



Therefore, this

United States Patent

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees

FIG. 22

963

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Mite Vol. %
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Calcite Vol. %
Rutile Vol. %
Pyrite Vol. %
Biotite Vol. %
Residual Vol. %
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MATRIZ (%)
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URZĄD PATENTOWY
POLSKIEJ RZECZYPOSPOLITEJ LUDOWEJ
Dokument patentowy
NA JEDY USTAWY Z DNIA 14 PAŹDZIERNIKA 1972 R.
O WYNALEZKACH (CZ. II, NR 43, POZ. 213 ZOSTAŁ
UDZIŁONY NA RZECZ
Szwajc, Marburg, Francja

PATENT
Nr 126624

NA WYNALEZEK PT.
Z OPISEM WYKONANIA
PRZEDSTAWIONY W OPISIE PATENTOWYM
WŁACZONYM DO NIMNIEJSZEGO DOKUMENTU
PATENT TRWA OD DNIA 16.05.78
WARSZAWA, DNIA 11 września 1987 R.
WPRZ
Prof. inż. Przemysław Trzaskowski

Doc. of Patm. 25 May 1978
of Szwajc 27 January 1982

Grace of God of the United Kingdom of
Reinland and Territories, Queen, Head of the
from these presents shall come, greeting:
body corporate, of 12 Place

SCHLUMBERGER IN BRIEF

	1988	1987	1986
Operating Revenue	\$4,924,522,000	\$4,401,993,000	\$ 4,568,395,000
Income (loss):			
Continuing operations	\$ 453,864,000 ^A	\$ 502,560,000 ^B	\$(1,654,570,000) ^C
Discontinued operations ^D	—	(220,000,000)	(363,021,000)
Before extraordinary item	453,864,000	282,560,000	(2,017,591,000)
Extraordinary item	22,287,000	70,080,000	—
Net income (loss)	\$ 476,151,000	\$ 352,640,000	\$(2,017,591,000)
Income (loss) per share:			
Continuing operations	\$ 1.72 ^A	\$ 1.81 ^B	\$ (5.76) ^C
Discontinued operations ^D	—	(0.79)	(1.26)
Before extraordinary item	1.72	1.02	(7.02)
Extraordinary item	0.08	0.25	—
Net income (loss)	\$ 1.80	\$ 1.27	\$ (7.02)
Dividends declared per share	\$ 1.20	\$ 1.20	\$ 1.20

^AIncludes a gain of \$35 million (\$0.13 per share) on the sale of the Electricity Control & Transformers division of Schlumberger Industries.

^BIncludes nonrecurring credit of \$222 million (\$0.80 per share) resulting from the settlement of the U.S. offshore tax case and a gain of \$69 million (\$0.25 per share) on the sale of an investment in Compagnie Luxembourgeoise de Télédiffusion.

^CIncludes nonrecurring charges of \$1.74 billion (\$6.05 per share).

^DRepresents discontinued operations of Fairchild Semiconductor.

Schlumberger made substantial progress in 1988 as operating results increased to \$419 from \$211 million excluding unusual items. Oilfield Services year-to-year operating net income tripled as North American Wireline & Testing returned to profitability and all Drilling & Pumping Services operations showed major improvements. The Measurement & Systems businesses, buoyed by an unexpectedly strong economy worldwide, did well where we are strong and marked time elsewhere.

Despite the strong improvement in oilfield operating results, activity in the second half of the year was adversely affected by oil price weakness. As a result, the rig count in North America at year end was 25% below the previous year and 8% below the figure at July this year. Outside of North America, the major oil companies reacted cautiously to the oil price decline and did not significantly cut spending.

The other major development in 1988 was the elaboration of a five-year plan to help the whole company identify the opportunities and challenges for the future. Following the turmoil in the oil markets of recent years and the close look we have been taking at our industrial businesses, we felt it was time to give our shareholders, customers, managers and other employees a clear statement of our basic values and our plans to implement them in the form of a consistent business strategy. The values as we defined them have not changed, they remain:

First, that people, their motivation and dedication to client service worldwide, are our main asset.

Second, that our commitment to technology and quality is the basis for our competitive advantage.

Third, that our determination to produce superior profits is the cornerstone for our future independence of action, and growth.

As a result of the plan, we have already undertaken three important moves:

1. The Dutch Auction which resulted in the company buying back 30.5 million shares at \$35 each for a total of \$1.07 billion. The five-year plan clearly showed that we had plenty of room for growth in our main businesses and that any major acquisition over the next few years was most unlikely. The weakness in the oil markets during the third quarter of 1988 provided an attractive opportunity to initiate the share repurchase.

2. The announcement of the sale of our Defense Systems and Graphics busi-

nesses. Both are profitable but in the long term will be more successful inside companies strategically committed to their particular industries.

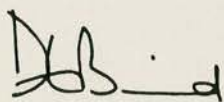
3. The creation of a Computer Science laboratory in Austin, Texas. The increasing importance of computers and software in all our businesses makes it essential for Schlumberger to be a leader in the application of these technologies.

How do we see the business environment in the coming years? In the oil business, the events of 1988 may be fairly typical of what we can expect over the next three years – unstable oil prices driven up and down by OPEC politics and seasonal demands. However, with long-term oil demand increasing and non-OPEC supplies peaking, OPEC will be able to impose an oil price structure of their choosing sometime early in the 1990s.

As a result, oil companies are becoming more sanguine about short-term price stability and are focusing more on non-OPEC oil reserves for the mid-1990s. For Schlumberger, this translates into gradually increasing levels of oilfield service activity, particularly outside the United States. Inside the United States, the situation is more complex. We think that the shift to gas drilling will continue. We do not anticipate any major political move to stimulate oil drilling in the near future, but there will come a moment when the extent to which the U.S. depends on imported oil will provoke some kind of action.

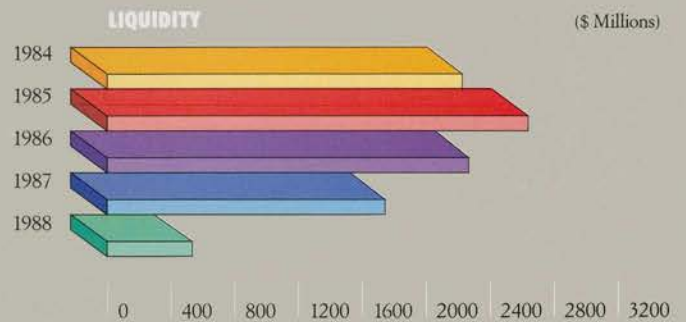
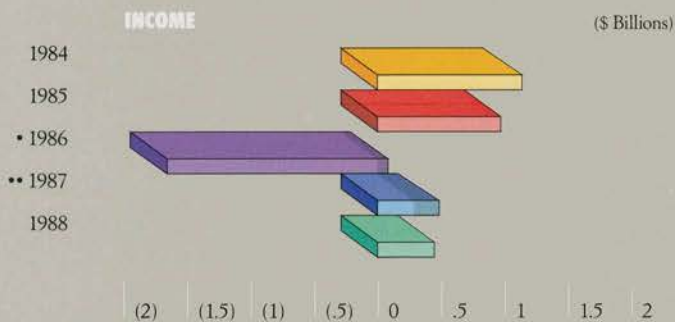
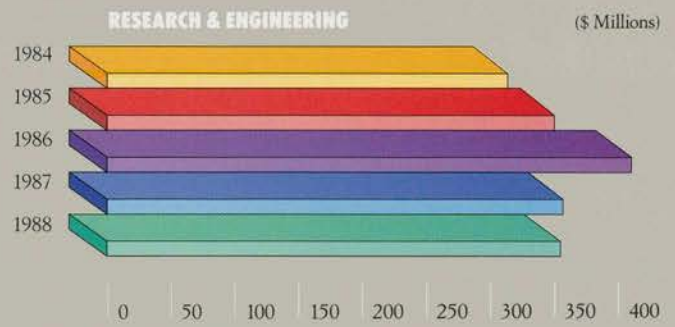
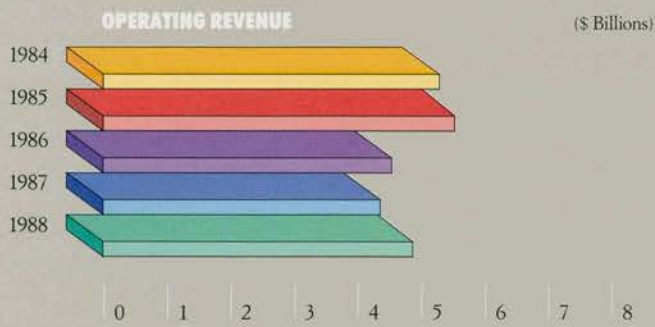
Outside the oilfield, the world economies look set for at least another 12 months of growth and we expect our metering businesses to continue to flourish, particularly due to continued geographical expansion and the technical developments associated with remote reading, solid-state meters and electronic systems.

In 1989, we will continue to implement the strategy contained in our five-year plan. We are confident that the favorable internal and external trends which produced the much improved results of 1988 will continue into 1989.

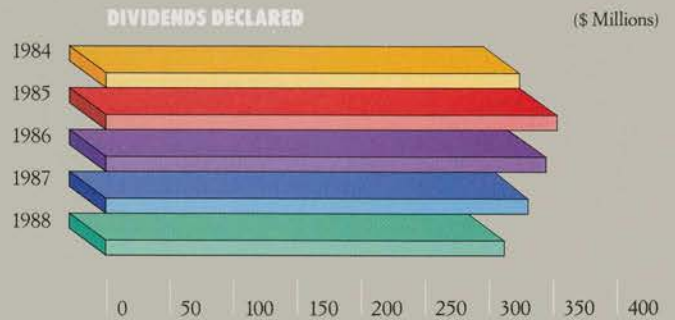
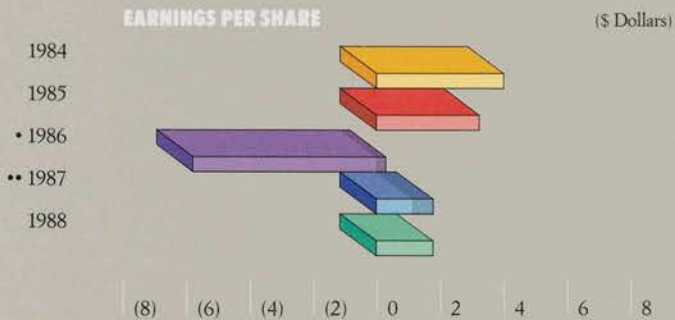


Euan Baird
Chairman & Chief Executive Officer
February 7, 1989

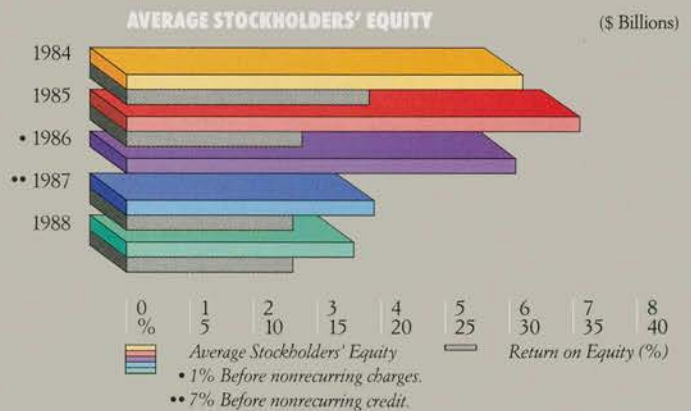
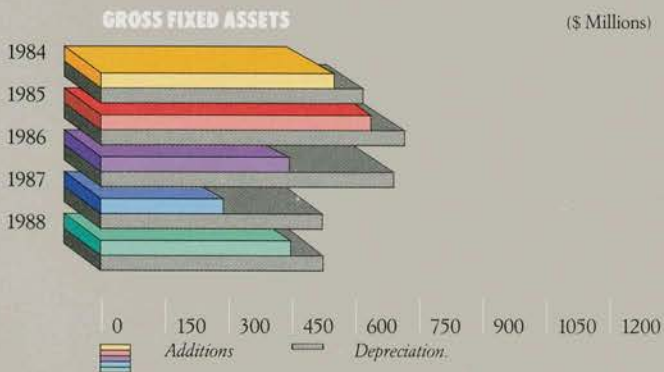
ALL CHARTS REFER TO CONTINUING OPERATIONS



• Includes \$1.74 billion of nonrecurring charges.
 •• Includes \$222 million nonrecurring credit.



• Includes after tax nonrecurring charges of \$6.05 per share.
 •• Includes after tax nonrecurring credit of \$0.80 per share.



• 1% Before nonrecurring charges.
 •• 7% Before nonrecurring credit.

FINANCIAL REVIEW

Management's Discussion and Analysis of Results of Operations

(Stated in millions)

Operating Revenue	1988	1987	1986
Oilfield Services	\$2,721	\$2,306	\$2,652
Measurement & Systems	\$2,204	\$2,096	\$1,916

OILFIELD SERVICES

Revenue increased 18% in 1988 compared to a decline of 13% in 1987; on a comparable basis, including 100% of GECO in all years, revenue was up 14% in 1988 and down 15% in 1987.

Oilfield activity in 1987 was well below the previous year. A recovery that began in the second half carried through the first half of 1988, and then lost momentum in North America as a result of unstable oil prices. The recovery continued outside of North America in 1988 as emphasis shifted from development to exploration, especially in offshore areas like the North Sea. Worldwide, active rigs lost 7% in 1987 but gained 5% in 1988, and active marine vessels increased 13%. There was continued pressure on day rates of offshore rigs, but overcapacity for other types of services was reduced and prices firmed in many areas.

Wireline, Testing & Seismic Services

On a comparable basis, including 100% of GECO in both years, revenue in 1988 increased 15%. Firmer prices and strong client interest in new technology contributed to the growth. Field engineer recruiting increased as a total of 500 engineers were hired.

In 1987, revenue on a comparable basis was down 14% as oilfield activity was affected by overproduction and fluctuating oil prices.

North America

Revenue in 1988 was 20% higher on a 1% increase in average active drilling rigs. Activity declined in the second half as oil companies held back spending in response to weaker oil prices. However, the recovery in service prices held up. The average number of drilling rigs in the U.S. remained flat as gains offshore were offset by lower land activity, but were 21% lower during the fourth quarter. In Canada, the average active rigs increased 9%.

In 1987, revenue was 4% behind 1986. In the U.S., the average number of active drilling rigs was down 4% but was unchanged in Canada. Activity increased substantially in the second half of the year as revenue improved 51% compared to the first six months. Cost cutting measures, begun in 1986, have improved both competitiveness and profitability since then.

Eastern Hemisphere and Latin America

(Australasia, Far East, Middle East, Africa, Europe, Latin America)

Revenue in 1988 increased 12%, reflecting activity growth in all areas except Latin America. The average number of active drilling rigs was up 6%, mainly due to increased offshore and

exploration activity. Customer acceptance of new services and improved productivity contributed to the good results.

Revenue declined 21% in 1987 as activity shifted toward development drilling and lower cost exploration while prices remained weak. The average number of rigs was 10% lower due to surplus production capacity in major areas.

Seismic Services — GECO

GECO revenue grew 18% in 1988, with strong improvements in marine seismic data acquisition and sales of nonexclusive proprietary surveys. Utilization and prices improved in spite of overcapacity in the marine seismic market. The 3D segment grew fastest and accounted for 65% of marine seismic acquisition revenue. Five new seismic data processing centers were opened.

In 1987, revenue increased 17%. Improvements were due to higher activity in the Gulf of Mexico and the North Sea, and firmer prices.

Drilling & Pumping Services

Drilling & Pumping Services revenue increased 15% over 1987, versus an 18% decrease in 1987, reflecting increased activity outside North America, particularly in the North Sea. Pumping Services revenue increased worldwide mainly due to firmer prices. Anadrill's Measurements While Drilling (MWD) service has emerged as the technological leader helping boost revenue significantly.

In 1987, the decline in revenue resulted from reduced activity outside of North America in the early part of the year, together with pressure on day rates of offshore drilling rigs.

Sedco Forex

Contract drilling industry activity in 1988 increased slightly, up 5% outside North America and flat in the U.S. Total offshore utilization rate grew from 53% in 1987 to 66%.

Industry-average day rates for offshore rigs were higher except in the Gulf of Mexico where semisubmersible rates were severely depressed due to oversupply.

During 1988, Sedco Forex revenue improved 11%, reflecting higher rig activity and revenue from the Sydney Ocean Outfalls Project in Australia. Rig utilization rates were 77% offshore and 59% on land compared to 73% and 37%, respectively, a year ago. In 1987, revenue was down 27%, due to the expiration of some long-term contracts and a 26% drop in active land rigs.

At year-end 1988, the Sedco Forex fleet consisted of 77 drilling rigs (42 offshore and 35 on land); four rigs were retired.

Anadrill

Worldwide revenue increased 37% in 1988, up 27% in North America and 41% outside North America. MWD gained 60% as prices firmed and several new products were introduced that improve drilling efficiency. Drilling Services revenue grew 17%.

These improvements benefited from a decision to concentrate on integrated drilling services in geographic areas with strong activity. A new generation of MWD equipment, now being introduced, provides more reliable and cost-effective operations, particularly in extended-reach and horizontal drilling. Worldwide revenue in 1987 was down 11%, off 7% in

North America and 13% outside North America. While MWD and Drilling Services jobs increased, prices per job deteriorated. As a result, MWD revenue was only up 1% while Drilling Services declined 18%.

Dowell Schlumberger (50% owned)

In 1988, worldwide revenue increased 13%. In North America, revenue increased 9% aided by firmer prices and higher activity in the Gulf of Mexico and Canada. Outside North America, revenue increased 17% as prices increased moderately. North Sea activity was particularly strong.

New developments included: a computer program for designing stimulation jobs to maximize production, a low fluid loss and fast setting cement formulation called SALTBOUND, and initiation of coiled-tubing operations with Wireline & Testing to log, test and treat highly deviated or horizontal wells.

Worldwide revenue in 1987 declined 8%. In North America, revenue increased 11% on steady growth in drilling activity coupled with improved prices. Outside of North America, revenue fell 18% as prices were generally soft.

MEASUREMENT & SYSTEMS

Revenue increased 5% in 1988 and 9% in 1987. On a comparable basis, adjusted for businesses acquired or discontinued, revenue increased 8% and 11% in 1988 and 1987, respectively.

Schlumberger Industries

On a comparable basis, revenue rose 11% in 1988 and 13% in 1987; orders were up 18% and 11%, respectively. The strongest performances were at Electricity Management, Water & Gas and Electronic Transactions. Unless otherwise specified, comparisons given below refer to U.S. dollars, on a comparable basis.

Electricity Management

Revenue and orders were up 23% and 25%, respectively, in 1988 compared to increases of 14% and 15% in 1987.

As a result of steady growth in the low-voltage electricity distribution market over the period, sales of residential metering and load management grew, aided by geographical expansion and new product introduction. In the U.S., growth was due mainly to the introduction of new electronic industrial meters, but a decline in U.S. housing starts eroded residential meter prices. In the U.K., coming privatization of utilities has helped sales of new solid-state products which improve metering, switching and collection efficiency.

New developments include: automatic meter reading based on data communication via power line carrier, radio or telephone line, opening of meter service centers with the first in Saskatchewan, Canada, and entry into the energy management business in the U.K.

Electricity Control & Transformers, which addressed a small sector of the market for high-voltage transmission equipment, was sold.

Water & Gas

In 1988, revenue increased 11% and orders 13% compared to increases of 15% and 14%, respectively, in 1987.

Over this period, market share and geographical distribution have increased as a result of acquisitions in North America, West Germany, Italy and Brazil. A joint venture in South Korea has started to produce gas meters, and licenses to manufacture gas meters were granted in the U.S.S.R., Italy and China.

Two major new products were successful: the Gallus 2000 residential gas meter and the Voltex line of large water meters. Automated factories to manufacture the Gallus 2000 were built in France and Italy.

A new activity is the start-up of meter test, repair and installation services in the U.S. and Canada.

Electronic Transactions

Revenue gained 16% in 1988 and 34% in 1987, while orders were up 15% and 42%, respectively.

Sales of Urban Terminals and Systems increased in western Europe, notably integrated parking systems, introduced in 1988, and card-operated mass transit ticketing systems.

Smart Cards and Systems produced 19 million cards in 1988. A new microprocessor-based smart card will be produced in the U.S. where there are several new applications. A new electronic payment terminal, the Delta, has helped boost market share in France.

Retail Petroleum Systems revenue increased. New developments included: Micromax Mark II, a gasoline station system based on a local area network, and a new multiproduct dispenser which can be reconfigured in the field.

Process Control and Transducers

Revenue in 1988 was up 2% and orders increased 19%. In 1987, revenue and orders rose 7% and 9%, respectively.

Following substantial restructuring, continuing activities showed growth despite adverse conditions in principal markets: oil, petrochemical and steel industries, and a recession in the nuclear industry. However, some sectors were beginning to recover.

Defense Systems

Revenue was down 1% in 1988, but orders were up 14%; in 1987, revenue increased 5% while orders fell 5%.

Significant contracts were received for electro-optical systems for visible spectrum tactical reconnaissance. The largest volume ever of cockpit voice and flight data recorders was shipped in the U.S. and a key contract was won for a new rotary recorder for the U.S. Air Force.

Early in 1989, Schlumberger announced its decision to sell its Defense Systems operations.

Schlumberger Technologies

Revenue and orders were level during the period 1986-1988. During the period, a very weak market in 1986 for semiconductor testers, particularly in the U.S., improved progressively up through 1988; severe competition in CAD/CAM markets in North America was not fully compensated by increased sales of ATE systems and Graphics products in Europe.

Automatic Test Equipment

Revenue was down 11% and orders declined 10% compared

to 1987. Lower sales of semiconductor testers in North America were partially offset by higher sales in Asia. Sales of the IDS5000, an integrated circuit diagnostic system, continued to increase. For 1987, revenue was level with 1986 and orders were up 10% as sales of semiconductor testers in Europe were at a good level throughout the year.

Computer Aided Design & Manufacturing

Revenue in 1988 increased 8%; North America and Europe/Asia gained 3% and 11%, respectively. Orders were up 6% overall, but were flat in North America where competition remained strong. Orders for BRAVOdraft, a low-cost detail drafting system, continued at a steady pace throughout 1988. Revenue and orders in 1987 declined by 17% and 18%, respectively, compared to 1986, as intense competition in North America impacted sales.

Graphics

Revenue and orders increased 14% due to the continued strength of pen plotter sales in Europe. The new 18 Series pen plotter was very successful as 3,000 orders have been booked since inception. The expanding dealer network in Europe, North America and Asia contributed significantly to this success. Revenue and orders growth in 1987 were 20% and 31%, respectively, due to improving European market share. Early in 1989, Schlumberger announced its decision to sell the Graphics division.

Instruments

Revenue in 1988 was level and orders improved 7%. Sales were at a good level in Radio Frequency test, Telecommunication test, mechanical design verification and service test product lines. Several new products, together with cost reduction measures, helped Instruments improve its results in the fourth quarter. Revenue for 1987 was up 11% with good increases in most product lines; orders were down 4%.

The Adret frequency synthesizer business was sold in 1988.

<i>Net Income</i>	<i>(Stated in millions except per share amounts)</i>					
	1988		1987		1986	
	Per Amount	Per Share	Per Amount	Per Share	Per Amount	Per Share
Continuing operations	\$454	\$1.72	\$503	\$1.81	\$(1,655)	\$(5.76)
Discontinued operations	—	—	(220)	(0.79)	(363)	(1.26)
Extraordinary item	22	0.08	70	0.25	—	—
Net Income	\$476	\$1.80	\$353	\$1.27	\$(2,018)	\$(7.02)

Income from continuing operations in 1988 included the \$35 million (\$0.13 per share) after tax gain on the sale of Electricity Control & Transformers; 1987 included the after tax gain of \$69 million (\$0.25 per share) on the sale of the Company's investment in Compagnie Luxembourgeoise de Télédiffusion and a nonrecurring credit of \$222 million (\$0.80 per share) resulting from the settlement of the litigation with the U.S. Government regarding taxation of Wireline operations on

the outer continental shelf area. The 1986 loss from continuing operations included nonrecurring charges of \$1.74 billion (\$6.05 per share) which is explained in the Notes to Consolidated Financial Statements.

Excluding the unusual items described above, income from continuing operations was up \$208 million in 1988 and \$127 million in 1987. Both Oilfield Services groups contributed significantly to this improvement due to the combined effect of reduced operating costs and, in 1988, revenue growth; in 1987, despite a revenue decline, Oilfield Services profits rose due to significantly lower operating costs. In Measurement & Systems, good growth at Schlumberger Industries produced record profits in 1988 and 1987. Losses at Schlumberger Technologies have continued.

Included in 1987 and 1986 net income are losses relating to the discontinued operations of Fairchild Semiconductor. The 1987 loss of \$220 million (\$0.79 per share) represented the loss on the sale to National Semiconductor. The 1986 loss of \$363 million (\$1.26 per share) included provisions for estimated loss on disposal (\$200 million) and operating losses during the phase-out period (\$70 million).

Net income in 1988 and 1987 also included extraordinary gains of \$22 million (\$0.08 per share) and \$70 million (\$0.25 per share), respectively. These gains resulted from awards from the Iran-U.S. Claims Tribunal related to Iran's seizure of SEDCO, Inc. assets in 1979 prior to its acquisition by the Company.

Interest and Other Income

Interest and other income included a 1988 gain of \$35 million on the sale of Electricity Control & Transformers and a 1987 gain of \$76 million on the sale of the Company's investment in Compagnie Luxembourgeoise de Télédiffusion. Included in 1986 was a \$71 million gain on the sale of a portion of the Company's investment in Compagnie Générale des Eaux, less provisions for anticipated losses on certain other investments. Excluding these items, interest and other income declined \$33 million in 1988 and \$121 million in 1987 primarily as a result of lower interest income; this reflects the decline in short-term investments resulting from Treasury Stock purchases in 1988 and debt payments in 1987.

Interest Expense

Interest expense, excluding interest provided in 1987 and 1986 related to U.S. income tax litigation, declined \$12 million in 1988 and \$41 million in 1987. These reductions were primarily due to lower average outstanding debt.

Liquidity

A key measure of financial position is liquidity, defined as cash plus short-term investments less debt. The following table summarizes the Company's change in liquidity for each of the past three years:

	(Stated in millions)		
	1988	1987	1986
Income (loss), continuing operations	\$ 454	\$ 503	\$(1,655)
Depreciation & amortization	552	535	719
Nonrecurring items	—	(222)	1,298
Other	(89)	(54)	2
	917	762	364
(Increase) decrease in working capital requirements	(95)	(270)	517
Fixed asset additions	(455)	(276)	(447)
Dividends paid	(325)	(335)	(348)
Other	46	39	142
Increase (decrease) from ongoing operations	88	(80)	228
Purchase of Treasury shares	(1,207)	(364)	(474)
Discontinued operations	2	(122)	(148)
Extraordinary item	—	116	—
Other	(87)	(54)	22
Net decrease in liquidity	\$(1,204)	\$ (504)	\$ (372)
Liquidity — end of period	\$ 555	\$1,759	\$ 2,263

The decline in liquidity since 1986 resulted primarily from the purchase of Treasury shares, including the "Dutch Auction" completed in 1988 under which the Company purchased 30.5 million Common shares at a total cost of \$1.07 billion. Current liquidity levels, combined with liquidity provided by ongoing operations, are expected to fully satisfy future business requirements.

Research & Engineering

Expenditures by business sector were as follows:

	(Stated in millions)		
	1988	1987	1986
Oilfield Services			
Wireline, Testing & Seismic Services	\$159	\$153	\$202
Drilling & Pumping Services	33	34	43
	192	187	245
Measurement & Systems			
Schlumberger Industries	90	85	72
Schlumberger Technologies	71	83	93
	161	168	165
	\$353	\$355	\$410

Fixed Assets

Additions by business sector were as follows:

	(Stated in millions)		
	1988	1987	1986
Oilfield Services			
Wireline, Testing & Seismic Services	\$264	\$122	\$249
Drilling & Pumping Services	86	50	70
	350	172	319
Measurement & Systems			
Schlumberger Industries	75	74	71
Schlumberger Technologies	29	30	56
	104	104	127
Other	1	—	1
	\$455	\$276	\$447

It is anticipated that expenditures for fixed assets in 1989 will continue at 1988 levels and will be financed internally from liquidity generated from ongoing operations.

Common Stock, Market Prices and Dividends Declared per Share

Quarterly high and low prices for the Company's Common Stock as reported by The New York Stock Exchange (composite transactions), together with dividends declared per share in each quarter of 1988 and 1987 were:

	Price Range		Dividends Declared
	High	Low	
1988			
Quarters			
First	\$37 ⁷ / ₈	\$28 ¹ / ₂	\$0.30
Second	38 ³ / ₄	33 ³ / ₈	0.30
Third	35 ³ / ₄	30 ⁷ / ₈	0.30
Fourth	35 ³ / ₈	31 ¹ / ₄	0.30
1987			
Quarters			
First	\$41 ¹ / ₂	\$32	\$0.30
Second	47	39 ³ / ₈	0.30
Third	51	42 ³ / ₄	0.30
Fourth	48 ¹ / ₄	26	0.30

The number of holders of record of the Common Stock of the Company at December 19, 1988 was approximately 38,000. There are no legal restrictions on the payment of dividends or ownership or voting of such shares. United States stockholders are not subject to any Netherlands Antilles withholding or other Netherlands Antilles taxes attributable to ownership of such shares.

CONSOLIDATED STATEMENT OF OPERATIONS

Year Ended December 31,	<i>(Stated in thousands except per share amounts)</i>		
	1988	1987*	1986*
<i>Revenue</i>			
Operating	\$4,924,522	\$4,401,993	\$ 4,568,395
Interest and other income	250,850	325,026	370,025
	5,175,372	4,727,019	4,938,420
<i>Expenses</i>			
Cost of goods sold and services	3,528,114	3,258,242	3,491,172
Research & engineering	352,568	354,965	409,516
Marketing	302,918	282,760	260,582
General	274,658	269,060	314,550
Interest	128,602	165,654	410,001
Nonrecurring items	—	(222,200)	1,601,314
Taxes on income	134,648	115,978	105,855
	4,721,508	4,224,459	6,592,990
<i>Income (Loss) from Continuing Operations</i>	453,864	502,560	(1,654,570)
<i>Loss from Discontinued Operations of Fairchild Semiconductor</i>	—	(220,000)	(363,021)
<i>Income (Loss) before Extraordinary Item</i>	453,864	282,560	(2,017,591)
<i>Extraordinary Item</i>	22,287	70,080	—
<i>Net Income (Loss)</i>	\$ 476,151	\$ 352,640	\$(2,017,591)
<i>Income (loss) per share</i>			
Continuing operations	\$ 1.72	\$ 1.81	\$ (5.76)
Discontinued operations	—	(0.79)	(1.26)
Before extraordinary item	1.72	1.02	(7.02)
Extraordinary item	0.08	0.25	—
Net income (loss)	\$ 1.80	\$ 1.27	\$ (7.02)
Average shares outstanding (thousands)	264,199	277,065	287,387

*Reclassified, in part, for comparative purposes.

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

CONSOLIDATED BALANCE SHEET

Assets	<i>(Stated in thousands)</i>	
December 31,	1988	1987
<i>Current Assets</i>		
Cash	\$ 41,670	\$ 57,073
Short-term investments	1,407,446	2,511,506
Receivables less allowance for doubtful accounts (1988 — \$65,873; 1987 — \$68,468)	1,129,553	1,099,140
Income tax refund	—	103,800
Inventories	583,282	575,941
Other current assets	60,614	70,841
	3,222,565	4,418,301
<i>Investments in Affiliated Companies</i>	299,642	252,258
<i>Long-Term Investments and Receivables</i>	149,592	112,796
<i>Fixed Assets less accumulated depreciation</i>	1,616,683	1,670,354
<i>Excess of Investment Over Net Assets of Companies Purchased less amortization</i>	243,242	231,143
<i>Other Assets</i>	68,439	56,116
	\$5,600,163	\$6,740,968
<i>Liabilities and Stockholders' Equity</i>		
<i>Current Liabilities</i>		
Accounts payable and accrued liabilities	\$1,144,960	\$1,233,922
Estimated liability for taxes on income	592,784	657,263
Bank loans	633,004	658,396
Dividend payable	71,614	82,032
Long-term debt due within one year	69,426	25,514
	2,511,788	2,657,127
<i>Long-Term Debt</i>	191,454	125,283
<i>Other Liabilities</i>	141,903	122,674
	2,845,145	2,905,084
<i>Stockholders' Equity</i>		
Common stock	432,899	423,816
Income retained for use in the business	4,721,322	4,560,168
Treasury stock at cost	(2,352,563)	(1,146,520)
Translation adjustment	(46,640)	(1,580)
	2,755,018	3,835,884
	\$5,600,163	\$6,740,968

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

CONSOLIDATED STATEMENT OF CASH FLOWS

Year Ended December 31,	<i>(Stated in thousands)</i>		
	1988	1987	1986
Cash flows from operating activities:			
Net income (loss)	\$ 476,151	\$ 352,640	\$(2,017,591)
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	552,162	534,530	817,402
Loss from disposal of discontinued operations	—	220,000	200,000
Nonrecurring items	—	(222,200)	1,298,322
Earnings of companies carried at equity, less dividends received (1988 — \$20,660; 1987 — \$10,063; 1986 — \$38,916)	(514)	73,542	108,708
Gain on sale of subsidiary/investments	(34,871)	(75,834)	(70,876)
Extraordinary gain	(22,287)	(70,080)	—
Provision for losses on accounts receivable	17,355	26,574	44,959
Other adjustments	(51,613)	(73,732)	(61,609)
Change in operating assets and liabilities:			
(Increase) decrease in receivables	(7,460)	29,768	247,185
Decrease (increase) in income tax refund receivable	103,800	(103,800)	—
(Increase) decrease in inventory	(4,672)	38,398	83,063
(Decrease) increase in accounts payable and accrued liabilities	(65,118)	(187,360)	278,309
Decrease in estimated liability for taxes on income	(64,665)	(151,497)	(127,034)
Other — net	2,107	28,234	(7,923)
Net cash provided by operating activities	900,375	419,183	792,915
Cash flows from investing activities:			
Purchases of fixed assets	(455,353)	(276,373)	(585,579)
Sales of fixed assets	76,804	111,100	191,072
Proceeds from sale of subsidiary/investments	62,900	83,994	109,571
Investment in affiliated company	(25,000)	—	—
Proceeds from extraordinary item	—	115,635	—
Payment for purchase of Neptune International, net of cash acquired	—	(134,838)	—
Payment for purchase of GECO A.S. common stock	(100,164)	—	(76,950)
Decrease in short-term investments	1,244,627	1,377,944	772,760
(Increase) decrease in long-term investments and receivables	(81,324)	(1,979)	7,954
Net cash provided by investing activities	722,490	1,275,483	418,828
Cash flows from financing activities:			
Dividends paid	(325,415)	(334,662)	(348,487)
Purchase of shares for Treasury	(1,206,578)	(363,616)	(474,439)
Proceeds from issuance of long-term debt	106,863	7,524	293,317
Payments of principal on long-term debt	(179,516)	(415,840)	(782,708)
Net (decrease) increase in short-term debt	(33,622)	(576,246)	107,812
Net cash used in financing activities	(1,638,268)	(1,682,840)	(1,204,505)
Net (decrease) increase in cash	(15,403)	11,826	7,238
Cash, beginning of year	57,073	45,247	38,009*
Cash, end of year	\$ 41,670	\$ 57,073	\$ 45,247

*Excludes amounts relating to discontinued operations.

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

(Dollar amounts in thousands)

	<i>Common Stock</i>				<i>Translation Adjustment</i>	<i>Income Retained for Use in the Business</i>
	<i>Issued</i>		<i>In Treasury</i>			
	<i>Shares</i>	<i>Amount</i>	<i>Shares</i>	<i>Amount</i>		
Balance, January 1, 1986	303,376,857	\$421,186	7,402,725	\$ 310,528	\$(134,343)	\$6,900,894
Translation adjustment, 1986					81,848	
Purchases for Treasury			14,821,980	474,439		
Sales to optionees less shares exchanged	2,705	(73)	(3,972)	(199)		
Net loss						(2,017,591)
Dividends declared (\$1.20 per share)						(343,882)
Balance, December 31, 1986	303,379,562	421,113	22,220,733	784,768	(52,495)	4,539,421
Translation adjustment, 1987					50,915	
Purchases for Treasury			9,079,720	363,616		
Sales to optionees less shares exchanged	94,118	2,703	(37,106)	(1,864)		
Net income						352,640
Dividends declared (\$1.20 per share)						(331,893)
Balance, December 31, 1987	303,473,680	423,816	31,263,347	1,146,520	(1,580)	4,560,168
Translation adjustment, 1988					(45,060)	
Purchases for Treasury			34,498,650	1,206,578		
Tax benefit on stock options		9,300				
Sales to optionees less shares exchanged	1,100	(217)	(10,634)	(535)		
Net income						476,151
Dividends declared (\$1.20 per share)						(314,997)
Balance, December 31, 1988	303,474,780	\$432,899	65,751,363	\$2,352,563	\$ (46,640)	\$4,721,322

*See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies*

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Summary of Accounting Policies

The Consolidated Financial Statements of Schlumberger Limited and its subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States.

Principles of Consolidation

The Consolidated Financial Statements include the accounts of majority-owned subsidiaries. Significant 20%–50% owned companies are carried in investments in affiliated companies on the equity method. The pro rata share of revenue and expenses of 50% owned companies is included in the individual captions in the Consolidated Statement of Operations. The Company's pro rata share of after tax earnings of other equity companies is included in interest and other income.

Translation of Non-U.S. Currencies

All assets and liabilities recorded in functional currencies other than U.S. dollars are translated at current exchange rates. The resulting adjustments are charged or credited directly to the Stockholders' Equity section of the Balance Sheet. Stockholders' Equity was decreased \$45 million in 1988 and increased \$51 million and \$82 million in 1987 and 1986, respectively. Revenue and expenses are translated at the weighted average exchange rates for the period.

All transaction gains and losses are included in income in the period in which they occur. Transaction gains included in the 1988 results amounted to \$9 million compared to losses of \$4 million in 1987 and gains of \$39 million in 1986.

Short-Term Investments

Short-term investments are stated at cost plus accrued interest, which approximates market, and comprised mainly certificates of deposit and time deposits in U.S. dollars.

For purposes of the Consolidated Statement of Cash Flows, the Company does not consider short-term investments to be cash equivalents as they generally have original maturities in excess of three months.

Inventories

Inventories are stated principally at average or standard cost, which approximates average cost, or at market, if lower.

Excess of Investment Over Net Assets of Companies Purchased

Costs in excess of net assets of purchased companies are amortized on a straight-line basis over the estimated life, but not in excess of 40 years. Accumulated amortization was \$46 million and \$37 million at December 31, 1988 and 1987, respectively.

Fixed Assets and Depreciation

Fixed assets are stated at cost less accumulated depreciation, which is provided for by charges to income over the estimated useful lives of the assets by the straight-line method. Fixed assets include the cost of oilfield technical equipment manufactured by subsidiaries of the Company. Expenditures for renewals, replacements and betterments are capitalized. Maintenance and repairs are charged to operating expenses as incurred.

Upon sale or other disposition, the applicable amounts of asset cost and accumulated depreciation are removed from the accounts and the net amount, less proceeds from disposal, is charged or credited to income.

Taxes on Income

The Company and its subsidiaries compute taxes on income in accordance with the tax rules and regulations of the many taxing authorities where the income is earned. The income tax rates imposed by these taxing authorities vary substantially. Taxable income may differ from pretax income for financial accounting purposes. To the extent that differences are due to revenue or expense items reported in one period for tax purposes and in another period for financial accounting purposes, an appropriate provision for deferred income taxes is made. The provisions were not significant in 1988, 1987 or 1986.

Approximately \$1.2 billion of consolidated income retained for use in the business at December 31, 1988 represented undistributed earnings of consolidated subsidiaries and the Company's pro rata share of 20%–50% owned companies. No provision is made for deferred income taxes on those earnings considered to be indefinitely reinvested or earnings which would not be taxed when remitted.

Tax credits and other allowances are credited to current income tax expense on the flow-through method of accounting.

In December 1987, Financial Accounting Standard No. 96 – Accounting for Income Taxes was issued by the Financial Accounting Standards Board. As permitted by FAS No. 96, the Company will implement this Standard on January 1, 1989. The Company's U.S. subsidiary is in an operating loss carryforward position and, as a result, has no deferred tax balances. The adoption of this Standard will not have a material effect on the Company's results of operations or financial position.

Net Income per Share

Net income per share is computed by dividing net income by the average number of common shares outstanding during the year. The effect of stock options, which are common stock equivalents, on the computation of earnings per share is not significant.

Research & Engineering

All research & engineering expenditures are expensed as incurred, including costs relating to patents or rights which may result from such expenditures.

Discontinued Operations

The Fairchild Semiconductor operations were sold effective September 30, 1987 to National Semiconductor Corporation in exchange for National Semiconductor common stock and warrants with a guaranteed minimum cash value of \$122 million. In 1988, the Company received \$127 million from National Semiconductor which repurchased its common stock and warrants and settled in cash the balance of the guaranteed purchase price plus interest.

The results of the Fairchild Semiconductor business, including losses on disposal, have been reported as discontinued operations in the Consolidated Statement of Operations. The 1987 loss of \$220 million represents the loss on the sale to

National Semiconductor and arose primarily from the re-assumption of Fairchild debt. In 1986, the aggregate discontinued operations loss included provisions for the estimated loss on disposal of \$200 million, operating losses during the phase-out period of \$70 million and the Fairchild operating losses of \$93 million.

Nonrecurring Items

On December 23, 1987 the Company announced that it reached a settlement with the U.S. Government concerning whether Wireline oilfield operations on the outer continental shelf area during the years 1970 through 1986 were subject to U.S. taxation. As a result of the settlement, the Company recorded in 1987 a fourth quarter after tax credit to income of \$222 million (\$0.80 per share). After 1986, income from Wireline oilfield operations on the outer continental shelf area is subject to U.S. tax.

In the fourth quarter of 1986, the Company recorded nonrecurring charges with an after tax effect of \$1.74 billion (\$6.05 per share). These charges related to the Oilfield Services segment in the amount of \$1.46 billion, and to the Measurement & Systems segment in the amount of \$130 million; \$150 million of the balance represented potential interest related to the Company's litigation with the U.S. Government which was settled in 1987 as described above. The Oilfield Services charges consisted primarily of write-offs of goodwill at Dowell Schlumberger (\$182 million), the 50% owned pumping services subsidiary, and at Sedco Forex (\$373 million), the drilling services operation, and write-offs and write-downs of certain equipment and inventories aggregating \$730 million. The Measurement & Systems charges consisted mainly of provisions for consolidation of operations in both the Schlumberger Industries and Schlumberger Technologies groups.

The pretax effect of the 1986 charges was \$1.83 billion. The potential interest related to the Company's litigation with the U.S. Government (\$228 million pretax) was classified as interest expense; tax benefits related to the 1986 charges were included in taxes on income.

Extraordinary Item

In December 1988, Sedco Forex, the Company's drilling services operation, received an award from the Iran-U.S. Claims Tribunal of \$22 million relating to Iran's seizure of SEDCO, Inc.'s civil and mechanical engineering and construction business prior to its acquisition by the Company.

In July 1987, Sedco Forex received an award from the Iran-U.S. Claims Tribunal of \$116 million. This award arose from Iran's seizure of a SEDCO, Inc. drilling business in 1979 prior to its acquisition by the Company. After provisions for taxes and other expenses of \$46 million, the award resulted in a net gain of \$70 million.

Acquisitions

On June 29, 1987, the Company announced the acquisition of Neptune International, a producer of water meters and flow measurement equipment, at a cost of \$136 million. The acquisition was accounted for as a purchase and the accounts of Neptune have been consolidated with those of the Company effective July 1, 1987. Cost in excess of net assets acquired was

\$117 million which is being amortized on a straight-line basis over 25 years.

In November 1986, the Company acquired, primarily through the subscription of common stock, 50% of GECO A.S. at a cost of \$77 million. GECO provides offshore geophysical services, chiefly in the North Sea and the United States. The acquisition was accounted for as a purchase and in 1987 and 1986 the related investment was included in investments in affiliated companies; the pro rata share of GECO's results, from the date of acquisition, was included in the Consolidated Statement of Operations. In February 1988, the Company acquired an additional 25% ownership interest at a cost of \$100 million through the subscription of newly issued GECO common stock. As a result, GECO has been treated as a consolidated subsidiary in 1988.

Fixed Assets

A summary of fixed assets follows:

December 31,	<i>(Stated in millions)</i>	
	1988	1987
Land	\$ 60	\$ 62
Buildings & improvements	634	668
Machinery and equipment	4,830	4,447
Total cost	5,524	5,177
Less accumulated depreciation	3,907	3,507
	\$1,617	\$1,670

Estimated useful lives of buildings & improvements range from 8 to 50 years and of machinery and equipment from 2 to 15 years.

Investments in Affiliated Companies

Investments in affiliated companies at December 31, 1988 comprised mainly the Company's 50% investments in the worldwide Dowell Schlumberger business (\$214 million) and 50% owned companies acquired through the acquisition of SEDCO.

Equity in undistributed earnings of all 50% owned companies at December 31, 1988 and 1987, amounted to \$75 million and \$71 million, respectively.

Long-Term Debt

Long-term debt of \$191 million is at money market based rates varying up to 13.7% and is primarily denominated in U.S. dollars, Norwegian krone and Japanese yen.

Long-term debt at December 31, 1988 is due \$57 million in 1990, \$66 million in 1991, \$36 million in 1992, \$21 million in 1993 and \$11 million thereafter.

Lines of Credit

The Company's principal U.S. subsidiary has an available unused Revolving Credit Agreement with a group of banks. The Agreement provides that the subsidiary may borrow up to \$600 million until December 31, 1989 at money market based rates. In addition, at December 31, 1988, the Company and its subsidiaries had available unused short-term lines of credit of approximately \$285 million.

Capital Stock

The Company is authorized to issue 500,000,000 shares of Common Stock, par value \$0.01 per share, of which 237,723,417 and 272,210,333 shares were outstanding on December 31, 1988 and 1987, respectively. The Company is also authorized to issue 200,000,000 shares of cumulative Preferred Stock, par value \$0.01 per share, which may be issued in series with terms and conditions determined by the Board of Directors. No shares of Preferred Stock have been issued. Holders of Common Stock and Preferred Stock are entitled to one vote for each share of stock held.

In 1988, the Company completed a "Dutch Auction" tender offer under which it purchased 30.5 million shares of Common Stock at \$35 per share. Including related expenses, the total cost amounted to \$1.07 billion.

Also in 1988, the Company adopted a noncompensatory Employee Discounted Stock Purchase Plan. Under the Plan, employees may purchase Common Stock at the end of the Plan year through payroll deductions of up to 10% of compensation. The price per share is equal to 85% of the lower of the beginning or end of Plan year market price. The aggregate number of shares which may be purchased cannot exceed 3,000,000 shares.

Options to officers and key employees to purchase shares of the Company's Common Stock were granted at prices equal to 100% of fair market value at date of grant.

Transactions under stock option plans were as follows:

	Number Of Shares	Option Price Per Share
Outstanding Jan. 1, 1987	5,813,511	\$ 4.76-74.72
Granted	760,250	\$29.25-49.31
Exercised	(164,070)	\$ 8.50-46.56
Lapsed or terminated	(652,438)	\$17.51-69.42
Outstanding Dec. 31, 1987	5,757,253	\$ 4.76-74.72
Granted	2,366,100	\$32.44-34.00
Exercised	(10,604)	\$12.00-35.06
Lapsed or terminated	(631,134)	\$29.25-69.42
Outstanding Dec. 31, 1988	7,481,615	\$ 4.76-74.72
Exercisable at Dec. 31, 1988	3,071,759	\$ 4.76-74.72
Available for grant		
Dec. 31, 1987	7,575,077	
Dec. 31, 1988	5,837,917	

Income Tax Expense

The Company and its subsidiaries operate in over 100 taxing jurisdictions with statutory rates ranging up to about 50%.

The Company's U.S. subsidiary is in an operating loss carry-forward position. At December 31, 1988, the subsidiary had unused operating loss carryforwards for consolidated financial statement purposes of \$1.2 billion which expire in the years 2000-2003. The tax benefit of these carryforwards is available to reduce future U.S. federal income tax expense.

Leases and Lease Commitments

Total rental expense was \$134 million in 1988, \$126 million in 1987 and \$148 million in 1986. Future minimum rental commitments under noncancelable leases for years ending

December 31 are: 1989 — \$72 million; 1990 — \$52 million; 1991 — \$36 million; 1992 — \$23 million; and 1993 — \$14 million. For the ensuing three five-year periods, these commitments decrease from \$25 million to \$6 million. The minimum rentals over the remaining terms of the leases aggregate \$18 million.

Contingencies

During 1980, a floating hotel, the Alexander Kielland, functioning as a dormitory for offshore work crews in the North Sea, capsized in a storm. The substructure of the floating hotel originally had been built as a drilling rig by an independent shipyard from a design licensed by a subsidiary of the Company. The Company's subsidiary was not involved in the ownership or operation of the drilling rig or in its conversion or use as a floating hotel. The accident has been investigated by a Commission appointed by the Norwegian Government, which has published its report. In October of 1981 and in February of 1982, the Company's subsidiary, the independent shipyard and one of its subcontractors were sued in France by Phillips Petroleum Company Norway and eight others operating as a group in the Ekofisk Field in the North Sea and by the Norwegian insurers of the Alexander Kielland seeking recovery for losses resulting from the accident of approximately \$111 million (at December 31, 1988 currency exchange rates).

While the Company does not believe it, or its subsidiary, has liability in this matter, the litigation will involve complex international issues which could take several years to resolve and involve substantial legal and other costs. In the opinion of the Company, any liability that might ensue would not be material in relation to its financial position or results of operations.

The Company and its subsidiaries are party to various other legal proceedings, including environmental matters. Although the ultimate disposition of these proceedings is not presently determinable, in the opinion of the Company any liability that might ensue would not be material in relation to the consolidated financial position or results of operations of the Company.

Segment Information

The Company's business comprises two segments: (1) Oilfield Services and (2) Measurement & Systems. Services and products are described in more detail on page 36 in this report.

Financial information for the years ended December 31, 1988, 1987 and 1986 by industry segment and by geographic area is as follows:

	Oilfield Services	Measurement & Systems	Adjust. & Elim.	(Stated in millions) Consolidated
<i>Industry Segment 1988</i>				
Operating revenue				
Customers	\$2,721	\$2,204	\$ —	\$ 4,925
Intersegment transfers	1	13	(14)	—
	\$2,722	\$2,217	\$ (14)	\$ 4,925
Operating income	\$ 320	\$ 174	\$ (30)	\$ 464
Interest expense				(129)
Interest and other income less other charges — \$(3)				254
Income before taxes				\$ 589
Depreciation expense	\$ 421	\$ 108	\$ 2	\$ 531
Fixed asset additions	\$ 350	\$ 104	\$ 1	\$ 455
At December 31				
Identifiable assets	\$2,398	\$1,647	\$ (22)	\$ 4,023
Corporate assets				1,577
Total assets				\$ 5,600
<i>Industry Segment 1987</i>				
Operating revenue				
Customers	\$2,306	\$2,096	\$ —	\$ 4,402
Intersegment transfers	—	9	(9)	—
	\$2,306	\$2,105	\$ (9)	\$ 4,402
Operating income	\$ 147	\$ 107	\$ (2)	\$ 252
Interest expense				(166)
Interest and other income less other charges — \$14				311
Nonrecurring item				222
Income before taxes				\$ 619
Depreciation expense	\$ 421	\$ 104	\$ 2	\$ 527
Fixed asset additions	\$ 172	\$ 104	\$ —	\$ 276
At December 31				
Identifiable assets	\$2,133	\$1,868	\$ (19)	\$ 3,982
Corporate assets				2,759
Total assets				\$ 6,741
<i>Industry Segment 1986</i>				
Operating revenue				
Customers	\$2,652	\$1,916	\$ —	\$ 4,568
Intersegment transfers	—	44	(44)	—
	\$2,652	\$1,960	\$ (44)	\$ 4,568
Operating income (loss)	\$ 8	\$ 74	\$(1,614)*	\$(1,532)
Interest expense				(410)
Interest and other income less other charges — \$(23)				393
Loss before taxes				\$(1,549)
Depreciation expense	\$ 593	\$ 93	\$ 2	\$ 688
Fixed asset additions	\$ 319	\$ 127	\$ 1	\$ 447
At December 31				
Identifiable assets, continuing operations	\$2,372	\$1,593	\$ (32)	\$ 3,933
Identifiable assets, discontinued operations				150
Corporate assets				3,929
Total assets				\$ 8,012

*Includes pretax nonrecurring charges of \$1.60 billion.

Transfers between segments and geographic areas are for the most part made at regular prices available to unaffiliated customers. Certain Oilfield Services segment fixed assets are manufactured within that segment and some are supplied by Measurement & Systems.

Corporate assets largely comprise short-term investments. During the years ended December 31, 1988, 1987 and 1986, neither sales to any government nor sales to any single customer exceeded 10% of consolidated operating revenue.

	Western Hemisphere		Eastern Hemisphere			Adjust. & Elim.	Consolidated
	U.S.	Other	France	Other European	Other		
<i>(Stated in millions)</i>							
<i>Geographic Area 1988</i>							
Operating revenue							
Customers	\$1,346	\$607	\$731	\$1,159	\$1,082	\$ —	\$ 4,925
Interarea transfers	185	43	189	35	7	(459)	—
	\$1,531	\$650	\$920	\$1,194	\$1,089	\$ (459)	\$ 4,925
Operating income (loss)	\$ (3)	\$102	\$ 90	\$ 94	\$ 228	\$ (47)	\$ 464
Interest expense							(129)
Interest and other income less other charges — \$(3)							254
Income before taxes							\$ 589
At December 31							
Identifiable assets	\$1,325	\$355	\$707	\$1,039	\$ 697	\$ (100)	\$ 4,023
Corporate assets							1,577
Total assets							\$ 5,600
<i>Geographic Area 1987</i>							
Operating revenue							
Customers	\$1,183	\$549	\$763	\$ 964	\$ 943	\$ —	\$ 4,402
Interarea transfers	150	32	169	21	5	(377)	—
	\$1,333	\$581	\$932	\$ 985	\$ 948	\$ (377)	\$ 4,402
Operating income (loss)	\$ (93)	\$ 97	\$ 58	\$ 71	\$ 147	\$ (28)	\$ 252
Interest expense							(166)
Interest and other income less other charges — \$14							311
Nonrecurring item							222
Income before taxes							\$ 619
At December 31							
Identifiable assets	\$1,246	\$393	\$815	\$ 808	\$ 769	\$ (49)	\$ 3,982
Corporate assets							2,759
Total assets							\$ 6,741
<i>Geographic Area 1986</i>							
Operating revenue							
Customers	\$1,101	\$584	\$761	\$ 932	\$1,190	\$ —	\$ 4,568
Interarea transfers	247	3	174	56	5	(485)	—
	\$1,348	\$587	\$935	\$ 988	\$1,195	\$ (485)	\$ 4,568
Operating income (loss)	\$ (261)	\$ 44	\$ 15	\$ 136	\$ 168	\$(1,634)*	\$(1,532)
Interest expense							(410)
Interest and other income less other charges — \$(23)							393
Loss before taxes							\$ (1,549)
At December 31							
Identifiable assets, continuing operations	\$1,057	\$433	\$853	\$ 743	\$ 977	\$ (130)	\$ 3,933
Identifiable assets, discontinued operations							150
Corporate assets							3,929
Total assets							\$ 8,012

*Includes pretax nonrecurring charges of \$1.60 billion.

Pension Plans and Deferred Benefit Plans

Effective January 1, 1987, the Company adopted Financial Accounting Standard No. 87 – Employers' Accounting for Pensions. As permitted by this Standard, pension cost and related disclosures for non-U.S. defined benefit pension plans for 1988 and 1987 and all defined benefit pension plans for 1986 were determined under provisions of the previous accounting principle.

U.S. Pension Plans:

The Company and its U.S. subsidiary sponsor several defined benefit pension plans which cover substantially all employees. The benefits are based on years of service and compensation on a career-average or final pay basis. These plans are substantially fully funded with trustees in respect to past and current service. Charges to expense are based upon costs computed by independent actuaries. The funding policy is to contribute annually amounts that can be deducted for federal income tax purposes. These contributions are intended to provide for benefits earned to date and those expected to be earned in the future.

Net pension cost in the U.S. for 1988 and 1987 included the following components:

	<i>(Stated in millions)</i>	
	1988	1987
Service cost – benefits earned during the period	\$ 16	\$ 13
Interest cost on projected benefit obligation	32	30
Expected return on plan assets (actual returns: 1988 – \$58; 1987 – \$18)	(38)	(38)
Amortization of transition asset	(4)	(4)
Amortization of prior service cost	1	—
Net pension cost	\$ 7	\$ 1

The adoption of FAS No. 87 decreased 1987 pension cost by \$4 million. Pension expense in 1985 was \$21 million. In 1986, the actuarial assumptions for return on assets and rate of compensation increases were changed from 7% and 7% to 9% and 6%, respectively. As a result, 1986 pension expense was \$30 million below that of 1985.

Effective January 1, 1989 the Company amended its pension plans to improve retirement benefits for employees.

The funded status of the plans at December 31, 1988 and 1987 was as follows:

	<i>(Stated in millions)</i>	
	1988	1987
Actuarial present value of obligations:		
Vested benefit obligation	\$412	\$353
Accumulated benefit obligation	\$416	\$358
Projected benefit obligation	\$483	\$414
Plan assets at market value	496	453
Excess of assets over projected benefit obligation	13	39
Unrecognized net gain	(15)	(2)
Unrecognized prior service cost	33	5
Unrecognized net asset at transition date	(41)	(46)
Pension liability	\$ (10)	\$ (4)

In both years, assumed discount rate and rate of compensation increases used to determine the projected benefit obligation were 8.5% and 6%, respectively; the expected long-term rate of return on plan assets was 9%. Plan assets at December 31, 1988 consist of common stocks (\$260 million), cash or cash equivalents (\$175 million), fixed interest investments (\$51 million) and other investments (\$10 million). Approximately 3% of the Plan assets at December 31, 1988 represents Schlumberger Limited Common Stock.

Non-U.S. Pension Plans:

Outside of the United States, subsidiaries of the Company sponsor several defined benefit and defined contribution plans which cover substantially all employees who are not covered by statutory plans. For defined benefit plans, charges to expense are based upon costs computed by independent actuaries. These plans are substantially fully funded with trustees in respect to past and current service. Pension expense was \$10 million, \$9 million and \$8 million in 1988, 1987 and 1986, respectively. For defined contribution plans, funding and cost are generally based upon a predetermined percentage of employee compensation. Charges to expense in 1988, 1987 and 1986 were \$10 million, \$9 million and \$9 million, respectively.

Other Deferred Benefits:

In addition to providing pension benefits, the Company and its subsidiaries have other deferred benefit programs. Expense for these programs was \$50 million, \$39 million and \$42 million in 1988, 1987 and 1986, respectively.

In addition, the Company and its U.S. subsidiary provide certain health care benefits for certain active and retired employees. The cost of providing these benefits is recognized as expense when incurred and aggregated \$47 million, \$39 million and \$42 million in 1988, 1987 and 1986, respectively. Outside of the United States, such benefits are mostly provided through government sponsored programs.

Supplementary Information

Operating revenue and related cost of goods sold and services comprised the following:

	<i>(Stated in millions)</i>		
Year ended December 31,	1988	1987	1986
Operating revenue			
Sales	\$2,173	\$2,072	\$1,932
Services	2,752	2,330	2,636
	\$4,925	\$4,402	\$4,568
Direct operating costs			
Goods sold	\$1,359	\$1,325	\$1,293
Services	2,169	1,933	2,198
	\$3,528	\$3,258	\$3,491

Cash paid for interest and income taxes was as follows:

	<i>(Stated in millions)</i>		
Year ended December 31,	1988	1987	1986
Interest	\$125	\$235	\$252
Income taxes	\$172	\$234	\$250

Accounts payable and accrued liabilities are summarized as follows:

December 31,	<i>(Stated in millions)</i>	
	1988	1987
Payroll, vacation and employee benefits	\$ 245	\$ 230
Trade	329	336
Other	571	668
	<u>\$1,145</u>	<u>\$1,234</u>

The caption "Interest and other income" includes interest income, principally from short-term investments, of \$202 million, \$235 million and \$356 million for 1988, 1987 and 1986, respectively. This caption also includes:

- In 1988 – a gain of \$35 million on the sale of Electricity Control & Transformers business;
- In 1987 – a gain of \$76 million on the sale of the investment in Compagnie Luxembourgeoise de Télédiffusion;
- In 1986 – a gain of \$71 million on the sale of a portion of the investment in Compagnie Générale des Eaux, less provisions for anticipated losses on certain other investments.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders
of Schlumberger Limited:

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of operations, stockholders' equity and cash flows present fairly, in all material respects, the financial position of Schlumberger Limited and its subsidiaries at December 31, 1988 and 1987 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 1988, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

Price Waterhouse

New York, New York
February 6, 1989

Quarterly Results (Unaudited)

The following table summarizes results for each of the four quarters for the years ended December 31, 1988 and 1987. Gross profit equals operating revenue less cost of goods

sold and services. Earnings per share for the year does not equal the sum of the four quarters due to the decrease in average shares outstanding resulting from the Company's purchase of Treasury shares.

	<i>Continuing Operations</i>				<i>Total</i>	
	<i>Operating</i>		<i>Income</i>		<i>Net Income</i>	
	<i>Revenue</i>	<i>Gross Profit</i>	<i>Amount</i>	<i>Per Share</i>	<i>Amount</i>	<i>Per Share</i>
<i>(Stated in millions except per share amounts)</i>						
Quarters — 1988*						
First	\$1,246	\$ 367	\$ 101	\$ 0.37	\$ 101	\$ 0.37
Second	1,257	355	144	0.53	144	0.53
Third	1,181	338	112	0.42	112	0.42
Fourth	1,241	336	97	0.40	119	0.49
	\$4,925	\$1,396	\$ 454	\$ 1.72	\$ 476	\$ 1.80
Quarters — 1987**						
First	\$1,031	\$ 245	\$ 5	\$ 0.02	\$ 5	\$ 0.02
Second	1,053	269	30	0.11	30	0.11
Third	1,089	305	152	0.54	2	—
Fourth	1,229	325	316	1.15	316	1.15
	\$4,402	\$1,144	\$ 503	\$ 1.81	\$ 353	\$ 1.27

*For 1988, income from continuing operations and net income include a second quarter gain of \$35 million (\$0.13 per share) on the sale of the Electricity Control & Transformers division of Schlumberger Industries. Net income for the fourth quarter includes an extraordinary gain of \$22 million (\$0.09 per share).

**For 1987, income from continuing operations includes a third quarter gain of \$69 million (\$0.25 per share) on the sale of an investment in Compagnie Luxembourgeoise de Télédiffusion and a fourth quarter nonrecurring credit of \$222 million (\$0.81 per share). Net income for the third quarter also includes a loss from discontinued operations of \$220 million (\$0.79 per share) and an extraordinary gain of \$70 million (\$0.25 per share).

STRATEGIES FOR A CHANGING ENVIRONMENT

Schlumberger growth and leadership have been driven by technology and innovation, reinforced by a determination to produce superior profits. These basic values remain the cornerstone of success and continue to receive strong support.

A CHALLENGE FOR SCHLUMBERGER

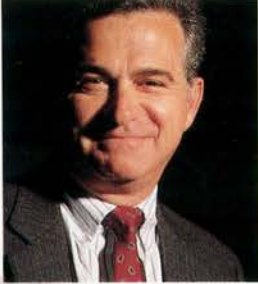
The drop in oilfield activity and the increasingly strong global competition in all Schlumberger businesses have highlighted the need for a strong corporate-wide strategy.

THE CORPORATE STRATEGY

Particular emphasis now is being put on the following business strategies:

- Refocus efforts on businesses where Schlumberger can have worldwide leadership.
- Accelerate the product cycle from conception to commercial introduction. Efficient conversion of technology into marketable products or services is a decisive competitive weapon.
- Improve quality, both in products and services, recognizing that quality and cost effectiveness go hand-in-hand.
- Intensify communications with customers in order to anticipate their needs and react faster to them.
- Develop people to deliver to customers the high level of service that the new technologies demand and to provide Schlumberger with a new generation of leadership for the 1990s.

All Schlumberger business groups are working hard on these objectives as the case histories in the next part of this report clearly indicate.



Mike Ekstrom, now Vice President of Wireline, Testing & Seismic research, led both the research and engineering of the Formation Microscanner. Mike reports, "When we rolled out the first FMS log for a technical evaluation team, there was an audible gasp."



Geochemical and formation microscanner logs with various 3D seismic plots.

Bob Cannon, Senior Exploration Geologist (right), Sun Exploration and Development Company, and Mike Grace, Schlumberger Senior Application Development Engineer, examine FMS images of complex West Texas formations. As Bob Cannon puts it, "FMS images are a low-cost alternative to coring."



THE PROBLEM — PRODUCE OIL AT THE RIGHT PRICE

Every day the oil industry's job gets harder. Increasingly, future demand for oil and gas has to be met by more expensive production from smaller, more complex, harder to find reservoirs. In the short term, falling oil prices have amplified the need for oil companies to lower production costs.

THE SCHLUMBERGER RESPONSE

Research and engineering developments resulting from long-term planning have come together recently in new services designed to increase the efficiency of the oil industry. Through innovative technology, these services provide vastly more detailed subsurface information that can help oil companies minimize the risks of very large investment decisions and reduce the costs of appraising and producing prospective oil and gas fields. The number of wells to evaluate and develop a prospect is lessened, and production and recovery per well are increased. Broader markets for Wireline, Testing & Seismic services are the result. Geological information plays a key role in this context.

The Search For Oil And Gas

Schlumberger Wireline logging services have been an indispensable tool for oil men to find and quantify oil and gas reservoirs. In exploration, the primary task of an oil company is to search for potential hydrocarbon traps, to drill a minimum number of wells to prove or disprove the presence of oil or gas, and, in case of success, to appraise the reservoir size and characteristics. For these tasks, wireline logging services have been geared to provide high quality petrophysical measurements of the rocks around the well bore such as: formation depth, thickness, porosity and lithology, as well as oil, gas and water content.

Helping The Oil Company Geologists

In the early eighties, however, Marketing recognized that the oil companies' emphasis in the future would be on having a more complete set of measurements to describe broadly formation characteristics far away from the well. For this task, Schlumberger

initiated a number of borehole geophysics projects and, in 1986, acquired an interest in GECO, a Norwegian seismic service company, in order to obtain a coherent geophysical description around the well and throughout the reservoir. Simultaneously, new wireline technology was developed that gave significantly more information about the geology and the dynamic behavior of the reservoir. Today, both geological and petrophysical downhole tools are combined in one logging run to acquire a maximum amount of detailed data about reservoir heterogeneities in a minimum amount of rig time. Nearly 10% of Schlumberger's field engineers now include specialists in geology, geophysics and reservoir engineering. They are assigned to centers around the world where they are available to assist oil company geologists and reservoir engineers in using the new technology to solve their problems.

The Current Environment

In the current economic environment, the largest saving for an oil company can be

Wireline, Testing & Seismic Services

The Wireline, Testing & Seismic Services group provides oilfield services that help locate and define oil and gas reservoirs, and assist in the completion, development and production phases of oil and gas wells. These services are provided to oil companies in nearly 100 countries worldwide. The group employs about 14,000 people of whom more than 2,000 are field engineers who supervise well-site services in the oil fields.

The two major operating units are:

Wireline & Testing Services provides measurements of the geophysical and geological properties of underground formations to help locate and characterize reservoirs, and services to test and produce oil and gas wells. Most measurements and services are performed by lowering instruments into the well at the end of an electrical cable called the wireline. In addition, logging may be performed while drilling is in progress, and perforating by guns conveyed on tubing. *GECO* acquires, processes and interprets seismic data that is used as an exploration and development tool by oil companies to define subsurface structures where prospective oil or gas reservoirs may be trapped.

1

made in field development where 70% of the exploration and production budget money is spent. It is by positioning wells precisely in optimal locations that the number of production wells can be reduced and maximum production and recovery can be achieved.

Efficient field development requires detailed reservoir information: geometry and stratigraphy as well as the distribution of petrophysical measurements throughout the field. Another requirement is understanding the geochemistry, microstructure and stresses in the reservoir rock in order to design the completion of each well for optimum productivity.

Development of Geological and Geophysical Tools

Wireline & Testing research and engineering in the early eighties was focused on several promising data acquisition and processing techniques that could provide the geologist with this detailed information.

Research was undertaken on a logging tool that would take an electrical image of the borehole wall which, when processed, showed a high-resolution picture of rock microstructure around the well bore. This tool, the highly successful Formation Microscanner, today is available to all Schlumberger clients. It can resolve vertical and azimuthal details of the order of one-tenth of an inch, giving a log the appearance of a photograph of an actual rock core. Such details allow the geologist to see and analyze rock fractures, to visualize sedimentary patterns which help to understand how the sediments have been deposited and the textural changes they have undergone.

To supplement this information, the Geochemical Logging Tool also was engineered. This is an induced nuclear spectroscopy tool which resolves questions about the chemical composition of rocks and fluids in underground formations and helps to define petrophysical and geological environments through the quantitative measurements of rock geochemistry. Geochemical measurements, correlated with data on rock

density supplied by other logging services, can give a more precise measure of rock porosity.

Similarly, since 1986, GECO has developed and introduced dramatic improvements in acquiring three-dimensional (3D) surface seismic data. These data, calibrated with the aid of borehole Vertical Seismic Profiles, provide a substantially more detailed and accurate picture of subsurface structure than traditional two-dimensional surveys. When 3D surface seismic data are combined with high-resolution wireline logging data and downhole seismic data, oil company analysts can create stratigraphic models which give a more reliable prediction of formation thickness, porosity and permeability trends far away from the well. As a consequence, 3D seismic surveys have become a powerful tool for reservoir delineation and development.

These new services reinforce the data supplied by other more conventional electrical, acoustic, nuclear and pressure measuring tools. Data from a wide spectrum of measurements with the aid of interpretation workstations can be merged into a coherent high-resolution picture to characterize a reservoir. Additional significant progress can be expected in the future as oil companies gain experience with these new tools. Oil companies are beginning to have the means to maximize production and recovery reliably. To quote one oil company project manager, "The biggest breakthrough with the new technology is the aid in the understanding of what is a reservoir rock mineralogically and texturally, and to predict laterally the reservoir characteristics."



Claude Daban (right), now head of the engineering center, and Pierre Delfiner, manager of interpretation, contributed to FMS engineering. Notes Claude, "Through intensive effort and teamwork, we developed the commercial FMS tool in less than half the usual time. We are very proud of the result."



Mazen Issa Dauleh, a Jordanian Senior Field Engineer, with an FMS logging tool in Ras Gharib, Egypt.





The GECO Searcher in the Gulf of Mexico towing multiple streamers used for 3D seismic surveys.

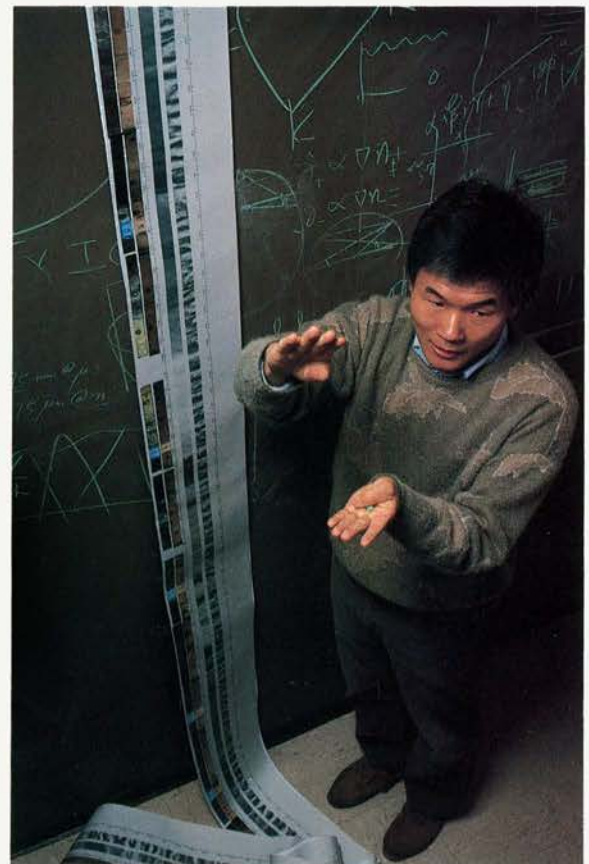


Jim Grau, a nuclear physicist, and Mike Herron, a geochemist, worked on the Geochemical Logging Tool. Says Jim, "The GLT analyzes the whole well more quickly and cheaply than coring."



Stephan Luthi, sedimentologist, works to understand and interpret FMS logs. According to Luthi, "I'm attracted by the detailed images of rock structure. It's comparable to an outcrop that is narrow but very high."

Min Yi Chen, research physicist, with experimental FMS logs. He was responsible for signal processing and mathematical analysis of the Formation Micro Scanner.



Drilling & Pumping Services

The Drilling & Pumping Services group offers oilfield services in the drilling and completion phases of oil exploration and development: drilling wells, real-time analysis of the drilling process, and pumping services.

Drilling & Pumping Services, with 11,000 employees, operates in North and South America, Europe, Africa, the Middle East and Far East.

The three operating divisions are:
Sedco Forex operates 42 offshore and 35 land drilling rigs.
Anadrill provides real-time, well-site analysis of surface and downhole drilling and geological data used to aid drilling efficiency and safety, to determine the direction of drilling, and the types of formations being drilled.
Dowell Schlumberger (50% owned) offers pressure pumping services for cementing casing in the borehole and for stimulating production by acidizing or fracturing treatments which are designed to open flow channels in reservoir rock.

2

THE CHALLENGE

A knotty problem facing oil well drillers is when to suspend operations and pull the drill string out of the borehole to replace a worn-out bit. Too soon adds unnecessary and costly time to the drilling process. Later risks a catastrophic bit failure that could leave broken pieces of the bit in the borehole.

THE SOLUTION

Anadrill has resolved this economic dilemma by developing MELSM and SPINSM, drilling efficiency measurements that make the driller an eyewitness to what's happening downhole every foot of the way. Besides settling the potentially expensive bit-change decision process, these measurements help drillers choose the optimum weight on bit and drill string rotation speed for maximum rate of penetration.

Research Focused on Drill Bit Performance

Fundamental research at the Schlumberger Cambridge Research Center in the U.K. has shown that the torque and axial load at the bit are directly related to bit wear. These studies showed that it is possible to monitor the wear of the bit teeth and detect the onset of catastrophic bit failure by measuring downhole weight on bit and torque while drilling is in progress. Other data correlations also were found that are related to the friction in the drill string as the drill pipe rotates and slides in the borehole. Interpretation of these data can warn the driller when friction is building up to the point where the drill string might get stuck, a major problem. In addition, the driller can use the data to select the right types of drilling fluids to relieve friction and to set drilling parameters that will optimize bit performance.

Anadrill Develops and Markets the Techniques

Both of these techniques were made-to-order for Anadrill's Measurements While Drilling (MWD) tool which measures the actual down-hole weight applied to the bit and the torque generated at the bit. By combining and processing these downhole data with similar measurements taken at the surface, Anadrill can tell the driller the condition of the bit and the friction in the

drill string foot-by-foot while drilling is going on.

A product "champion" was assigned within Anadrill to develop these techniques into commercial services. This gave Anadrill an opportunity to make a new market, offering oil companies two unique services that lowered their drilling costs by significantly improving their drilling efficiency and safety, while adding value to Anadrill's MWD services.

Commercial Success

In Anadrill's hands, the concepts were brought to the market late in 1987 as MEL (Mechanical Efficiency Log) which measures drilling efficiency and bit condition, and SPIN (Sticking Pipe Indicator) which measures drag and rotating friction of the drill string. Numerous clients have reported savings estimated to exceed \$100,000 per well by using these products and they routinely use Anadrill engineers as part of their well-site decision making team.



A group of researchers with the full-scale drilling simulator in the Schlumberger Cambridge Research laboratory in the United Kingdom.

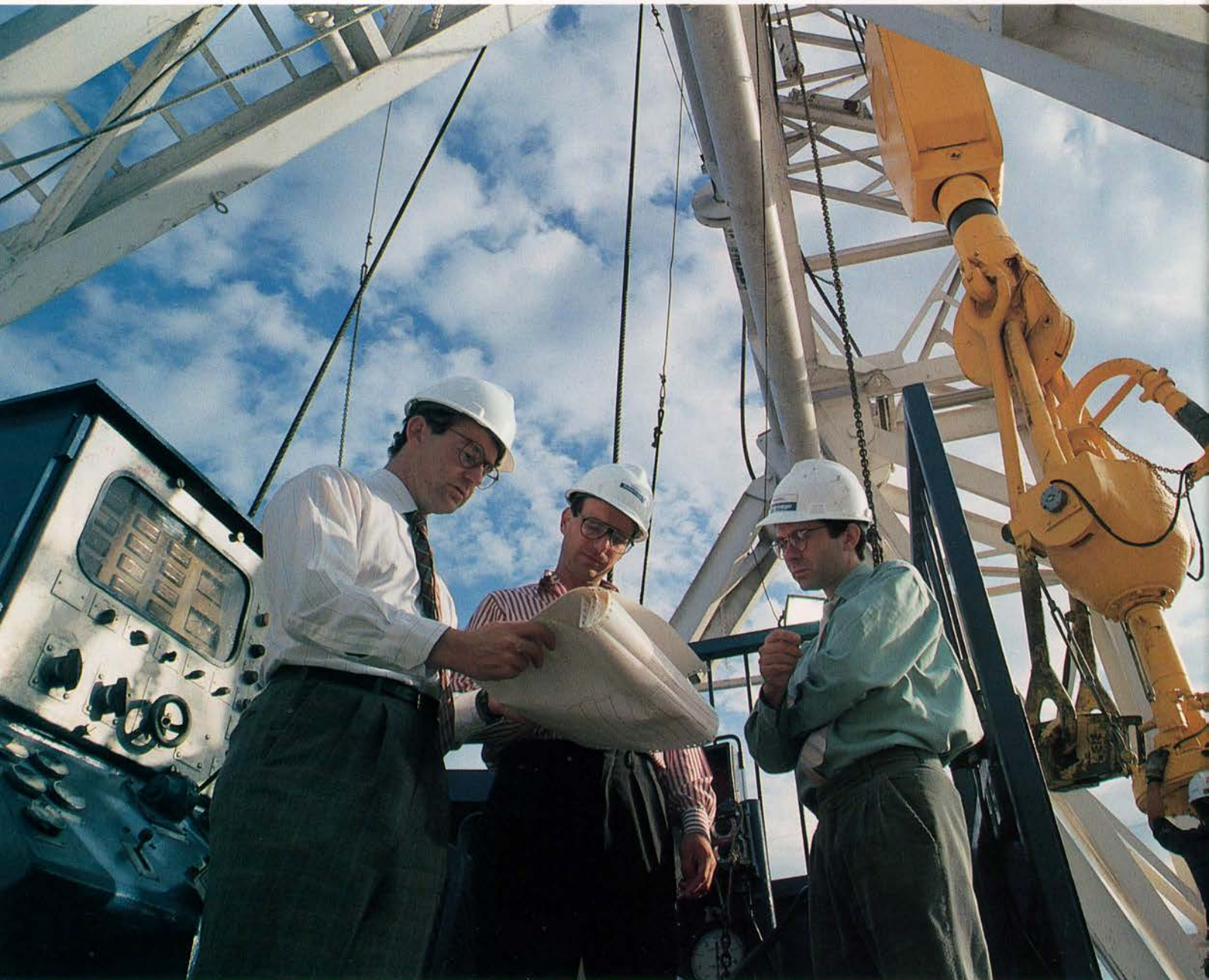


Components of a Measurements While Drilling tool with MEL and SPIN logs.

Trevor Burgess, Mike Sheppard and Marc Lesage (from the left) are part of the engineering team, headed by Trevor, who developed MEL and SPIN into commercial services at Anadrill. According to Trevor, "We think of MEL and SPIN as preventive medicine, versus diagnosing an illness. With these services, the driller gets an early warning of trouble."



Christian Wick, now Drilling Planning Center Manager in Aberdeen, Scotland, was responsible for software development related to friction analysis. He said, "MEL and SPIN development went smoothly. Everything came together simultaneously at exactly the right time."





Richard Hebert, Anadrill General Field Engineer, discusses a Measurements While Drilling log with Jimmy Williford of Chevron on a production platform in the Gulf of Mexico.

Ian Falconer conducts a training seminar. He was the "product champion" for MEL and SPIN and now is Field Service Manager in Nigeria. As he tells it, "Clients were skeptical at first but soon saw how it could save them money. About 40% of our MWD jobs include MEL and SPIN."



Some of the patents covering electronic metering, awarded to Schlumberger.



From the left, Dave Clark, Manager, Geoff Kingston, John Vaughan, Keith Lucking and Eddie Martin were the engineering group that developed the electronic meter.



THE U.K. MARKET FOR ELECTRICITY METERS

The market for electricity meters in the United Kingdom had stagnated by the mid eighties as new home construction began to decline. Tight competition and technical similarities among all of the competing electromechanical meters kept prices low and margins thin.

THE STRATEGY

Schlumberger Industries had invented an electronic solid-state meter and decided to commercialize this revolutionary product, using it as a springboard to gain a leadership position and change the nature of the U.K. market. From this first product, introduced three years ago, have grown a range of products that make Schlumberger the worldwide leader in solid-state metering.

A Marketing Opportunity

Analysis of the U.K. market by the team at Schlumberger's Felixstowe plant showed that solid-state technology could help solve two key problems that faced the Regional Electricity Utilities: minimizing fraud, both theft of electricity by tampering with the meter, and nonpayment for electricity used; reducing

the peaks and troughs in the daily load cycle to allow more efficient power generation, making electricity competitive with all other forms of energy.

The solid-state meter offered significant advantages over the traditional electromechanical products: easier application of multirate tariffs, a simple link to communications systems for remote control and automatic reading, virtually tamper-proof, and a wide range of functions and displays. Nonetheless, the decision to develop an electronic product was high risk and success depended on being able to change totally all aspects of the business operations. The key challenge in the residential metering market was to achieve consistent, high-quality, volume production at attractive prices.

A small-scale trial, based on a Schlumberger chip, had been carried out in the early eighties and demonstrated the feasibility

of electronic metering. This prototype, however, was extremely expensive to produce and subject to radio frequency interference.

The Felixstowe team was convinced that these problems could be solved and that, in the long term, solid-state metering products would find a U.K. market. The decision was made to take the lead in this untested market and commit major resources to the effort. Time-to-market was crucial to success.

The Products

Three basic solid-state metering products were planned to take advantage of the technology and address the major problems of the electric utilities: a residential meter, a prepayment meter, and a radio teleswitch for remotely controlling tariffs and loads.

The principal task of the engineering group was to design these products to be low cost and easy to manufacture and test.

Electronic meters presented the company with other opportunities: to reduce manufacturing and assembly costs through the introduction of just-in-time production line techniques, computerized production control and the application of state-of-the-art automation. To implement these plans, nearly \$10 million was invested in a new plant and equipment in Felixstowe. The company now spends more than \$1 million

Schlumberger Industries

Schlumberger Industries designs, manufactures and sells products, systems and service for the acquisition, processing, transmission and analysis of data.

In 70 plants and 100 sales offices, 18,000 people are employed in 17 countries.

The operating divisions are:

Electricity Management produces electricity meters, load and rate management and automatic meter reading and billing systems.

Water & Gas produces meters for measuring, automatic reading and billing for the consumption of water, gas, thermal energy and industrial fluids.

Electronic Transactions produces cards, terminals, systems and service to automate point-of-sale payments: fuel dispensing systems for gas stations, parking and mass transit terminals, public payphones and smart cards.

Process Control and Transducers produces industrial process control equipment, and valves and transducers.

Defense Systems produces electro-optical and communications systems for the defense industry, and flight recorders.

3

a year on workforce training, a necessary ingredient for efficient operations. The heart of the solid-state meter is a printed-circuit board which is loaded with surface-mounted components by an automatic insertion robot. Measuring circuits are trimmed automatically to precise tolerances with a laser. Finished meters are fully tested under computer control and are shipped with a government-approved certificate of accuracy.

The SPA single-phase meter, launched in 1985, became the world's first mass-produced electronic residential electricity meter. By the end of 1988 it was still the only solid-state residential meter on the market and, at a premium price, had the major market share. It is now used in all 15 of the U.K. electric utilities.

The Prepayment Meter

The U.K. has a large number of coin meters installed for the prepayment of electricity. These meters permit the utilities to collect revenue from mobile urban populations. However, thefts from coin boxes in consumers' homes and assaults on collecting staff had become a major problem.

Schlumberger developed the KBA product (Key Budget Meter) based on the solid-state meter. This is a prepayment meter which eliminates theft by removing the cash box from the consumer's home. A consumer receives an electronic key that he can "charge" by inserting coins in a nearby public vending machine; then by inserting the charged key in his KBA meter, he transfers the amount of electricity purchased to the meter. In turn, the meter reading is recorded on the key and, the next time the key is "charged", the vending machine sends this reading to the utility's central computer. An essential feature is the high level of security built into the key, the meter, and the vending machine through unique coding. Schlumberger engineers worked closely with the utilities' personnel, engineers and also accountants, during product development. London Electricity is installing KBAs as quickly as possible and

expects their use to grow because consumers themselves are now asking for the meter as an aid in budgeting household expenditures. Disconnections for nonpayment have been halved, receivables reduced by \$9 million and bad debts by \$3.6 million in the first year the KBA was introduced in London. Schlumberger products now dominate the prepayment meter market.

The Radio Teleswitch

Managing electricity supply requires that the variations in the daily demand cycle are minimized, reducing peaks. Ideally, with steady demand (no peaks), high capital cost electricity generating plants could run close to full capacity and expensive standby generators would not be needed. One way to smooth demand is differential pricing which encourages consumption of electricity at off-peak periods.

The RTA (Radio Teleswitch), based on another proprietary Schlumberger chip, was designed to reduce variations in demand. When activated by a signal broadcast by the British Broadcasting Corporation, the RTA can change tariffs in a household or industrial meter and turn off, or on, interruptible loads such as water or space heaters and air conditioning. This technology is now the industry standard.

Results

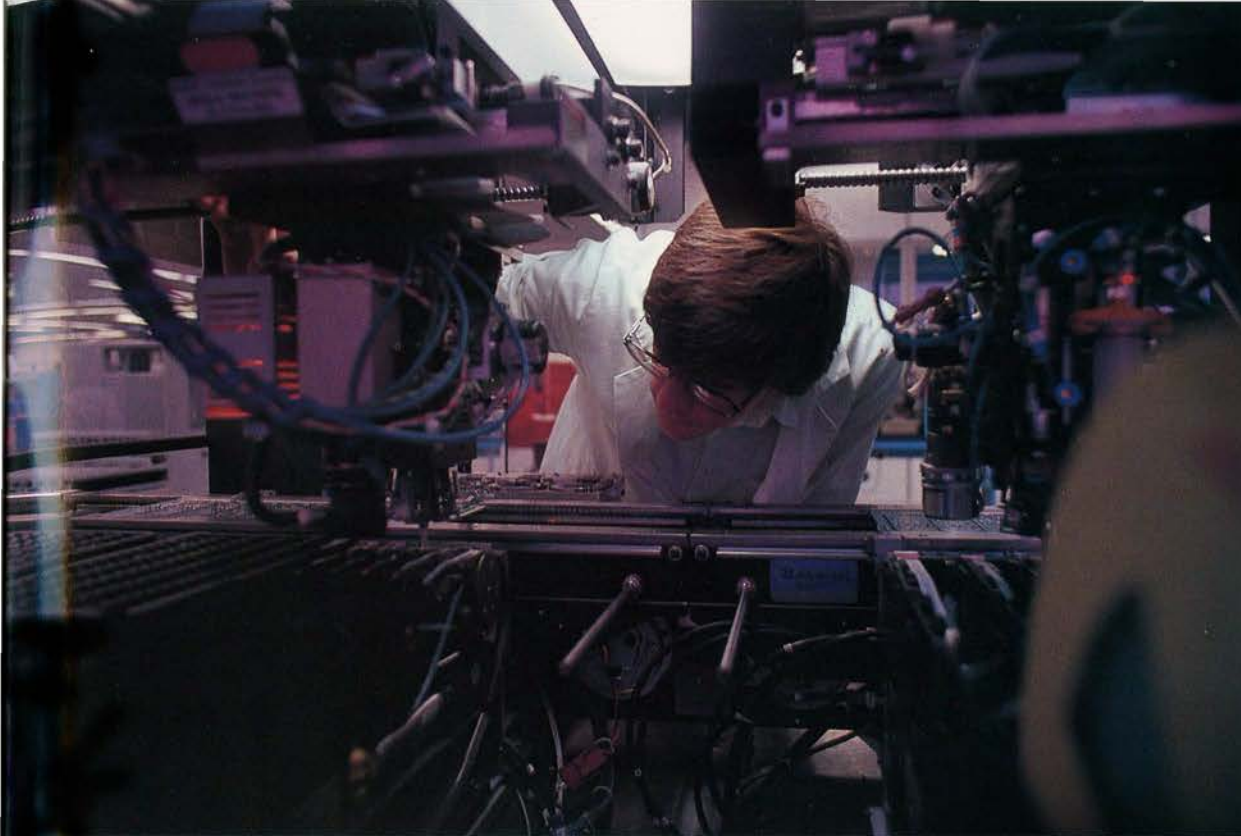
The introduction of solid-state meter products has been so successful that, at the end of 1988, Schlumberger terminated all production of electromechanical products. The change to electronic products has required higher levels of skill and expertise. In the last four years, over 100 graduate engineers have been recruited into the rapidly growing Engineering and Manufacturing groups. Today some 800 people work at Felixstowe. The rapid growth in volume of solid-state electricity meter products has doubled overall factory output over the past four years. In 1988, U.K. orders were up 50% and revenue gained 39%, amply justifying the risks taken and the investments made.



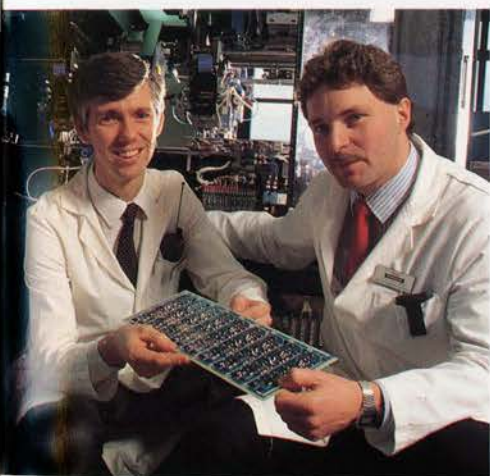
According to Tony Maboney, Sales Manager, "Total commitment by everyone concerned made our marketing strategy work."



Bernard Patry, previously Engineering Manager, remembers, "The engineers were very clear on the cost realities."



One of the assembly machines for automated meter production.



Steve Johnson, Industrial Engineering Manager, Paul Lavars, Manufacturing Manager, and Rick Hellaby, Production Manager, in the meter production area. "Our success was based on communications and training" explained Paul.

The U.K. Eastern Electricity Board is a major customer for radio tele-switches. Deputy Chairman Walter Waring sees tele-switches eventually installed in most of their 2.8 million customer premises. The teleswitch, he added, "is a very good product which meets all our specifications."



Ken Harvey is Deputy Chairman of London Electricity. "We collect more than £1 million from budget meters each month," he said, "and 40% is the collection of previous debt."



FIVE YEAR SUMMARY

(Stated in millions except per share amounts)

Year Ended December 31,	1988	1987	1986	1985	1984
<i>Summary of Operations</i>					
Operating revenue:					
Oilfield Services	\$ 2,721	\$ 2,306	\$ 2,652	\$ 3,966	\$ 3,616
Measurement & Systems	2,204	2,096	1,916	1,619	1,630
	\$ 4,925	\$ 4,402	\$ 4,568	\$ 5,585	\$ 5,246
% Increase (decrease) over prior year	12%	(4%)	(18%)	6%	5%
Operating income:					
Oilfield Services	\$ 320	\$ 147	\$ 8	\$ 1,039	\$ 1,170
Measurement & Systems	174	107	74	69	147
Eliminations	(30)	(2)	(1,614) ^B	1	10
	\$ 464	\$ 252	\$ (1,532) ^B	\$ 1,109	\$ 1,327
% Increase (decrease) over prior year	85%	N/A	N/A	(16%)	(1%)
Interest expense	\$ 129	\$ 166	\$ 410 ^C	\$ 209	\$ 146
Taxes on income	\$ 135	\$ 116	\$ 106	\$ 324	\$ 401
Income (loss), continuing operations	\$ 454	\$ 503 ^A	\$ (1,655) ^C	\$ 978	\$ 1,173
% (Decrease) increase over prior year	(10%)	N/A	N/A	(17%)	2%
(Loss) income, discontinued operations	\$ —	\$ (220)	\$ (363)	\$ (627) ^D	\$ 9
Extraordinary item	\$ 22	\$ 70	\$ —	\$ —	\$ —
Net income (loss)	\$ 476	\$ 353 ^A	\$ (2,018) ^C	\$ 351 ^D	\$ 1,182
Income (loss) per share					
Continuing operations	\$ 1.72	\$ 1.81 ^A	\$ (5.76) ^C	\$ 3.27	\$ 4.07
Discontinued operations	—	(0.79)	(1.26)	(2.10) ^D	0.03
Extraordinary item	0.08	0.25	—	—	—
Net income (loss)	\$ 1.80	\$ 1.27 ^A	\$ (7.02) ^C	\$ 1.17 ^D	\$ 4.10
Cash dividends declared	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.12
<i>Summary of Financial Data</i>					
Income as % of revenue, continuing operations	9%	11%	N/A	16%	21%
Return on average stockholders' equity, continuing operations	13%	13%	N/A	14%	19%
Fixed asset additions	\$ 455	\$ 276	\$ 447	\$ 650	\$ 559
Depreciation expense	\$ 531	\$ 527	\$ 688	\$ 700	\$ 624
Average number of shares outstanding	264	277	287	299	289
<i>At December 31,</i>					
Liquidity	\$ 555	\$ 1,759	\$ 2,263	\$ 2,511	\$ 2,182
Working capital	\$ 711	\$ 1,761	\$ 2,119	\$ 3,349	\$ 3,221
Total assets	\$ 5,600	\$ 6,741	\$ 8,012	\$ 11,282	\$ 10,913
Long-term debt	\$ 191	\$ 125	\$ 504	\$ 1,014	\$ 966
Stockholders' equity	\$ 2,755	\$ 3,836	\$ 4,123	\$ 6,877	\$ 6,992
Number of employees	48,000	50,000	50,000	61,000	64,000

^AIncludes nonrecurring credit relating to continuing operations of \$222 million (\$0.80 per share).

^BIncludes nonrecurring charges relating to operating income of \$1.60 billion.

^CIncludes nonrecurring charges relating to continuing operations of \$1.74 billion (\$6.05 per share) including pretax interest expense of \$228 million.

^DIncludes unusual charges relating to discontinued operations of Fairchild Semiconductor with an after tax effect of \$486 million (\$1.63 per share).

DIRECTORS

Don E. Ackerman^{1,2}
*Partner, J.H. Whitney & Co.
New York City*

Euan Baird^{3,4}
*Chairman and Chief Executive Officer
Schlumberger*

Guy Dejouany³
*Chairman and Chief Executive Officer
Compagnie Générale des Eaux
Paris*

John Deutch⁴
*Provost
Massachusetts Institute of Technology
Cambridge, Massachusetts*

Roland Génin³
*Vice Chairman of the Board
Schlumberger*

George H. Jewell^{1,2}
*Partner, Baker & Botts
Houston, Texas*

Paul Lepercq³
*President, Lepercq International Holding Ltd.
Hamilton, Bermuda*

Didier Primat²
*President, Primwest Holding N.V.
Curaçao, N.A.*

Nicolas Seydoux^{3,4}
*Chairman and Chief Executive Officer
Gaumont, Paris*

Eiji Umene
*Managing Director
Nippon Steel Corporation
Tokyo*

Arnaud de Vitry¹
*Chairman and Chief Executive Officer
Eureka SICAV, Paris*

¹Member Audit Committee

²Member Compensation Committee

³Member Finance Committee

⁴Member Nominating Committee

OFFICERS

Euan Baird
Chairman and Chief Executive Officer

Roland Génin
Vice Chairman of the Board

Arthur Lindenauer
*Executive Vice President
Chief Financial Officer*

Michel Guilloud
Executive Vice President

Victor E. Grijalva
Executive Vice President

René Mitieus
Executive Vice President

André Salaber
Executive Vice President

Ian Strecker
Executive Vice President

David S. Browning
Secretary and General Counsel

Jean Boucharlat
Vice President

Jimmy D. Callison
Vice President

John D. Ingram
Vice President

Allen D. Klein
Vice President

André Misk
Vice President

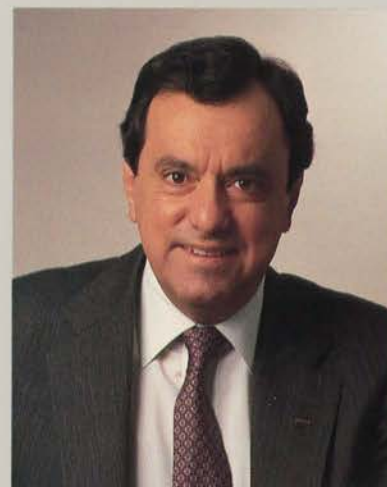
Jean-Dominique Percevault
Vice President

Patrick J.B. Corser
Controller

Andrew Gould
Treasurer

James A. MacKenzie
Assistant Secretary

Thomas O. Rose
Assistant Secretary



Victor E. Grijalva
*Executive Vice President
Wireline, Testing & Seismic Services*

MANAGEMENT CHANGES

After 38 years of distinguished service with Schlumberger, Roy Shourd, Executive Vice President, has retired. On December 8, the following management appointments were announced:

André Salaber was appointed Executive Vice President in charge of Safety; Victor Grijalva, formerly President of Schlumberger Well Services – North America, was appointed Executive Vice President – Wireline, Testing & Seismic Services, replacing Salaber. J.D. Callison, formerly Vice President and General Manager – North America for Dowell Schlumberger, was appointed Vice President of Industry Affairs for Oilfield Services – North America.

OILFIELD SERVICES

Wireline, Testing & Seismic Services

Wireline, Testing & Seismic Services provides oilfield services that help locate and define oil and gas reservoirs, and assist in the completion, development and production phases of oil and gas wells. These services are provided to oil companies in nearly 100 countries worldwide.

Wireline & Testing Services

Measurements of the geophysical and geological properties of underground formations to help locate and characterize reservoirs, and services to test and produce oil and gas wells. Most measurements and services are performed by lowering instruments into the well at the end of an electrical cable called the wireline. In addition, logging may be performed while drilling is in progress, and perforating by guns conveyed on tubing.

GECO

Acquires, processes and interprets seismic data used to define subsurface structures where prospective oil or gas reservoirs may be trapped.

Drilling & Pumping Services

Drilling & Pumping Services offers oilfield services in the drilling and completion phases of oil exploration and development.

Sedco Forex

Operates 42 offshore and 35 land drilling rigs.

Anadrill

Well-site analysis of surface and downhole drilling and geological data used to aid drilling efficiency and safety, to determine the direction of drilling, and the types of formations being drilled.

Dowell Schlumberger (50% owned)

Pressure pumping services for cementing casing in the borehole and for stimulating production by acidizing or fracturing treatments.

MEASUREMENT & SYSTEMS

Schlumberger Industries

Schlumberger Industries designs, manufactures and sells products, systems and service for the acquisition, processing, transmission and analysis of data.

Electricity Management

Electricity meters, load and rate management and automatic meter reading and billing systems.

Water & Gas

Meters for measuring, automatic reading and billing for the consumption of water, gas, thermal energy and industrial fluids.

Electronic Transactions

Cards, terminals, systems and service to automate point-of-sale payments: fuel dispensing systems for gas stations, parking and mass transit terminals, public payphones and smart cards.

Process Control and Transducers

Industrial process control equipment; valves and transducers.

Defense Systems

Electro-optical and communications systems for the defense industry, and flight recorders.

Stock Transfer Agent

The First National Bank of Boston
Boston, Massachusetts

Registrar

The First National Bank of Boston
Boston, Massachusetts

Schlumberger stock is listed on the New York (trading symbol SLB)

Paris
London
Amsterdam
Frankfurt and
Swiss stock exchanges

Schlumberger Technologies

Schlumberger Technologies provides hardware and software tools to help engineering customers cut design and production cycles.

Schlumberger Automatic Test Equipment

Automatic test equipment and software for functional and in-circuit testing of printed-circuit boards and integrated circuits.

Schlumberger CAD/CAM

Computer-based solutions for engineering design and manufacturing processes; software for numerically controlled machine tools.

Schlumberger Graphics

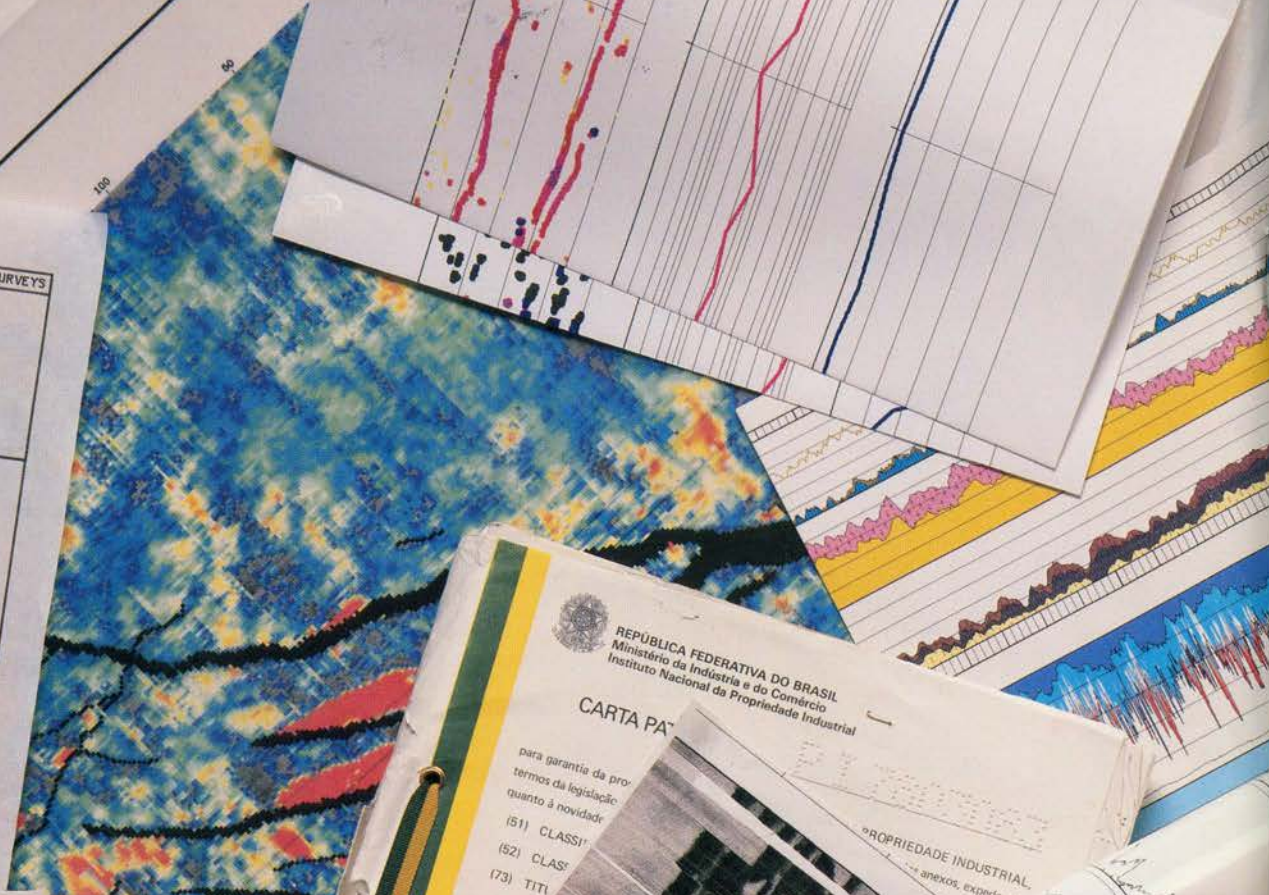
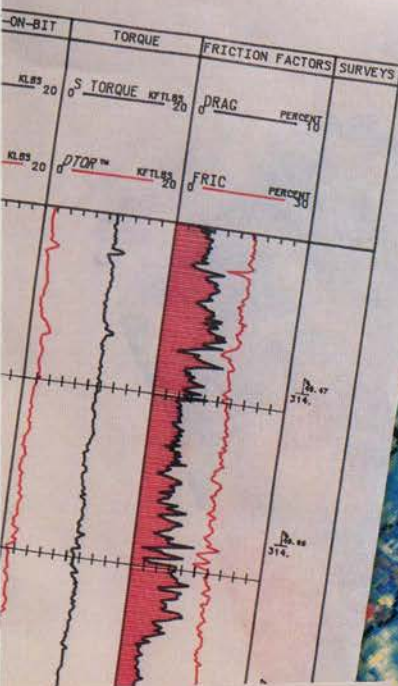
Plotters for creating graphic images or engineering drawings such as electronic drafting, architectural drawing and mapping.

Schlumberger Instruments

Electronic instruments for mechanical design, telecommunications, process control and electronic service.

Form 10-K

Stockholders may receive without charge a copy of Form 10-K filed with the Securities and Exchange Commission on request to the Secretary, Schlumberger Limited, 277 Park Avenue, New York, New York 10172.



REPÚBLICA FEDERATIVA DO BRASIL
 Ministério da Indústria e do Comércio
 Instituto Nacional da Propriedade Industrial

CARTA PAT

para garantia da pro-
 termos da legislação
 quanto à novidade

(61) CLASSI
 (52) CLAS
 (73) TITI

PROPRIEDADE INDUSTRIAL
 anexos, exped. nr
 in Go

(4) TITULO:
 NATUREZA: Privilégio de Invenção
 (21) DEPOSITO NO 7803083
 PRIORIDADE
 (31) País de origem: Inglaterra
 (32) Data
 PRAZO DE VALIDADE: quinze (15) anos contados a partir da data de depósito observadas as condições legais.
 45 - Expedida em 26 de Julio de 1983
 Luiz Carlos O. da Cunha Lima Urbano Ribeiro do Amaral
 Diretor de Patentes

G/A

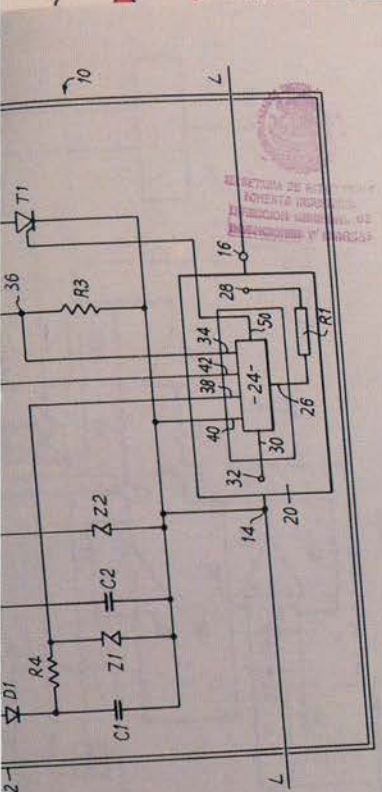
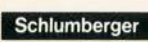


FIG.1
 p.p.de ENERTEC
 APODERADO.
 EDUARDO CORREA E.



IMPRELARE
 CONFORME
 BREVET D'INVENTION
 Nº 78 13998



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 42, rue Saint-Dominique, 75007 Paris
 2-7-1, Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163

