

This is SAAB

This is Saab

an advanced technology company

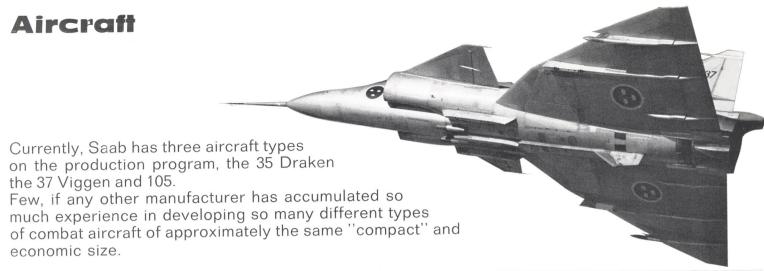
The Saab company was founded in 1937 by private Swedish industry for the production of aircraft for the Swedish Air Force. During World War II, the company developed and produced in large quantities several types of bombers and fighters. A technical pioneer in many fields, Saab was one of the first companies in the world to develop ejection seats. After the war, the company diversified its activities to a considerable extent. In addition to military aircraft, Saab produced two types of civil aircraft, one trainer and one twin engine airliner, and also entered into the field of automobiles. Car production has since expanded rapidly to become a major part of Saab's overall business. During the mid-fifties the company ventured into the field of electronics, initially with fire control systems, bombing computers and automatic flight control systems. During this period, Saab also started to build computers for its own purposes and, in the early sixties, a new product line - the D21 - emerged in the computer field. Saab has recently put a third generation computer, the D22, on the market. In the field of military aircraft, the jet-age at Saab has seen the

development and production of six different types of aircraft in order to fulfil the changing requirements of the Swedish Air Force. Apart from aircraft, the company is also developing and producing several types of guided missiles. In the work to develop new weapons systems for Sweden's defence, Saab's resources in technical personnel and facilities have been greatly increased to include more than 3,000 scientists and engineers. This means that Saab has at its disposal the largest organization in Scandinavia for advanced technical development work. Today, Saab is not only Sweden's largest defence industry but it is also rapidly expanding its activities into many other interesting areas.



Saab Linköping, the head office of the Saab group of companies, is the centre for aerospace development and production.

1963	1964	1965	1966	1967
892.6	1,106.5	1,137.7	1.264 6	1,424.2
71.3	76.0	70.3		84.8
12,639	13,719			13,699
				13,077
652.8	763.3	823.1	864.9	959.5
57.1	58.9	48.6		71.4
24.4	24.8	25.2		27.0
65.9	91.7	90.1		107.8
15.3	19.1	17.5		21.0
17.—	17.69	13.89		16.67
9.—	9.—	9.—		10.—
900,000	1,080,000	1.260.000		1.260.000
10,600	11,000	14,000		14.800
10,771	11,173	11,616	11.220	10,815
	892.6 71.3 12,639 652.8 57.1 24.4 65.9 15.3 17.— 9.— 900,000 10,600	892.6 1,106.5 71.3 76.0 12,639 13,719 652.8 763.3 57.1 58.9 24.4 24.8 65.9 91.7 15.3 19.1 17.— 17.69 9.— 9.— 900,000 1.080,000 10,600 11,000	892.6 1,106.5 1,137.7 71.3 76.0 70.3 12,639 13,719 14,245 652.8 763.3 823.1 57.1 58.9 48.6 24.4 24.8 25.2 65.9 91.7 90.1 15.3 19.1 17.5 17.— 17.69 13.89 9.— 9.— 9.— 900,000 1.080,000 1.260,000 10,600 11,000 14,000	892.6 1,106.5 1,137.7 1,264.6 71.3 76.0 70.3 79.1 12,639 13,719 14,245 14.221 652.8 763.3 823.1 864.9 57.1 58.9 48.6 51.1 24.4 24.8 25.2 21.0 65.9 91.7 90.1 84.0 15.3 19.1 17.5 16.2 17.— 17.69 13.89 12.86 9.— 9.— 9.— 900,000 1.080.000 1.260.000 1.260.000 10,600 11.000 14,000 14,500





The SAAB 37 Viggen is a multi-purpose combat aircraft with short take-off and landing (STOL) characteristics. The Viggen aircraft is designed as a basic flying platform that can be used for all-weather attack, reconnaissance and interception purposes. The great flexibility of the Viggen is due not only to its high performance and special acrodynamic features but also because of its miniaturized Saab-designed digital computer. The STOL characteristics have been obtained

through a completely new and unique wing design with two co-operating delta wings, as well as through the great thrust offered by the RM 8 by-pass engine produced in Sweden by Svenska Flygmotor under Pratt & Whitney licence (JT8D). This Mach 2 class aircraft which has a thrust reverser, requires only approx. 500 m for take-off and landing. 175 Viggens are on order for the Swedish Air Force.

The SAAB 35 Draken double delta wing jet fighter/attack aircraft is currently the backbone of the Swedish Air Force. More than 500 Draken aircraft are on order for the Swedish Air Force which uses not less than six Draken versions for fighter/attack, reconnaissance and training. The latest Draken version, the J35F, with its advanced electronics and missiles is regarded by experts as the most modern interceptor system in service in Europe today.

The versatile Draken has also been further developed into a long-range attack and reconnaissance version, the 35X, (below), forty-six of which have been ordered by the Danish Air Force. This Mach 2 aircraft is powered by a Rolls-Royce Avon Series 300, produced under licence in Sweden. The 35X can carry up to 4.5 tons of weapons and has a max. range of more than 3,000 km.







Originally developed as a private venture, the twin-jet SAAB 105 is in large scale service with the Swedish Air Force for training and light attack operations. While the Swedish A. F. Sk60 versions of the 105 are powered by two French Turbomeca Aubisque by-pass engines, the company has also developed a new version of the aircraft, the 105XT (left) now ordered by Austria, with more powerful General Electric J85 engines offering increased speed and climb performance as well as considerably greater load-carrying capability. The Sk60C attack version (below) can carry several powerful armament alternatives including two 30 mm gun pods, guided missiles and heavy rockets.



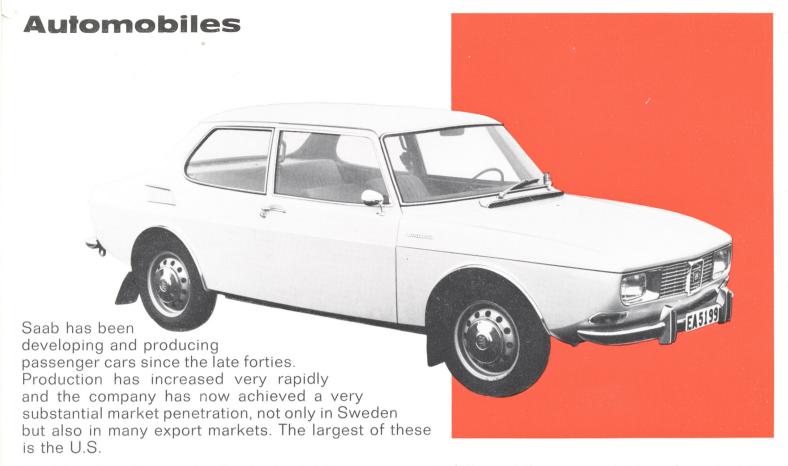
Missiles and Space

In addition to aircraft, the company manufactures three basic types of guided missiles. The largest production program is the licence manufacture of the U.S. Hughes Falcon air-to-air missile (both infra-red Rb 28 and radar- homing Rb 27 versions). Also in production and service is the Rb 08 surface-to-surface missile system for coast defence purposes and for large destroyers. The Rb 08 is based on the French Nord CT20 target drone. Initial production has also started of the Saab-designed Rb 05 air-to-surface weapon.



The Rb 05 missile is included in the armament of both the Viggen and the SAAB 105 and is radio-command controlled by the pilot. Many tests and launchings have been made from the Draken two-seat trainer version (left).

Saab aircraft and missile technology has proved very useful for the company's activities in space research. Saab's largest space program is the telecommunications system for the research satellite being developed for ESRO by the MESH European space industry consortium in which Saab is a member.



Saab has long been using front wheel drive very successfully and the sporty driving characteristics of the car have won it many remarkable international rally victories. The safety thinking, so well developed in the aeronautical industry, has always inspired the Saab car designers too. The current production rate will soon be increased to 70,000 units per year in connection with an extension of the model program in the form of a new and larger model, the SAAB 99, (above). The new car is very roomy and has been designed with particular emphasis on safety and comfort.

The SAAB 95 is a highly practical estate car version of the two-door SAAB 96 Sedan. It can seat up to seven people or carry a load of 500 kg. The 95 is powered by a 73 bhp (SAE) V4 engine. The SAAB 95 is the most sold station wagon in Sweden.

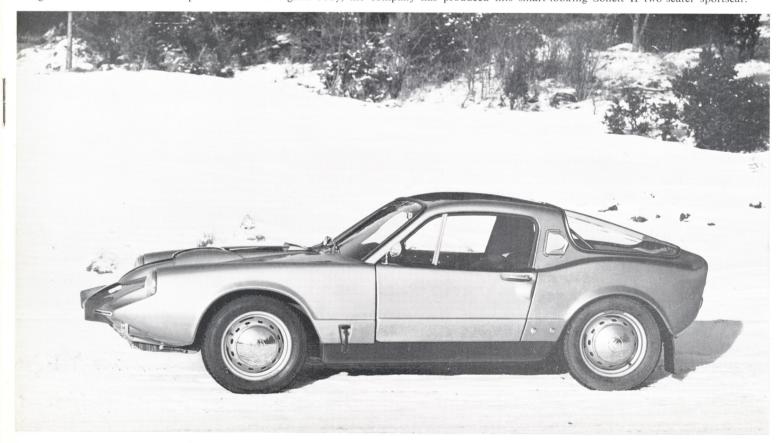




High performance, outstanding safety, economy and excellent driving characteristics are the main features of the SAAB 96. This five-seater family car is the latest development of the famous SAAB car

that has twice won the Monte Carlo Rally and the British R.A.C. Rally three times. The SAAB 96 is one of the most popular cars sold in Sweden.

Using standard Saab chassis components in a fibre-glass body, the company has produced this smart-looking Sonett II two-seater sportscar.



Electronics

DATASAAB is the name of the Computer Division of the Saab group, which since 1960 develops, produces and markets complete data processing systems for commercial/scientific data processing. Computers have been used in developing Saab products — mainly to solve large and complex calculations for aircraft projects. The Viggen system could hardly have been developed without the use of computers. Saab developed the first Swedish completely transistorized computer, the D2, which was the predecessor of the DATASAAB D21 and the CK37 (the Viggen computer).

The D21 is used today mainly for commercial applications by companies and institutions in Scandinavia where it has shown superior characteristics in comparison with computers of other makes. The D21 has been followed in production by the D22, a larger and more modern computer. The DATASAAB product line includes the D21 and D22 data processing systems, the CK37 airborne computer, the Medela data terminal and a computer controlled film scanner.

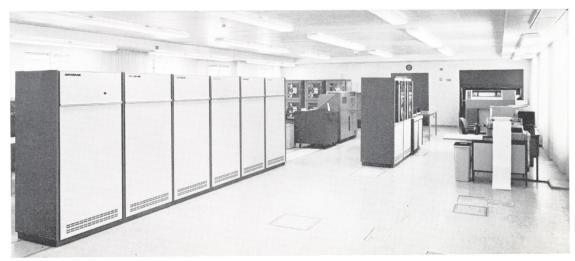
An information system designed for the efficient management of medical records in hospitals, the DATASAAB Medela was introduced in 1965.

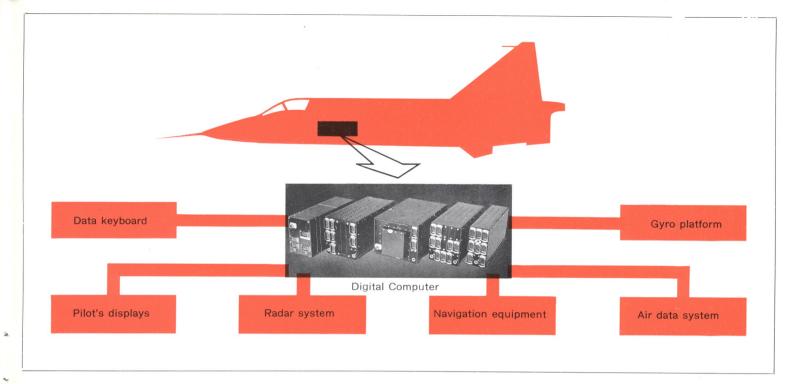


The D21 was the first Saab civil data processing system for both commercial and technical/scientific purposes. For the D21 was developed the problem orientated program language ALGOL-GE-NIUS which for a long time was the only program language on the market for both commercial and scientific applications.

Saab introduced a new computer system in 1966 — the D22. The D22 belongs to the third generation of computers. It has an extremely high speed along with a very large main memory. The D22 is supplied with a large selection of peripheral equipment such as high speed printers, disk storage, cards and paper tape units, mass storage and a variety of data communication equipment. The DATASAAB D22 runs with an advanced multiprogramming, normally only found amongst larger and more expensive systems. The D22 software includes six problem orientated languages, ALGOL, ALGOL-GENIUS, COBOL, FORTRAN, ADAPT and PROSIM (for simulating purposes). Saab's computer systems D21 and D22 are compatible.

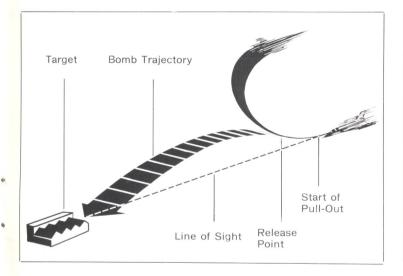




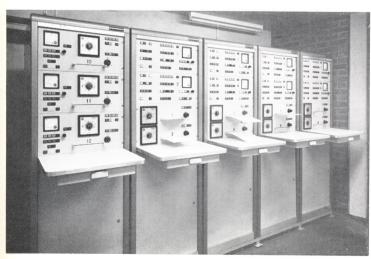


The CK37 is a general purpose miniature computer with an impressive capacity. It backs up the pilot in all mission phases; take-off, approach, attack, return and landing. It can be programmed with tactical data on the ground, with fresh data in the air through a scheme-board input. It checks out on-board systems both during ground readiness and in

flight and it tells the pilot what he needs to know without distracting him, by projecting a head-up display on a reflector-glass in the pilot's line of vision. The drawing above indicates the role of CK37 in the Viggen with the most important sensor systems.







The drawing (above left) shows the principle of the SAAB BT9 bombing computer which is used not only in Swedish attack aircraft but also in several other air forces. Saab has recently developed a new model of this bombing and rocket firing computer with Laser target distance measuring capability.

Another example of Saab's extensive line of military electronic products is the BT16—22 series of self-marking infantry targets and simulators. (above). This training system is controlled by radio and helps to make the soldiers' training quicker, safer and more realistic. The system is used both in Sweden and abroad. The Saab Processer (left) is a system for the automatic control of industrial processes.

The company also produces several advanced types of numerical machine-tool control systems, both for the Swedish industry and for export.

Products and localities

During the years, Saab has built up a very substantial capacity for the research and development and production of advanced weapons systems. The most notable research facilities include an extensive weapons system simulation centre, climatic test chambers for environmental testing, extensive facilities for structures and systems testing and a modern automatic flight test evaluation centre. Extensive production facilities are also available for aircraft, missiles and electronics. Also in the automotive field, many important new research and development and production facilities have been added, not least during the development of the new SAAB 99 model line. This includes a well-equipped engine laboratory, car shake-down and climatic test facilities etc.



Saab Parent Company

Aircraft. Missiles. Combat information and fire control systems. Measuring and recording apparatus. Space research materials. Systems engineering. ■ Linköping. Stockholm. Gothenburg. Ödeshög. Employees: about 6,000



Automobiles. Parts for jet engines. Pressing tools. ■ Trollhättan, Gothenburg. Kristinehamn. Employees: about 3,400



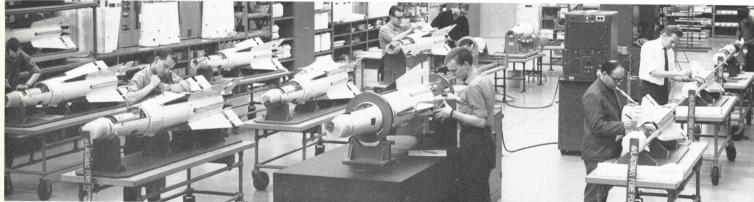
Computers. Computer equipment. Airborne computer systems. ■ Linköping. Gothenburg. Stockholm. Helsinki. Malmö. Oslo. Employees: about 500



Airborne equipment. Industrial control systems. Medical equipment. Military training equipment. Jönköping. Stensholm. Stockholm. Employees: about 900







Left: The Saab Trollhättan automobile final assembly facility will soon turn out approx. 70,000 units per year.

Top: Quantity production in Linköping of the SAAB 105 and 35 Draken jet aircraft. Well over 500 Draken and 170 of the 105 type are on order. Above: Final assembly at Saab Linköping of the Hughes Falcon air-to-air missiles.

Business aircraft: Cessna. Helicopters: Hughes, Alouette. Engine overhauls. Aircraft servicing. Norrköping. Stockholm. Malmö. Sundsvall. Employees: about 70



Saab Group Companies

AB Nyköpings Automobilfabrik, Nyköping. ANA branches, 24 Automobiles, commercial vehicles and buses: SAAB, Chrysler, Rootes, Büssing. Tractors, combine harvesters and industrial machines: Massey-Ferguson, Forestry and agricultural machinery. Employees: about 2,500

AB Mikro-Verktyg and AB Kugghjul, Södertälje. Precision tools. Special machines. Special gearboxes. Gears. Employees: about 150



SAAB-USA, Inc. and SAAB Motors, Inc., New Haven, USA; Saab (Gt Britain) Ltd., Slough, England; SAAB Deutschland GmbH, Frankfurt a/M, Germany. Sales of SAAB automobiles, aerospace and automotive purchasing. Employees: about 200







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