

Making ideas fly.

“A digital infrastructure with standardized interfaces. Fully integrated computerized systems using a common database. A system that can be used both independently and as a component in a higher system.”

All this adds up to what could well be a description of a modern, sophisticated computer system. But there is one very significant difference: this system is airborne.

The description matches the Gripen, the first of the world's fourth generation combat to enter operational service. A supersonic system aircraft using sensors, control surfaces, weapons, monitoring devices and displays both as transmitters and carriers of information. With its digital technology, the Gripen exploits its integrated functions to the limit.

Brain power has replaced brute force. Today, limits are no longer set by technology, but by Man's mental capacity. In the critical situations of the future, the outcome will be determined by the ability to process and utilize huge volumes of data, whether the scene is the cockpit of a fighter aircraft, a control center for telecommunications satellites, the operator's console of a surveillance system, or the table in a company boardroom.

For over 60 years, Saab has been stretching the laws of nature, pushing forward the limits to what is considered physically and psychologically possible. The need to satisfy Man's curiosity has resulted in new products, new companies and new types of business. By studying Man as part of the system, we get ideas to fly.



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Future publication dates

Financial information will be published on the following dates:

- The Interim Report for the first quarter of 1998 will be published in April 1998.
- The Interim Report for the second quarter of 1998 will be published in August 1998.
- The Interim Report for the third quarter of 1998 will be published in October 1998.
- “The 1998 Report” will be published in February 1999.

Highlights

1997

- JANUARY** Ericsson Saab Avionics is formed.
Saab Ericsson Space forms the subsidiary company, Austrian Aerospace GmbH.
- FEBRUARY** A Memorandum of Understanding is signed with Airbus regarding Saab's participation in the design study phase for the A3XX project, a new aircraft for over 500 passengers.
Training Systems receives a major Support & Repair contract from the UK.
Delivery of a newly developed edition of the software for the fighter version of the Viggen.
- MARCH** Traffic Systems wins its largest order so far for an automatic road toll system for Melbourne, Australia.
- MAY** Training Systems receives the largest order in its history for target equipment from the Norwegian Defense.
Training Systems also receives an order from the UK for simulators for the Challenger 2 Main Battle Tank.
- JUNE** Saab receives an order for the 64 aircraft in batch 3 of the Gripen.
First delivery from Commercial Aircraft to Boeing Commercial Airplane Group.
Saab Marine Electronics launches new radar-based level-gauging equipment, Saab Tank Radar Pro, specially designed for the process industry.
- JULY** An order is received from the Swedish Defense for conversion of the two-seat Viggen to a combined trainer and ECM aircraft.
- AUGUST** Space receives an order from the American authorities for development of the GPSOS measuring instrument to be used in atmospheric studies.
- SEPTEMBER** Saab celebrates its 60th Jubilee with a major symposium, air display and Jubilee Reception, at which Saab presents its new company symbol with the "Aerospace" concept.
Saab receives certification according to Boeing's quality system.
The 1,000th BT 46 system is delivered to the USA.
- OCTOBER** Saab announces that it is considering ending production of regional aircraft.
The first squadron of Gripen aircraft is declared operationally in Sweden.
Space receives an order from Mitsubishi Electric Corporation for separation systems, representing a breakthrough in the Japanese market.
An agreement is signed on the transfer of metal bonding work from BAe to Saab.
- NOVEMBER** Dynamics receives an order from the Swedish Defense for a study of homing heads for future missile programs.
Training Systems signs a contract with the Swedish Defense for BT 46 systems to be used in Battle Tank 121/122.
- DECEMBER** The Board of Directors of Saab decides to terminate production of regional aircraft.
Dynamics receives an order for laser rangefinders from Oerlikon-Contraves in Switzerland and for IR cameras from the Swedish Defense.

1998

- JANUARY** Commercial Aircraft receives an order for floor structures for the new Airbus A340-500/600.
- FEBRUARY** Investor AB is studying the possibility of broadening ownership of Saab AB and of listing the company on the Stockholm Stock Exchange.

Business overview

Only a handful of companies in the world are capable of developing and manufacturing complex military aircraft systems. Saab is one of those companies and it pursues these activities with profit.

The Saab Group comprises Saab, Regional Aircraft and Saab Aircraft Finance Group (SAFG).

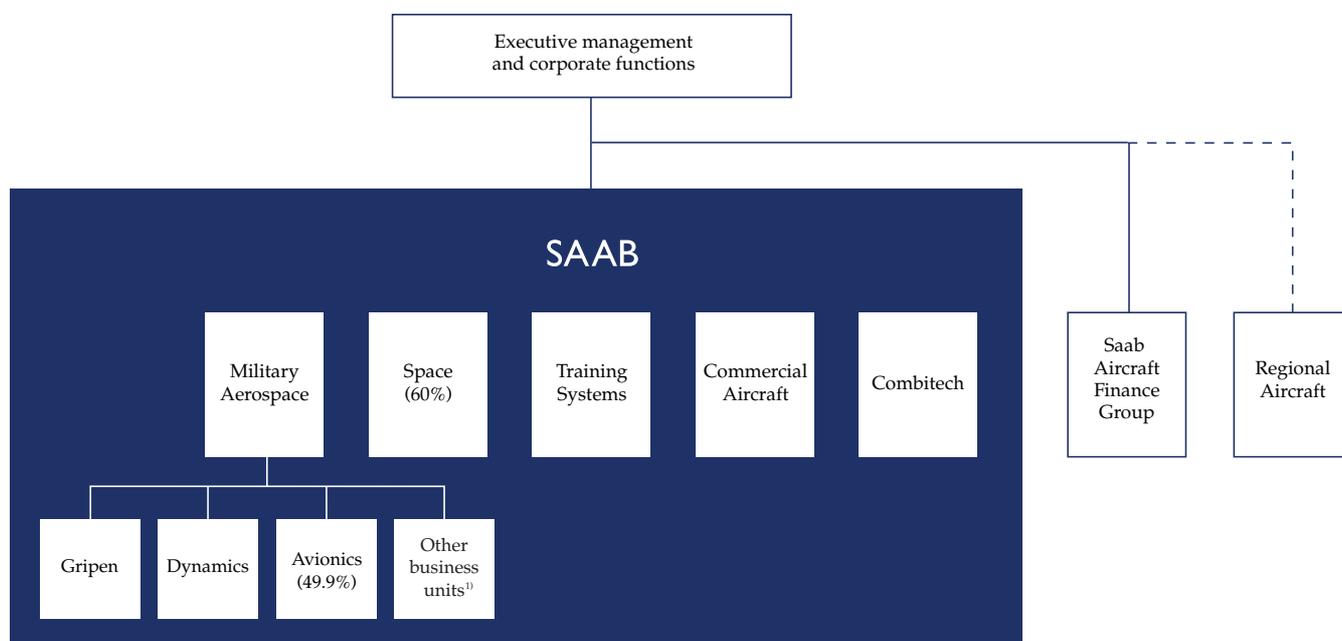
In 1997, the board decided to discontinue the manufacturing of regional aircraft. The last regional aircraft will be delivered in 1999, but Saab's commitment regarding Customer Support and leasing arrangements remains.

Saab

Saab is active in the aircraft-, space- and defense industry and supplies advanced products and systems based on sophisticated information technology. The business areas are Military Aerospace, Space, Training Systems, Commercial Aircraft and Combitech. A significant part of the product range is marketed internationally.

Saab's products have always been at the forefront of technological development. Saab's capabilities in total systems integration is the foundation for the success of the business. Systems integration is integration of high technology products to achieve sophisticated systems solutions.

The Saab Group



¹⁾ General Military Programs, Future Products and Technology, and CSM Materialteknik

Saab (excl. Regional Aircraft and SAFG)	(pro forma)	1997	1996	1995	1994	1993
Sales, SEK m.		6,866	5,638	4,804	3,784	3,707
Operating income before depreciation*, SEK m.		934	947	858	637	603
Operating income*, SEK m.		557	610	618	418	400
Operating margin before depreciation*, %		13.6	16.8	17.9	16.8	16.3
Operating margin*, %		8.1	10.8	12.9	11.0	10.8

*excl. reversal of loss risk reserve of the Gripen base contract 1996 and 1997.



Military Aerospace

Gripen

Saab's Gripen is the world's only 4th generation fighter currently in operative service. By 4th generation aircraft it is meant that the characteristics to a large extent are based on complex information technology. Currently 50 Gripen aircraft are in service in the Swedish Air Force.

Gripen is capable of three types of mission – fighter, attack and reconnaissance. Loaded with the appropriate weaponry, it can change its mission while airborne, quickly adapting to new combat situations.

Saab has expanded its marketing capabilities and broadened its international network through a joint venture with British Aerospace. The two companies cooperate in the areas of marketing, adaptation, manufacturing and support of the Gripen for international markets.

Being the only 4th generation fighter currently in operative service, Gripen has an advantage in the international markets for fighter aircraft. In markets believed to be accessible, over 2,000 aircraft are estimated to be replaced in the coming 10-15 years. Saab aims to take a market share of at least 20 percent of that market.

Dynamics

Dynamics develops and manufactures weaponry and electronics systems for army, navy and air force use. The product range includes primarily guided weapons and electro-optical systems, for example the RBS15 anti-ship missile which has a strong market position. Dynamics takes part in several joint European defense programs.

Avionics

Advanced avionics systems are an integral part of modern fighter aircraft. Together with Ericsson, Saab develops and manufactures electronic warfare systems, display and reconnaissance systems and other military electronic products.

Other

Saab's other activities in military aerospace include General Military Programs, Future Products & Technology and CSM Materialteknik.

The General Military Programs unit is responsible for further development, modifications and other qualified services for Gripen's predecessors – the Lansen, Draken, Viggen and Saab 105.

Future Products and Technologies and CSM Materialteknik are primarily active in areas such as research and development.

Space

Space has established itself as a well-respected manufacturer of subsystems for the international space industry. Its products include on-board computers, data handling systems, antennas and antenna systems, microwave electronics and satellite separation systems. The Space activities are conducted through a company of which Saab owns 60 percent and Ericsson 40 percent.

Training Systems

Training Systems is a world leader in military training equipment, specializing in laser simulators, graphic simulators and target equipment. The laser simulators are designed to carry out true life exercises in the field with existing weapon systems at low costs and with limited impact on the environment. In 1997, some 94 percent of sales were exports, and these products are being used in over 20 countries. Major customers include the armed forces of the U.S., U.K. and Germany.

Commercial Aircraft

Commercial Aircraft is focusing on becoming a direct supplier of subsystems and partner in collaborative programs with large aircraft manufacturers. In these activities, Saab can utilize the technological and competence synergies between military and commercial aircraft.

Since the beginning of 1998, the operations of Commercial Aircraft include Customer Support for the more than 500 Saab 340 and Saab 2000 regional aircraft in operation around the world.

Combitech

The strategy of Combitech is to commercialize spin-offs from Saab's military operations. Dynamics, Space and Training Systems were originally developed within Combitech. In 1997, Combitech was reorganized and a number of companies divested to streamline the operations and refine the strategy.

Regional Aircraft

Saab's regional aircraft have over the years captured substantial market shares, but production has not been profitable and demand for turboprops has not been sufficient.

In December 1997, the Board made the decision to discontinue production of regional aircraft. The last aircraft will be delivered in mid-1999.

Provisions have been made in order to cover anticipated costs relating to the discontinuation and ensure that the Saab Group can provide Customer Support for the existing fleet. The provisions were calculated with the intention to ensure that Regional Aircraft will not impact the results of the Group negatively.

Saab Aircraft Finance Group (SAFG)

SAFG manages a leasing portfolio of some 300 Saab regional aircraft on lease to 27 customers in 17 countries. Activities include the leasing of Saab 340 and Saab 2000 to regional aircraft operators.

Leasing commitments for the aircraft in the portfolio extend over many years. The portfolio is treated as a financial asset and the value has been adjusted to an estimated market value through additional provisions.

Saab's strategy in brief

- *Continue supplying the Swedish Armed Forces with leading products*
- *Actively pursue exports possibilities for the Gripen and other products*
- *Maintain market leadership in key niches*
- *Taking advantage of systems integration skills*
- *Seek continued technological excellence*
- *Fully exploit information technology*
- *Participate in restructuring of the aerospace and defence industry*
- *Strengthening growth and profitability through commercialization of defense technology*

Financial objectives

The Saab Group sets individual financial objectives for each of Saab, Regional Aircraft and SAFG. The objectives for Saab are:

- In the next few years, preserve and improve underlying profitability (i. e. before reversals of Gripen loss risk reserve and before export development costs).
- In the long term achieve an operating margin before depreciation of at least 15 percent and of at least 10 percent after depreciation and a return on equity of 15 percent.
- In the long term, achieve an equity/assets ratio that should exceed 30 percent.

Financial information in brief

The aerospace industry calls for a long term perspective, as product development extends over long time periods and requires substantial investments.

The orders placed by the Swedish armed forces entail manufacturing and further development until 2007 and, thereafter, upgrading is expected throughout the life-span of the aircraft.

As the export activities for the Gripen are intensified, further investments will be made for adaptation and further development of the aircraft. Saab's development costs for the export version are estimated at approximately SEK 1 bn, during the period 1998-2002.

In late 1997, the Board decided to discontinue the manufacturing of regional aircraft. Provisions totaling SEK 4,079 m., before tax (SEK 2,937 m. after tax) were taken in Regional Aircraft in order to provide for the related costs of the discontinuation of regional aircraft manufacturing and continued Customer Support. The provisions were calculated with the intention to see to that Regional Aircraft should not impact the results of the Group negatively.

In connection with the decision to discontinue the manufacturing of regional aircraft, the management has decided to adjust the book value of the SAFG portfolio, which is treated as a financial asset, in line with its market value. The value was adjusted through additional provisions of SEK 1,342 m. in 1997, whereafter total provisions are SEK 2,728 m.

The shareholders' equity of SAFG was negatively affected by the provisions. The intention is that SAFG's operations shall be as independent from the Group's other operations as possible. For this purpose, a capital base was required i.e. to improve SAFG's credit situation and to comply with certain net worth provisions in certain SAFG financing arrangements. In 1997, SAFG was therefore capitalized with an equity contribution of SEK 1,500 m.

The return on investment in SAFG will be generated by interest income on the capital contribution and the return on the portfolio from reversal of provisions conditional upon performance being better or in accordance with the underlying assumptions of the provisions made.

Outlook 1998

Saab's operating income, excluding reversal of loss risk reserves, amounted to SEK 557 m. in 1997. The development costs concerning Gripen export will increase considerably compared to 1997, when these costs amounted to SEK 63 m., which may result in a somewhat lower operating income for 1998.

Pro forma

The following selected consolidated financial statements are in accordance with the Group's operating structure and are based on the Saab Group's formal annual report. See page 60-86. The pro forma consolidated financial data are based on the following:

No adjustments have been made in the years 1995 and 1996 for the provisions, capital contribution and revaluation of real estate

property on December 31, 1997. The selected consolidated financial statements include the divested companies within Combitech until the date of disposal. Operating income of these companies and operations has been affected by SEK 9 m. in 1995, SEK -109 m. in 1996 and SEK -213 m. in 1997.

The following tables show the income statement and balance sheet of the Group divided into Saab, Regional Aircraft and SAFG at December 31, 1997 and key ratios for Saab and the Group. Amounts attributed to Saab and Regional Aircraft refer to internal allocations within Saab AB. In the balance sheet of Saab, the SAFG holding is reported as a fixed asset of SEK 1,500 m., which consists of the book value of the shares in subsidiaries with regard to SAFG in Saab AB.

Saab (excl. Regional Aircraft and SAFG)

(in SEK m.)	1997 (pro forma)	1996 (pro forma)	1995 (pro forma)
Sales	6,866	5,638	4,804
Operating income before depreciation ¹⁾	934	947	858
Operating income ¹⁾	557	610	618
Order bookings	14,106	5,337	3,819
Order backlog	24,388	17,185	17,452
Total assets	16,582 ²⁾	19,427	16,938
Capital employed	5,994	7,623	6,158
Net liquidity	4,873	10,750	9,107
Shareholders' equity	3,091 ²⁾	5,110	3,578
Return on capital employed ¹⁾	17.5%	18.4%	22.0%
Operating margin before depreciation ¹⁾	13.6%	16.8%	17.9%
Operating margin after depreciation ¹⁾	8.1%	10.8%	12.9%
Equity/assets ratio	21.9%	31.6%	26.0%

1) Excl. reversal of loss risk reserve of the Gripen base contract of SEK 300 m. in 1996 and of SEK 313 m. in 1997.

2) Incl. investment in SAFG of SEK 1,500 m.

The Saab group (incl. Regional Aircraft and SAFG)

(in SEK m.)	1997	1996 (pro forma)	1995 (pro forma)
Sales	8,674	8,159	7,925
Operating expenses	-8,569	-9,006	-8,324
Items affecting comparability ¹⁾	-5,421	-1,219	
Operating income	-5,316	-2,066	-399
of which Saab ²⁾	557	610	618
Income after financial income and expenses	-4,845	-1,572	271
Net income	-3,790	-1,385	148
Order bookings	16,612	7,736	6,053
Order backlog	27,122	20,042	20,509
Total assets	32,780	31,388	28,137
Capital employed	6,440	8,975	8,719
Net liquidity	11,921	14,070	10,824
Shareholders' equity	3,091	6,324	5,829
Return on capital employed ³⁾	8.8%	neg.	5.0%
Return on shareholders' equity ³⁾	2.4%	neg.	2.5%
Equity/assets ratio	10.2%	22.5%	23.3%

1) Items affecting comparability relate to provisions taken in the regional aircraft activities.

2) Excl. reversal of loss risk reserve of the Gripen base contract of SEK 300 m. in 1996 and of SEK 313 m. in 1997.

3) Exclusive of "Items affecting comparability".

For definitions of key ratios see Note 41, page 86.

The valuation of the shares in SAFG consequently affects the reported equity of Saab. The reason for reporting the SAFG holding at this value is that the holding represents a financial investment which in principle can be divested.

Interest income on the Group's interest-bearing assets has historically been reported in Saab by allocation to the business areas, including Regional Aircraft. Transactions with SAFG within the Group have been conducted on an interest-free basis. The following will be

valid with regard to calculation of future interest income per business area; interest-bearing assets attributable to SAFG will carry interest and thus SAFG will be considered an independent unit. Within the Parent Company Saab AB, an internal allocation of interest bearing assets between Saab and Regional Aircraft is conducted where interest effects regarding Regional Aircraft will be reported within Saab. Interest effects within Regional Aircraft mainly arise due to the provisions taken to cover the costs of the discontinuation.

THE SAAB GROUP Income Statement

(in SEK m.)	1997				
	Saab	Regional Aircraft	SAFG	Eliminations	Saab Group ¹⁾
Sales	6,866	3,035		-1,227	8,674
Cost of goods sold	-4,461	-3,166		1,227	-6,400
Gross margin	2,405	-131			2,274
Operating expenses	-1,538	-422	-212		-2,172
Items affecting comparability		-4,079	-1,342		-5,421
Share in income of associated companies	3				3
Operating income	870	-4,632	-1,554		-5,316

Balance Sheet

(in SEK m.)	December 31, 1997				
	Saab	Regional Aircraft	SAFG	Eliminations	Saab Group ¹⁾
Property, plant and equipment	2,499	84			2,583
Lease assets			6,919		6,919
Deferred tax receivables	163	1,142		-439 ²⁾	866
Other fixed assets	1,717 ⁴⁾		515	-1,500 ³⁾	732
Inventories, etc.	3,342	1,654			4,996
Receivables and other current assets	1,149	227	196		1,572
Cash and marketable securities ⁵⁾	7,712	3,926	3,474		15,112
Total assets	16,582	7,033	11,104	-1,939	32,780
Shareholders' equity	3,091		1,500	-1,500 ³⁾	3,091
Minority interest in subsidiaries	64		94		158
Provision for pensions	2,213	30			2,243
Other provisions	61	4,097	3,149	-439 ²⁾	6,868
Long-term borrowings	30				30
Lease obligations			5,682		5,682
Short-term borrowings	596	322			918
Accounts payable and other short-term liabilities	3,342	2,231	679		6,252
Advance payments from customers	7,185	353			7,538
Total shareholders' equity and liabilities	16,582	7,033	11,104	-1,939	32,780

1) In accordance with Annual Report.

2) Netting of deferred tax assets and liabilities.

3) Elimination of shares in SAFG against equity in SAFG.

4) The Parent Company Saab AB's holding in SAFG is reported as an asset in Saab.

5) Liquid funds include, apart from receivables on companies in the Investor Group, the netting of receivables and liabilities between Saab, Regional

Aircraft and SAFG. The provisions taken in Regional Aircraft and SAFG and the capital contribution received by SAFG, increased their receivables on Saab at December 31, 1997, but did not impact the financial net for 1997. The division between Saab and Regional Aircraft is made on an operational basis and refers to internal allocations within Saab AB.

The composition of liquid funds in Saab on December 31, 1997, is set forth in the table below.

Cash and marketable securities	271
Current investments	5,672
Receivables on Investor Group	7,347
Gross liquid funds	13,290
Inter-group liability to Regional Aircraft	-3,868
Liability to SAFG	-1,710
Net liquid funds	7,712



“This is where the fun begins.”

Apart from Saab, there are only a few companies in the world with the ability to produce advanced military aircraft. Saab and BAe are two of them. For the past three years, Saab and BAe have been partners in the jointly owned company, Saab-BAe Gripen AB.

BAe has sales of just over SEK 100 billion, of which over 80% is earned from exports, and about 46,000 employees. Apart from its size, the company is largely a reflection of Saab, especially in regard to technical know-how. Or as John Weston, head of BAe's business areas in defence and the Group's entire development and technology, puts it:

JOHN WESTON
BRITISH AEROSPACE

“Together, we’re capable of achieving almost anything in total systems integration for military use – on land, at sea or in the air. This is something where we will soon be amongst only a handful of companies, as these systems are becoming more and more complex.”

To get an idea of the value of the companies’ joint knowhow in an international perspective, we asked John Weston and Saab’s President, Bengt Halse, to give their views on everything from the Gripen’s export potential to the future of the European aircraft and defence industry.



BENGT HALSE
SAAB

"One thing many people wonder about is: Why should Saab be successful in exporting the Gripen?"

John Weston (JW): The most important thing is that the Gripen fits in exceptionally well with today's international security scenario. Most governments have to find a balance between the funds available for defence and something that will be effective without being expensive. This is where the true strength of the Gripen lies. The Gripen is an aircraft that is small and cost-effective – not only to purchase, but throughout its life. It's the only fourth generation aircraft that many nations are able to afford.

Bengt Halse (BH): I agree. We have a highly competitive product. The Gripen is a lightweight fighter based on the same concept as the American Joint Strike Fighter programme, but 15-20 years ahead. Another important difference is our partnership with BAe. Previously, our Achilles' heel has been that we are a relatively small manufacturer in a small country, which furthermore stands outside NATO. When it comes to development costs, small size hasn't been a disadvantage for us, but when it comes to marketing the results abroad, it's clear that considerably more resources are needed. With the backing of the British Government, BAe is probably the best salesman in exporting advanced military systems. This has opened up completely new prospects for us.

"What does the competition look like?"

BH: At present, there are still a number of what we call "sunset aircraft", in other words aircraft approaching the end of their life

span. These include the F16, F18, Mirage 2000 and MIG29. Compared with them, the Gripen is the "sunrise aircraft".

JW: True. The Gripen is perfectly suited to a very interesting market niche. The challenge



we face is that there is already an aircraft in that niche – the F16, of which the Americans have built over 4,000. But, just as Bengt Halse says, the F16 is an earlier generation aircraft using earlier generation technology. Looking further ahead, there are a number of fourth generation aircraft in the wake of the Gripen, such as the French Rafale, the

Eurofighter and the American F22, which is designed for ultimate air superiority regardless of cost. I think there will be very, very few countries able to afford it. In my view, not even the UK will have the money for it.

"How important is Government backing?"

JW: When a country buys a military aircraft which will be in service for 20-30 years, this is not a purely commercial transaction. It represents a considerable part both of its defence capability and taxpayers' money. Therefore, customers want to be absolutely sure there is a relationship backing up the deal. Consequently, the relationship between the purchaser's Government and the seller's Government is as important as having a capable manufacturer.

BH: This time, we have two Governments behind us, the Swedish and the British. This is a further argument for our success. Also, we have the support of the Swedish Air Force. Sweden has about 50 Gripen fighters in the air every day which are used for tactical planning. So it's only now that we've got all the tools we need for a determined marketing and sales campaign.

"Are there any possible conflicts of interest between Sweden and the UK regarding the countries where you are allowed to make sales?"

BH: There are certain parts of the world, such as the Middle East, for which the rules governing exports are interpreted somewhat differently for historical reasons. However, I don't see any great difference today between the British and Swedish Govern-

ments' views on how and where we can export the Gripen. For example, they both put great emphasis on aspects such as human rights.

"So how do you rate your chances?"

BH: Saab and BAe match each other perfectly. We have a product that is perfectly placed in the market for the next 10-15 years. BAe has an organisation that is optimal for exporting the Gripen. The available market for "light-weight fighters" is a market with a volume of about 2,000 aircraft by 2010. One should always try not to use the word "unique" – but this is almost unavoidable when you're talking about the Gripen's position in the market. Our aim is to capture 20% of the market, which would triple our order backlog compared with the present level in Sweden.

"Leaving the Gripen for a moment, do you see any other potentials for collaboration between Saab and BAe?"

JW: I think we've both realised that our cooperation has implications stretching considerably beyond selling the Gripen on the international market. We can see what is happening in the USA as a sign of globalisation of the aerospace industry in its entirety. One of the milestones along the way will be a closer relationship between the European aerospace companies. Here, I can see a role for BAe and Saab.

BH: We're already working on joint strategies and future technologies. The industry

is fairly well agreed that no further aircraft projects in Europe will be carried out on a national basis. We're already engaged in discussions with BAe, DASA and Dassault on a possible alternative. In the end, there will of course be political considerations, but I feel that we have a very large measure of agreement today. The aim is to be one of



the guarantors of European security. To do this, the industry has to have the necessary vitality. This is where you will find the driving force for cross-border rationalisation.

JW: There's a political desire for Europe to get together something that is sufficiently big and strong to have much greater equality in doing business with the USA, initially as a partner, but later on also as a member of a global company. The USA is still the largest individual defence market in the world. Every

year, it spends USD 250 billion on defence. If you look at the countries where most of the European defence industry is located – the UK, France, Germany, Sweden, Italy and Spain – we're together spending less than half that sum. So, if you want to have a strong position in the military aircraft industry in the long term, you have to have access to the American market.

"In other words, we can regard the partnership between BAe and Saab as part of the restructuring of the military aircraft industry in Europe. How far will it go?"

BH: An interesting question. I don't think it can go as far as wiping out national identities. Put it like this: Saab will stay Saab for a very long time in the future. However, ownership in Saab and BAe may become quite different to what it is today. At the same time, it's quite clear that one of Saab's main functions will always be to meet the needs of the Swedish Defence.

JW: That's an important part of the equation. In the same way as it's natural for the

USA to choose an American supplier, we still need a strong British identity in the UK, a strong Swedish identity in Sweden, a strong German identity in Germany, and so on.

"How will this be achieved?"

BH: In the first place, it's a matter of being a good citizen of the country where you're operating. In our case, Saab will continue to be a company controlled from Linköping and will generate Swedish jobs in develop-

ment and production with its large positive distributive effects, even if ownership may become international. However, our capability as a systems supplier to the Swedish Defence must never be compromised, since this whole concept would then collapse.

JW: It's also a matter of structuring ourselves in such a way that we have one company with leading decision-makers from each of the countries taking part. We have to have a balance in the management structure between what the individual managers of the respective business areas may want to achieve. I believe that it's possible to accomplish this. There are several examples of international companies that are multinational, but which are regarded as having very strong national identities, such as Shell and Unilever.

BH: ABB is also a good example. In Sweden, ABB is regarded as a classical Swedish company. In Germany, it's seen as German. In Switzerland, it's a Swiss company.

"What will be Saab's role in such a pan-European perspective? Is it a matter of national adaptation of the products themselves, not just translating operating manuals into Swedish?"

BH: We can take the next generation of European fighter aircraft as an example. I can imagine having a joint systems design office with overall development responsibility, located somewhere in Europe with some of our people working there. At the

same time, we would have a design responsibility of our own at home, concerning for example the forward section of the fuselage. We would also make national adaptations to specific Swedish requirements. Thanks to digitalisation, this will become very much simpler. We would collaborate in



BH: Private ownership is necessary to make things work. It is very difficult to combine and Government ownership in such a constellation.

"Will a Stock Exchange listing of the Saab share make this process easier?"

JW: Yes, it's very likely that it would. Since the major obstacle to rapid development and restructuring lies in the different ownership structures of the companies involved. Listing of the Saab share may make the process somewhat simpler and it will definitely be easier to bring Saab into this pan-European unit.

"There are some who say that a listing could force Saab into more short-sighted action?"

JW: Yes, I've heard that. We've been a publicly owned company for a long time and that hasn't affected our farsightedness. We have to be farsighted in the same way as the pharmaceuticals industry. I've never met anyone who has tried to convince me we're investing too much money in technology

building a general European airframe that would be adapted in Sweden to incorporate different systems and software, depending on the weapons heritage and so on, and the purposes the aircraft is to serve. This form of collaboration already exists in missiles, such as the medium range Meteor, in which both BAe and Saab are involved.

"How important is the ownership picture if this is to be a success?"

that won't yield a return within the next 20-30 years. Naturally, this assumes that operations show a profit. It's pretty reasonable for investors to expect that Saab shows a positive result.

"There's a lot of talk about "shareholder value" today."

JW: The principles behind this concept are always linked with the market economy and

shareholding. It's just the way we talk about it: how we choose to combine these messages into targets that control operations and which pass through different trend cycles. But in the end, "shareholder value" is driven by the same old moral attitudes that govern profitability.

If you look at the various parties with interests in the company and the interests of the people who work there, there's no real conflict. If you have a company generating good profits and liquidity, it can always invest in its business in the form of new products, new techniques and new plants. If you don't have the resources to do this, you will never have resources for satisfying the other parties with interests in the company, for example through dividends to shareholders.

"One of the most important resources in the areas where you are both active is brain power. How will you get people's brains to work together in view of the differences in company culture and national character?"

BH: I don't think we should underestimate the difficulties. We must have respect for the differences and we must learn to handle and appreciate them. When it comes to Swedes and Englishmen, this isn't so difficult, since we share something very important – our sense of humour. In the end, all collaboration is a matter of being able to mix with each other.

JW: I think the trick of getting things to work is to get people to realise that their own particular approach is not necessarily the only way, and perhaps not even the best. But what drives us on is basically

the same. We both have a strong engineer culture. We develop and produce both extremely complex systems on the cutting edge of technology and we both have a culture dominated by this. Also, we're both



keen to structure our costs, contract out work and price our products in such a way that we really make money for our shareholders.

I don't think it's a coincidence that both BAe and Saab are the first companies in Europe to come to the conclusion that operating in the regional aircraft industry is not a particularly good idea.

BH: Yes. If we lay our pictures of the world on top of each other, there isn't a lot of difference between them. At the same time, we mustn't be too similar. We should exploit our differences. That's where you'll find a large part of the dynamics.

JW: You can always count on certain questions leading to fairly heated discussion. Creative tension is always a good thing in a company, at least to a certain level. As we say here in England: "When the arguments start generating more heat than light, then it's time to do something about it."

"Finally, a question to which probably every reader wants the answer. When will you receive the first export order for the Gripen?"

JW: (Laughing). I've always been very unwilling to try to predict when customers are ready to reach for their pens. I believe we still have some way to go. We have to remember that sales campaigns for this type of aircraft can take an extremely long time. I think the longest one we were involved in took 12 years and the average is about six years. We've only just started. Personally, I think we must simply have patience.

BH: Your guess is as good as mine, John.

JW: Let me put it like this. If I had to choose between being sales manager for the Gripen or for the F22, and my pension depended on how many I sold, I would choose the Gripen. No doubt about that.

"Thank you very much."



Pre-packed skills



Man needs space to grow.

At dawn on October 6, 1997, the Cassini/Huygens space probe set out on its journey to Titan, one of Saturn's moons. On its way, it will pass Venus twice and the Earth once, before accelerating with the aid of gravitational forces to pass Jupiter and then Saturn.

On November 27, 2004, after travelling for almost seven years, the space probe will arrive at its destination and begin searching for another piece of the puzzle behind the origin of life and the Universe. A vital component in making sure this information reaches the Earth, so that the project is a success, is the microwave and antenna equipment supplied by Saab.

During the time that Cassini/Huygens is making its lonely journey, nearly 1,000 commercial satellites will be launched into Earth orbit. Many of these will also be using not only antenna and microwave technology but data processing and separation systems from Saab. However, instead of searching for the secret of the beginning of life, these satellites will serve more concrete purposes, such as mobile telephony, the Internet, digital TV and video-on-demand.

It may sound unbelievable that Bill Gates and Mickey Mouse should have more influence than NASA on development in the space sector, but it is nevertheless true. It is a sign that the industrial society has taken a decisive step into the Information Age.

A MODERN COMMUNICATIONS SATELLITE COSTS ABOUT SEK 800 MILLION. LAUNCHING IT COSTS ANOTHER SEK 500-800 MILLION. THE INSURANCE PREMIUM ALONE IS ABOUT SEK 250 MILLION. IF A MALFUNCTION OCCURS IN THE SPACE SEPARATION SYSTEM, SHOWN HERE BY BUSINESS AREA MANAGER BENGT MÖRTBERG, ALL THIS MONEY WILL LITERALLY VANISH INTO THIN AIR. HAPPILY, THIS HAS NEVER HAPPENED IN THE 200 LAUNCHES IN WHICH WE HAVE TAKEN PART.



LENNART HÄGG, TECHNICAL MANAGER OF SAAB TANK CONTROL AT SAAB MARINE ELECTRONICS, WITH THE TANK RADAR PRO, A RADAR-BASED LEVEL-GAUGING SYSTEM FOR CONTACTLESS MEASUREMENT IN PROCESS TANKS. WHAT ORIGINALLY STARTED AS AN IDEA FOR AN ALTERNATIVE USE OF MILITARY TECHNOLOGY HAS DEVELOPED OVER THE YEARS INTO A COMPANY WITH WORLDWIDE BUSINESS AND A LEADING MARKET POSITION BOTH IN MARINE APPLICATIONS AND THE PETROLEUM INDUSTRY, AND SOON PERHAPS ALSO IN THE PROCESS INDUSTRY.





WITH THIS EXPERIMENTAL EQUIPMENT WORN BY ANITA LARSSON, ENGINEER AND VERIFIER AT AVIONICS, THE IMAGE IS CREATED DIRECTLY IN THE EYE. THE TECHNIQUE, KNOWN AS VRD, VIRTUAL RETINAL DISPLAY, USES A LASER BEAM TO "DRAW" PICTURES ON THE RETINA. THE PRINCIPLE RESEMBLES THAT OF A TV BUT THE ELECTRON BEAM IS REPLACED BY A LASER BEAM AND THE PICTURE TUBE BY THE RETINA. WITHIN THE FORESEEABLE FUTURE, A HELMET-MOUNTED DEVICE USING THIS TECHNIQUE MAY REPLACE SOME OF THE CONVENTIONAL DISPLAYS IN THE GRIPEN, PRIMARILY FOR PROJECTING CRITICAL INFORMATION TO THE PILOT.



"NO MORE NAVIGATION PROBLEMS."
PETER BERGLJUNG, PROJECT MANAGER FOR INTEGRATED NAVIGATION SYSTEMS AT DYNAMICS, IS SEEN HERE WITH A TRANSPONDER THAT USES GPS SATELLITE-BASED DATA TO OBTAIN ABSOLUTE AND RELATIVE GLOBAL POSITIONING TO WITHIN ONE METER. AN EXAMPLE OF ITS APPLICATION IN THE MILITARY CONTEXT IS IN TACTICAL AIR COMBAT TRAINING WHICH MIGHT OTHERWISE INVOLVE UNACCEPTABLE RISK AND COST. THE GREATEST POTENTIAL OF THE TECHNOLOGY, HOWEVER, IS EXPECTED TO BE IN ENHANCING AIR AND MARITIME TRAFFIC SAFETY. FOR EXAMPLE, IT COULD ENABLE AN AIRCRAFT TO MAKE A SAFE LANDING ALMOST ANYWHERE IN THE WORLD, IN ANY WEATHER AND EVEN WHERE THERE ARE NO OTHER MODERN AIR TRAFFIC CONTROL FACILITIES.

Games that aren't games
The boundary between leisure and military applications of the same technology is becoming all the more diffuse. Technology that used to be reserved for national and international research programs and military purposes has found its way into many commercial applications, even TV games. Saab's history contains many examples of this process. Now, however, a transfer of technology and knowledge is also taking place in the opposite direction. Whether commercial or military, the basic problems are often the same, as are the techniques used in solving them. This is a matter of information and sensor technology, of systems integration and of understanding the interface between man and machine.

More precisely, it is true to say that the difference between a TV game and information warfare is more a matter of purpose than technology.

One example of the integration of technologies can be seen in military training, where the combination of lasers and information technology is being used in command-and-control of ground forces. Another example is in GPS satellite navigation technology, which permits the exact determination of aircraft or ship positions in relation to each other as well as globally. In military contexts, GPS technology can be used for

extremely realistic training in missile warfare or for landing a Gripen fighter without the aid of any type of ground system, even in the worst weather. In civil applications, exactly the same systems can be used for many purposes – from monitoring

“MANY PEOPLE FIND IT DIFFICULT TO UNDERSTAND THAT A LITTLE BLACK BOX CAN CONTAIN SO MUCH SYSTEMS SKILL.”

“IN FACT, THE LITTLE BLACK BOX MAY WELL BE CRITICAL FOR AIR SAFETY.”

the progress of a goods consignment between supplier and customer to increasing the safety of air traffic, which in some cases is beginning to resemble the tailbacks encountered on the ground in many cities.

One of the military consequences of this new technology is that machines rather than people become the prime targets in a conflict. Also, knowledge of technology and economics is more important than control over land areas when it comes to building up a nation's defense.

The difference between data and information
The dramatic development in the military sphere has an exact counterpart in the commercial world. Both are the outcome of three important technical advances.

The first of these is the enormous growth in computer capacity, which

makes it possible to handle and process huge quantities of information.

The second is the rapid increase in communications bandwidth, which enables larger amounts of information to be distributed to more people in less time. Information available at one location can be spread to the whole world within a few hours.

The third is the degree of precision, which for the first time makes it possible to hit a military target with a single projectile or to reach out to a commercial target with a single message.

While these developments are paving the way for completely new military as well as commercial scenarios, they present us with one of our greatest challenges. How are we to combine the enormous amounts of data from all these systems and transform them into a reliable picture of reality?

For the president of a company, this will be a difficult task to manage alone. For the pilot of a Gripen, at the hub of an intensively busy information system, it will be impossible.

Goodbye to the human factor.
In the same way as the Gripen has to have computers to be able to fly, the pilot has to use a variety of computer systems to carry out his



A MODERN COMBAT AIRCRAFT LIKE THE GRIPEN NEEDS REPLENISHING NOT ONLY WITH FUEL BUT ALSO WITH INFORMATION. THE LATTER USES A DATA PACK AS SHOWN HERE. THE DATA PACK IS NOT MUCH LARGER THAN A MOBILE PHONE AND IS LOADED PRIOR TO THE MISSION WITH INFORMATION ON WAYPOINTS, TACTICAL PARAMETERS AND TYPE OF MISSION: FIGHTER, ATTACK OR RECONNAISSANCE.

“HOW DO WE KEEP A STEADY PULSE AND HIGH RELIABILITY IN AN ENVIRONMENT OF EXTREME INFORMATION STRESS? THIS IS ONE OF THE MAJOR CHALLENGES WE FACE.”

mission. Each individual source of information – such as a radar, laser or infrared sensor, or a radio communications link – gives its own “view” of the situation. These views have to be assembled into a single picture of reality and produce a collective recommendation on pilot action.

Making the information environment tolerable is one of our most important tasks. The aim is to prevent the human system from becoming overloaded, thereby minimizing the risks connected with the human factor.

In expert language, the basic concept is known as situation awareness: the perception of elements in the environment within a limited time and space, the apprehension of their significance and an extrapolation of their evolution in the near future. To understand what this implies, we can consider the normal situation when driving a car.

The driver registers his environment with his sight, hearing and physical senses. His balance system reacts if he takes a bend too quickly. His sense of feeling registers the vibrations transmitted to the steering wheel from the tires. On the car radio, he hears a warning of traffic jams. The car’s own information system indicates fuel, oil and water

status, and warns him of anything from an open door to the risk of skidding. Passengers tell him if he has missed a turn and via the mobile phone he is given a “mission” such as shopping, fetching children from day nursery or attending a meeting at work. All this is enough to make him feel stressed, with an accompany-



Mats Hultin, engineer and project manager on the Gripen.

ing increase in his accident risk.

Now consider how the pilot of a Gripen would experience information stress at twice the speed of sound. Furthermore, his situation is likely to become even more demanding in the future, with the development of new sensor technology, faster telecommunications and virtual reality technology.

The information war, which was once a matter of gleaning intelligence from the enemy’s dispatches,

has now taken on a new and very tangible meaning. Is it a real missile, or just information that looks like a missile, that’s heading for your aircraft?

“What you see is not what you get”

There are two very clear trends in all development.

One is that increasing numbers of individual functions are being gathered together in the same physical unit.

The other, which is related to the first, is that increasingly complex systems are becoming increasingly simple to use. A mixer tap is much more complex than two separate taps for hot and cold water, but it makes it much easier to regulate temperature and flow.

In combination with developments in electronics and data technology, which are leading to an increasing proportion of functions and performance being decided by software, this means that an apparently everyday solution, or even an outdated one, may in fact be on the cutting edge of technology. To the untrained eye, the Viggen, which was the world’s first combat aircraft with an onboard computer, looks the same as it did in 1971. However, through the continuous replacement of its computer systems and software, it now has



IN SPACE, THERE ARE NO REPAIR SHOPS. ALL THE ELECTRONICS ON BOARD A SPACE PROBE OR COMMUNICATIONS SATELLITE MUST BE VIRTUALLY IMMUNE TO MALFUNCTIONS AND EVEN CAPABLE OF SELF-REPAIR. AS WELL AS BEING LIGHTWEIGHT AND EXTREMELY POWER-EFFICIENT, ELECTRONIC COMPONENTS MUST PERFORM THOUSANDS OF FUNCTIONS WITHIN A TINY AREA. AN EXAMPLE IS THE "THOR" MICROPROCESSOR, SEEN HERE IN THE HAND OF RITVA SVENNINGSSON, PROJECT MANAGER AT SPACE.



completely different characteristics and performance.

Perhaps the best proof of the statement that increasingly complex systems are becoming increasingly simple to use is provided by the Gripen. As the first and so far the only fourth-generation digital combat aircraft, the Gripen represents a masterpiece of advanced, high-technology systems integration. Nevertheless, or possibly for just this reason, it is sufficiently straightforward for the pilot, a technician and five conscripts to refuel, service and rearm in less than 10 minutes.

Our place in the system

In the past eighty years, the cost per calculation, today defined as computer operations per second, has been reduced to one trillionth of its original level, in other words by a ratio of 1,000,000,000,000 to 1.

If the trend continues at this pace – and there is little to suggest that it will not – the level of 10 teraops (one trillion operations per second) that researchers consider necessary in a computer with the same capacity as the human brain will be achieved by a supercomputer costing less than SEK 100,000,000 in

2010 and by a PC costing SEK 25,000 in 2030. The question will then be: “Do we need a man in the machine any longer?”

If all knowledge can be etched in



Katarina Karlsson, one of the operatives in the bonding section.

silicon and therefore bought for money, what will be the basis for our competitiveness?

“HARDWARE IS INERT AND IS DEVELOPING RELATIVELY SLOWLY. HOWEVER, IT CONTAINS SOFTWARE WHICH IS DEVELOPING AT LIGHTNING PACE. UNDER THE HOOD IS A MOTOR RUNNING AT FULL SPEED. THE TRICK IS TO DRIVE AS FAST AS POSSIBLE WITHOUT WRECKING THE SYSTEM.”

The answer to this question is that there is knowledge that is very difficult to acquire for money. You can buy or read your way to knowledge of the constituent parts, but the ability to build a unit out of them

demands experience that can only be obtained by practicing in a real environment. Furthermore, the integration skills involved in a high-technology system span so many areas, perhaps hundreds, that it is impossible for a single person even to have a general idea of the whole.

The risk is that through eagerness to solve the problem, more resources and more people will be introduced into the process, with the result that, in addition to the system that was originally to be integrated, yet another complex system is added.

Selling your soul

Now we are beginning to get to the core of the subject.

Can it be true that as a system becomes more complex, technical skills become less important than humanistic skills?

Designing advanced systems requires the integration of skills that no single person can master alone. Thus, systems integration demands communication.

In order to reach its target, communication in turn demands both insight and social skills. The interfaces we are building cannot be exclusively mechanical or electronic; they must also be human. To gain



A WING LIGHTER THAN A FEATHER? NOT QUITE, HOWEVER THE LANDING GEAR DOOR SHOWN BY PONTUS KALLÉN, HEAD OF BUSINESS UNIT COLLABORATIVE PROGRAMS, IS A GOOD EXAMPLE OF THE USE OF COMPOSITE MATERIALS TO REDUCE AIRCRAFT WEIGHT WITHOUT SACRIFICING STRENGTH OR SAFETY. SAAB HAS DEVELOPED SPECIAL SKILLS IN COMPOSITE MATERIALS WHICH ARE NOW BEING MARKETED IN JOINT PROGRAMS WITH COMPANIES SUCH AS AIRBUS AND BOEING.

"IT'S NOT ENOUGH JUST TO BE TECHNICALLY BRILLIANT. TO GAIN RESPECT FOR A SOLUTION, YOU NEED TO SHOW RESPECT FOR THE PROBLEM."

respect for a solution, you need to show respect for the problem.

Knowledge, not only machines and technology, is the most important commodity of our age. At the same time, knowledge is an increasingly perishable product. It has to be used as soon as possible, otherwise it will quickly lose its value.

The people and organizations that will prove successful in this new age are those who learn to exploit new information quickly. At the same time as they are able to invest in new knowledge, they will be bold enough to leave established knowledge behind them. Good returns on investment are a matter of obtaining the best interest on intellectual capital, and the growth in value is higher in networks than in hierarchies.

A new challenge for the engineer

All the time, the world is changing around us. Military applications become commercial. Development becomes faster and competitors more numerous. New actors create even more competition, which is unaffected by traditional rules for arriving at a solution. The same technology as is used for realistic animations in films such as "Jurassic Park" can be applied to military training and simulation, and vice versa.

That is one part of the challenge: applying existing technology to new

areas and making better products in a shorter time with fewer resources.

The other part of the challenge lies in implementing innovative technology to develop completely new solutions, even completely new needs. It is vital to avoid a morass of



Bo Öhrling, skills manager for tool design at business unit Collaborative Programs, in the rear fuselage of a Saab 340.

detail and instead create new action patterns that are tens or hundreds of times more efficient than was previously possible. This applies both in military strategy and private consumption.

The third part of the challenge is to lead the way in uncharted territory, in other words applying a classical scientific approach in order to see something no one else has ever seen before.

All the time, reality is so advanced and so complex that we have

full freedom for our creativity at every level.

What begins as an idea in the head of an engineer grows into a total aviation, space or related system, sometimes involving more than 100 spearhead skills in high technology. Brain power replaces brute strength. A single person becomes a group of 8,000, using a wealth of know-how to perform tasks no-one else can manage.

Back on Earth

There are those who claim that the purpose of evolution is to make people travel. Staying in one place for any length of time is only a recent development in the history of Man. From the beginning, Man has been an explorer and his fascination with technical progress is simply a reaction to his limited geographical mobility.

Cassini/Huygens is an odyssey in both time and space. It is also an odyssey in knowledge. Is it possible that Man is in fact completing the circle? By probing the depths of space, he is really looking into himself. Technology meets the humanist. The engineer meets the creator. Science fiction becomes commercial reality. In every challenge, there is business potential.

In his search for meaning and order, Man is travelling on a journey without an end. Around the next turn there will always be another.



IN ORDER TO DEVELOP, WE HAVE TO MAKE MISTAKES. AT THE SAME TIME, WE NEED HELP IN DRAWING THE RIGHT CONCLUSIONS FROM OUR MISTAKES. THESE ARE TWO OF THE BASIC PRINCIPLES BEHIND ALL LEARNING AND THEREBY ALSO THE ADVANCED TECHNIQUES DEVELOPED BY SAAB TRAINING SYSTEMS. A THIRD PRINCIPLE IS THAT THE GREATER THE REALITY OF AN EXERCISE, THE MORE EFFECTIVE IS THE LEARNING PROCESS. THEREFORE, WE MUST MAKE SURE THAT THE CONSEQUENCES OF MISTAKES ARE LIMITED, AT LEAST IN MILITARY CONTEXTS. A GOOD EXAMPLE OF THIS IS THE BT 46 LASER-BASED FIRING SIMULATOR, PART OF WHICH IS SHOWN HERE BY PETRA CARLBERG, PROJECT MANAGER AT TRAINING SYSTEMS AND MOTHER OF ANDREA.





Operations

Clarifying the company's value



"DURING THE YEAR, SAAB'S BOARD HAS FOCUSED ITS WORK ON THE COMPANY'S FUTURE ORIENTATION AND STRUCTURE. WE HAVE ALSO AIMED AT A BETTER CLARIFICATION OF THE VALUE OF THE INDIVIDUAL PARTS AND THE WHOLE."

The most important consequence of this work has been the decision to terminate production of regional aircraft, since no improvement has been seen in the situation during the year. The market is saturated, demand is poor and prices too low.

On December 15, 1997, Saab's Board decided to end production of the Saab 340 and Saab 2000 regional aircraft. Our existing commitments to customers will be fulfilled and the company will continue to offer the world's Saab operators both customer support and finance.

The decision means that Saab is being forced to abandon a venture in commercial aircraft production going back almost 20 years. It was at the beginning of the eighties that the Swedish Government wanted the country's aviation industry to apply its capabilities in military aircraft to penetrating the commercial aircraft market, thereby also gaining a commercial platform. Saab set its sights on the regional aircraft market which was expanding at that time. Thanks to the company's considerable skills, the Saab 340 became the world market leader and over 400 aircraft are currently in service.

However, market conditions changed with time. Today, there is almost chronic overcapacity in the industry, with a large number of suppliers of regional aircraft in the Saab 340 and Saab 2000 segment. Under these conditions, it is impossible to achieve profitability.

Instead of struggling on in a situation that was untenable in the long term, Saab has now chosen to concentrate on the market for aircraft for over 100 passengers, which forms over 90 percent of the total market. Today, all production is in the hands of two companies: Boeing and Airbus. Saab is now exploiting its wide-ranging knowhow in aircraft development and production to become a partner and supplier, primarily to these major manufacturers.

Saab is also continuing to work for a restructuring of the European aircraft industry in order to become competitive against its American counterpart. Saab's collaboration with British Aerospace will play an important part in this respect. A good example of successful restructuring in the Swedish defense industry can be seen in Ericsson Saab Avionics, which is now an associated company in business area Military Aerospace. Its knowhow in high technology will be very important for the further development of the Gripen program.

Saab's future orientation will be advanced military aircraft, niches in high technology defense and space products, and spin-off products deriving mainly from the military programs.

During the year, Combitech has undergone a considerable restructuring. A number of companies, mainly in the IT field, have been sold and Combitech now operates as a business area within the parent company. Its orientation is to provide a "hothouse" for innovations with commercial applications that are generated by the military programs.

These products will be developed, commercialized and then possibly sold if they do not fit in with Saab's general structure.

Several of the companies in business area Combitech operate with spin-off products from the military programs. One example is Saab Marine's radar-based level-gauging systems for the petrochemical and other industries. These products have become world leaders.

Another example is Space, which until the end of 1997 was part of Combitech. Space has developed very rapidly in recent years, focusing on well-defined niches where it is among the leaders. During the year, significant breakthroughs have been made in the American and Japanese markets.

As was stated in 1995, Saab's owner, Investor, has decided to study the possibility of broadening ownership in Saab and listing the company on the Stockholm Stock Exchange. In the event of a listing, the intention is to offer shares in Saab to Investor's shareholders.

The company has clarified the areas to be given priority in the future. Hopefully, this will contribute to clarifying the considerable values in world class high technology presented by Saab.

On behalf of the Board, I wish to thank the management and all personnel for an excellent effort during a difficult year.



Anders Scharp
Chairman
Saab AB

Saab in a new formation



"WE HAVE MADE THE DECISION TO ELIMINATE THE FINANCIAL RISK EXPOSURE IN PRODUCTION OF REGIONAL AIRCRAFT, WHICH GIVES US AN INTERESTING FUTURE PROFIT GENERATION CAPACITY. THE INVESTMENTS IN OUR FUTURE REMAIN STRONG, AND OUR PRODUCTS ARE AT THE GLOBAL LEADING EDGE. WE ARE LOOKING FORWARD TO THE FURTHER STRUCTURAL TRANSFORMATION OF THE INDUSTRY AND TO A POSSIBLE FLOTATION OF SAAB FROM A POSITION OF STRENGTH."

During 1997, the Group's operations have been dominated by a number of major events and developments. Batch 3 of the Gripen, consisting of 64 aircraft together with further development and modification, was ordered during the summer. In the autumn, the first squadron of Gripen fighters was declared operationally fully deployed. Combitech underwent a comprehensive restructuring and strategic focusing. In December, the decision was made to terminate production of the Saab 340 and Saab 2000 regional aircraft.

The decision to leave the field of regional aircraft has necessitated considerable provisions in the financial statements to handle future restructuring costs, continued support for the existing fleet and customer finance of aircraft. The provisions mean that Saab's income in the future will not be negatively affected by developments in regional aircraft. A measure of the inherent financial strength of the Group is that, despite extra provisions totaling SEK 4 billion after tax, the Group continues to have a strong balance sheet. We expect that the demand for qualified personnel from other parts of the Group, together with proactive measures, will greatly reduce the consequences of the decision for our personnel.

To clarify our operations, we have rearranged the Group into five business areas from the beginning of 1998. The largest of these, Military Aerospace, includes military aircraft, missile systems and avionics. Although the stability of the programs being carried out for the Swedish Air Force is a basic element, the operation is also characterized by intensive international activities. Collaboration with British Aerospace in exporting the Gripen has been further extended and streamlined, and today Gripen is a strong brand name throughout the world. I believe that we have good prospects of capturing at least 20 percent of our potential market of about 2,000 fighter aircraft by 2010, which is our target.

During the year, a new version of the RBS15, the world's most cost-effective anti-ship missile, underwent extensive trials with complete success. Project definition studies of a new generation of air-to air missiles have been conducted with companies in a number of European countries and are expected to result in full-scale development this year.

The electro-optics division acquired from Ericsson, and the joint venture company, Ericsson Saab Avionics, have shown positive development during the year.

Space was one of the most successful areas in 1997. In addition to strong sales and continued good profitability, a number of breakthrough orders have been received from the USA and Japan.

Training Systems has had an exceptionally good year with high sales and excellent profitability, and has strengthened its position as world leader in its niches.

We are continuing the long-term reorientation of Saab's commercial aircraft operations initiated during 1997. This entails the build-up of subcontractor and partner relations

with manufacturers of large aircraft, continued high quality support to the Saab aircraft fleet in operational service, and support of the leasing portfolio.

Combitech's restructuring has involved the streamlining of both its strategy and structure. The business area will generate added value from Saab's core activities and realize this value at a suitable point in time. Operations that were acquired earlier, which had no organic connection with the Group's core activities and which showed weak profitability have been divested or positioned for divestment. All development costs, including earlier activated costs, in the area of Traffic Systems have been expensed in the income statement. This has resulted in considerable structural costs, but also in better focusing of the business area.

Information technology is playing a decisive part in the systems being developed in Military Aerospace, not only directly as in avionics, but also through sensor, data and information systems leading to decisive system advantages for our aircraft and missile systems. Space, Training Systems and Combitech are three business areas whose business concepts are based on information technology. We will be further developing and strengthening our position in this area to add further value to our systems and products.

Our major investments in R&D are continuing and now occupy over 2,000 persons. This has made us an attractive workplace, especially for undergraduates, who have voted Saab one of Sweden's most popular employers.

We have made the decision to eliminate the financial risk exposure in production of regional aircraft, which gives us an interesting future profit generation capacity. The investments in our future remain strong, and our products are at the global leading edge. We are looking forward to the further structural transformation of the industry and to a possible flotation of Saab from a position of strength.



Bengt Halse
President and Chief Executive Officer
Saab AB





Saab

Military Aerospace

Space

Training Systems

Commercial Aircraft

Combitech

Military Aerospace

The business area, Military Aerospace, consists of the military aircraft programs and the development of future products and technology, as well as Saab Dynamics, Ericsson Saab Avionics and CSM Materialteknik.

Dynamics develops and manufactures missile guidance systems and defense electronics. The associate company, Avionics, which is 50 per cent owned by Saab, is the largest supplier of electronics for the Gripen fighter, and in particular, its cockpit presentation system. CSM Materialteknik, is one of the Nordic region's leading technical material laboratories, and is jointly owned by Celsius and Saab.

On June 26, 1997, IndustriGruppen JAS AB received an order for a third batch, of 64 aircraft. This order also included different programmes to enhance the already excellent capabilities of the aircraft and a programme to explore the growth potential of Gripen. In total, 204 aircraft have been ordered and 28 of these are two-seaters.

IndustriGruppen JAS functions as coordinating supplier of Gripen to the Swedish Air Force and consists of Volvo Aero Corporation, Ericsson Microwave Systems, Celsius Aerotech, Ericsson Saab Avionics and Saab, which accounts for 65 per cent of invoiced sales.

Examples of changes in batch 3 are Avionics' work on Gripen's new display system, EP-17, and Dynamics' development of a newly integrated navigation and landing system. The order will mean continuous production of aircraft for the Swedish Air Force through the year 2007. The first aircraft in the third batch is expected to be delivered in 2003.

The joint export effort with British Aerospace has been intensified and inquiries have been received from a number of potential customer countries.

Gripen is the first fourth generation aircraft to enter service. The competition thus consists primarily of modernized versions of third generation fighter aircraft (the Viggen generation), such as the American F16 and F18, the French Mirage 2000-5, and the Russian MiG-29.

Aircraft of the 4th generation are systems aircraft with an infrastructure on a digital design together with fully integrated computerised systems using a mutual database with standard interfaces. This means that sensors, weapons, control surfaces, input devices, displays etc. can be used as

information providers and information carriers, theoretically in an endless number of combinations. Only the physical laws and the human being put the limits. This creates the base of considering the Gripen not only as a "multirole" aircraft but more as a "swingrole" aircraft. This generation of aircraft also comprise F-22, Rafale, JSF and the Eurofighter.

Collaboration with British Aerospace has been further developed and given a single management structure to increase efficiency and to avoid the duplicating of work. This means that the two companies have built up a joint export organization.

The work of the business unit Future Products and Technology includes improving Saab's methods and design principles for cost-effective development and production. During the year, substantial resources have been put into man-machine interface research. Advanced maneuverability of aircraft, including technology for unmanned flight, is another priority area of development.

A substantial part of technical development is currently being carried out together with domestic and international partners. Saab is also participating in several European collaboration projects, among them no less than 40 EU projects. The many years of experience in development cooperation with British Aerospace, which led to today's Gripen-related export partnership, now also covers Avionics.

Dynamics is working together with Matra BAe Dynamics and others on Meteor, a radar-guided, medium-range air-to-

air missile. A new round of offers is planned for the first half of 1998.

Dynamics is also taking part in the international cooperation project, IRIS-T, a short-range IR air-to-air missile. The German company, Bodenseewerk Gerätetechnik, will be the prime contractor. During the year, an offer was submitted to the German defense authorities and development is expected to start in the first half of 1998.

Both Meteor and IRIS-T are intended for use in combat aircraft, for example the EF2000 and Gripen.

Successful tests were conducted during the autumn for the next generation of radar-guided anti-ship missile, RBS15 Mk3, and development work is progressing according to plan.

An upgraded programme for the fighter Viggen (JA37) has been delivered to the Swedish Air Force. Saab has also

AN ORDER FOR A THIRD BATCH OF THE GRIPEN MULTI-ROLE FIGHTER, 64 AIRCRAFT, WAS RECEIVED DURING THE YEAR.

20 GRIPEN WERE DELIVERED DURING THE YEAR, COMPARED TO 14 THE PREVIOUS YEAR. THIS MEANS THAT THE SWEDISH AIR FORCE HAS TAKEN DELIVERY OF 48 AIRCRAFT.

SWEDEN'S FIRST GRIPEN SQUADRON HELD IT'S FIRST COMBAT MANOEUVRE IN SEPTEMBER 1997.

SUCCESSFUL TESTS HAVE BEEN CARRIED OUT DURING THE AUTUMN WITH THE NEXT GENERATION OF ANTI-SHIP MISSILES – RBS15.

received an order from the Swedish Defence Materiel Administration (FMV) for the conversion of the two-seat Viggen (SK37) to a combined training and Electronic Warfare role. The first test aircraft will be delivered to FMV in 1998. Deliveries of the modified SK60 airframes has been in progress during the year. At the end of 1997, a total of 75 of the 96 aircraft had been delivered. The twin-engine training aircraft was equipped with a new, more powerful RM15 engine. Ten of these aircraft have been completely remodified by Saab.

Amounts/total in SEK million	1997	1996	1995	1994	1993
Inflow of orders	11,405	2,506	1,917	1,746	1,813
Backlog of orders	21,969	15,053	16,345	16,894	17,468
Invoicing	4,480	3,471	2,698	2,337	2,238
Operating profit/loss	586	557	425	320	393
Investments	153	195	177	199	178
Research & Development	1,332	1,229	1,455	1,361	1,130
Number of employees at Jan. 1, 1998	3,879				



ONE OF THE APPROXIMATELY 50 AIRCRAFT NOW IN SERVICE WITH THE SWEDISH AIR FORCE, SEEN HERE WITH ATTACK ARMAMENT INCLUDING THE SAAB DYNAMICS RBS15 MISSILE (WITH BLACK NOSE). THE AIRCRAFT IS PAINTED WITH A WATER-BASED PAINT INTRODUCED WITH BATCH 2, WHICH IS NOT ONLY MORE DISCREET BUT ALSO MORE ENVIRONMENT-FRIENDLY.

Space

Business area Space consists of Saab Ericsson Space AB and its subsidiaries, which develop and manufacture equipment for use in space, data systems, antennas and microwave electronics, as well as guidance and separation systems. This equipment is used in launchers, satellites and other space-craft. The company is now established as a one of the world-leading suppliers in this area.

Space received several strategically important orders in 1997, including a number for the huge US market and the European space organization, ESA.

Space is 60 per cent owned by Saab and 40 per cent by Ericsson. From January 1, 1998, Space forms its own business area, directly under Saab AB. Previously, it was a subsidiary of Combitech. This change is a step in promoting the rapid growth of space activities within the Group.

The profitability of Space was satisfactory, and maintained the growth figures of the last few years. In 1997 sales rose by 27 per cent. The company's continued expansion required new premises to be taken in Linköping. Construction work started on a new facility in Gothenburg in December. The new recruitment of technicians is made easier by the fact that prospective graduate engineers rank Space as their third most attractive employer among Sweden's 120 largest companies, according to the "Company barometer".

Two Austrian subsidiaries of Space, Schrack Aerospace and ORS, were merged into one company during the year, Austrian Aerospace, whose objective is to coordinate resources and thereby improve its effectiveness and efficiency. The company is 78 per cent owned by Saab Ericsson Space AB. The other owners are Ericsson Austria, which has 10 per cent and the German company, Dornier Satelittensysteme, which has 12 per cent.

An order was received from ESA (European Space Agency) for the development of a new measuring instrument, GRAS, for measuring humidity, temperature and electron density in the atmosphere. GRAS will be used with METOP, a new series of European weather satellites. This work is expected to lead to a production order for the instruments.

A new order from the US authorities raises the company's profile in this major market. A measuring instrument, which is similar to GRAS, will be developed for a new series of eight US weather satellites. It is also expected that the development project will lead to a production order.

The company has also received additional orders from the French company, Matra Marconi Space, for a further ten on-board computers for a new series of Ariane 4 rockets.

Space has a market leading position in Europe as a supplier of complete data handling systems for commercial telecommunications satellites. The French company, Aérospatiale, has placed an order for such a system for the Spanish satellite, HISPASAT 1C, for television broadcasting in southern Europe, and reflector antennas for the television satellite, Eutelsat W24. Order for data handling

systems for four additional telecommunications satellites were also placed.

During the year, Sirius 2, the Nordic region's new telecom satellite, which replaces Tele-X, was launched. Its data handling system and reflector antennas were built by Space.

The two rebuilt solar research satellites, which are part of the European Cluster II-program, were equipped with TT&C antennas for communication, and harness from Space.

One thousand antenna elements of the 3,100 ordered for the ICO-Global project were delivered during the year to Hughes Space and Communications of the US. ICO-Global will supply world wide satellite-based mobile telephony. Twelve satellites will be launched and the system will be fully operational by the year 2000.

Space is one of the world's leading makers of satellite separation systems for commercial launching. The system consists of a clamp band which attaches the satellite to the rocket and, by using pyrotechnical bolt cutters, separates the satellite from the rocket at the appropriate height. During the year, new contracts were signed, among them Mitsubishi Electric Corporation, which is the company's first Japanese customer, and the German company DASA/Dornier, for the Cluster II-program.

Sweden's new research satellite Odin, which has been equipped with data systems and reflector antennas from the company, was set up during the year at the plants in Linköping.

Amounts/total in SEK million	1997	1996	1995	1994	1993
Inflow of orders	605	593	447	355	305
Backlog of orders	674	663	479	356	312
Invoicing	594	467	383	312	302
Operating profit/loss	47	45	35	35	21
Investments	43	30	30	23	13
Research & Development	171	140	132	86	85
Number of employees at Jan. 1, 1998	575				



SPACE EQUIPMENT IN SERIAL PRODUCTION. DURING THE YEAR, SPACE DELIVERED 1,000 ANTENNA ELEMENTS FOR SATELLITE-BORNE MOBILE TELEPHONY TO HUGHES SPACE AND COMMUNICATIONS IN THE USA. ALTOGETHER THE ORDER COMPRISES 3,100 ANTENNA ELEMENTS FOR 12 SATELLITES.

Training Systems

Business area Training Systems consists of Saab Training Systems AB with subsidiaries and has a world-leading position in the area of military training equipment. The company's three product areas are the laser-based simulator system, BT 46, the graphic simulator family, BT 61, range equipment for live firing.

The largest product area is the laser-based simulator system which is used in training and practice. The BT 46 systems, which can be used in all direct fire weapons, are used by several of the world's largest military powers, such as the US, the UK and Germany.

At the end of September, the 1000th system was delivered to the US. Further orders have been received from the US Army and US Marine Corps.

In Germany, Training signed a development contract for the BT 46 system to be used for the Leopard tank and the reconnaissance vehicle, Luchs. Development work on simulator systems for the Wiesel MK and Wiesel TOW has been completed. Further orders have also been received from the German defense authorities, among them serial contracts for the Leopard tank and an order for options series for the Marder Armoured Personell Carrier. The first series of simulators for the Panzerfauset 3 is being produced, and deliveries will continue until 2002. 1998 will also see the start of deliveries of the simulator system for the Milan anti-armor missile.

During the year, the UK Armed Forces also ordered additional BT 46 systems, and also placed an extensive order for support and repairs of previously supplied equipment.

At the end of the year, the Finnish defense authority ordered the BT 46M, which is a man worn target system. Soldiers wear vests and helmets equipped with detectors and reflectors which provide information on hit results.

In Sweden the simulator system for the 121/122 tank was put into operation. Additional system functions are to be introduced during 1998/99.

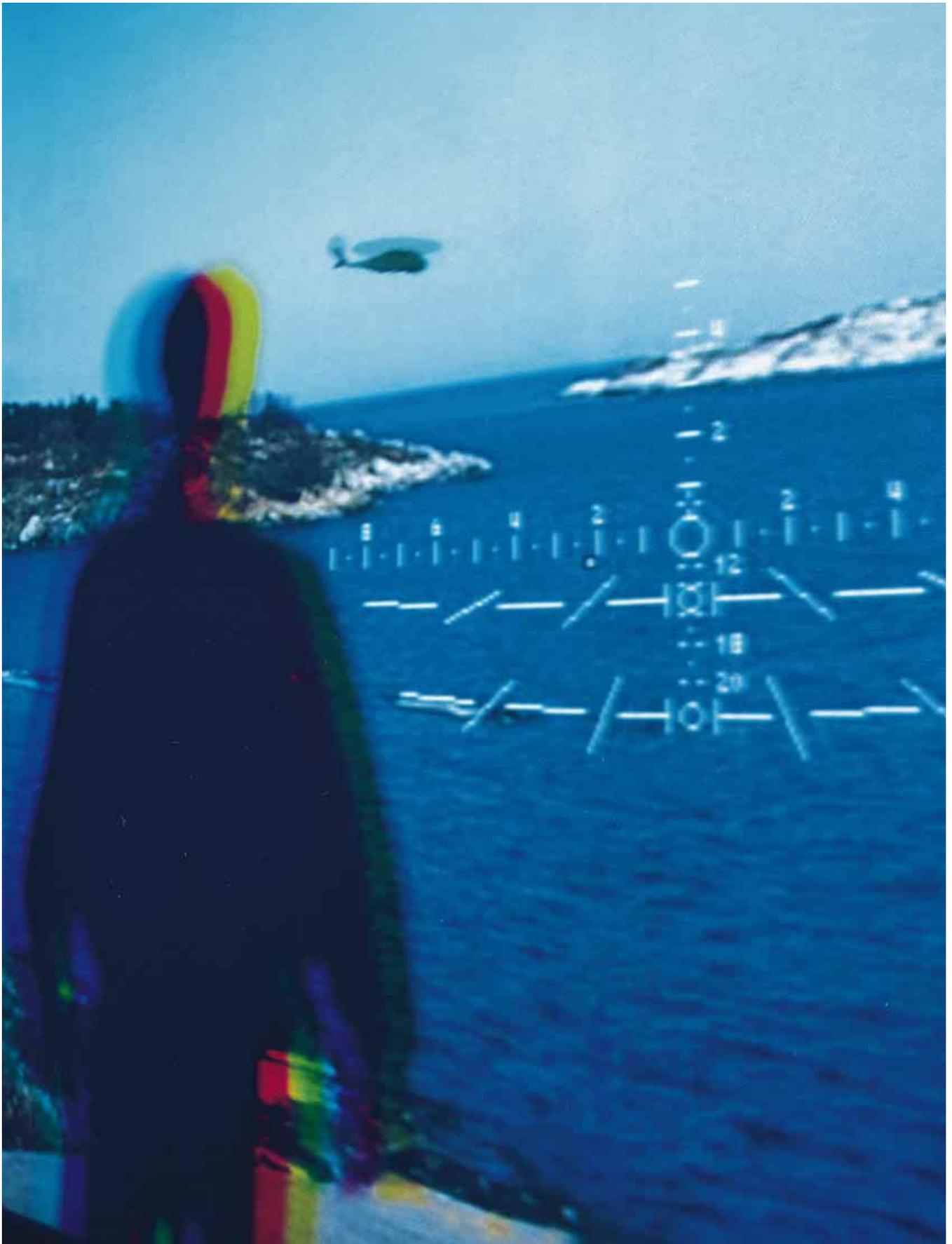
The BT 61 is a graphic simulator used for exercise and decision-making practice, and

utilizes authentic photographic environments, moving three-dimensional targets and sound reproduction. During the year, the BT 61 has been developed, including new software and data bases. Marketing of this system has been intensified.

Training Systems is also one of the world's largest suppliers of range equipment for live firing exercises. Sales during the year have been very good and a contract was signed with the Norwegian defense authorities for deliveries up to 2001. This is the largest single order of range equipment that Training Systems has ever received. Deliveries have already started.

1997 WAS A GOOD YEAR FOR TRAINING SYSTEMS. INVOICING INCREASED BY 19%. INVESTMENT IN PRODUCT DEVELOPMENT HAS CONTINUED. THE COMPANY'S LARGEST MARKETS ARE NOW THE UK, THE US AND GERMANY. THE COMPANY HAS BEGUN WORKING UP A NUMBER OF NEW MARKETS DURING THE YEAR.

Amounts/total in SEK million	1997	1996	1995	1994	1993
Inflow of orders	677	1,045	438	473	522
Backlog of orders	1,007	999	513	802	820
Invoicing	668	559	727	491	283
Operating profit/loss	156	115	172	122	41
Investments	51	24	15	25	15
Research & Development	94	48	48	49	29
Number of employees at Jan. 1, 1998	258				



MORE AND MORE COMPLEX AND COSTLY MILITARY TECHNOLOGY IN COMBINATION WITH SHRINKING DEFENCE BUDGET ALLOCATIONS MEAN INCREASED BUSINESS OPPORTUNITIES FOR VARIOUS TYPES OF SIMULATOR, ILLUSTRATED HERE BY THE BT 61 FROM TRAINING SYSTEMS, A GRAPHIC SIMULATOR FOR SHOOTING AND DECISION-MAKING TRAINING WITH PHOTOGRAPHIC, AUTHENTIC ENVIRONMENTS AND MOBILE THREE-DIMENSIONAL TARGETS.

Commercial Aircraft

Since January 1, 1998, the Commercial Aircraft¹ business area includes Saab's investment in cooperation programs and sub-contractor programs with other aviation industries, as well as Customer Support for the fleet of Saab 340 and Saab 2000 aircraft. The main strategy is to position the company as an attractive partner and supplier of sub-systems with its own development program, working in the large aircraft sector.

During the year, a number of contracts were signed with the US company, Boeing, the world's largest manufacturer of civilian aircraft. Among other parts, Saab produces wing structures for the new Boeing 777 long-haul aircraft. Deliveries started in the middle of 1997.

At the beginning of 1998, Saab received an order for the development and manufacture of a floor structure for the extended version of the Airbus "jumbo jet" – A340-500/600, with deliveries to start in the year 1999. The aircraft will have a capacity of 300-400 passengers. The order came from French Airbus partner, Aérospatiale, and is worth around SEK 600 million.

Last year, a Memorandum of Understanding (MoU) was also signed with the Airbus consortium on participating in a preliminary study and possibly also as a partner in the new A3XX project.

THE ORDER INFLOW THIS YEAR HAS BEEN HEALTHY. SAAB HAS RAPIDLY POSITIONED ITSELF IN THE MARKET AS A PARTNER AND SUBCONTRACTOR TO OTHER AIRCRAFT INDUSTRIES.

Customer Support

The Customer Support operations cover the approximately 500 Saab 340 and Saab 200 civilian aircraft, which can be found worldwide. Most of these

The result will be the world's largest aircraft, with a capacity of between 500 and 600 passengers on two decks.

Last year saw the signing of an agreement with British Aerospace, in which Saab takes over a part of the company's metal bonding of aircraft components. This is a specialist area, which Saab also intends to market to other manufacturers.

The future world market for aircraft for 100 passengers or more, is estimated at 700 aircraft per year. The market is totally dominated by Boeing, which has a market share of around 65 per cent, and by Airbus, with 35 per cent.

aircraft will operate for a further 25 years. Customer Support will be responsible for manufacturing and selling spare parts and type improvements, which have arisen in the course of operating experience.

Customer Support extends also to deliveries of spare parts, training of technicians and production, and updating of inspection, repair and maintenance manuals. In addition, complete product support is offered to operators in emergency situations. The customer support section is based in Linköping but operations are implemented throughout the world.

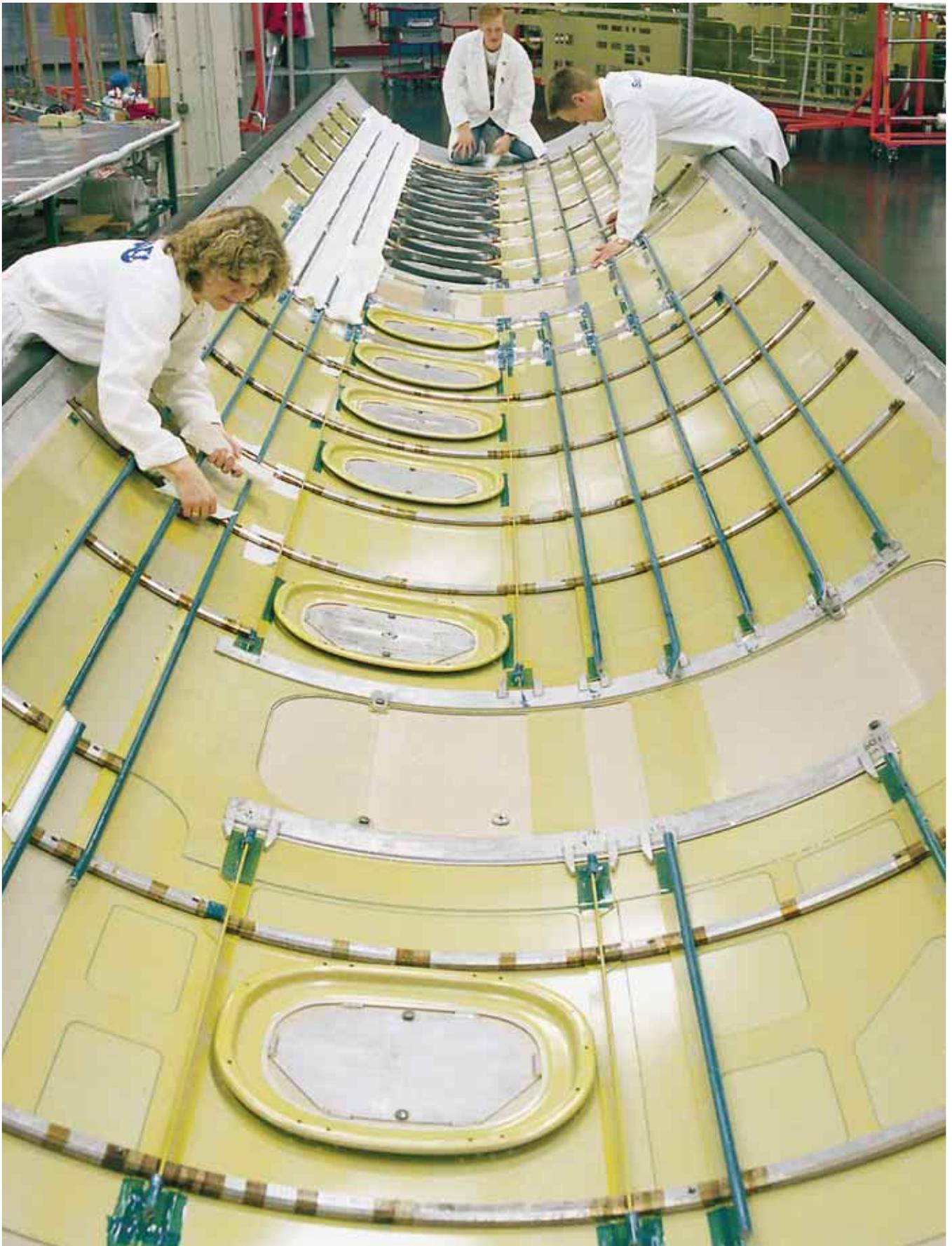
Amounts/total in SEK million	1997	1996	1995	1994	1993
Inflow of orders ²	290	303	290	287	531
Backlog of orders ²	102	56	31		
Invoicing ²	244	278	259	287	531
Operating profit/loss ³	3				
Investments	45				
Number of employees at Jan. 1, 1998	1,166				

¹The operation started as an independent business area on January 1, 1997.

In the formal part of the financial statements, the business unit is reported under the name Collaborative Programs.

²Refers to Regional Aircraft and external business.

³Operating income from external business.



BONDING TOGETHER METAL PARTS INSTEAD OF USING TRADITIONAL RIVETING TECHNOLOGY, IS ONE OF SAAB'S SPECIAL EXPERTISE AREAS NOW BEING MARKETED AGAINST OTHER AIRCRAFT MANUFACTURERS. DURING 1997, DELIVERIES WERE STARTED TO BOEING AND A FIRST ORDER TO AIRBUS. EXTENSIVE FLOOR STRUCTURES FOR THE NEW A340-500/600, WERE RECEIVED AT THE BEGINNING OF 1998.

Combitech

Previously a subsidiary company, Combitech became a business area in the parent company, Saab AB, on January 1, 1998. Combitech is returning to its original business concept of a breeding ground for spin-off, mainly from military programs. A development of this strategy is the clear aim that after the commercialization of spin-off products, their value should also be realized at the appropriate point in time. The business area Combitech consists of Combitech Electronics (electronics), Combitech Innovation (development company), Combitech Network (IT security), Combitech Software (real time systems), Combitech Traffic Systems (automatic road toll systems), IV Image Systems (systems for movement analysis), Pronesto (technology trading), Saab Marine Electronics (radar-based level-gauging systems), Saab Survey Systems (airborne measurement).

Turnover at Combitech increased during the year by 15%. The operating profit/loss for Saab Combitech was, however, negative. One of the main reasons for this was that several of the previously acquired IT companies did not develop according to plans with regard to their results and were disposed of, which resulted in capital losses. The substantial investment in Combitech Traffic Systems also lowers the result as the company has higher development and marketing costs than estimated. At the end of the year Space switched to presenting its accounts as a separate business area within the Group. At the beginning of 1998 the IT company Telelogic was sold. In recent years Combitech has experienced operating losses due to development costs within Combitech Traffic Systems and costs related to certain IT companies acquired during 1994 and 1995. A large part of the operating losses during 1997 can be explained by depreciations in assets in connection with the phasing out of these companies.

Combitech Electronic's sales of Multi Chip Modules (MCM) for advanced integrated control of engines and vehicles' four-wheel drive systems etc., continue to increase with orders from several vehicle manufacturers. A new 3,000 m² production plant for volume production of MCM started operation in Jönköping this year.

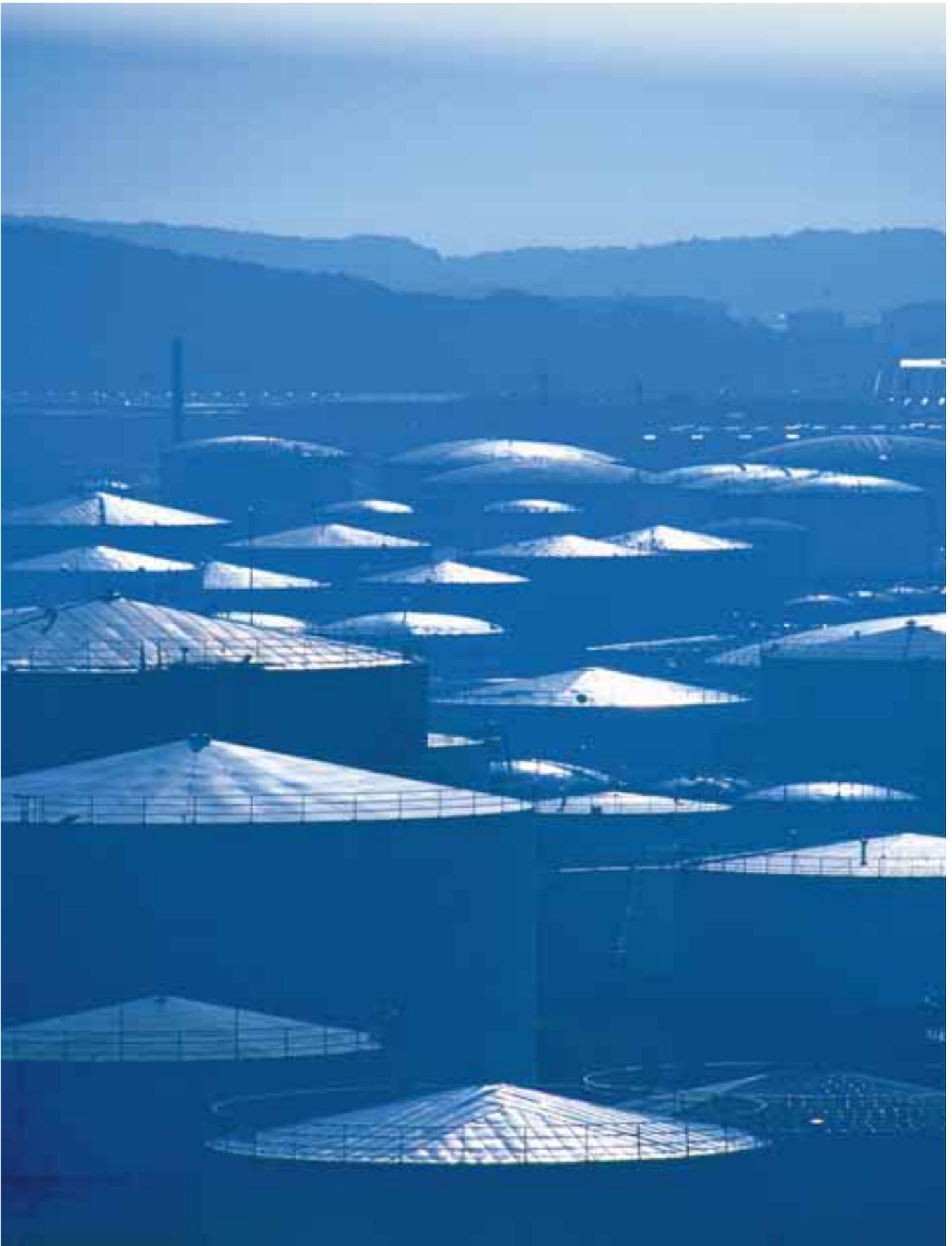
Combitech Network has established itself during the year as a strong partner for clients requiring IT security within the defence industry, development-intensive industry and the financial sector. Clients who have been added to the client list include Ericsson, FMV, Sergel Kreditjänster, Swedbank and Telia Finans.

Combitech Software is highly profitable and is expanding strongly. The company has doubled its personnel in just over a year and now has more than 100 employees in seven locations in Sweden. The number of clients has increased amongst others in the telecommunications and medical branches.

Combitech Traffic Systems received the largest order in its existence for a new generation of road toll collection systems for Melbourne, Australia. The order is initially worth between SEK 200 and 300 million and expected additional orders are expected to yield the same amount over a three-year period.

Saab Marine Electronics expanded strongly this year and reported healthy profit. The company is a world-leading supplier of radar-based level-gauging systems for tankers, as well as the chemical and process industries. This is a good example of a spin-off product from military programs. During the year, Saab Marine Electronics launched a new product for the process industry, and have received good responses from the market. Saab Marine Electronics has also acquired 50 per cent of the share capital of ScanJet AB, a Swedish company which specializes in cleaning chemical tanks. The company's products complement each other.

Amounts/total in SEK million	1997	1996	1995	1994	1993
Inflow of orders	1,356	1,020	807	509	397
Backlog of orders	781	455	377	262	210
Invoicing	1,073	932	792	446	396
of which subsequently divested operations	114	267	230		
Operating profit/loss	-338	-159	-7	-31	-106
of which subsequently divested operations	-213	-109	9		
Investments	91	30	23	11	20
Research & Development	137	143	102	66	80
Number of employees at Jan. 1, 1998	878				



FROM MILITARY TECHNOLOGY TO A WORLD-LEADING CIVILIAN APPLICATION. UTILIZING AND FURTHER DEVELOPING RADAR TECHNOLOGY ORIGINALLY DEVELOPED FOR ROBOT SYSTEMS, SAAB MARINE ELECTRONICS HAS BECOME A MARKET LEADER IN CONTACTLESS LEVEL GAUGING FOR TANKERS, THE CHEMICAL INDUSTRY AND THE PROCESS INDUSTRY.

General principles

Operative financial administration in the Saab Group is handled by Saab Treasury, which is responsible for the Group's investment and borrowing activities, in addition to external management of interest and currency risks.

The Saab Group's operations are largely those of a high technology project-oriented industry with long-term commitments. The general policy of the operative units is to minimize the financial risks involved in operations, i.e. the focus is on financial neutrality. Risk minimization is achieved through financial transactions towards Saab Treasury. In addition, added value is created in Saab Treasury through active participation in the financial markets based on a given risk mandate. The Saab Group has thereby established a strategy of decentralized responsibility for hedging and centralized responsibility for trading.

The Group's interest rate risks are managed on the principle that interest rate fixing on the assets side must correspond to future commitments on the liabilities side.

The Saab Group's currency risks in its military business are largely hedged in the respective contracts. In other operations in the Saab Group, the policy is to hedge the currency risk continuously when signing firm orders.

The provisions made for terminating regional aircraft production and which are in foreign currency have been hedged via forward currency transactions.

Saab Treasury's operations consist of three areas of responsibility:

1. Liquidity management

The Saab Group's liquidity is managed centrally by Saab Treasury. On December 31, 1997, the Group had a net liquidity of SEK 14,164 m. (13,621). This corresponds to about 43% (60%) of the Group's balance sheet. In accordance with Saab's investment policy, which has been formulated by the Board of Directors of Saab AB, the fixed interest rate term is approximate 15 months. Capital investments are made with Investor AB and in Swedish Government bonds and mortgage-backed bonds. Interest rate swaps are also used to obtain the desired fixed interest rate term. At the close of books, the average fixed interest rate term was 11 months. The average return on liquid funds in 1997 was 6.2% (7.9%).

2. Internal bank

In order to achieve economies of scale, all financial transactions are made via Saab Treasury. Based on the internal bank operation, the Saab Treasury units support the units with analyses, advice and financial transactions. Currency and interest rate transactions between Saab Treasury and the units are conducted at market rates. The internal bank accepts no risks and all transactions involving internal companies are conducted simultaneously with external parties.

3. Trading

The Board of Directors of Saab AB has given Saab Treasury a risk mandate of SEK 20 m. for trading in currency and money market instruments, expressed according to Value at Risk (VaR). Should the cumulative trading result for the year be negative, the trading mandate is reduced by the corresponding amount. During 1997, the trading result was SEK 15 m. (99).

Organization

The operations of Saab AB largely consist of long-term projects, which increases the complexity of financial transactions. Continuous investments in personnel skills are made in order to maintain a satisfactory level of competence and analytical capability. Well-defined rules for accounting and responsibility are documented, and compliance is monitored regularly.

Saab Treasury consists of three units:

- Trade Services, with responsibility for handling all business deals after they have been made.
- Middle Office, with responsibility for risk analyses and reporting.
- Trading, which conducts financial business with internal and external parties.

Risk calculation

Risks are measured in accordance with the Value at Risk method. This calculates potential losses depending on movements in the currency and interest rate markets on the basis of historical price fluctuations. Saab Treasury uses a market history of one year with daily readings. The time required for neutralizing a position is reckoned as 5 days. With this method, the trading operation is assumed to be unable to lose more than SEK 20 m. in 99 cases out of 100 when fully utilizing its risk mandate.

Derivatives

Saab Treasury's holding of derivatives on December 31, 1997 was nominally SEK 18,914 m. (14,545). This amount can be divided into interest rate swaps for interest rate risk management of the liquidity of SEK 7,300 m. and the leasing portfolio of SEK 3,408 m. The remainder consists of forward agreements for the USD portion of provisions for regional aircraft and firm orders.

Credit risks

The lowest permissible rating for the bank's opposite parties is Single A, according to Moody's and S&P's long-term rating. Calculation is made of the actual and expected credit risks and is fully in accordance with the recommendations of the Bank of International Settlement (BIS). At December 31, 1997, the credit risks of the opposite parties totaled SEK 1,026 m. (1,223).

Regional Aircraft

Saab Aircraft Finance Group

As a result of the deterioration in market conditions and several years of losses, the Board of Directors decided in December 1997 to terminate production of regional aircraft and to adjust the book value of the leasing portfolio to a calculated market value.

Since the first deliveries of the Saab 340 in 1984, there has been a growing trend towards a high level of overcapacity and price competition in the regional aircraft market. In the case of the Saab 340, which competes in the segment for 30-37 seat aircraft, this has led to unsatisfactory prices and rental levels, even though the aircraft has a leading position in the market. Furthermore, the Saab 2000, a newer model in the 50-58 seat segment, has not been able to make a breakthrough in the USA, which is the largest market. The weakness of the American market is primarily due to passenger preference for jets instead of turboprop aircraft. Prices of 50-seat turboprop aircraft have been successively reduced to increase their competitiveness against regional jets.

Regional Aircraft

The decision on termination means that the Group will end production of new aircraft at mid-1999, after all present orders have been delivered. The Group will continue to provide customer support for the approximately 500 Saab airliners in service throughout the world.

In connection with the decision to end production, major provisions have been made to cover the losses generated by remaining manufacture and continuing customer support operations. The provisions amount to SEK 4,079 m., before tax (SEK 2,937 m. after tax) per December 31, 1997.

An extensive study has been carried out to calculate the losses entailed by the termination. The provisions have been made on certain assumptions regarding the calculated operating losses in Regional Aircraft during 1998 and 1999, write-downs of current assets and fixed assets, costs for relocating personnel, costs for contracted commitments towards suppliers, estimated decrease in revenue for Commercial Aircraft and deficits in covering certain corporate costs. In addition, an external consultant was appointed to conduct an independent study, the results of which confirmed the estimated costs of termination.

Amounts/total in SEK	1997	1996	1995	1994	1993
Order inflow	2,706	2,702	2,524	793	1,120
Order backflow	2,734	2,857	3,057	3,881	6,871
Sales	3,035	2,902	3,391	1,360	2,004
Operating profit/loss	-4,632	-2,312	-856	-948	-527
of which items affecting comparability	-4,079	-1,219			
Capital expenditures	13	23	12	15	29
Research & development	58	230	214	314	495
Number of employees at Jan. 1, 1998	1,332				

The provisions have been calculated so that operations in Regional Aircraft will not have a negative influence on the financial result of the Group's other operations in the future.

About 1,800 of the Group's employees will be affected by the termination. A considerable number will be offered new duties in the Group's other operations, primarily in Commercial Aircraft and military production, where there is a need of trained engineers and technicians. After agreements on early pensions and relocations, the company management estimates that a few hundred employees will be declared redundant in the coming two years.

Saab Aircraft Finance Group

To strengthen the market position of the Saab 340 and Saab 2000 in connection with the cessation of production of commercial aircraft, SAFG has been returned to the Saab Group.

The Saab Aircraft Finance Group (SAFG) consists of companies in Sweden and the USA which lease Saab 340 and Saab 2000 aircraft to operators throughout the world.

During the year, SAFG signed lease contracts for 21 (24) new Saab 340 and 6 (3) new Saab 2000 aircraft. 40 (48) new lease contracts for Saab 340 aircraft were signed for new and existing customers. SAFG sold off 2 (2) and purchased 2 (6) used Saab 340 aircraft for its leasing portfolio. In total, SAFG leases 296 (275) Saab 340 and Saab 2000 aircraft to 27 (30) operators across the world.

At year-end, 4 (6) of these aircraft were not contracted to airlines. During the year, 0 (2) Saab aircraft were repossessed from airlines as a result of defaults on contracts.

Saab AB has issued guarantees totaling USD 744 m. (839) to the advantage of the finance sources for the leasing portfolio. Of this sum, USD 251 m. (299) is reported as leasing commitments in the balance sheet, USD 211 m. (94) as a liability in the balance sheet, included in the total reserve provision for the leasing portfolio, and the remaining USD 282 m. (446) as contingent liabilities.

The Swedish Export Credits Guarantee Board (EKN) has issued residual value guarantees totaling USD 231 m. (120) in respect of 42 (31) lease contracts in the USA. EKN has rights of regress totaling USD 40 m. (120) towards Saab regarding these transactions, this sum being included in the total guarantee volume.

After 1999, no further new aircraft will be added to the portfolio, whereby the life of the portfolio is limited. As a consequence here of, SAFG's leasing portfolio has been revalued at market value, which is based on what are today considered to be realistic assumptions during the remainder of the portfolio's life. The valuation comprises assumptions for each aircraft type and production year, expected rents, duration of lease contracts, renovation costs in connection with re-leasing, down time before re-leasing, economical life and residual value. When assessing the portfolio value,

attention has also been given to the lease contracts held by SAFG for new aircraft delivered during 1998. The provisions do not include the 61 aircraft owned by Saab-Scania Rental AB and Swedish Aircraft Three KB, since these aircraft are financed non recourse to Saab.

The market valuation for the leasing portfolio resulted in a further provision of SEK 1,342 m. in the financial statements of December 31. Together with earlier provisions, the provision for the leasing portfolio amounts to SEK 2,728 m. (USD 350 m.). The provision reflects a conservative estimate of the market value of SAFG's leasing portfolio.

The income statement and balance sheet are summarized on page 9.

Amounts/total in SEK	1997	1996	1995
No. of aircraft in leasing portfolio ¹	296	275	244
Guarantee volume	5,855	5,764	4,277
Guarantee volume in USD m.	744	839	641
Leasing revenues and other income	1,706	1,398	1,281
Operating profit/loss	-1,554	-664	-161
of which items affecting comparability	-1,342		
Number of employees at Jan. 1, 1998	44 ²		

¹The leasing portfolio includes 61 aircraft financed non recourse to Saab.

²The market sales in Saab Aircraft has been transferred to SAFG as of January 1, 1998.

“Saab is to comply with local environmental regulations and make continuous improvements in its operations to minimize the negative environmental consequences of its plants, manufacturing and products. An efficient and documented environmental management system shall be applied in development, production, product support and service. The system is to be followed up through regular audits.”

Environmental Report

Environmental activities at Saab

Environmental management – orientation and content

At Saab, work is in progress to adapt operations to the environmental policy and general goals set up in 1996 for environmental work.

Responsibility for environmental work is held in the first hand by the managers of the respective subsidiary, business unit and support department. In pace with development of the environmental management system, environmental questions are being increasingly integrated in decision making at Saab's various units.

Personnel undergo continuous training in environmental matters. During 1997 and 1998, supplementary environmental training programs were conducted at Saab in Linköping, Dynamics, Avionics and Space. Coordinators have been appointed for environmental and/or chemical issues within the manufacturing units. At Saab in Linköping, a special environment department is in operation which also deals with environmental issues relating to the Group as a whole.

The exchange of environmental information is an important condition for industry reducing its burden on the environment. Saab has well-developed environmental collaboration in this respect with authorities, companies, research institutes and universities.

A systematized database for monitoring and inspecting chemical products used in operations is a prerequisite for reliable and effective environmental work. In Linköping, Saab has successively developed its system for handling chemical products into a highly practical tool for environmental work. The system is now being used by most Saab units.

During 1997, Saab Marine Electronics received certification according to ISO 14001. Saab Marine Electronics is the first unit in the Saab Group to achieve full implementation of Saab's environmental policy and general goals. Environmental programs with fixed targets have been drawn up for closed cycle adaptation of products, the phasing out of environmentally hazardous substances, minimizing the usage of raw materials, reducing the occurrence of waste products and alleviating the environmental burden of transport.

The goal is for Saab's manufacturing units to adopt an environmental management system primarily adapted to ISO 14001 no later than 1999.

Many of Saab's products contain finished components purchased from various suppliers. During 1997, Dynamics, Avionics and Saab Marine Electronics carried out work on defining environmental requirements for purchasing components, materials and consumables.

Saab applies a highly detailed procedure for monitoring the health and environmental effects of the chemical products it purchases. Saab in Linköping has a special group for evaluating chemicals before purchase. No chemicals may be used in the company's operations without the approval of this group. The data processing system for handling chemical

products already mentioned is naturally a major asset in this context. Saab also sets demands on chemical products and presorting capability in its subcontracted work.

Environmental performance and orientation

The main environmental burden is presented by the Saab plants in Linköping. Activities at the plants occupy a large number of workshops and involve the manufacture of aircraft, missiles and space equipment, in addition to component manufacture, subcontracted work and retrofit in older aircraft. Consequently, it is difficult to define and measure the activities with different key ratios.

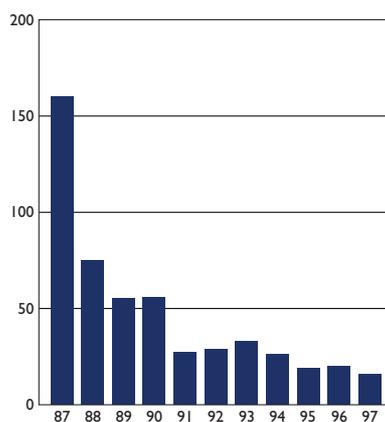
For this reason, environmental performance is recorded only in the form of total levels. Saab is working on finding suitable key ratios for easier monitoring of environmental work in relation to policy and goals.

Injurious and environmentally hazardous chemicals

Chlorinated compounds

Saab was one of the first companies in the aerospace industry to phase out the use of ozone depleting substances from its manufacturing processes. These substances were eliminated in 1993. For this work, Saab was awarded an environmental prize by the Environmental Protection Agency in the USA.

Consumption of Trichloroethylene



The above diagram shows how the consumption of trichloroethylene ("tri") at the Saab plants in Linköping has decreased over a 10-year period. During this time, an average of 82% has been released into the atmosphere, while the remainder has been collected as waste. The number of machines using trichloroethylene has been reduced from 18 to four. Several have been replaced with new water-based equipment. Most of the reduction has thus been achieved through changes in the production processes. Although Saab has exemption

for using trichloroethylene, no trichloroethylene is used at its other units.

The use of other chlorinated substances such as methylene chloride and chlorinated paraffins has been almost completely phased out at Saab. An exception is Saab Dynamics, which uses about 2 kg of methylene chloride per year. The product will be replaced as soon as a satisfactory alternative is found.

Cyanides and other environmentally hazardous substances

Since the beginning of the 90s, Saab has reduced its usage of cyanide from over 3,000 kg per year to about 100 kg. During 1996-97, degreasing agents and crack indication liquids containing environmentally hazardous tensides and chromates have been replaced with safer alternatives.

Metals

Consumption of cadmium in manufacture at Saab Aircraft has been reduced from about 200 kg/year in the 80s to about 30 kg today. However, there is still widespread usage in the aerospace industry of surface treatment chemicals, paints and sealing compounds containing chromium. A chromate-free primer has been introduced for certain limited usage and a chromate-based process has been phased out. The major international development projects reported below show that the aerospace industry attaches very high priority to reducing the usage of products containing chromium.

Orientation

In meeting requirements on safety and technical performance, companies oriented towards the aerospace field and other high technology products are continuing to use substances classified as injurious or environmentally hazardous. The replacement of materials in the industry has to be preceded by extensive quality and safety tests.

Saab has been working for a long time on projects aimed at replacing injurious and environmentally hazardous substances. Several of these projects are carried on internationally in collaboration with suppliers and other companies in the same industry. The two principal projects are summarized below. The projects are aimed at reducing the burden on the environment and adapting the processes used in the aircraft industry to future environmental requirements. At the same time, they seek to reduce costs and improve technical performance.

- *Development of new and more environment-friendly methods for cleaning, pickling and anodizing.*

Most companies in the European aircraft industry are taking part. The project has a budget of SEK 31 m. and is funded to 50% by EU research programs. Saab's share is SEK 3.5 m. The project is oriented towards replacing chromates and trichloroethylene, and is being carried out during 1996-1999.

- Development of new and more environment-friendly systems for corrosion protection in aircraft.

The project is funded to 50% by EU research programs and has a budget of SEK 41 m. It involves almost the whole of the European aircraft industry, Saab's share amounting to SEK 2.3 m. The project is oriented towards replacing chromates and solvents, and covers the period 1997-2001.

Emissions to water and the atmosphere

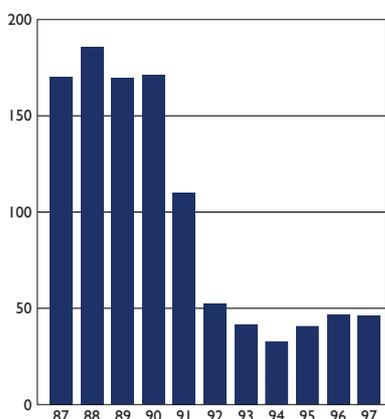
Emissions of trichloroethylene to the atmosphere have been described above.

Emissions of volatile organic compounds (VOC) at the Saab plant in Linköping have mainly been limited through the installation of purification facilities, and to a certain extent by changing to paints with a lower VOC content. A water-based paint has been introduced for the final coat on the Gripen. The diagram shows how VOC emissions at the Saab plant in Linköping have varied over a 10-year period. The large reduction in 1990-92 is due to the installation of purification equipment. Other variations are largely the result of production changes. VOC emissions at Saab's other units total about 5-6 tons per year.

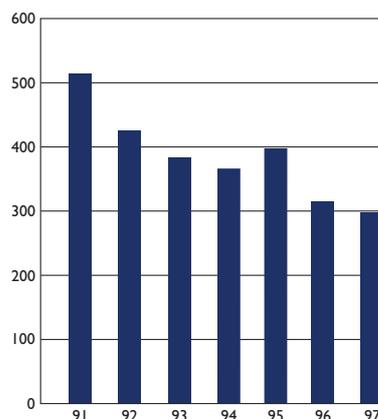
Emissions of metals from the surface treatment operations at Saab in Linköping and Ericsson Saab Avionics have decreased during the 90s. The amount of emissions in 1997 was very small: 0.05 kg cadmium, 2.0 kg chromium, 1.2 kg nickel, 1.5 kg copper and 1.2 kg zinc.

During the period 1990-2002, Saab in Linköping implemented several measures to reduce emissions to water, including the installation of recirculating systems for water used in surface treatment. Consequently, the purification plants have a high technical standard. Further work is now being oriented towards replacing environmentally hazardous processes.

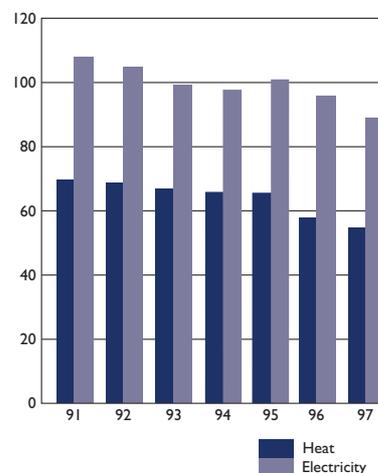
VOC emissions (tons)



Water consumption, 1 000 m³



Energy consumption
1000 MWh



During 1995, 1996 and 1997, emissions of urea from the Saab airfield amounted to 76, 50 and 75 tons respectively. The increase in 1997 is due to the virtual prohibition of acetate-based agents causing damage to aircraft and equipment. During the same years, the use of glycol amounted to 3, 2 and 3.8 tons respectively. About 70% of the glycol is collected and processed in purification plants.

Emissions and noise from aircraft

The Saab 340 and Saab 2000 have excellent performance in regard to noise, fuel consumption and emissions. In comparison primarily with jet aircraft, both the Saab 340 and the Saab 2000 have low noise levels at take-off and landing, while engine emissions are among the lowest. This is advantageous for operators since airport charges are partly related to noise and emission levels.

The development of military aircraft is very largely oriented towards technical performance, which naturally limits the possibilities of environmental adaptation. In terms of noise, the Gripen is equivalent to other modern combat aircraft. A comparison with the Viggen shows that the Gripen has lower fuel consumption and emits smaller quantities of carbon dioxide, carbon monoxide and hydrocarbons. However, the Gripen has larger emissions of nitrogen oxides than the Viggen.

In order to reduce the noise from aircraft in Linköping, detailed instructions have been issued for engine runs, flight times and flight paths at take-off and landing.

Water and energy

The diagrams show how consumption of water and energy at Saab's plant in Linköping has changed during the period 1991-1997. In the energy diagram, consumption of heat energy has been adjusted to standard years. Consumption of water and energy both show a clearly decreasing trend. This is the result of determined work involving a large number of measures to reduce water and energy consumption and related costs.

Closed cycle adaptation and waste products

Saab in Linköping has built up a highly cost-effective system for sorting and recycling waste products. In the first hand, waste products are sent for recycling. During 1995, 1996 and 1997, there has been a heavy increase in sorting and recycling of corrugated paper, plastics, electronics and metal cans. Energy recovery from wood waste has increased considerably. The proportion of waste products deposited on tips has decreased in recent years, independent of changes in operations.

During the year, Dynamics, Space, Avionics and Combitech have carried out projects to define and introduce measures for the closed cycle adaptation of products. These

measures meet the requirements on producer responsibility for electronic products.

During 1997, further actions have been taken to optimize pre-sorting and recycling of waste products at Saab. Responsibility for packaging used in the Swedish market is met through membership of Reparegistreret AB.

During 1997, Saab, together with a number of other parties, has taken part in a project to study the possibilities of recycling composite materials.

Further work will largely be oriented towards reducing the amount of waste.

Cooling production and fire extinguishing systems

At the Saab plant in Linköping, the installed amount of refrigerant media containing CFC has been reduced from 305 kg to 137 kg in 1997. Further reductions will be made during 1998.

In Linköping, there are 580 cooling installations containing HCFC with an installed amount of 4,756 kg HCFC. Most of this will be replaced in the planned solution based on coordinated cooling production. This very extensive project is aimed at creating a cooling production system with a long life and will continue during the period 1998-2002.

During 1997, The Saab plants phased out about seven tons of halon that had been installed for extinguishing

fires in buildings. All halon has now been replaced with foam installations and modifications to buildings. The only remaining halon is a small quantity used for fire extinguishers in aircraft.

Accidental damage to the environment

During the year, there have been no accidents involving damage to the environment. Saab is well prepared for handling emergency situations such as fires or chemical spills. The plant in Linköping has its own rescue service on constant standby.



Environmental licenses and expenditure

Licenses

During 1997, Saab's operations have been conducted in accordance with formal decisions and conditions. Saab's aircraft production in Linköping is the only operation in the Saab Group that is obliged to seek a license from the National Licensing Board for Environment Protection. Its license to conduct operations was granted in 1990. Owing to the termination of regional aircraft production and a successive increase in manufacture of subsystems for other aircraft manufacturers, it may be necessary to review the license.

Saab's operations in Linköping and Dynamics and Avionics in Jönköping inspect and monitor their activities in accordance with predetermined inspection programs. No formal inspection programs are required for other Saab units.

Saab is not involved in any ongoing disputes concerning the environment. Neither have any authorities imposed any obligations concerning Saab's handling of environmental issues or its usage of chemicals. All units have excellent relations with the authorities involved.

Economics and the environment

Within Saab's premises in Linköping is a disused waste tip. Possible leaching of metals from the tip is monitored regularly by taking samples. During 1998, an estimate will be obtained for removing the tip.

Environmental expenditure in the form of direct charges, fees to Reparegistret and obligatory insurance is put at about SEK 500,000 for 1997. Currently, there is no overall picture of indirect environmental charges or taxes, i.e. these are debited by suppliers when Saab is invoiced for goods or services.

Environmental work within a company involves both costs and savings. As environmental work is successively integrated in operations, it is impossible to specify these costs. The annual cost of the environmental department is about SEK 2.1 m.

The annual cost of R&D directly aimed at reducing the environmental burden of operations is about SEK 1.3 m.

During the year, the direct costs of major environmental investments were about SEK 15 m. (mainly for the replacement of halon). During the period 1998-2002, about SEK 75 m. will be invested in a new system eliminating freon from cooling production in Linköping.

In addition, a large number of indirect environmental investments are made each year in which positive environmental effects result from other investments. An example is the noise and energy reduction from new machines and installations, reduced water and material consumption through the introduction of new processes, and reduced emissions by changing to electric vehicles.