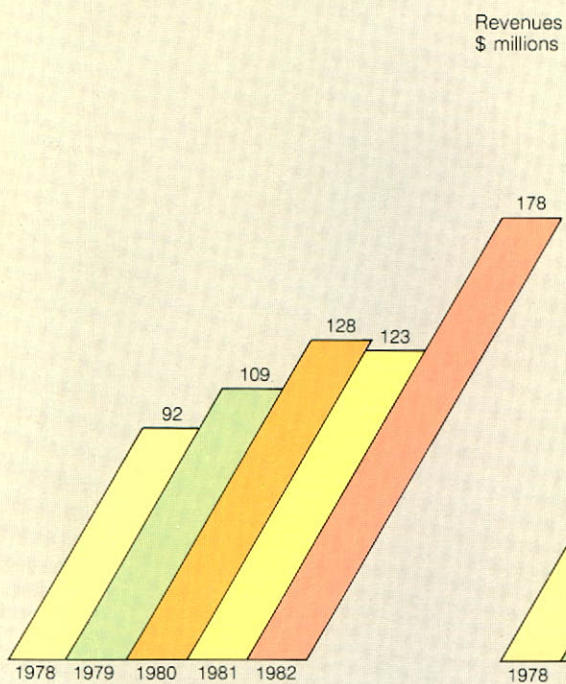
The Communications Systems Division continued to suffer from the extremely competitive world market for large earth stations. Steps have been taken to redirect its operations to areas where its technical capabilities are in greater demand. These include equipment for Time Division Multiple Access/Digital Speech Interpolation that enhance the capacity of communications satellite systems.

Astro Research Corporation showed significant growth in both earnings and revenues in 1982 as the market for sophisticated extendible structures continued to expand.

The Gears and Transmissions Division, which has gained an international reputation for the quality of its work, maintained a high level of activity. In December, the Division won an important new contract, an \$8 million order from Sikorsky Aircraft, a division of United Technologies Corporation, to produce the main, intermediate and tail gearboxes for the Sikorsky S-70 series helicopter. Sikorsky has options under this agreement which, if exercised, will give Spar twelve years of continuing production on this program.

Despite weak aviation markets, the Repair and Overhaul Division increased sales and profits over 1981. However, The Copter Shop was unprofitable due to the severe recession affecting its major customers in the natural resource industry in Western Canada.

Northway-Gestalt Corporation's results continued to improve and it achieved an operating profit in 1982. Steps initiated in 1981 to redirect the business are bringing results with the award in 1982 of the first contracts to provide digital mapping services to the municipalities of Barrie, Ontario and Monterrey, Mexico. The advantages of digital mapping and related software services are of increasing importance to a wide variety of Northway-Gestalt's clients.



J. H. Chapman Memorial Prize

In 1982 Spar awarded nine prizes which honor the memory of the late John H. Chapman, often referred to as the Father of the Canadian Space Program. The awards annually recognize students selected by the faculty in communications engineering at several Canadian universities and are designed to encourage graduates to pursue careers in that field. The prizes are jointly administered by Spar and the Canadian Aeronautics and Space Institute.

Organization

The reorganization of Spar, which has been an important factor in the company's success, was further refined in 1982 with the appointment of Mr. R. Don Pollock, Executive Vice President; Mr. John D. MacNaughton, Senior Vice President; and Mr. George B. Gomes, Senior Vice President, to the new Corporate Operations Office responsible for the day-to-day operations of the company. This change eliminated the Group level of management and transferred certain corporate functions to the operating divisions.

Contracts were signed with three employee associations in 1982. Three other agreements expire in the last quarter of 1983.

Outlook

Spar has a healthy backlog of orders and anticipates increased revenues and earnings in 1983.

With the success of the *Anik D* satellite and the award of the Brazilian satellite program, the company has established itself as a strong participant in the international communications satellite business and is well placed to benefit from this expanding market. In addition, a growing volume of business in gears and transmissions should play an important role in the long term growth of the company.

On behalf of the Board, we express our appreciation to all employees, customers, investors, suppliers and bankers for their encouragement and support.



L. D. Clarke
Chairman of the Board
and Chief Executive Officer



R. B. Dodwell
Vice Chairman of the Board

March 10, 1983

The 24-channel Anik D built by Spar for Telesat Canada, launched the second decade of nation-wide voice, data and television services.



NASA

DELTA

Canada

Description of operations



Spar is the principal supplier in Canada and a major international manufacturer of satellite communications systems.

Satellite and Aerospace Systems Division

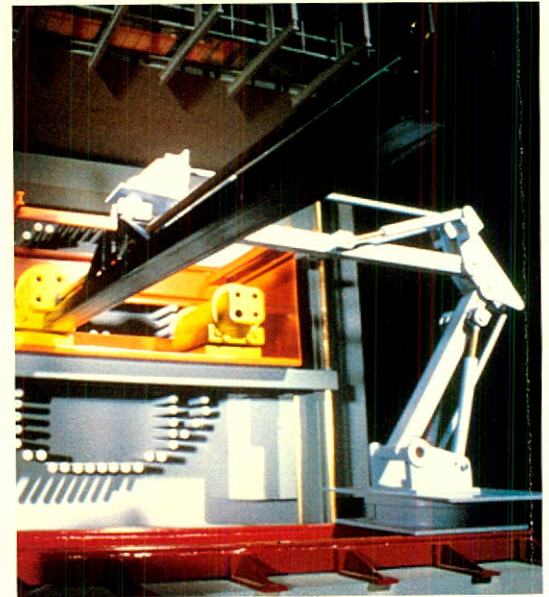
Vice President and General Manager:

J. Ron McCullough

Facilities: Ste-Anne-de-Bellevue, Quebec

Employees: 581

Capability: designs, develops and manufactures satellite communications systems, including complete satellites, as well as manufacturing satellite communications subsystems and components such as antennas, transponders, power supply electronics, satellite hardware and electronics equipment.



Spar is continuing work on a contract from Ontario Hydro for the initial design of a remote manipulator control system to service nuclear reactors.

Remote Manipulator Systems Division

General Manager: Eric R. Grimshaw

Facilities: Weston, Ontario

Employees: 298

Capability: designs, develops and builds remote manipulator systems for both space and terrestrial applications. This Division also builds large complex electro-mechanical space systems such as the *L-Sat* solar array.

Defence Systems Division

Vice President and General Manager:

John E. Lockyer

Facilities: Kanata and Weston, Ontario

Employees: 178

Capability: specializes in remote heat sensing technology for defence and navigational applications. Other activities include the development of electro-optical defence products, production of electronic assemblies for satellites and the manufacture and marketing of combat equipment to the Canadian Armed Forces.



Spar has developed a unique infrared surveillance system for the passive detection of ships, missiles and aircraft for defence and navigation purposes.



Time Division Multiple Access/Digital Speech Interpolation (TDMA/DSI) equipment enhances the capacity of satellite communications systems.

Communications Systems Division

Acting Divisional Manager:

R. Don Pollock

Facilities: Ste-Anne-de-Bellevue, Quebec

Employees: 168

Capability: designs and builds ground-based satellite communications systems for domestic and international markets. Current activities include Time Division Multiple Access/Digital Speech Interpolation components for the Intelsat network as well as communications projects in Ghana, Swaziland and the People's Republic of China.



Astro Research Corporation supplies deployable structures for the European Space Agency, NASA and The National Aeronautics & Space Development Agency of Japan.

Astro Research Corporation

President: John D. MacNaughton

Facilities: Carpinteria, California, U.S.A.

Employees: 39

Capability: designs and develops lightweight deployable structures for space and ground applications. These include the patented STEM product line and Astromast structures which have been used on spacecraft to deploy antennas, experiment packages and solar arrays.

Gears and Transmissions Division

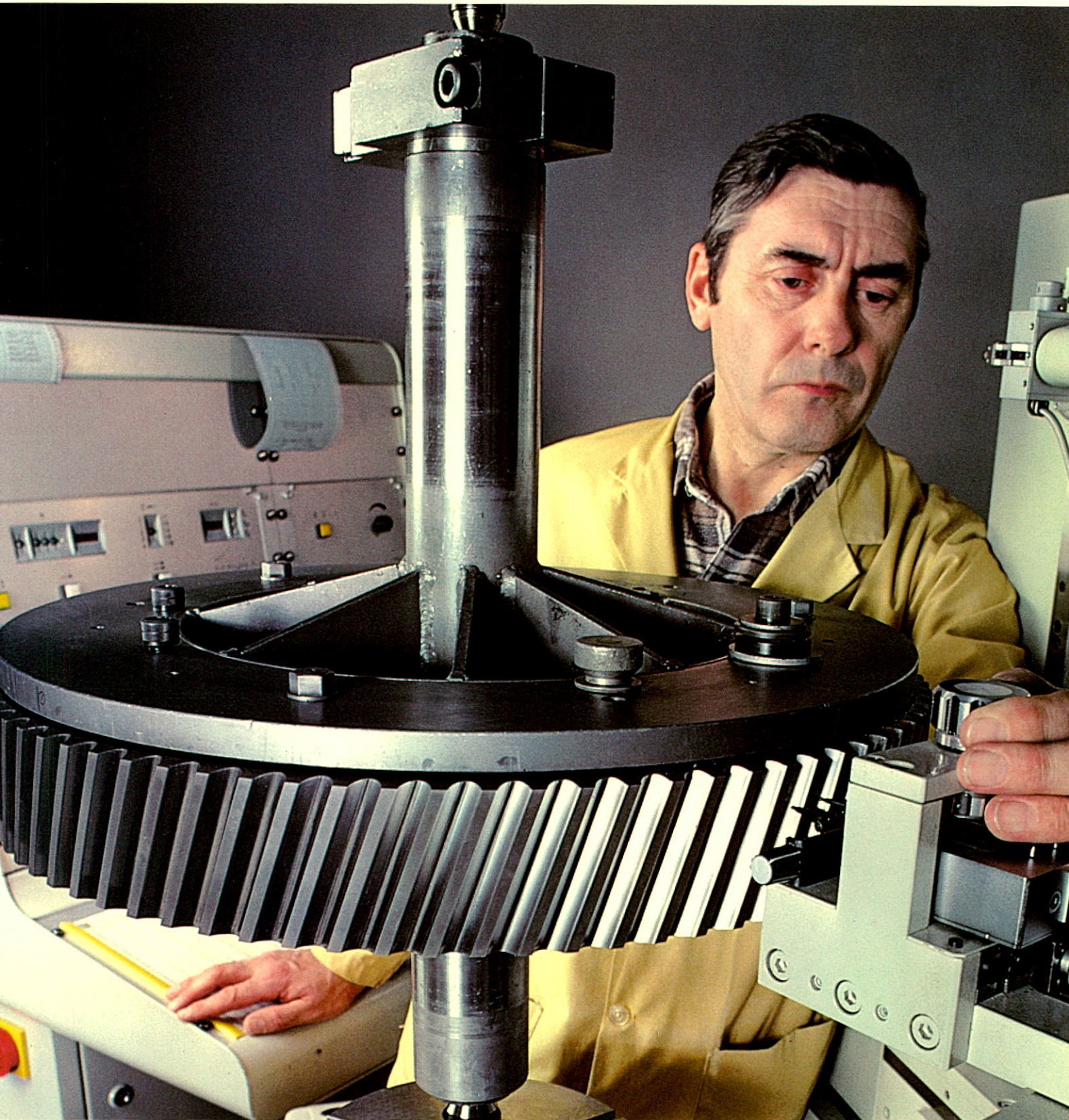
Vice President and General Manager:

William B. Simpson

Facilities: Toronto, Ontario

Employees: 365

Capability: manufactures and assembles lightweight, high-speed, high-torque power transmission systems and equipment for gas turbine engines and fixed and rotary wing aircraft, as well as the complex, ultra-high precision gears for the Remote Manipulator System.



Spar manufactures precision gears, gearboxes and transmissions for aircraft and spacecraft.



Seventeen aircraft equipment manufacturers in North America and Europe have appointed Spar as a Canadian warranty and service station for their products.



Spar's Copter Shop is approved by the Ministry of Transport for most light and medium size helicopters.

Repair and Overhaul Division

General Manager: Edward J. O'Brien
 Facilities: Toronto, Ontario
 Employees: 151
 Capability: repairs and overhauls aircraft and markets aviation products and accessories. These services cover engine and flight instruments, components of electrical, oxygen, navigation and auto pilot systems, constant speed drives, accessory gearboxes and components of flight control and heating systems.

The Copter Shop

Manager: Hamilton R. Sullivan
 Facilities: Calgary, Alberta
 Employees: 15
 Capability: operates an authorized service center for Bell, Aerospatiale and Hughes helicopters, including the sale of parts and accessories; the repair and overhaul of mechanical and electrical components; and the rebuilding and maintaining of airframes.



Northway-Gestalt's digital mapping service provides a framework for land use data bases.

Northway-Gestalt Corporation

President: Robert E. Marcille
 Facilities: Toronto, Ontario; Dartmouth, Nova Scotia; Vancouver, British Columbia; Denver, Colorado, U.S.A.
 Employees: 139
 Capability: acquiring, processing, analyzing and displaying data on the earth's terrain and producing conventional graphic maps through remote sensing techniques. The company also gathers information in digital form from aerial photos and maps to provide a data base for land information systems – digital mapping – and manufactures and markets the Gestalt Photo Mapper (GPM) on a worldwide basis.

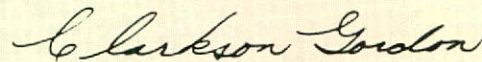
Auditors' report

To the Shareholders of Spar Aerospace Limited:

We have examined the consolidated balance sheet of Spar Aerospace Limited as at December 31, 1982 and the consolidated statements of income and retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at December 31, 1982 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Canada
February 24, 1983


Chartered Accountants

Spar Aerospace Limited
Amalgamated under the Canada Business Corporations Act

**Consolidated
balance
sheet**

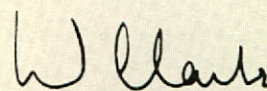
(\$000s)

December 31, 1982

Assets	1982	1981
Current:		
Cash and short term notes	\$ 35,208	
Accounts receivable	34,612	\$ 25,027
Inventories (note 2)	28,588	20,528
Prepaid expenses	1,498	977
Total current assets	99,906	46,532
Accrued incentive revenue (note 3)	1,038	
Fixed, at cost:		
Building and leasehold improvements	1,958	1,886
Machinery, tooling and equipment	24,347	22,265
	26,305	24,151
Less accumulated depreciation and amortization	13,053	10,442
Net fixed assets	13,252	13,709
Goodwill, at cost less accumulated amortization	3,952	4,181
Deferred development costs less accumulated amortization	310	395
	\$118,458	\$ 64,817
Liabilities		
Current:		
Bank indebtedness		\$ 9,339
Accounts payable and accrued charges	\$ 25,715	16,209
Income and other taxes payable (note 4)	4,182	1,932
Dividend payable	497	
Current deferred income taxes (note 4)	2,788	1,469
Current portion of long term debt (note 5)	1,330	1,543
Customer advance payments (note 2)	48,298	4,282
Total current liabilities	82,810	34,774
Long term debt (note 5)	6,926	10,655
Deferred income taxes (note 4)	3,087	1,925
Shareholders' equity		
Share capital (note 6):		
Preferred Shares - Series A		4,477
Junior Preferred Shares, Second Series	34	34
Special Shares	76	76
Common shares	14,632	9,138
	14,742	13,725
Retained earnings	10,893	3,738
Total shareholders' equity	25,635	17,463
	\$118,458	\$ 64,817

(See accompanying notes to consolidated financial statements)

On behalf of the Board:


Director


Director

**Consolidated
statement
of income and
retained
earnings**

(\$000s)

For the year ended
December 31, 1982

	1982	1981
Revenues	\$177,775	\$122,567
Cost of sales including all expenses except items shown below	134,310	92,857
Administrative and selling expenses	21,827	17,684
Research and development costs	2,759	2,240
Depreciation and amortization	2,981	2,639
Interest on long term debt (note 5)	1,798	1,649
Other interest (net)	591	1,787
Amortization of goodwill	229	229
	164,495	119,085
Income before income taxes	13,280	3,482
Income tax expense (note 4)		
– current	2,219	214
– deferred	2,481	1,101
	4,700	1,315
Net income for the year	8,580	2,167
Retained earnings, beginning of year	3,738	1,937
	12,318	4,104
Dividends on:		
Common shares	(1,248)	
Preferred Shares – Series A	(177)	(366)
Retained earnings, end of year	\$ 10,893	\$ 3,738
Earnings per Common share (in dollars)		
– basic	\$ 2.87	\$.73
– adjusted basic	\$ 2.67	
– fully diluted	\$ 2.34	\$.68

Basic earnings per Common share are calculated on net income after deducting dividends on Preferred Shares, divided by 2,926,240 shares being the weighted average number of Common shares outstanding during the year (1981 – 2,479,574).

Adjusted basic earnings per Common share assumes the conversion at the beginning of the year of all issued Preferred Shares – Series A on the basis of 2.08 Common shares for each Preferred Share. All such shares were converted or redeemed on or prior to July 2, 1982.

Fully diluted earnings per Common share are based on 4,118,904 shares assuming (1) the conversion of all issued Special Shares on the basis of 50 Special Shares for each Common share, (2) the exercise of all outstanding warrants and options on the basis of one Common share for each warrant or option, (3) the effect of unissued shares to employees participating in the employee share purchase plan, and (4) the recognition of imputed earnings after tax at the rate of 10.37% (\$1,237) on cash that would have been received therefrom.

(See accompanying notes to consolidated financial statements)

Consolidated statement of changes in financial position

(\$000s)

For the year ended
December 31, 1982

	1982	1981
Working capital was provided by:		
Operations –		
Net income for the year	\$ 8,580	\$ 2,167
Items not affecting working capital		
Amortization of goodwill	229	229
Depreciation and amortization	2,981	2,639
Deferred income taxes	1,162	1,124
Accrued incentive revenue	(1,038)	
Gain on disposal of machinery and equipment	(183)	(122)
	11,731	6,037
Issue of share capital (note 6)	1,067	17
Proceeds on disposal of machinery and equipment	305	580
Long term debt (note 5)	2,138	5,929
Total working capital provided	15,241	12,563
Working capital was applied to:		
Purchase of machinery and equipment, net of government grants (1982 – \$128; 1981 – \$502)	2,525	1,678
Long term debt repayments and provision for current instalments	5,867	1,593
Deferred development costs	36	395
Conversion of Preferred Shares – Series A (note 6) Less Common shares issued on conversion	4,427 (4,427)	
Redemption of Preferred Shares – Series A (note 6)	50	
Dividends	1,425	366
Total working capital applied	9,903	4,032
Increase in working capital	5,338	8,531
Working capital, beginning of year	11,758	3,227
Working capital, end of year	\$17,096	\$11,758
Changes in working capital components:		
Increase in current assets –		
Cash, short term notes and bank indebtedness	\$44,547	\$ 6,408
Accounts receivable	9,585	138
Inventories and prepaid expenses	8,581	1,448
	62,713	7,994
Increase (decrease) in current liabilities –		
Taxes (including current deferred income taxes)	3,569	477
Customer advance payments	44,016	(3,368)
Accounts payable and other current liabilities	9,790	2,354
	57,375	(537)
Increase in working capital	\$ 5,338	\$ 8,531

(See accompanying notes to consolidated financial statements)

Notes to consolidated financial statements

December 31, 1982

(dollars in thousands, except per share figures)

1. Summary of accounting policies

The accompanying financial statements consolidate the accounts of the company and its subsidiaries and have been prepared by management in accordance with generally accepted accounting principles consistently applied. Because a precise determination of many assets and liabilities depends on future events, the preparation of financial statements for a period necessarily involves the use of estimates and approximations. The financial statements have, in management's opinion, been properly prepared within reasonable limits of materiality and within the framework of the accounting policies summarized below.

Revenue recognition

Revenue is accrued under the percentage of completion method as the work is performed and provision is made for any anticipated losses where the estimate of total costs on a contract indicates a loss. As some contracts extend over one or more years, any revisions in cost and profit estimates made during the course of the work are reflected in the accounting period in which the facts indicating a need for the revision become known. Some contracts contain incentive and/or penalty provisions based on performance relative to established targets. Such awards or penalties are included in revenue or cost estimates when such amounts can reasonably be determined.

Research and development costs

The company expenses all research and development expenditures as incurred with the exception of:

- a) costs related to special purpose test facilities and equipment for development purposes which are capitalized and included as machinery, tooling and equipment.
- b) certain development costs related to the initial manufacture of new products which are deferred and amortized over a period of five years commencing in the year in which the cost is incurred. Should the company determine that no future benefit will accrue on a program, the unamortized deferred cost will be totally written off at that time. Development costs are claimed for income tax purposes as incurred.

Inventories

Inventories of raw materials and finished goods are valued at the lower of cost, applied on a moving average basis, and market value determined as the lesser of replacement cost or net realizable value. Contracts in process are valued at estimated sales value calculated on the percentage completion basis where the work has advanced sufficiently to warrant such valuation and contracts in the initial stages are valued at cost.

Fixed assets

Additions to fixed assets are recorded at cost after deducting investment tax credits and government grants. Depreciation and amortization is provided by the straight line method on a basis estimated to amortize the cost of the assets over their useful lives as follows:

Aircraft	20%
Buildings	10%
Machinery and fixtures	10% to 20%
Special purpose test facilities	12½% to 33⅓%
Tooling	33⅓%
Leasehold improvements	Term of the lease plus renewable option if applicable

Goodwill

Goodwill is being amortized to earnings on a straight line basis over twenty years.

Foreign exchange

Transactions in foreign currencies are translated into Canadian dollars at the approximate rate prevailing at the time of the transactions. Assets and liabilities in foreign currencies are translated at rates prevailing at the year-end. Foreign exchange gains and losses are included in income for the year.

2. Inventories

Inventories are classified as follows:

	1982	1981
Contract costs and estimated earnings	\$144,096	\$114,526
Less customer advance payments	118,819	97,841
	25,277	16,685
Raw materials, parts and supplies	2,312	3,109
Finished goods	999	734
	\$ 28,588	\$ 20,528

Customer advance payments in excess of contract costs and estimated earnings of \$48,298 (1981 - \$4,282) are included in current liabilities.

3. Accrued incentive revenue

During the year, the company recognized incentive revenue net of costs totalling \$1,651. This figure represents the present value of cash payments net of direct costs that the company is reasonably assured of receiving over an eight-year period commencing in 1983, relating to the *Anik* D1 satellite launched in 1982. The company expects to receive net

payments aggregating \$602 by the end of 1983 and payments of \$605 in 1984, and approximately \$207 in each of the years 1985 to 1990 inclusive. The aggregate present value of the 1984 and subsequent payments, \$1,038, is classified as long term.

4. Income taxes

As a result of timing differences in the reporting of certain revenue and expense items for income tax purposes, income taxes have been deferred. Current deferred income taxes result primarily from differences in the valuation of contracts in process inventory. The balance of deferred income taxes arises primarily from claiming depreciation in excess of that charged in the accounts plus the deferral of incentive income for income tax purposes.

Income tax expense in 1982 has been reduced by \$1,006 (1981 - \$185) principally as a result of the inventory tax allowances and tax credits for scientific research.

As at December 31, 1982, one of the company's subsidiaries had losses for income tax purposes in the amount of \$3,057 which are available to reduce future years' income taxes. The losses and their respective years of expiry are as follows:

Expiry	Loss
1985	\$ 529
1986	1,531
1987 and beyond	997

5. Long term debt

	Total liability	Portion due in 1983 shown in current liabilities	Long term
Bank term loan bearing interest at 15.9% repayable in annual instalments of \$500 (U.S. funds) to April 30, 1985 and the balance of \$3,000 (U.S. funds) by April 30, 1986	\$ 5,558	\$ 618	\$ 4,940
Bank term loan bearing interest at 17.7% repayable in semi-annual instalments of \$175 (U.S. funds) to January 31, 1987	1,945	432	1,513
Non-interest bearing loans from the Government of Canada for the purchase of machinery and equipment repayable in annual instalments to 1985, at which time the company acquires full title to the assets	412	137	275
Chattel mortgage on aircraft bearing interest at 1% over prime rate repayable in blended monthly instalments to 1985	145	60	85
Federal Business Development Bank loans bearing interest rates of 11.0% and 12.5% secured by fixed and floating charges on the company's assets in Calgary repayable in blended monthly instalments to 1986	109	28	81
Other notes payable	87	55	32
	<u>\$ 8,256</u>	<u>\$ 1,330</u>	<u>\$ 6,926</u>

Collateral security for the bank term loans includes:

- a general assignment of accounts receivable;
- an assignment of inventory; and
- floating charge demand debentures of \$40,000 on all the assets of Spar Aerospace Limited and \$4,000 on all the assets of its subsidiary Northway-Gestalt Corporation subject to prior charges of non-bank indebtedness. The company has agreed to maintain certain minimum levels of shareholders' equity and working capital and is limited in the amount of cash dividends payable on Common shares, without prior bank approval, to 30% of cumulative net earnings from January 1, 1981.

Long term debt is repayable as follows:

1983	\$ 1,330
1984	1,310
1985	1,246
1986	4,153
1987	217
	<u>\$ 8,256</u>

6. Share capital

A summary of changes to share capital for the year ended December 31, 1982 is as follows:

	Common		Preferred Series A		Special		Junior Preferred Second Series		Total
	Shares	\$	Shares	\$	Shares	\$	Shares	\$	\$
Issued and outstanding, December 31, 1981	2,497,795	9,138	331,625	4,477	394,306	76	3,444,848	34	13,725
a) Issue of Common shares for cash under employee share purchase plan	117,763	927							927
b) Issue of Special Shares for cash					66,835	12			12
c) Exercise of options for cash	14,000	109							109
d) Exercise of warrants for cash	1,577	19							19
e) Conversion of Preferred – Series A to Common at 2.08 Common for 1 Preferred	682,058	4,427	(327,915)	(4,427)					
f) Redemption of Preferred – Series A			(3,710)	(50)					(50)
g) Conversion of Special to Common at 1 Common for 50 Special	1,306	12			(65,428)	(12)			
Issued and outstanding, December 31, 1982	3,314,499	\$14,632	0	\$0	395,713	\$76	3,444,848	\$34	\$14,742
Authorized, December 31, 1982									
– Series							3,481,000		
– Class	Unlimited		10,000,000		6,000,000		20,000,000		

Preferred Shares

The Preferred Shares may be issued in one or more series with such designation, preferences, rights, privileges, restrictions and conditions attached as may be determined by the directors.

All outstanding Preferred Shares – Series A were converted or redeemed during 1982.

Junior Preferred Shares

The Junior Preferred Shares may be issued in one or more series with such designation, preferences, rights, privileges, restrictions and conditions attached as may be determined by the directors.

Subsequent to December 31, 1982, the Junior Preferred Shares, Second Series were redeemed at a price of \$0.01 per share.

Special Shares

Special Shares are not transferable except in certain limited circumstances. Such shares rank, as to payment of dividends and repayment of capital, junior to all other existing shares of the company and are not entitled to receive, in the case of repayment of capital, any amounts in addition to the amount paid up thereon. The Special Shares are not entitled to dividends except in a year for which dividends

of at least \$0.75 (adjusted for subdivisions and consolidations of the Common shares, if any) have been paid on the Common shares, in which case dividends may be paid, subject to certain prescribed limits. Each Special Share entitles the holder to 10 votes at a meeting of shareholders. The Special Shares are not redeemable prior to June 30, 1991 (but will be redeemable thereafter at \$0.15 per share), are purchasable by the company at any time and are convertible into Common shares at any time on the basis of 1 Common share for 50 Special Shares. The Special Shares carry a preemptive right entitling the holders to receive newly issued Special Shares in proportion to such shareholders' holdings of Special Shares. On any issue of additional Common shares (except in certain circumstances) or on the issue of any security convertible into Common shares, the company is required to offer to the Special shareholders, at a specified price, sufficient additional Special Shares in proportion to their holdings of Special Shares to bring the number of Special Shares to be outstanding thereafter up to 10% of the number of Common shares outstanding on a fully diluted basis. Neither Special Shares nor Common shares are to be subdivided or consolidated without the other being subdivided or consolidated on the same basis.

Common shares

The holders of Common shares are entitled to one vote per share at all meetings of shareholders (see Special Shares above) and to receive dividends when declared by the directors. Each Common share is equal to every other Common share and, in the event of the distribution of assets in connection with the dissolution of the company, the holders of Common shares are entitled, subject to the prior rights of the holders of Preferred Shares and Junior Preferred Shares but in priority to the rights of holders of Special Shares, to receive the amount paid up on such Common shares together with any declared and unpaid dividends. Thereafter in such event, and after payment to the holders of Special Shares of the amount paid up on such Special Shares together with any declared and unpaid dividends thereon, the holders of Common shares are entitled to receive the remaining property of the company.

Warrants

Share purchase warrants entitle the holder to purchase the number of Common shares specified for a price of \$14.00 per share if exercised on or prior to February 28, 1985.

During the year ended December 31, 1982, 1,577 warrants for Common shares were exercised at a price of \$12.00 per share (\$19). Subsequent to December 31, 1982, to February 28, 1983, warrant holders exercised their rights to purchase 86,702 Common shares at a price of \$12.00 per share (\$1,040). At February 28, 1983, 600,684 warrants remained outstanding all exercisable at \$14.00 per share.

Stock options

Under an incentive stock option plan, there are outstanding options to full-time officers and other employees to purchase Common shares of the company. Options were exercised in

1982 for 14,000 shares and options on 5,000 shares were forfeited on termination of employment.

At December 31, 1982, 233,000 Common shares, including 216,000 Common shares to officers of the company, were under option at prices ranging from \$6.41 to \$8.50 per share. These options may be exercised at various periods to 1991.

Employee share purchase plan

In 1982 the company offered a Common share purchase plan to employees who had served a probationary period. The plan allowed each qualifying employee, over a two-year period, to purchase Common shares of the company at a cost of \$7.87 per share. As part of the plan, the company agreed to pay a bonus to each participant equal to 40% of the employee's contribution to be used to purchase additional Common shares of the company. Certain officers, related to maximum participation in the plan, are receiving interest-free loans from the company for a portion of their commitment repayable within 3 to 5 years. At December 31, 1982, outstanding loans amounted to \$143 and were secured by Common shares purchased under the plan. In total, the plan will result in the purchase of approximately 435,000 shares at a total value of \$3,423 of which 117,763 shares at a value of \$927 were issued in 1982. The plan may be reoffered from time to time at the discretion of the directors at then current market price.

Shares required for future issue

A total of 1,245,300 Common shares may be required for future issue, 7,914 for conversion of the Special Shares, 687,386 for exercise of the warrants, 233,000 for exercise of stock options, and 317,000 for participants in the employee share purchase plan.

7. Lease commitments

Facility	Year of expiry	Annual rental
Toronto - Caledonia Road	1989	\$ 341
- Ormont Drive	1988	353
Ottawa - Kanata	1985	306
Montreal - Ste-Anne-de-Bellevue	1988	545
Other	1983-1988	441
		<u>\$ 1,986</u>

8. Pension plans

Pension contributions by employees together with those made by the company are deposited with trustees according to the terms of the plans. Pensions at retirement are related to remuneration and/or years of service. Actuarial studies as of December 31, 1980 and 1981 indicated an excess of fund assets over the actuarially computed current service obligations. The company's policy is to amortize such surplus or deficiency over three years and has included one-third of the surplus in income, which, after certain offsets and income taxes, increased net income in the year

by approximately \$480 (1981 - \$465).

The amount charged to earnings (including payments to government pension plans) was \$757 (1981 - \$787) which includes amortization of prior service costs less amortization of the actuarially computed surplus.

Based on actuarial valuations at December 31, 1981, the unfunded past service pension costs of \$1,878 at December 31, 1982 (1981 - \$1,964) will be amortized and funded over a period of up to 15 years.

9. Industry segment information

The company's operating divisions have been grouped into two industry segments.

It is the company's policy to price internal sales or transfer values for services, generally on an equivalent basis as that used for pricing externally. This same basis has been used to eliminate intersegment revenues and operating profits.

	Gears and transmissions, aviation and other services		Satellites, communications and advanced systems		Eliminations		Consolidation	
	1982	1981	1982	1981	1982	1981	1982	1981
External revenues	\$ 49,149	\$ 41,320	\$128,626	\$ 81,247			\$177,775	\$122,567
Intersegment revenues	6,543	9,622			\$ (6,543)	\$ (9,622)		
Total revenue	\$ 55,692	\$ 50,942	\$128,626	\$ 81,247	\$ (6,543)	\$ (9,622)	\$177,775	\$122,567
Segment operating profit	\$ 6,915	\$ 4,098	\$ 12,621	\$ 6,188	\$ (384)	\$ (889)	\$ 19,152	\$ 9,397
General corporate expenses							(3,483)	(2,479)
Interest expense (net)							(2,389)	(3,436)
Income taxes							(4,700)	(1,315)
Net income							\$ 8,580	\$ 2,167
Identifiable assets	\$ 32,342	\$ 31,719	\$ 49,995	\$ 32,179			\$ 82,337	\$ 63,898
Corporate assets							36,121	919
Total assets							\$118,458	\$ 64,817
Capital expenditures	\$ 1,215	\$ 895	\$ 1,310	\$ 783				
Depreciation and amortization	\$ 829	\$ 1,019	\$ 2,152	\$ 1,620				
Amortization of goodwill	\$ 229	\$ 229						

- The company operates principally in Canada.
- The company's revenues from export markets were approximately \$95,000 in 1982 (1981 - \$61,000).
- Due to the technological nature of the products and services provided, a significant portion of the company's business is with various branches and agencies of the Canadian government and crown corporations as well as with foreign government agencies.

Gears and transmissions, aviation and other services includes: (i) gears and transmission systems and equipment for gas turbine engines, fixed and rotary wing aircraft and robotic applications; (ii) repair and overhaul of a wide range of commercial and military aircraft instrumentation and mechanical components and helicopter maintenance; and (iii) automated and conventional mapping services.

Satellites, communications and advanced systems includes: (i) satellite systems and subsystems and ground-based satellite communications systems; (ii) remote manipulator systems for space and terrestrial applications; and (iii) electro-optical systems for sea and land-based applications.

Ten-year review

	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973
Earnings (loss) per share:										
Basic										
net income (loss)										
for the year	\$2.87	\$.73	\$ (.55)	\$.61	\$1.05	\$.82	\$.60	\$.41	\$.28	\$.28
Fully diluted										
net income for the year	\$2.34	.68*	**	.56	.80	.71	.55	.37	.25	.24
Cash dividends paid per										
Common share	\$.40		.30	.30	.21	.14	.13	.11	.08	.08
Preferred Share	\$.54	1.08	1.08	1.08	1.06					
Deferred Share				.05	.03					
Shareholders' equity per										
Common share										
fully diluted	\$5.62	4.22	3.94	5.12	5.14	4.65	3.16	2.73	2.41	2.23
Revenues	\$177,775	122,567	127,729	108,813	91,869	70,089	37,347	28,716	26,444	18,490
Net income (loss)										
for the year	\$ 8,580	2,167	(877)	1,605	2,184	1,311	956	638	419	407
Capital expenditures										
(net of government										
grants)	\$ 2,525	1,678	4,155	4,567	2,851	4,000	751	664	898	890
Long term debt	\$ 8,256	12,198	7,000	945	710	1,272	2,280	2,538	2,565	1,392
Shareholders' equity	\$ 25,635	17,463	15,645	14,730	13,854	12,441	5,616	4,860	4,317	4,002
Working capital	\$ 17,096	11,758	3,227	6,089	7,979	7,621	4,759	4,248	3,862	2,760
Ratio of current assets										
to current liabilities	1.2	1.3	1.1	1.2	1.4	1.6	1.8	1.9	1.9	1.8
Number of employees	1,902	1,895	2,100	1,900	1,670	1,400	730	700	750	650
Number of shareholders										
Common	2,800	2,930	2,970	2,690	2,150	2,060	2,120	2,150	2,170	2,190
Preferred and Special	64	620	675	780	744					

*Does not include exercise of warrants and options which would be anti-dilutive.

**Fully diluted not shown as effect would decrease loss per share.

Directors

Robert A. Basil
President, Robert Basil
International, Inc.
(Elected director 1981)

David S. Beatty†
President, Beatinvest Limited
(Elected director 1969)

Larry D. Clarke*
Chairman of the Board
and Chief Executive Officer,
Spar Aerospace Limited
(Elected director 1967)

Camille A. Dagenais
Chairman of the Board,
The SNC Group
(Elected director 1980)

Roland B. Dodwell*
President, R. B. Dodwell Ltd.
(Elected director 1967)

John D. Houlding
President and Chief Executive
Officer, Polar Gas Project
(Elected director 1977)

William H. Jackson*
Engineering Consultant
(Elected director 1967)

Philip A. Lapp*
President, Philip A. Lapp Limited
(Elected director 1967)

Earl H. Orsert
President and Chief Executive
Officer, London Life Insurance
Company
(Elected director 1978)

David A. B. Steel*
Vice President and Director,
McLeod Young Weir Limited
(Elected director 1967)

Barbara L. Steele†
Company Director
(Elected director 1980)

† Member of the Audit Committee
* Member of the Executive Committee

Officers

Larry D. Clarke
Chairman of the Board and
Chief Executive Officer

Roland B. Dodwell
Vice Chairman of the Board

Corporate Operations Office

R. Don Pollock
Executive Vice President

George B. Gomes
Senior Vice President

John D. MacNaughton
Senior Vice President

E. Peter Birch
Corporate Vice President,
Personnel and
Employee Relations

David C. Cleland
Vice President and Corporate
Controller

John E. Lockyer
Vice President and
General Manager,
Defence Systems Division

I. A. (Don) Mayson
Vice President,
Business Development

J. Ron McCullough
Vice President and General
Manager, Satellite and
Aerospace Systems Division

Ken J. Perry
Vice President

William B. Simpson
Vice President and General
Manager, Gears and
Transmissions Division

Claus Wagner-Bartak
Vice President

Sheldon Polansky
Secretary

Corporate information

Executive Offices
Royal Bank Plaza, South Tower
P.O. Box 83, Toronto, Canada M5J 2J2
(416) 865-0480

Corporate Office
6303 Airport Road, Suite 403
Mississauga, Ontario L4V 1R8

Government Relations Office
77 Metcalfe Street, Suite 200
Ottawa, Ontario K1P 5L6

Satellite and Aerospace Systems Division
21025 Trans-Canada Highway
Ste-Anne-de-Bellevue,
Quebec H9X 3R2

Remote Manipulator Systems Division
1700 Ormont Drive
Weston, Ontario M9L 2W7

Defence Systems Division
4100 Weston Road
Weston, Ontario M9L 1W7
P.O. Box 13050
Kanata, Ontario K2K 1X3

Communications Systems Division
21025 Trans-Canada Highway
Ste-Anne-de-Bellevue,
Quebec H9X 3R2

Gears and Transmissions Division
825 Caledonia Road
Toronto, Ontario M6B 3X8

Repair and Overhaul Division
825 Caledonia Road
Toronto, Ontario M6B 3X8

The Copter Shop
1190 McTavish Road N.E.
Calgary, Alberta T2E 7G6

Wholly-owned subsidiaries

Astro Research Corporation
6390 Cindy Lane
Carpinteria, California
U.S.A. 93013

Northway-Gestalt Corporation
1450 O'Connor Drive
Toronto, Ontario M4B 2V2

Auditors
Clarkson Gordon

Bankers
The Bank of
Nova Scotia

Legal Counsel
Borden & Elliot

Transfer Agents
Montreal Trust
Company

Listed
Toronto Stock
Exchange
Montreal Stock
Exchange
(Trading Symbol:
SPZ)

SPAR