

# RUAG



ANNUAL REPORT 2002

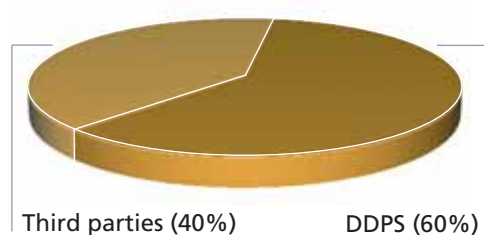
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## Overview of key figures

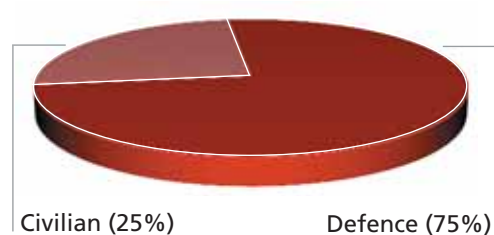
	2002	2001*	Change in %
Order backlog	888.2	955.5	-7.0%
Net sales	1'006.0	982.1	2.4%
EBIT	63.5	93.9	-32.3%
Operating profit	44.0	111.0	-60.4%
Free cash flow	(52.7)	(85.1)	38.1%
Return on equity	7.1%	21.2%	-66.7%
Net capital expenditure	148.9	139.1	7.1%
Research and development	46.7	39.3	18.8%
Number of employees (average for year)	4'544	4'165	9.1%

\*All figures restated in accordance with IFRS.

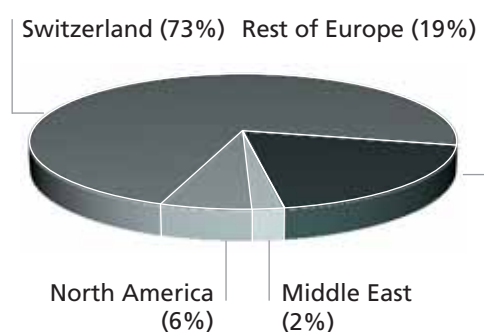
**Net sales by customer group**



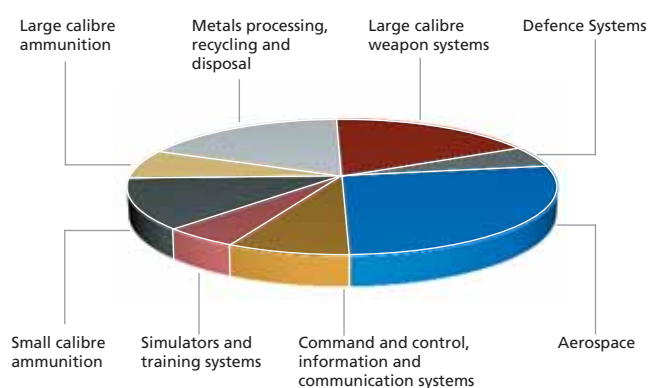
**Net sales by application**



**Net sales by region**



**Business Divisions**

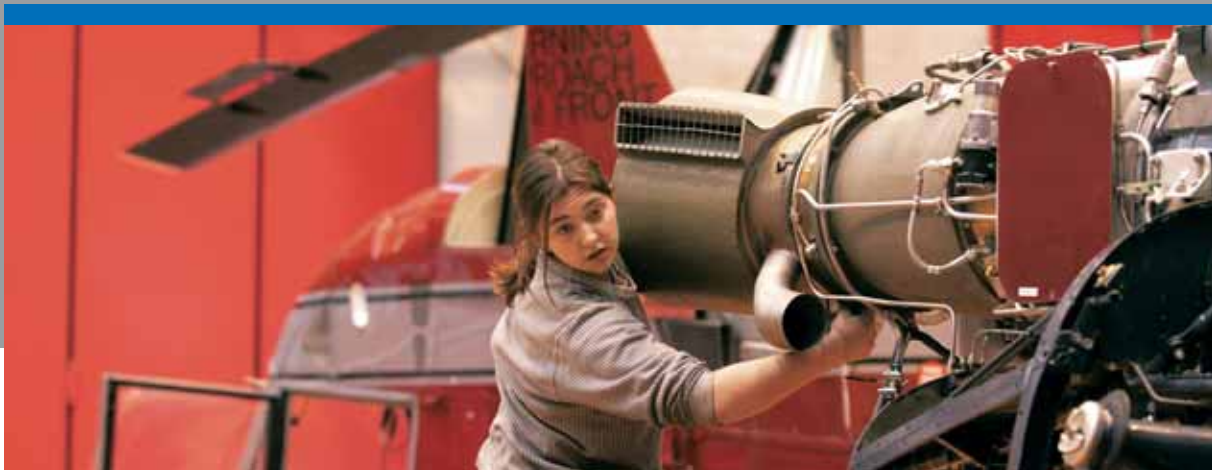




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Young women are increasingly attracted to the technical professions

## Business activity

# RUAG consolidates its position in a difficult environment

The Swiss economy has been greatly affected by the global economic downturn. The fourth-quarter recovery which was anticipated at the beginning of the year failed to materialize. Instead general stagnation bordering on recession was observed towards the end of the reporting period. The capital goods industry was particularly hard hit by the global economic downturn. The strength of the Swiss Franc proved to be an added difficulty for various sectors of the economy.

Although the RUAG technology group, a supplier of military and civilian products and services, was not unaffected by the economic situation, it significantly strengthened two of its divisions – small calibre ammunition and aviation – by acquisitions. These will have a positive effect in the future and can be viewed as a success. Overall, RUAG achieved a respectable result in 2002 under difficult economic circumstances.

## Market

Business with the major customer, the Swiss Federal Department of Defence, Protection of the Population and Sport (DDPS), for the benefit of the Swiss Armed Forces, continued to decline.

There were even unplanned cuts in orders in the course of the year in addition to the anticipated continuation of the long-term downward trend, which is the result of cutbacks in the size of the Armed Forces and reduced national defence spending.

The Swiss Armed Forces accounted for around 60% (previous year 73%) of RUAG's sales. RUAG was able to provide the services demanded with the requisite quality and reliability. The overall volume of maintenance work was practically unchanged. There are three major influencing factors – firstly the level of use, secondly the decommissioning of old weapon systems, both of which entail a reduction in volume, and thirdly the fact that modern, technologically more sophisticated systems place greater servicing demands on industry.

The reporting year saw the reaching of a critical limit in terms of maintenance work, because cash flow problems at the DDPS meant that it could not always provide the necessary funds on time, which sometimes had a negative effect on the punctual procurement of spare parts. This almost resulted in a partial shutdown of certain systems. However, RUAG worked with the DDPS to find a solution that permitted completion of the relevant orders to the customer's satisfaction.

As stated in last year's annual report, RUAG and the Federal Government are on the threshold of a ground-breaking decision as regards heavy ammunition. Swiss Armed Forces orders will soon run out and subsequent procurement is not anticipated at present. Despite being a technological leader in the field, RUAG will hardly be able to maintain the appropriate expertise and production on the basis of the future needs of the Swiss Armed Forces alone.

Third-party business accounted for 40% of total sales (27% in 2001). Third-party business includes the civilian sectors and defence technology other than DDPS orders. It should be remembered that civilian small calibre ammunition for hunting and sporting purposes was not consolidated until August. As soon as the aviation, automotive and semiconductor industries recover when demand improves, RUAG, as a supplier to all three areas, will be able to expect growth, following a strengthening of the relevant business and customer relationships in the reporting year.

## Acquisitions

RUAG took a majority holding in the small calibre ammunition business of Dynamit Nobel, which has production sites in Stadeln/Fürth (Germany), Sulzbach-Rosenberg (Germany) and Arnoldsfors (Sweden). This has made RUAG a European market leader in the small calibre ammunition business. While RUAG in Thun has specialized in service-issue and special-purpose ammunition for over 150 years, the acquisition has brought in extremely well-positioned brand products for hunting and sporting purposes. Propellant cartridges for the commercial fixings industry complete the range of products. The transnational small calibre ammunition business was successfully launched under the name of RUAG Ammotec. The process of integration and exploitation of synergies has begun.



Trainees make up roughly 10 percent of the workforce

Shortly before the end of the reporting year RUAG was able to acquire two divisions of the insolvent Fairchild Dornier GmbH based in Oberpfaffenhofen (Germany). One of the divisions has been operating as RUAG Aerospace Services GmbH since the beginning of 2003, and the other as RUAG Aerospace Structures GmbH. Both divisions will be consolidated from 2003.

RUAG Aerospace Services maintains Bombardier Challenger, Do 228 aircraft and Bell-UH-1-D helicopters on behalf of the German Federal Ministry of Defence. Civilian maintenance business includes the Do 228 and Do 328 aircraft and a Cessna service centre.

RUAG Aerospace Structures produces large assemblies for Airbus aircraft. Both divisions report to RUAG Aerospace in Emmen.

These acquisitions are important stages on the path to achieving the expansion objectives specified in the Group strategy.

## Sales

The 2002 financial statements are the first to comply with IFRS (International Financial Reporting Standards), formerly IAS. For ease of comparison, last year's figures have been restated in accordance with the new standard.

The RUAG Group increased its sales by 2.4%, to CHF 1'006 million (CHF 982 million in 2001). However, without the

new small calibre ammunition business consolidated from August, there would have been a fall to CHF 935 million (-4.8%), primarily due to the decline in defence technology business with the DDPS. On the other hand, business with third parties increased sharply from CHF 265 million to CHF 389 million.

## Capital expenditure

RUAG's capital expenditure totalled around CHF 149 million (previous year: CHF 139 million). This included the acquisition of the small calibre ammunition division of Dynamit Nobel. The remaining investments focused mainly on modernizing production capacity in key strategic areas.

## Earnings

Earnings before interest and tax (EBIT) totalled CHF 64 million (previous year: CHF 94 million). The operating result in the reporting year did not meet expectations. However, it must be taken into account that the previous year's EBIT was positively influenced by the one-off write-back of reserves of CHF 22 million. The reporting year also saw unscheduled write-downs totalling a further CHF 14 million on fixed assets in the heavy ammunition sector, amortization of goodwill and the loss resulting from the bankruptcy of Swisswings.

The sharp decline in net profit to CHF 44 million (previous year: CHF 111 million) is a reflection of various factors: The net profit achieved in 2001 bene-

fited greatly from the release of provisions for pension commitments totalling CHF 64 million, which were no longer required due to a change in the law. On the other hand, the unscheduled depreciation and amortization, the financing costs for the acquisition made in the small calibre ammunition sector and the unfavourable Swiss Franc/dollar exchange rate had a negative impact on the net profit for the financial year.

CHF 47 million (previous year: CHF 39 million) were spent on research and development.

Despite the difficult economic conditions, RUAG has a solid base. The current, acquisitions-fuelled rate of growth has to be slowed down and consolidated into strong profitability.

## Staff

The workforce increased from an average of 4'165 over the year to 4'544, due to the acquisition in the small calibre ammunition sector. There were 5'076 full-time posts in the Group on 31 December 2002, compared to 4'179 in 2001. Jobs were lost as a result of the consolidation of ammunition production at the Thun site and the establishment of component manufacturing at Altdorf.

Job cuts were announced in the aerospace construction business unit of RUAG Aerospace as a result of the marked fall in civil aviation assembly orders and partially implemented in the reporting year.



Job satisfaction is within the benchmark range

In respect of restructuring, an “Agreement on socially acceptable measures” was concluded between unions and employers and implemented with effect from 1 January 2002. The agreement contains a whole range of measures, from alternative employment within the Group to the operation of job centres, to prevent or reduce hardship for those concerned.

Staff surveys on job satisfaction yielded results within the benchmarking range of similar companies. Two pilot projects for the introduction of an annual working time system produced positive results. Preparations began for membership of Swissmem in 2004 and thus accession to the collective wage agreement for the engineering industry.

The number of apprentices training in nine trades at RUAG was maintained at almost 10% of the total workforce.

### Real estate

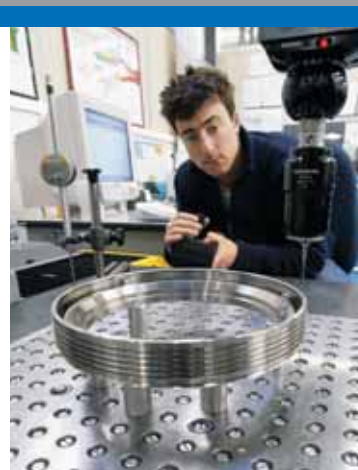
Further steps were taken in the reporting year as part of RUAG's existing real

estate strategy. The business park properties at the RUAG Electronics site in Berne and the properties at the Aigle and Brunnen sites were spun off to form an independent real estate company. A substantial proportion of the non-essential real estate at these sites was thus placed under single, professional management.

The introduction and systematic implementation of the market price model at properties for own use has resulted in more intensive use of the available space.

### Prospects

All the relevant forecasts for the 2003 financial year again anticipate an unfavourable overall development. Recovery is not generally expected until the following year. RUAG will do its utmost to meet this challenge and withstand the increasing competitive and price pressure. However, the level of orders at the end of 2002 – around 85% of annual sales – permits a healthy degree of optimism.



Quality is the starting point for excellent products

Report by the Board of Directors

## Leadership in key positions

The unusually high occurrence of executive malpractice in international and national businesses has triggered a wide-ranging and critical global debate on business responsibility and ethics. While the necessity of exposing and prosecuting criminal practices is undisputed, it also set in motion numerous political attempts to discredit decision-makers in managerial and supervisory roles with blanket accusations. Whether and how badly trust in business has been permanently damaged, not only by the misconduct of individuals but also by sometimes excessive criticism, remains to be seen.

At all events, the Board of Directors of RUAG is paying proper attention to further developments in the conflict between business/politics/society and "corporate governance". Although clear responsibilities, secure decision-making processes and adequate supervision are crucial to successful corporate management, so too it is vital to have honourable, competent individuals and leadership in the key positions in industry.

### Strategy and business planning

In addition to overall supervision of operational management of the Group, the Board of Directors also worked intensively on a number of opportunities during the reporting year and studied their strategic viability. This ultimately led to two major acquisitions, as described in the "Business Activity" section of the report. The business plan for the period 2003 to 2006 was also approved.

### Legal compliance

RUAG is aware of its responsibility as a supplier of defence-related products. The Board of Directors highlights this in its new mission statement, particularly in respect of legal compliance, by adopting a code of practice for the export of weapons and establishing a Central Office against Illegal Exports of War Material. This Office is at the disposal of the operational companies for internal preliminary review of defence export tenders, so that compliance with both statutory and international requirements is adequately appraised prior to consultation with the licensing authorities.

Further anti-corruption regulations have been put in place without any direct, immediate cause. The sales staff are required to comply with the relevant rules and an internal Compliance Office provides them with information and advice. RUAG expects its staff, customers and suppliers to conduct their business transactions properly, even in the current difficult competitive environment.

### Owner's strategy

With its resolution of September 1998, the Swiss Federal Government, as sole shareholder in RUAG Holding, put into place an owner's strategy that is valid until the end of 2002. It specifies, among other things, the core activities that RUAG has to provide for the Swiss Armed Forces. Accordingly, RUAG's operations for the Armed Forces focus primarily on the servicing of the Swiss

Armed Forces' weapon systems and equipment, and the maintenance and enhancement of its combat effectiveness. The maintenance of an adequate production capability to supply specific types of ammunition must be guaranteed. Furthermore, the companies are to expand their military and civilian offerings at home and abroad to provide a broader base for their core activities.

RUAG fulfilled the objectives of the current owner's strategy in the reporting year, despite the continued decline in the volume of orders from its main customer.

In November the Swiss Federal Government expanded and refined some aspects of its owner's strategy for RUAG to take account of the current reform of the Armed Forces. It is based on the armaments policy that applies to the entire military industry in Switzerland. The revised owner's strategy is valid for the period 2003 to 2006. The Board of Directors thus regards it as the basis for consistent continuation of RUAG's industrial operations in the interests of Swiss national defence.

### Discretionary business

Peter Siegenthaler, Director of the Federal Finance Administration, resigned as government representative on the RUAG Board with effect from the date of the annual shareholders' meeting.

The shareholders' meeting expressed its appreciation of his contribution.



As a supplier of defence technology products, RUAG bears a special responsibility

Dr Peter Saurer, Deputy Director of the Federal Finance Administration was elected his successor. In view of impending retirements, the Board was augmented by the appointment of Konrad Peter and Hans-Peter Schwald.

Urs Kiener was elected the new Group CFO and a member of the Executive Board with effect from 1 April 2002, replacing Kurt Dolder, the previous Head of Finance and Accounting, who retired. He also replaced his predecessor in the RUAG pension fund foundation. Rolf Müller, Managing Director of RUAG Components, was elected employer representative on the board of trustees of the RUAG pension fund, replacing Peter Schäublin, Managing Director of RUAG Ammotec.

The shareholders' meeting adopted the 2001 accounts, discharged the executive bodies and approved the first-time payment of a dividend.

### Acknowledgements

The Board of Directors thanks its customers for their trust and for their orders. RUAG gives top priority to customer satisfaction, and customer surveys were carried out in individual divisions of the company, with pleasing results.

Thanks are due to the Swiss Federal Government for its cooperation, and to the Group's management and staff for their professional commitment in a very difficult economic environment.

Walter Bürgi

Chairman of the Board of Directors

Toni J. Wicki

CEO



The Board of Directors, from left to right:

Dr Peter Saurer, Dr Hanspeter Käser, Konrad Peter, Hans-Ulrich Scherrer, Dr Walter Bürgi, Toni J. Wicki, Roland Zimmerli, Hans-Peter Schwald

## Members of the Board of Directors

Name	Born	Position	Joined	Elected until
Walter Bürgi	1934	Chairman, non-executive	1999	2003
Roland Zimmerli	1934	Vice Chairman, non-executive	1999	2003
Toni J. Wicki	1944	Chief Executive Officer	1999	2003
Hanspeter Käser	1943	Non-executive member	1999	2003
Konrad Peter	1945	Non-executive member	2002	2006
Hans-Ulrich Scherrer	1942	Non-executive member	1999	2003
Peter Saurer	1945	Non-executive member	2002	2006
Hans-Peter Schwald	1959	Non-executive member	2002	2006

## Executive Board

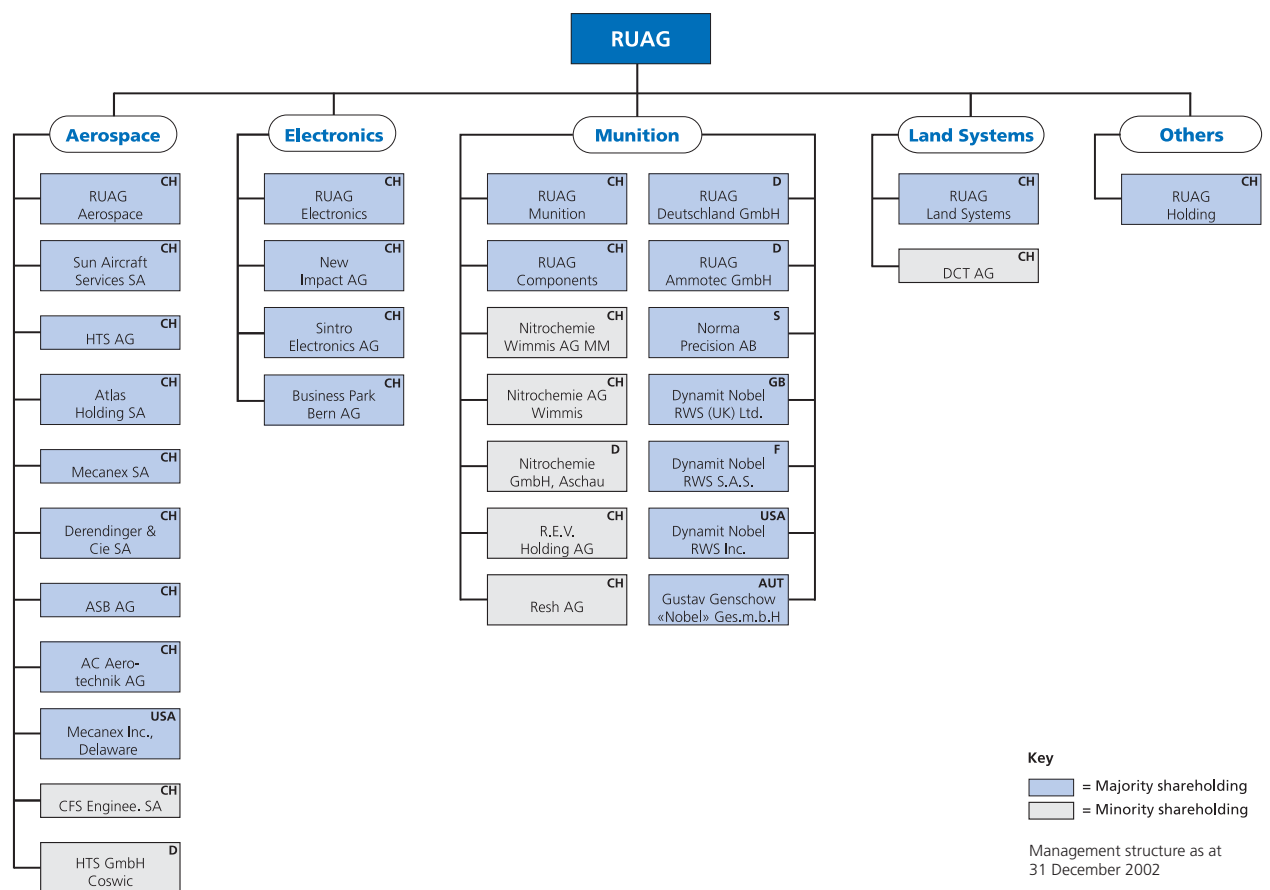
Name	Born	Position	Joined
Toni J. Wicki	1944	Chief Executive Officer	1999
Ueli Emch	1945	Member, Head RUAG Electronics	1999
Urs Kiener	1965	Member, Chief Financial Officer	2002
Eduard Knecht	1954	Member, Group Head Human Resources	1999
Stefan Kocher	1944	Member, Head RUAG Land Systems	1999
Paul A. Moser	1944	Member, Head RUAG Munition	1999
Peter Schneuwly	1945	Member, Head RUAG Aerospace	2001
Martin Stahel	1946	Member, Head Group Services	2000

Detailed personal profiles of the individual members of the Board of Directors and Executive Board can be found on the RUAG website at [www.ruag.com](http://www.ruag.com).



Adjustments being made to the "Panzerfaust" simulator

## Subsidiaries and affiliates





Payload fairings for civilian Stage 1 rockets



## Corporate Governance

### Background

This report on corporate governance describes the principles of management and control at the most senior level of the RUAG technology group, in accordance with the guideline concerning information on corporate governance (the Corporate Governance Guideline) of SWX Swiss Exchange. Unless otherwise specified, the information is applicable as at 31 December 2002.

### Board of Directors

The duties of the Board of Directors of RUAG Holding are governed primarily by the Swiss Code of Obligations, the Federal Council's owner's strategy, the Articles of Association and the Regulations Governing Organization and Operations.

The Board of Directors of RUAG Holding consists of eight individuals. The Chief Executive Officer is currently the sole executive member of the Board of Directors. The non-executive members of the Board of Directors have no material business relationship with the RUAG Group. The list on page 8 provides information about the name, age, position, date of joining and remaining period in office of the individual members of the Board of Directors:

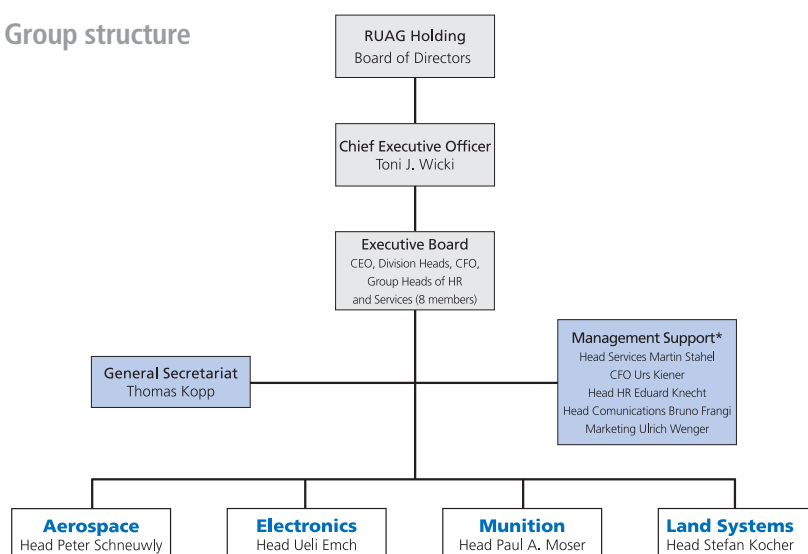
### Conflicts of interest

The members of the Board of Directors of RUAG Holding do not sit on the board of any other listed company.

### Election and term of office

The Board of Directors of RUAG Holding is elected by the annual shareholders' meeting. In accordance with the Articles of Association, the Board of Directors consists of at least three individuals. A

### Group structure



\* Finance/Controlling, HR, Communications, Marketing, Technology, Legal, Internal Audit

Detailed information regarding the legal structure can be found in the Financial Statements 2002 on page 34.

majority of the members of the Board of Directors must be Swiss nationals domiciled in Switzerland. The members of the Board of Directors are elected for a four-year term and may be re-elected. The Board of Directors is responsible for defining the rotation of such elections.

### Internal organization

The Board of Directors is ultimately responsible for the business strategy and overall management of the RUAG Group. It has the uppermost decision-making powers and determines the guidelines for strategy, organization, financial planning and accounting that are to be pursued by the RUAG Group. The Board of Directors has delegated the management of day-to-day business to the Chief Executive Officer (CEO). The latter shall be responsible for the overall management of the RUAG Group and for all matters not assigned to another corporate body

under the terms of Swiss law, the Articles of Association, owner's strategy of the Federal Council and Regulations Governing Organization and Operation.

The main duties of the Board of Directors, under the terms of the Swiss Code of Obligations and Articles of Association of RUAG Holding, are:

- The strategic focus and management of RUAG in accordance with the owner's strategy of the Federal Council
- The structuring of the accounting function, financial controlling and financial planning
- The appointment and dismissal of members of the Executive Board and other senior executives
- Overall supervision of business operations
- Production of the annual report, as well as the preparation of shareholders' meetings and implementation of resolutions passed by the latter



Decisions are taken by the Board of Directors as a whole. To assist the Board in its role, two committees have been formed: an Audit Committee and a Compensation Committee. In the 2002 financial year, the Board of Directors held regular meetings on seven occasions and on one occasion held an extraordinary meeting. In addition, the committees met on seven occasions.

The agenda for meetings of the Board of Directors is set by the Chairman at the request of the Chief Executive Officer. Any member of the Board of Directors may request that an item be included in the agenda. The members of the Board of Directors are provided with documentation prior to each meeting of the Board of Directors to enable them to prepare for the items to be discussed. The Board of Directors ensures an exchange of views with the senior executives of the company and regularly visits one or more of the RUAG Group's sites.

## Committees

The Board of Directors has formed an Audit and a Compensation Committee. These committees are chaired by an appointee of the Board of Directors. The committees meet regularly to draw up the minutes of meetings and recommendations for discussion at the regular meetings of the Board of Directors. The agenda of committee meetings is set by the respective chairman. The members of the committees are provided with documentation prior to the meetings to enable them to prepare for the items to be discussed.

### Audit Committee

The Audit Committee is comprised of at least two non-executive members of

the Board of Directors. The Audit Committee is currently comprised of four members: Walter Bürgi, Toni J. Wicki, Hanspeter Käser and Peter Saurer, the Chairman being Walter Bürgi. The members of the Audit Committee are experienced in financial and accounting matters by virtue of their professional backgrounds. The Audit Committee meets at least once annually, although it may be convened by the Chairman as and when business requires. The meetings are attended by the Head of Group Services, Chief Financial Officer, Internal Auditor and Representative of the External Auditors. The Audit Committee keeps minutes of the deliberations and resolutions of the meetings.

The main duty of the Audit Committee is to uphold a comprehensive and efficient audit structure for RUAG Holding and the RUAG Group. With regard to external auditing, the duties of the Audit Committee include:

- Approval of the main elements of the audit.
- Acceptance of the audit report and any recommendations of the auditors, prior to the annual accounts (individual and consolidated) being submitted to the overall Board of Directors for approval.
- Submitting a proposal to the overall Board of Directors regarding which external firm should be proposed to the shareholders' meeting for election as auditor and group auditor, assessing the service provided, remuneration and independence of the external auditors as well as supervising the compatibility of audit activities with any consultancy mandates.

It regulates and monitors internal auditing. The Audit Committee regularly provides the overall Board of Directors

with a report on its activities, and immediately informs the Board of any important matters.

### Compensation Committee

The Compensation Committee comprises the Chairman, Vice-Chairman and Chief Executive Officer, i.e. two non-executive members and one executive member of the Board of Directors. The position of Chairman is currently held by Walter Bürgi; Roland Zimmerli and Toni J. Wicki are the other members of the Compensation Committee.

The duty of the Compensation Committee is to submit the compensation package for the members of the Board of Directors to the overall Board of Directors for approval and, at the request of the Chief Executive Officer, to determine remuneration policy for the members of the Executive Board and approve the emoluments of the members of the Executive Board (whereby Toni J. Wicki does not participate in the case of his own emoluments). The Compensation Committee meets at least once a year.

### Information and controlling tools in relation to the Executive Board

The Management Information System (MIS) of the RUAG Group is structured as follows: Individual financial statements (balance sheet, income and cash flow statements) for the individual subsidiary companies are compiled monthly, quarterly, semi-annually and annually. These figures are compared with the budget for each division and for the Group on a consolidated basis. The budget, which represents the first year of a four-year plan for each subsidiary, is examined on the basis of quarterly results in the form of a forecast as to its feasibility.



The Chief Executive Officer provides the Board of Directors with a monthly written report on the feasibility of the budgeted figures.

## Executive Board

### Management organization

The Board of Directors has appointed an Executive Board under the chairmanship of the Chief Executive Officer. Its powers and duties are set out in the Regulations Governing Organization and Operations, as well as in the description of the functions of the Chief Executive Officer.

The divisional heads report to the Chief Executive Officer, who is responsible for overall management and cross-divisional cooperation.

The CEO, Divisional Heads, Head of Group Services, Chief Financial Officer and Head of Human Resources sit on the Executive Board (8 members).

### Chief Executive Officer

The Chief Executive Officer manages RUAG. His duties are all those not assigned to another company body under Swiss law, the Articles of Association and Regulations Governing Organization and Operations. The Chief Executive Officer submits the strategy, long and medium-term objectives, as well as the management guidelines of RUAG to the Board of Directors for their approval. At the proposal of the Chief Executive Officer, the overall Board of Directors decides the four-year corporate plan, the annual budget, individual projects, individual and consolidated statements as well as human resources issues. At the request of the Chief Executive Officer,

the Compensation Committee approves the remuneration of the members of the Executive Board as well as insurance issues.

The Chief Executive Officer regularly provides reports to the overall Board of Directors on the business performance, anticipated business matters and risks, as well as changes at the more junior management level. The members of the Board of Directors may request and examine additional information. The Chief Executive Officer must inform the Chairman without delay of any significant, unexpected developments.

The Chief Executive Officer regularly monitors whether the Articles of Association as well as the regulations and signatory powers issued by the Board of Directors require amendment and applies for such amendments to be made.

### Members of the Executive Board

The list on page 8 provides information about the name, age, position, date of joining and remaining period in office of the individual members of the Executive Board.

### Management mandates

No management mandates have been concluded by RUAG Holding and its group companies with any third parties.

### Compensation, profit-sharing and loans

#### Contents of, and process for determining compensation

For their services, the members of the Board of Directors receive compensation, for which application is made from

time to time through the Compensation Committee and determined by the overall Board of Directors.

The senior managers of the RUAG Group are compensated on a performance-related basis. The variable components of overall emoluments are based upon the achievement of pre-agreed, individual performance targets and upon the consolidated results. At the request of the Chief Executive Officer, the Compensation Committee approves the remuneration of the members of the Executive Board.

There are no profit-sharing schemes that allow for the purchase of shares or warrants.

### Compensation for incumbent company officers

The overall emoluments (excluding employer contributions to statutory retirement and survivors' insurance) paid to non-executive members of the Board of Directors in the 2002 financial year amounted to CHF 0.5 million.

The overall amount (including all employer contributions to pension funds, excluding employer contributions to statutory retirement and survivors' insurance or similar statutory social insurance contributions) paid to the executive member of the Board of Directors and the other members of the Executive Board in the 2002 financial year amounted to CHF 2.6 million.

In the 2002 financial year, no severance compensation was paid to non-executive members of the Board of Directors or members of the Executive Board having terminated their function with the company.



## Maximum overall compensation

The maximum overall compensation (including all employer contributions to pension funds, but excluding employer contributions to statutory retirement and survivors' insurance) paid to the executive member of the Board of Directors in the 2002 financial year amounted to CHF 0.6 million.

## Compensation for former company officers

No compensation was paid during the financial year to non-executive members of the Board of Directors or members of the Executive Board having departed during the financial year, in the prior-year period or previous to that after the departure of such members.

## Additional fees and remuneration

During the 2002 financial year, the members of the Board of Directors and Executive Board and/or closely connected individuals did not receive any fees or other remuneration for additional services provided to RUAG Holding or one of its Group companies.

## Company loans

The members of the Board of Directors or Executive Board and/or closely connected individuals are not, or were not, involved in transactions outside the normal business activities of RUAG Holding or one of its Group companies, or in any other transactions which are in some shape or form unusual yet significant for RUAG Holding, during the current or preceding financial year.

As at 31 December 2002, RUAG Holding and its Group companies had not pro-

vided any securities, loans, advances or credits to the members of the Board of Directors or Executive Board and/or closely connected individuals.

## Capital structure

The share capital of RUAG Holding amounts to CHF 340'000'000, comprising 340'000 fully paid-up registered shares, each with a par value of CHF 1'000. As at 31 December 2002, RUAG Holding did not have any conditional or approved capital, nor had it issued participation or dividend-right certificates. The registered shares of RUAG Holding are not listed.

## Changes to capital in the last three financial years

On 5 July 2001, the extraordinary shareholders' meeting of RUAG Holding approved the following change in the capital structure:

An increase in the share capital of CHF 50'000'000, from CHF 290'000'000 to CHF 340'000'000, through the issue of 50'000 registered shares to be fully paid up, each with a par value of CHF 1'000.

## The shares

At shareholders' meetings of RUAG Holding, each registered share carries one vote. The voting right may only be exercised if the shareholder is registered in the RUAG Holding share ledger as a shareholder with voting rights. The registered shares carry full dividend entitlement.

## Share ledger

The Board of Directors keeps a register of shareholders.

## Shareholder structure

### Shareholders

The Swiss Confederation owns 100% of the share capital and all the voting rights in RUAG Holding. The Federal Department of Defence, Protection of the Population and Sport represents the shareholder interests of the Swiss Confederation, under the terms of the Federal Act on State-Owned Armaments Companies, art.3, section 2.

### Owner's strategy of the Federal Council

The owner's strategy of the Federal Council creates the transparent, binding framework conditions which enable RUAG Holding and its Group companies to fulfil their duties on an economic basis while taking account of the broader interest. The owner's strategy is anchored in the Articles of Association of RUAG Holding. In its owner's strategy the Federal Council lays down strategic objectives in the interest of Swiss national defence, expectations regarding cooperation and joint undertakings as well as human resources policy and financial objectives. The binding owner's strategy of the Federal Council for the years 1999 to 2002 was updated last year on the basis of economic changes and reforms within the Department of Defence, Protection of the Population and Sport, and was approved by the Federal Council on 1 January 2003 for the years 2003 to 2006.

### Swiss Confederation representation on the Board of Directors

In addition to the representative of the Department of Defence, Protection of the Population and Sport (post currently



held by Hans-Ulrich Scherrer), a representative of the Federal Finance Administration (post currently held by Peter Saurer) sits on the Board of Directors of RUAG Holding.

### Cross-shareholdings

RUAG Holding has not entered into any cross-shareholdings with other companies, either in terms of capital or votes.

### Codetermination rights of shareholders

#### Voting right restrictions and representation

At shareholders' meetings of RUAG Holding, each registered share carries one vote. A shareholder may be represented by another shareholder only by written proxy.

### Statutory quorums

The statutory quorums as set out in the Swiss Code of Obligations (art. 704) apply to the following resolutions:

- Changes to the object of the company
- Introduction of voting shares
- Restrictions on the transferability of registered shares
- Approved or conditional capital increase
- Capital increase out of own resources, in return for contribution in kind or for the purpose of acquisition in kind and the granting of special benefits
- Restriction or abolition of subscription rights
- Relocation of the company's registered office
- Dissolution of the company without liquidation procedure.

### Convening of shareholders' meetings and setting of agenda

The convening of the shareholders' meeting and setting of its agenda are conducted in accordance with statutory provisions.

### Change in control and defensive measures

#### Obligatory offer for sale

There are no statutory provisions concerning opting-out and opting-up (Stock Exchange Act., art. 22).

#### Change in control clauses

Under the terms of the Federal Act on State-Owned Armaments Companies, any disposal of the capital or voting majority of the Swiss Confederation to third parties requires the approval of the Federal Assembly. That aside, there are no specific clauses consequent upon a change in control of RUAG Holding.

### Auditors

#### Duration of mandate and term of office for lead auditor

PricewaterhouseCoopers AG, Berne, have been auditors to RUAG Holding since 1999 and Group auditors to the RUAG Group since 1999. The senior auditor has been responsible for the audit mandate since 2000 (RUAG Holding) and since 2000 (RUAG Group).

#### Audit fees and additional expenses

In the 2002 financial year PricewaterhouseCoopers billed RUAG CHF 0.8 million for its services in connection with



the auditing of the annual accounts of RUAG Holding and the Group companies as well as the auditing of the consolidated financial statements of the RUAG Group.

In addition, PricewaterhouseCoopers billed RUAG CHF 3.4 million in respect of management consultancy, tax advisory and due diligence services as well as other auditing services in the context of internal auditing.

### **Supervisory and controlling tools in relation to auditing**

The Audit Committee of the Board of Directors evaluates the performance, fees and independence of the auditors

and of the Group auditor on an annual basis and submits to the Board of Directors a proposal as to which external auditor should be recommended to the shareholders' meeting for appointment. The Audit Committee then monitors on an annual basis the scope of external auditing, the auditing plans and the relevant processes and in each case discusses the audit results with the external auditors.

### **Information policy**

RUAG pursues an open information policy in relation to the public and to the financial markets. The reported figures extend beyond the statutory requirements in terms of transparency.

### **Important dates:**

Financial year-end:	31.12.2002
Announcement of annual results:	29.04.2003
Publication of Annual Report:	29.04.2003
Shareholders' meeting:	20.05.2003

The Annual Report, covering the year to 31 December 2002, is sent to shareholders together with an invitation to attend the annual shareholders' meeting.

Current annual reports and press releases may be found at [www.ruag.com](http://www.ruag.com). Media conferences are held at least once a year.



Expansion of the maintenance base for executive aircraft within Switzerland

Business divisions\*:

## Aerospace

RUAG Aerospace has further consolidated its core competencies in the provision of technical support to those aviation systems entrusted to it by the Department of Defence, Protection of the Population and Sports (DDPS). Direct access to both the aircraft and helicopter maintenance sector as well as to the government-sponsored and commercial aerospace sectors has now been achieved.

### Military aviation

The DDPS continues to be RUAG Aerospace's main military aviation customer. Its activities on behalf of the Air Force include demanding industrial maintenance tasks and system improvements to helicopters, combat and training aircraft and drone systems. As well as the maintenance line for the F/A-18 combat aircraft, preparations are under way on another line for extensive modifications in advance of the planned "Upgrade 21 Programme".

A milestone was reached with the delivery of the final "TH-98 Cougar" helicopter in the middle of the year. Final assembly was therefore successfully completed on schedule. The prototype phase for integrating the "Issys" self-protection system – an in-house development – was successfully concluded in autumn. Preparatory work has started on integrating this self-protection system into the TH-98 fleet.

The technically complex "Frequency Change Data Link Drone System ADS-95" project was successfully completed

at the end of 2002 several months ahead of schedule. The technology for "Opats", the automatic drone landing system, was successfully updated, and international sales have got off to a good start.

### Civil aviation

As regards civilian aircraft and helicopter maintenance, ASB (Bern/Belp), Sun Aircraft Services AG (Agno) and AC Aero-technik AG (Buochs) provide a sound basis within Switzerland. This network was extended by the setting up of the servicing facility in Kloten.

The abandonment of planned projects, the slow-down in delivery rates for current programmes and hesitation over placing new orders have mainly affected aircraft construction work.

Nonetheless, significant investment in production facilities has created the right conditions for future growth in aircraft construction work. The modernized range of machinery in the new metal-removing production department is capable of producing larger steel, titanium and aluminium components more accurately and more competitively. RUAG Aerospace is already producing components, prior to their final assembly, for the outer fixed trailing edge of the Airbus A380's wings.

### Aerospace

Customers have also slowed down delivery rates on aerospace programmes. At the same time, competition has in-

tensified. Thanks to infrastructure modifications, RUAG Aerospace is now able to handle both the "Ariane" and "Atlas" programmes more efficiently.

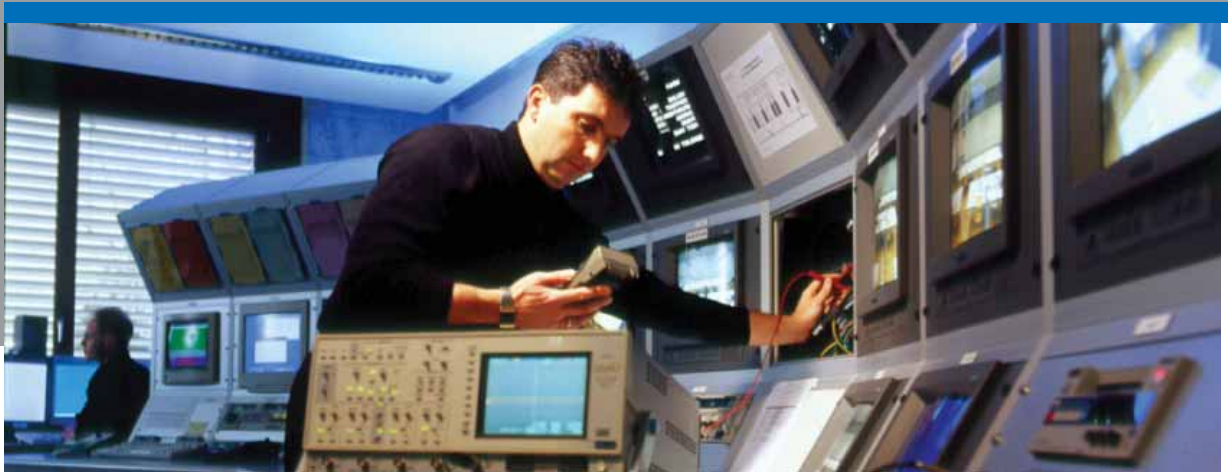
The subsidiaries' business activity levels have stabilized. The trend at Derendinger & Cie SA in Geneva may be regarded as particularly pleasing. MECANEX SA (Nyon) has displayed great commitment in successfully establishing itself in the market. An impressive performance by HTS AG (Wallisellen) has allowed it to gain a footing the aerospace market.



\*This summary of activities within the business divisions was compiled with market requirements and the needs of our customers in mind.



Maintenance of military and civilian helicopters



Inspecting a command and control simulator

## Command and control, simulation and training

During the reporting year, the operational activities of Sintro Electronics were integrated into the RUAG Electronics structure. This will allow RUAG Electronics to respond more effectively to customer requirements for "Total Training Solutions" from a single source in the international market for simulation and training.

Partial system acceptance was achieved for the expansion of the upgraded gunnery training facility for the self-propelled howitzers of the Swiss Armed Forces. This was followed by initial work to set up and commission the facility at the Bière training area. The RUAG Electronics and STN Atlas consortium was awarded the development contract for the "Elsa" firing training system by the Swiss Procurement Agency.



As regards live firing simulation, the Procurement Agency issued product acceptance for the newly developed laser fire simulators for the wheeled APC 93 and for the new APCs for the Swiss Armed Forces. This success came as the result of a joint development project with the German company C.O.E.L.

Further progress was made in developing the overall "Simug" (simulation support for field training exercises) system. Various validation tests were successfully conducted in advance of the forthcoming user trials.

### International activities

International activity in the area of simulation and training was further expanded. The selection of "Codarts" by the US Department of Defense as part of their "Foreign Comparative Testing (FCT) Program" was another international success. In addition, with support from the local office, the contract for a training centre in the United Arab Emirates, which included the driving simulators for various vehicles, was won against strong international competition.

### Telematics

RUAG Electronics and its partners made further progress with the "Polycom" project (Switzerland's communications security network). Contracts for

fault rectification and preventive maintenance on the relevant sub-networks were concluded with two cantons and with the Federal Office for Civil Protection (BZS) for its centre of excellence in training at Schwarzenburg (canton Berne). The maintenance infrastructure was established and the relevant staff trained at three sites.

RUAG Electronics consolidated its position and made further progress towards becoming the "market leader in the provision of after-sales services". A repair centre for industrial repairs to the Polycom terminals – the only "ARS" (Authorized Repair Station) in Switzerland – was set up in Aigle.

Preliminary work was done on setting up a contact centre for optimizing customer support. This centre will add a new dimension to the range of after-sales services. In the field of sophisticated system support, quick reaction times are becoming increasingly important.

A management tool pilot facility for the "Fatran" driving simulator for the Swiss Armed Forces was successfully put into service. By the end of the year preparations had also been made for employing similar management tools for the computer-assisted maintenance of the driving simulators at all sites. First orders were also received from the private-sector market.



Driving simulator ready for customer acceptance



Percussion caps being packed



Cartridges for industrial fixings

## Small calibre ammunition

On the one hand RUAG Ammotec focuses on defence technology products – service-issue ammunition, hand grenades and fragmentation munitions – plus training and high-performance ammunition for government departments, the police and special units. On the other, RUAG Ammotec is well-positioned in the sporting and hunting ammunition sectors. The renowned RWS®, Rottweil®, GECO®, norma® and SM® brandnames achieve the highest possible levels of recognition within their target customer groups. The product range is rounded off by propellant cartridges for the commercial fixings industry, explosive charges for humanitarian de-mining work, plus ammunition components.



### Service issue ammunition

Swiss Armed Forces contracts for the manufacture of 5.6 mm ammunition for the assault rifle 90 and the 9 mm pistol remained steady in 2002; however, a slight reduction is expected over the medium term, with trends in the off-duty shooting commitment being a significant factor.

In Germany, the budget figure for service issue ammunition was not achieved; however, a Bundeswehr order for tracer ammunition and a long-term contract for an artillery training system partly made up for this setback.

### Ammunition for official use

A pleasing development was the growth in sales of ammunition products for use by government departments. These are various types of ammunition used by police and special units. Deformation rounds for personal defence or to protect innocent third parties have only been officially approved in Switzerland for limited use by special police teams.

Increasingly, RUAG Ammotec is supplying low pollutant-emission small arms ammunition with non-toxic ignition materials and lead-free bullets so as to reduce the level of pollution to which both the environment and users of firing ranges are exposed.

### Hunting and sporting ammunition

The market for hunting and sporting ammunition remained stable. Sales throughout Europe, of the premium brandnames in particular, increased significantly thanks to RUAG Ammotec's internationalization strategy.

Our entry into the US market also passed off satisfactorily. Both developments helped to offset the drop in Armed Forces orders. In Europe, however, hunting and sporting rifle enthusiasts are noticeably unsettled by current and proposed changes to legislation.

RUAG Ammotec was successful in the international market with its hand grenades and 40 mm fragmentation grenades.

Explosive charges for destroying blinds and anti-personnel mines continue to be used in various countries.

Deliveries of pyrotechnic assemblies to the automotive industry for safety systems increased. Set against this, however, was a fall in sales of cartridges for commercial fixings due to the weakness of the construction industry.



Maximum-precision machinery frame passing through quality control

## Metals processing, recycling and disposal

The Metals Processing and Environment divisions were removed from RUAG Munition on 1 January 2002 and consolidated in RUAG Components. This has created a centre of excellence focused largely on civilian customers at



the Altdorf site, together with a production site in Thun. Operations commenced on schedule; and the hoped-for market acceptance at home and abroad was achieved. The technical

production cell at the Thun site was resized and the partial transfer of metals processing from Thun to Altdorf was provisionally completed.

The Metals Processing division's increasing concentration on the civilian market – and on the automotive, semiconductor and machine construction industries in particular – is aimed at reducing dependence on the defence technology market in the medium and long term. There is now a smaller volume of work being undertaken for the DDPS, but this work remains a strong revenue generator.

It includes metal components for ammunition manufacture, disposal through sales of surplus equipment and of vehicles withdrawn from service by the Armed Forces, plus the recycling and environmentally acceptable disposal of obsolete ammunition in a special incineration plant.

### Automotive and semiconductor industries

Deliveries of components to the automotive and semiconductor industries stagnated and failed to develop as expected since the presumed economic upturn in the second half failed to materialize. In contrast, the surface treatment and environmental sectors plus component manufacture for defence technology products remained stable.

Lower European sales volumes – significant in some cases – of passenger cars and commercial vehicles produced a slump in earnings from sheet and solid metal forming work, especially clutch discs and transmission shafts.

Efforts to enhance product portfolios with power generation and aerospace technology orders are bearing their first fruits. Other niche products, such as cutting tools for drilling tunnels, contributed to an improvement.

We were able to further consolidate our position in the surface treatment industry, bucking the trend in this sector in Switzerland, and to gain a foothold in niche markets. We have gained additional market share thanks to our position as a complete solutions provider.

### Environment

The Environment division continued its pleasing development. There was sustained growth in both the quantities recycled and in earnings. Our "raw materials from waste" strategy is being consistently implemented by investments in process optimization and TV picture tube recycling. This division is developing into a total disposal service provider with its range of environmental services.



Teamwork puts the final touches to an armoured mine-clearance vehicle



Pre-assembly of the gun for the new Armoured Infantry Fighting Vehicle

## Land systems and ammunition

RUAG Land Systems is mainly engaged on work for the Swiss Armed Forces. The modernization programme for the "M109" self-propelled howitzer is progressing on schedule. This contract will run out in 2003. Further "M113" vehicles were fitted with the new steering and braking system. The first of a total of twelve "MiRm 63/00" mine clearance vehicles were delivered to the Procurement Agency in the spring.

### New armoured personnel carriers

Following intensive preparations, a start has now been made on assembling the new armoured personnel carrier for the Swiss Armed Forces. Hägglunds Vehicle AB, the vehicle developer and general contractor, delivered the initial series production vehicle in the last quarter as part of "roll-out" to the customer.

RUAG Aerospace has successfully started production of the fire control system commissioned by SAAB for the new armoured personnel carrier. In parallel with production to meet Swiss needs, these fire control systems will also be produced for the Finnish Armed Forces.

### International marketing

RUAG Land Systems is concentrating its international marketing efforts on various upgrade solutions for the "M109" self-propelled howitzer and for the second generation of post-war main battle tanks. New products, such as the "Bighorn" mortar or the main battle tank sub-calibre device for use as

a training system are being greeted with interest by the market. For the future, too, the main attention will be directed towards exporting land systems to the European market.

In the Middle East, RUAG Land Systems relies on collaboration with local industry. A network of representatives was established in South America, South-East Asia and Australia.

The products and services supplied by RUAG Land Systems are meeting the needs of the international market. There was a marked increase in the number of tenders submitted.

### Guided weapons

RUAG Aerospace has carried out repair work and improvements to the medium air defence cannon system for the Swiss





There's no slacking on the shell assembly line

Armed Forces. Significant modifications designed to maintain combat effectiveness were completed on schedule. The "Rapier" validation firing trials were conducted on the Hebrides in autumn; both the guided weapons themselves as well as the fire units modernized by RUAG Aerospace successfully withstood testing under arduous conditions. This division will be significantly affected by the plans announced by the DDPS in the autumn, cancelling and reducing by one half the number of

medium air defence units. The conclusion of the contract with Matra BAE Dynamics of Stevenage for final assembly of the "Rapier Mk 2" guided weapon is a considerable and pleasing commercial success.

### Large calibre ammunition and warheads

In the large calibre ammunition sector, the DDPS is our most important business partner. Two major orders were

successfully completed in 2002: procurement of the "Panzerfaust" anti-tank system and the combat effectiveness enhancement of the "TOW" anti-tank guided weapon. Three significant new orders for the Swiss Armed Forces were either awarded to RUAG Munition's Warhead division or went into production: 120 mm mortar canister ammunition, 155 mm "smart" homing fuse ammunition for the artillery as well as the combat effectiveness enhancement for the "Dragon" warheads.



In the international market RUAG Munition's Warhead division further strengthened its position both as regards fragmentation ammunition and shaped-charge warheads. The 60 mm mortar round was successfully tested in the USA, and several countries throughout the world intend to procure it. Various European countries qualified the 120 mm canister ammunition which produces an extremely low number of blinds. Its warhead technology, which leads the way in penetration capability, is being employed both in new anti-tank system developments such as "Bill 2" (Sweden), "Alcotan" (Spain) and "Srat" (Germany) and for inexpensive combat effectiveness enhancements to existing systems.

Successful participation in international programmes and collaboration with system developers is aimed at compensating to the greatest extent possible for the drop in orders from within Switzerland. The technological breakthrough has been achieved.



Test rig for ammonium/water pump in satellite cooling circuits

## Research and development

Research and development work is conducted in the individual subsidiary companies. RUAG Aerospace is involved in the development of the future European military transport aircraft, the Airbus A-400 M. A model is undergoing testing in the wind tunnel. The preparatory phase of the fatigue trials on an F/A-18 airframe were completed. A start was made on simulating flight profiles where fatigue is a relevant factor.

RUAG Land Systems' Research Group has pressed on with a study into a 120 mm composite tank gun barrel. The objective – to design a tank gun of less weight, more advantageous centre of gravity and greater rigidity – was achieved using a new composite material. Initial firing trials were successfully held. Feasibility and definition studies were carried out for active protection systems for armoured vehicles.

RUAG Land Systems development activity has included making a start on building the prototype of an engineer vehicle, in partnership with Rheinmetall Landsysteme. Important decisions about vehicle configuration and design were taken in the development project aimed at maintaining the effectiveness of the "Leopard" main battle tank. RUAG Land Systems in-house development was chosen for the roof protection. There are also signs of international interest in this.

As part of the development of the "Minewolf" humanitarian de-mining equipment, detonation trials were

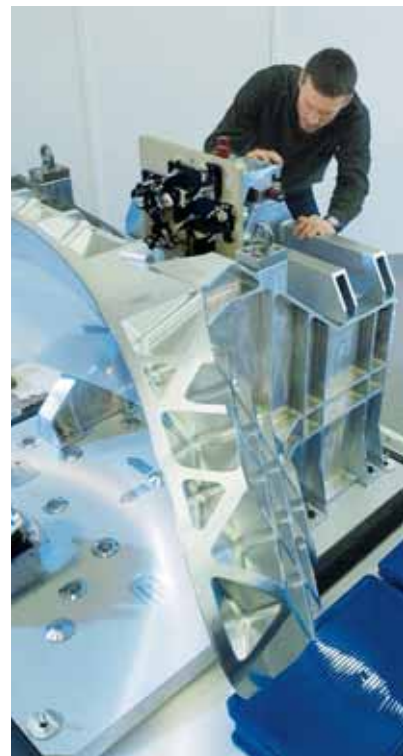
conducted in the firing tunnel. The next stage will be to test the vehicle in a real minefield.

Despite their lower weight, RUAG Munition's advanced fragmentation ammunition (hand grenades, 40 and 60 mm grenades) have achieved both high penetration performance and significantly increased effectiveness. With its shaped-charge and warhead technology – in the lead both as regards design and production – RUAG Munition is a sought-after international development partner.

Materials development areas, such as Ceramic Matrix Composites (CMC), and advances in process optimization, such as partial cold-warm forming work, are gaining increasing importance in the market. RUAG Components acquired new customers for these products.

### Speech recognition

RUAG Electronics is involved in various research projects such as speech recognition or actively modulation-capable retro-reflectors for which a patent application has already been submitted. By using speech recognition in a simulator, training can mirror real-life activity more closely if the system is capable of recognizing, recording and implementing certain defined commands issued by the exercise participants. Actively modulation-capable retro-reflectors can be used in friend-foe identification systems for example.



### Environmental simulation

RUAG's environmental simulation technology can provide conclusive information about the suitability of a product for its intended operating environment, its reliability and likely service life at both the development and the series-production stages. Consultancy work and the trials themselves concentrate on functional and service life aspects. Customers are drawn from the electronics, electrical and mechanical engineering industries, automobile industry suppliers, the aerospace industry and watch and clock manufacturers.



Work in progress in the clean room on the vacuum gas sub-system for the international space station's materials research laboratory



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