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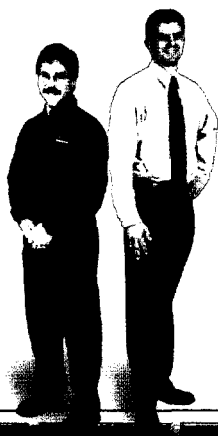
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A Passion for Safety



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FINANCIAL

2003 Annual Report

that men and women may

work in safety and that

they and their families

and their communities

may live in health

throughout the world, our

mission is to be the

leading innovator and

provider of quality prod-

ucts, related technologies

and services that protect

people's health, safety

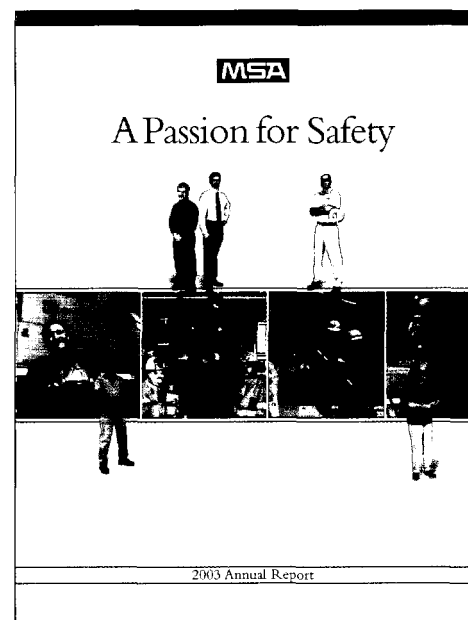
and the environment.

Behind every successful, and sometimes even life-saving, application of an MSA product stands a team of professionals committed to advancing MSA's mission of protecting life. Decades ago, MSA founders John T. Ryan and George H. Deike personified this mission while directing rescue operations at a mine explosion in western Pennsylvania.

On that particular day, the two men had ventured two miles into the mine with an MSA crew when a second explosion cut loose. Thrown in all directions and stunned, the crew found their way back to fresh air – except one. John Ryan was missing. George Deike donned a breathing apparatus and ran into the mine. Through the smoke, he saw Ryan kneeling without a mask. He was trying to pick up an injured miner he had found. The miner was wearing Ryan's mask.

For 90 years, MSA has been protecting the lives of people throughout the world with the same *Passion for Safety* John Ryan and George Deike exhibited in that Pennsylvania mine.

In this year's annual report, we profile the connection that exists between five MSA associates and select MSA customers. In their own way, these associates represent the *Passion for Safety* that exists among all MSA associates and the principle that truly defines a culture that is unique to MSA. Fittingly, this serves as the theme for our 2003 annual report.



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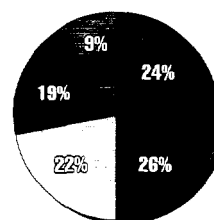
THE BUSINESS OF MSA

MSA is in the business of developing, manufacturing and selling innovative products to enhance the safety and health of workers throughout the world. Critical to MSA's mission is a clear understanding of customer processes and safety needs. MSA dedicates significant resources to research which allows it to develop an understanding of the safety equipment and instrumentation requirements in a diverse range of industries such as the fire service, homeland security, construction, public utilities, mining, chemical, petroleum, transportation, the military and hazardous materials remediation. MSA's reach has expanded into the home in an effort to better understand and protect the "do-it-yourself" consumer.

MSA's principal products, each designed to serve the needs of target markets, include respiratory protective equipment, thermal imaging cameras, portable and permanent gas detection instruments, as well as head, eye, face, hearing and fall protection.

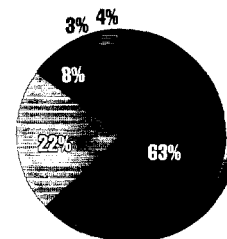
MSA was founded in 1914 by John T. Ryan and George H. Deike, two mining engineers who had firsthand knowledge of the terrible human loss that was occurring in underground coal mines. Their knowledge of the mining industry provided the foundation for the development of safety equipment to better protect underground miners. While the range of industries served by MSA has expanded greatly over the years, the founding philosophy of understanding customer safety needs and designing innovative safety equipment solutions remains unchanged.

MSA is headquartered in Pittsburgh, Pennsylvania, with operations employing 4,400 associates throughout the world. A publicly held company, MSA's stock is traded on the American Stock Exchange under the symbol MSA.



Annual Sales by Product Group

- Instruments
- Air-Supplied Respirators
- Air-Purifying Respirators
- Head Protection (Helmet, Eye, Face & Hearing)
- Other



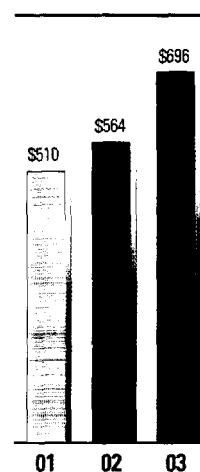
Annual Sales by Region

- North America
- Europe
- Asia & Pacific Rim
- South America
- Africa

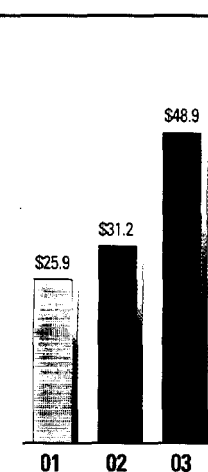
FINANCIAL HIGHLIGHTS

	2003	2002	2001
For The Year (thousands, except per share)			
Net sales	\$696,473	\$564,426	\$509,736
Net income from continuing operations	48,924	31,213	25,851
Discontinued operations – after tax	16,343	3,864	5,780
Net income	65,267	35,077	31,631
Basic earnings per common share:			
Continuing operations	1.33	.85	.72
Discontinued operations	.45	.11	.16
Net income	1.78	.96	.88
At Year End (thousands)			
Total assets	\$643,885	\$579,765	\$520,698
Working capital	206,216	138,182	135,186
Common shareholders' equity	306,867	288,009	252,451
Common Stock (thousands)			
Shares outstanding	36,928	36,621	36,302
Market capitalization	\$978,715	\$393,677	\$485,844

SALES (in millions)



NET INCOME (in millions)
(Continuing Operations)



To Our Shareholders, Associates, Customers and Supplier Partners:

In the last Leap Year, four years ago, in times of challenge for the company, I used at a meeting the following words from the Letter of Paul to the Galatians, Chapter 6, Verse 9, "Let us not be weary in doing good; for at the proper time we will reap the harvest if we do not give up." Though we are now working for many more and better harvests in the years to come, I must say that the 2003 vintage was a very successful and pleasant one.

The passion for safety that we have at MSA which has inspired us for years and decades has been particularly evident in the performance of the company in recent times. Sales and income from continuing operations reached record levels for the third consecutive year and improved over 2002 by 23% and 57%, respectively. The company's net income from continuing operations for 2003 totaled \$48.9 million on sales of \$696.5 million.

These results came primarily from our focus on being the premier global developer, manufacturer and supplier of safety products. The 2003 success came particularly from fully taking advantage of our opportunities in prosperous markets, limiting the shortfall of business in those markets with difficult economic circumstances, and getting the most out of every bit of our sales by strong performance in our manufacturing operations and other elements of productivity within the company.

Prosperous markets start with our largest one, the fire service. In the United States increased federal government funding to improve the quality of the equipment used by our firefighters and, particularly, new performance standards increased market demand. Due to the fine efforts of so many MSA associates, MSA was positioned to realize this opportunity and excelled in fulfilling this demand. It was particularly noteworthy that our self-contained breathing apparatus was the first, and for a good while the only, such product to be approved under both recent standards – the 2002 National Fire Protection Association (NFPA) standards for SCBA performance and the NIOSH Chemical Biological Radiological and Nuclear (CBRN) standard to protect first responders against terrorist chemical agents.

MSA provided service for the Homeland Security market well before the tragedies of 2001, and our Millennium Gas Mask is the leading product for this market and one of our Products of the Year in 2003. Several years ago the company identified International operations, which we define as those outside of North America and Europe, as having the greatest proportional opportunity for growing our business. Results from this area were very satisfactory in 2003 with strong growth in sales and even better improvement in earnings. Particularly good results were turned in by MSA Australia, MSA Argentina, MSA Japan, MSA Africa and MSA Middle East. MSA Gallet achieved another excellent year of performance and led the company's European operations.

Distinctly noteworthy is the performance of our U.S. National Sales Force in North America that exceeded its sales targets for the fourth consecutive year and did so this time by a wide margin. Creativity, adaptability and diligent effort backed by a top product line generated these fine results. In North America, this passion for excellence resulted in MSA receiving "Best Field Support and Customer Service" awards from two of our major distribution channel partners – Airgas and Orr Safety.

Sales to the U.S. federal government in the year were very strong led by the MCU-2/P Gas Mask and our newest product to protect military people in the war against terrorism – the Advanced Combat Helmet (ACH) with the MICH Communications System. These latter products came from a combined effort of MSA Gallet and MSA North America to fully meet the requirements for a ballistically effective and comfortable new-generation helmet integrated with an effective electronic communications system and are being widely deployed to save the lives of American men and women in combat. This product was recognized by the U.S. Army Material Command as one of the greatest inventions of 2002.

As we move forward to meet new challenges, the North American Sales Organization completed a strategic review of its operations to identify areas where MSA's value proposition to its customers particularly fits the value requirements of our current and potential customers. Based on this study, the company is investing in added sales efforts to focus on selected markets where we think the best opportunities lie.

The second element of the company's success were sales efforts and new product introductions that enabled the company to sell reasonably well in many parts of the global economy that were sluggish or deteriorating during 2003. This particularly involved elements of industrial North America, continental Western Europe and capital goods markets worldwide.

New product development continues to be a crucial element of our efforts. In 2003, we reached a significant internal goal as nearly one-third of sales were generated from products introduced over the last three years.



MSA's North American Sales Organization (NASO) played a major role in helping the company achieve record results in 2003. Shown above with John T. Ryan III (front center) and members of MSA's executive team are representatives of NASO, including U.S. regional sales managers, market sales managers, and directors responsible for field sales, government sales and customer service.

As a global leader in the safety products industry, MSA is committed to strategic efforts in new product development that meet market needs and to fulfill, "ahead of the pack," important new standards. The Evolution 5000 Thermal Imaging Camera was one of our Products of the Year as it combines a superior camera image – for firefighters involved in life-or-death decisions – with compact size, low weight and high durability against both drops and external heat, all delivered at a very market-competitive price. The development of the value-priced MSA Solaris Multigas Detector, with its compact size, was our Process of the Year as it went from initial concept to a product launched in ten months. Many other exciting new products are helping the company as you will read throughout this report, such as the UltimaX permanent instrument sensors and the SafeSite System for homeland security applications.

I am pleased to report that our new executives and managers promoted or hired last year have stepped into their new positions without missing a beat, and our team is working smoothly and well.

Operational Excellence

MSA has been getting the most out of its business with high productivity. Particularly distinguished were Safety Products Division operations in North America that exceeded measured performance levels by a considerable margin. Initiatives in Lean Sigma, a combination of Lean Manufacturing and Six Sigma programs, have continued to show benefits for our business. One immediate benefit from Lean Sigma is to improve the productivity in our use of floor space. In our Murrysville, Pennsylvania factory, this opened up space for an entirely new product line for that factory, improving the throughput and generating new jobs for the area.

A bittersweet element of MSA activities in 2003 was the sale of the Callery Chemical Division to the BASF Corporation. From its origin in the late 1930s in making chemicals for life-saving applications for U.S. Naval forces in World War II, Callery Chemical grew to be a leading manufacturer of boron and potassium chemicals. Callery was a valuable and profitable element of MSA for many years. However, it became quite clear that MSA, with our focus on safety, was not in a position to add value to Callery's growing specialty chemical business and that it would fit better with BASF.

MSA shareholders benefited directly from the success of Callery through the special distribution of \$4.38 per share, representing the net proceeds the company received from the sale. This transaction sharpens MSA's focus on driving growth in our core business. As the old saying goes, safety is our business – our only business. It is a wide, complex, diversified, global business involving many technologies and many markets, but it is one where a passion for safety well executed can generate very satisfactory results.

Outlook

At MSA our passion for safety can be directly expressed in the pursuit of our mission – that men and women may work in safety and that they, their families and communities may live in health throughout the world. We take the tough jobs where people's lives and health are particularly threatened; and the more difficult the assignment, generally the better MSA's market position is. We are approaching our 90th anniversary and, throughout this entire time, we and our predecessors in the workplace have been essentially pursuing this very same mission.

We had believed for several years now that the area in which the placement of investment in money and organizational effort that would produce the best results is in MSA International operations. We plan to continue to expand our global reach because in every place where workers, including consumers in their home workshops, need protection, MSA wants to be there because every such place is in "our neighborhood."

We should remember that some of our important markets have a history of being volatile. Some sales to the U.S. Department of Defense in 2003 were unique to the requirements of military operations conducted that year and in rebuilding the nation's

stocks of military equipment. However, MSA has received in recent months a number of large orders for the Advanced Combat Helmet and MICH communications system. This is a product in which there will be a steep ramp-up of production at two MSA locations which will present challenges that I'm sure we can successfully meet. Our indications at the present time, both from our internal activity and feedback from our distribution partners and from data on the U.S. Government's FIRE Act funding are that the North American fire service market should continue to be strong and growing throughout this year.

Our Millennium Gas Mask has been the industry's first product approved to the new CBRN standard. Funding for homeland security in the United States has been very strong over the last two years. There are differing opinions in the marketplace about the extent of growth in this area in 2004 and 2005, but we feel that it will continue to make a positive contribution to MSA sales.

Our efforts in international markets are continuing and accelerating, and we see good opportunities there in the future in each of our major regions. A new management team is in place in China, and with global support we look forward to good progress there.

The overall economies in the U.S. and China seem at the present time to be going strongly with good prospects. This is helpful for the global economy which, however, is excessively dependent on growth in these two countries. This growth should help MSA's operations in the affected areas, particularly industrial markets in North America. Growth in China, as well as North America, helps many third country markets in which MSA is particularly active, such as South America. It would be very helpful, though, for the world that economic development would have more breadth, and particularly have some help from Western Continental Europe which continues to be an area of business slowness and uncertainty.

We will continue at MSA to be watchful for both opportunities and challenges in a volatile world where the forces of terrorism have been suppressed but not eliminated. It has been a very satisfying four years since I used that quote from Galatians which was fulfilled in the interim. Now, opportunities and challenges should develop in new and interesting areas.

For a number of years we have been pursuing the goal of solid profitability. While this is a never-ending challenge, I am pleased that we made much progress in this area over the last several years. All of this rewards our shareholders, and a particular measure of this was that MSA stock was one of the top ten performers of the American Stock Exchange in 2003 in terms of stock price improvement over the year.

I close with a thought from Woodrow Wilson who was President of the United States in the year MSA was founded, "We are not here merely to make a living; we are here in order to enable the world to live more amply with greater vision and with the finest spirit of hope and achievement. We are here to enrich the world and one impoverishes oneself if one forgets that errand."

With our noble mission, our passion for it and our global reach, we are in a particularly good position to fulfill these ideals and go on to reap new and better harvests.



John T. Ryan III
*Chairman of the Board
and Chief Executive Officer*

A PASSION FOR SAFETY...

Southern Peru Copper Corporation

At far right, Southern Peru Copper Corporation safety experts leverage MSA's Manuel Ocasas' safety expertise. (From left to right Anibal Tapia, Manuel Ocasas, Jorge Medina, Ana Aguilar, and Alberto Paz)

At center below, Víctor Díaz, a heavy equipment operator at SPCC's Cuajone mine goes to work with MSA's V-Gard® Helmet.

Peru offers some of the world's most spectacular and varied scenery. But this nation's rugged and mountainous landscape also presents unique safety and business challenges. MSA Peru, however, has risen to the challenge.

By tailoring MSA products to meet specific needs and supporting their customers with outstanding service, MSA Peru leads all other competitors in providing customers with safer workplaces.

In South America, perhaps no customer values MSA's leadership more than Southern Peru Copper Corporation (SPCC), which employs more than 5,000 people at three separate locations in the rugged foothills of the Andes Mountains: the Cuajone and Toquepala mines and the Ito Refinery. At these sites, sales calls can last for weeks and generations of MSA employees can recall the challenges of such visits – including MSA chairman and CEO John T. Ryan III, who remembers traveling to the Cuajone Mine nearly 30 years ago.

But long hours and years of work by MSA and SPCC do pay off.

Just ask Mr. Santos Nuñez, a supply train driver at SPCC's Mines. In 2001, a rock slide cut loose a boulder down 200 feet of mountainside causing it to crash through the windshield of a locomotive operated by Mr. Santos. Fortunately he was wearing MSA's V-Gard Helmet, which was credited with saving his life. No one is more grateful than Mr. Nuñez.

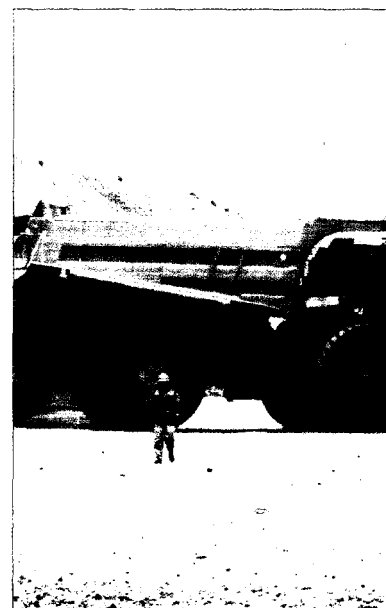
"My older daughter had just finished Civil Engineering studies and the younger one just earned her bachelor's degree in Architecture. I could have missed all this, but I had an MSA helmet," said Mr. Nuñez.

Today SPCC employees like Mr. Nuñez are among MSA's best advocates because they understand that behind the quality of MSA products there is a loyal team of experts who provide unparalleled service and support.

"There is no doubt the quality of our products opens doors here in Peru, but it's also the dedication of our sales team. Our team steadfastly supports all customer requests for training and consultation and this is where we differentiate ourselves from competitors," said Luis Fernando Flores, MSA's General Manager, Peru. "In the final analysis, it's MSA Peru's people who make a difference."

For SPCC workers like Santos Nuñez it's Manuel Ocasas, an MSA Peru sales representative, who makes that difference. Manuel helps SPCC leverage new safety technologies to ensure workers like Santos Nuñez are protected.

"Each security requirement is unique," said Manuel. "And the only way to understand the security requirement is to thoroughly know the company and its procedures, visit the exact place where a security solution is required, and then analyze the risks."



Santos Nuñez, left, a supply train driver for the Southern Peru Copper Corporation, credits MSA's V-Gard® Helmet with saving his life.

MSA's V-Gard® Helmet is on the job with Francisco Calizaza, right, a heavy truck operator at SPCC's Cuajone mine.



MANUEL OCSAS *Sales Representative, MSA Peru*

For Manuel Ocsas, the challenges of his job prompts him to excel. "On a given day I can work where it's about 85°F (29°C) and then travel 16,400 feet (5,000 meters) above sea level, where the temperature could be around 15°F (-10°C)," said Manuel, whose work typically begins around 4:00 a.m. when he leaves his home office in Arequipa for remote areas in southern Peru where sales calls can last for weeks.

"A passion for safety is what drives Manuel," said Luis Fernando Flores, MSA's General Manager, Peru. "He is there for the customer, visits them, follows up, and has mastered all of our customer service practices. His passion has helped him earn the respect and trust of our customers. He's a tremendous asset for MSA Peru and a great ambassador for safety."



A PASSION FOR SAFETY... In Titusville, Pa.

At right, Andy Fornadel (left) and Vince Colaizzi (right) take pride in MSA's Evolution 5000 Thermal Imaging Camera. They go to work every day knowing that across the globe, the Evolution TIC is an integral part of keeping first responders safe.

Armed with MSA thermal imaging technology, the Titusville Fire Department safely battles a structure fire. (Below)

Walk along Franklin Street in Titusville, Pa., and you can sense the pride residents feel toward their hometown. Home to Drake's Well, the birthplace of the U.S. oil industry, this close-knit town in northwestern Pennsylvania has a deep sense of community. Although the wells stopped pumping years ago, the bond of shared history gives the people of Titusville an appreciation for their community and each other.

City residents rely on Captain Joe Crotty and the Titusville Fire Department to keep this community safe. And the department, which responds to more than 550 calls per year, relies on MSA to advance their firefighting capabilities.

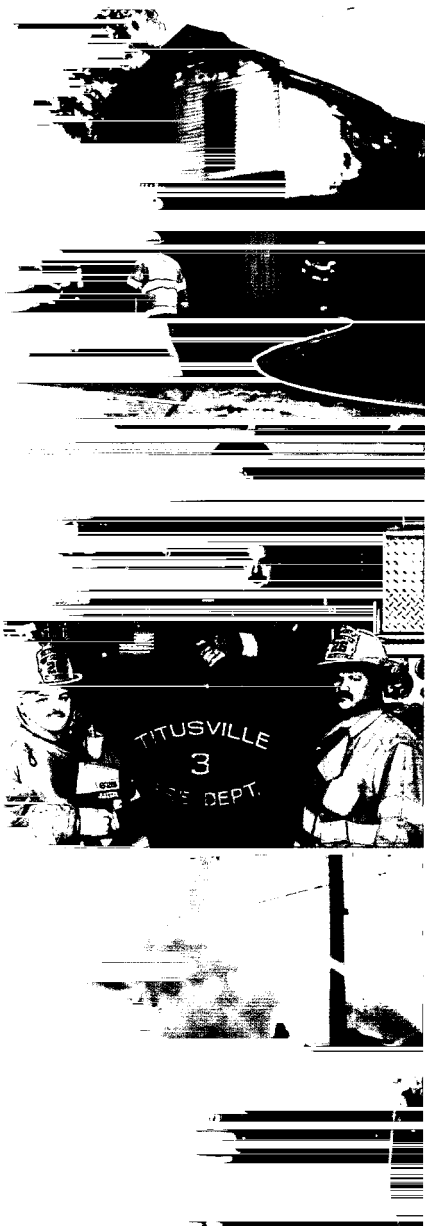
In 2000, the Titusville Fire Department, like many departments across the country, sought to improve its capabilities by adding the latest advancement in firefighting technology: an MSA Evolution Thermal Imaging Camera.

During a recent summer evening, Chief Crotty and his men learned just how valuable a safety tool an MSA Thermal Imaging Camera can be. The call came in for immediate response to a two-and-a-half story florist shop that was engulfed in smoke. A team of firefighters entered the building, battling the blaze on two floors. Inside, firefighters reported that heat conditions were rapidly worsening.

Noticing a subtle shift in the building's front door frame, Chief Crotty grabbed the Evolution Thermal Imaging Camera and conducted a quick two-sided scan of the exterior. The structure was white hot. The chief ordered the crews out of the building. Seconds later, the first floor began to disintegrate. Within two minutes, the roof collapsed into the second floor.

"Thermal imaging can and does save lives," said Crotty. "The thought of what might have happened at that fire is still sobering. I could have lost half a dozen men. Thank God for the Evolution Thermal Imaging Camera."

Chief Crotty has since incorporated the Evolution Thermal Imaging Camera into Titusville's standard operating procedures and training processes. "It improves the efficiency of our firefighting resources tremendously. Most of all," he adds, "it protects the most precious resources any fire department has – our firefighters."



At top, Titusville firefighters make quick work of a blaze thanks in part to the latest in thermal imaging technology from MSA.

At center, (from left) Chief Joe Crotty, Scott Attenborough and Assistant Fire Chief Ken Leach with their MSA Evolution® TIC.

Above, Titusville firefighters apply fire suppression materials to the heart of a florist shop fire.



Andy Fornadel tests the boundaries of his latest thermal imaging electronic designs. He makes sure that the camera's display functions properly every time a first responder turns it on.



Vince Colaizzi makes sure that the Evolution® 5000 TIC meets the ergonomic needs of first responders and builds the camera to withstand extreme heat and high impact.

ANDY FORNADEL *Design Engineer, MSA Instrument Division*

VINCE COLAIZZI *Design Engineer, MSA Safety Products Division*

The life-saving potential of the Evolution TIC is well known to MSA's Thermal Imaging Camera team. Engineers Andy Fornadel and Vince Colaizzi often hear stories like the one told by Titusville, Pa. firefighters, and they find them inspiring.

"Our team has an immediate and direct impact on safety. We get letters from grateful customers all the time," says Fornadel, who is responsible for the electronics design and display technologies that are integrated into every MSA Thermal Imaging Camera. "Being able to work on something like this every day is incredible. It has become very evident that the efforts of our team help save lives."

Colaizzi, a design engineer whose contributions have helped shape MSA Evolution cameras into the most ergonomic thermal imaging cameras on the market, concurs. "It's extremely satisfying to work for a company that focuses on protecting people," he said. "We don't just design products; we are an active part of MSA's mission to protect life."

A PASSION FOR SAFETY...

Bechtel

At Bechtel, one of the world's premier engineering construction and management companies, dedication to superior environmental, safety and health practices is a core value, one that pervades the business. So it's not surprising that Bechtel relies on MSA's quality products and support services to help it maintain an industry-leading record of zero lost-time incidents on 90 percent of its projects worldwide.

Having such an enviable safety record is no easy task for a company like Bechtel, which employs more than 40,000 employees on hundreds of projects in nearly 60 countries. But by teaming up with MSA, this international leader in the construction industry has found a global partner with a shared vision for safety.

"A real strength of MSA is their people and service," said John Mathis, manager of environmental safety and health for Bechtel's largest business line, Bechtel Systems & Infrastructure, Inc. "You're not just buying MSA equipment; you're buying the support and service that goes along with that equipment."

Throughout the world – from Chile to China – MSA tirelessly supports Bechtel as it strives for a high level of safety at each of its work sites. Most recently this support includes Bechtel's efforts to rebuild key infrastructure in Iraq, where MSA is working to ensure that the right safety equipment and training is available to Bechtel on demand. Such global support would not be possible without MSA's dedicated associates.

"They've responded to our project needs on a moment's notice," said Mathis, who explained that MSA products are a standard part of the company's inventory and equipment catalog. With this comprehensive support, MSA has consistently demonstrated an ability to bring both top quality equipment and support for that equipment on site under the most difficult conditions.

Perhaps nothing better reflects the strength of the relationship between MSA and Bechtel than the moments following the tragic September 11 attacks on New York City. In the hours following the attacks, Bechtel was on site volunteering to provide assistance and turned to MSA to get much of the vital safety equipment and personnel to support its use on site.

"The response was absolutely outstanding. These guys got it there right away," said Mathis, recalling MSA's ability to get critical safety equipment and personnel to the site of the World Trade Center within 24 hours of the attack.

"It was certainly a team effort," says Victor Vendetti, regional sales manager for MSA's North American construction market. Vendetti credits many within MSA, Bechtel and the government for enabling MSA to effectively do its part in the post-September 11 recovery efforts.

"Anywhere you find a Bechtel project, you'll likely find an MSA presence," says Victor.

As part of Bechtel's safety regimen, employees wear white MSA helmets for their first 30 days on a site. Following this period and safety training, workers graduate to wear the yellow V-Gard® Helmet.

Bechtel workers, below center, position steel frames prior to pouring concrete at a work site in Springerville, Ariz. The project is scheduled to employ more than 1,600 workers over the next three years.



In Springerville, Ariz., MSA supports Bechtel in the building of a 400 megawatt power plant, right, that will provide energy throughout the southwest United States.

At far right, safety is always part of the plan as Ben Smith, civil superintendent (left), confers with Greg Zurlinden, carpenter foreman, at Bechtel's Springerville, Ariz., work site where all employees wear MSA V-Gard® Helmets.





VICTOR VENDETTI *Regional Sales Manager, North American Construction Market*

"For a safety program to be truly effective, it's vital you have top down support and that the program has teeth," says Victor Vendetti, MSA's regional sales manager for the North American construction market. According to Victor, it is customers like Bechtel that help give him the drive and the passion to provide the proper equipment and training.

"You're not just selling equipment or providing training," said the MSA associate who has traveled to more than 40 countries in his 13 years with the company. "You're helping somebody do their job safely so they can go home every night."

Victor unabashedly has a *Passion for Safety* he shares within his own community of Seven Fields, a suburb near Pittsburgh, Pa.

"You really can't drive anywhere here without seeing a construction site. Sometimes I'll just stop and talk to the workers about safety. It's what I do."

Where does the passion originate? The answer is simple: "MSA's culture instills a real passion for protecting people," says Victor. "Any time you use an MSA product, you should know that product has been designed, assembled and sold by people who understand its life-saving ramifications."

A PASSION FOR SAFETY...

Region 13 Terrorism Task Force

With a self-proclaimed passion to protect, Alice Martin, right, assembles and tests another Solaris™ unit according to customer specification.

The Solaris™ Multigas Detector, below right, gives Region 13 Terrorism Task Force members an easy, reliable method of evaluating the level of harmful gases and quickly implementing proper safety precautions.

The world in which we live changed forever on September 11, 2001. It changed the way we travel, the way we work and the way we attend events. It changed the way Federal intelligence and law enforcement agencies communicate, and it changed the way local first response agencies interact, collaborate and share personnel and equipment resources.

Perhaps nowhere is this more evident than in western Pennsylvania where 13 counties and the City of Pittsburgh have joined forces to create the Region 13 Terrorism Task Force. Their efforts have been lauded as a best practice example of how a large geographic region, covering nearly 10,000 square miles, can best manage resources in the event of a domestic emergency. A group ahead of its time, the Region 13 Terrorism Task Force was actually formed in 1998 as a proactive means to share services and to formally develop mutual aid and response protocols.

Since 2001, this task force has quickly addressed the issues of homeland security by ensuring its personnel are properly equipped to face hazardous situations and unknown chemical and biological agents.

Alan Hausman is a consultant to the Allegheny County Department of Emergency Services and the equipment manager for the Region 13 Terrorism Task Force. He has a long-standing relationship with MSA, as the Task Force has relied on the company for safety equipment from the beginning. "Our first priority was respiratory protection," said Hausman. "We've used the Advantage® 1000 Gas Mask for years and are migrating to the new Millennium model." The group also uses MSA Photo Ionization Detectors that measure trace amounts of airborne volatile organic compounds.

Involved in emergency management for more than 20 years, Hausman doesn't compromise when it comes to purchasing safety equipment. "You never know what you're walking into," he says. "And while you hope it never happens, you must be prepared for the worst."

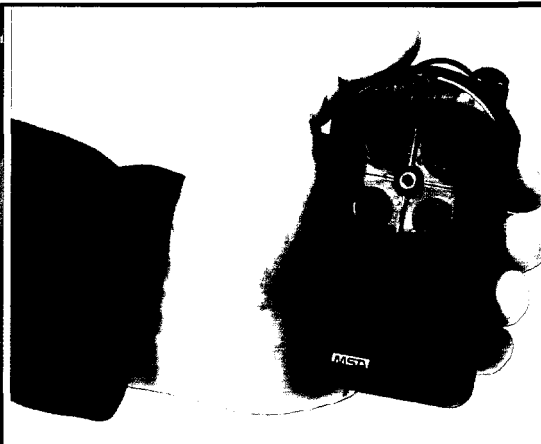
Most recently, Hausman and the more than 725 Region 13 fire departments have turned to MSA's Solaris Multigas Detector to help them assess emergency situations. "Our staff tested the Solaris and responded positively to its distinctive features such as ergonomics, backlighting and ease of operation," said Hausman. "An emergency situation can become quite intense with excessive noise and activity. Because the Solaris is easy to read and operate, it allows our personnel to quickly detect and monitor unknown gases in chaotic environments." Hausman says this is critical to maximizing the safety of both responders and citizens.

"I've been at this for a long time," Hausman commented. "I know what works."

At top, intense training exercises prepare Region 13 first responders for emergency scenarios. Securing a position while wearing MSA Advantage® 1000 Gas Masks protects this unit from breathing potentially harmful airborne toxins.

A member of the Region 13 Terrorism Task Force, above, wears MSA's Advantage® 1000 Gas Mask during training maneuvers.

Region 13 Terrorism Task Force consultant Alan Hausman in blue, demonstrates the functionality of the MSA Solaris™ Multigas Detector.





ALICE MARTIN *Production Technician, MSA Instrument Division*

Alice Martin, a 48-year veteran associate of MSA, is not surprised that the Region 13 Terrorism Task Force has opted for MSA's new Solaris Multigas Detector. "We make some of the most durable and reliable products available," she says.

Martin, a production technician, works in the Assemble-to-Order work cell for the Solaris line. She assembles products according to customer specifications, calibrates the final products and ships them out. Martin says, "Tell us how you want it, and we'll make sure it works."

For Martin, having a *Passion for Safety* means that the MSA products she helps produce must function exactly as designed every time. "Our products have to work as soon as a customer opens the box," Martin says. "I've been here a long time and I've sent safety equipment all over the world to assist all types of customers. There's a reason they come to us. We keep people safe."

Martin recalls an instrument that was returned to MSA after being involved in a fire with temperatures approaching 1,600°F. "In my 48 years at MSA, I'll never forget what that looked like. It was an unbelievable mess, but you know what? When I turned it on, it still worked. That's a reliable product."

The MSA Culture...

A PASSION FOR SAFETY



During a visit to MSA's Newport, Vt. production facility, U.S. Army First Sergeant Colin Rich, top right, expresses his appreciation to MSA associate Charles Geraw for his role in producing the Advanced Combat Helmet that saved Rich's life in Afghanistan.

Above, MSA associates Holly Boucher, left, and Abby Smith complete strap assembly for a new shipment of Advance Combat Helmets for the U.S. Army. Associates at the Vermont plant achieved remarkable production levels in 2003 to meet and exceed the Army's delivery goals.

United States Army First Sergeant Colin Rich, a native of Raeford, North Carolina, traveled nearly 10,000 miles from the Middle East to express his gratitude to the associates of MSA's Newport, Vermont manufacturing plant. He was grateful for the Advance Combat Helmet (ACH) MSA produces there, because just seven months earlier one of those helmets saved his life in Afghanistan.

Sgt. Rich is just one of the millions of people around the world who benefit from the *Passion for Safety* that the 4,400 men and women of MSA bring to work each day.

Having a *Passion for Safety* is a principle of working life at MSA. You sense it in the engineering labs and on the manufacturing floor; you hear it in the voice of the customer service representative responding to a customer question; or see it in the dedication of the company's field sales representatives. It reflects a realization that what one contributes at MSA does matter, regardless of the position or job function. It matters to the people who put their trust in MSA products to protect them on the job. It matters to families of those people, who expect their loved ones to return home in the same condition they left. And it matters to the shareholders of MSA, who understand the company's value proposition and put their trust in MSA to achieve its mission.

To be sure, 2003 was a year of achievement for MSA on many fronts.

From a broad perspective, MSA's success over the past year is attributable to initiatives begun years ago aimed at positioning the company to become the leading safety equipment provider in markets where the need is greatest – fire service, homeland security, federal government, international and the consumer marketplace. In addition to reaching growth markets, MSA recognized the importance of limiting the impact on the company of a sluggish economy in other markets by continuing efforts to improve productivity, allowing MSA to make the most of these opportunities. Perhaps that is the single greatest reason why, in these uncertain economic times, MSA was able to achieve record earnings and record revenue growth while many companies struggled in 2003.

New Product Development

With an eye on growth markets, MSA relied on innovative and fast-to-market product development to fuel expansion in 2003. Indeed, from a product development perspective, few companies in the safety industry could match MSA's achievements in 2003. In North America alone, sales from products introduced in the past three years accounted for nearly one third of total North America revenue.

With an ever-present global threat of terrorism, MSA responded with new products that directly benefited first responders in the fire service and law enforcement sectors.

As an example, MSA led the fire service industry in developing the first self-contained breathing apparatus (SCBA) that met two new performance standards that captured significant industry attention in 2003. The first standard, established by the National Fire Protection Association (NFPA), enhanced SCBA performance for structural firefighting applications.

The second, set forth by the National Institute for Occupational Safety and Health (NIOSH), focused on an issue of more growing concern: exposure to chemical, biological, radiological and nuclear agents (CBRN). The NIOSH standard, which is voluntary and an add-on to existing NIOSH approval requirements, is arguably the most difficult SCBA test protocol ever adopted, due largely to the wide and varied destructive characteristics of these lethal agents on equipment on which the user's life depends.

Borrowing from decades of experience in developing advanced respiratory protection equipment for the military and fire service, MSA won the race to gain both NIOSH CBRN and NFPA



In 2003, MSA reaffirmed its leadership position in developing products that meet and exceed new performance standards. The MMR EXTREME® Air Mask, left, was the first SCBA to not only meet new fire service industry requirements but also be approved for protection against chemical, biological, radiological and nuclear agents (CBRN). The Millennium® Gas Mask, far left, followed suit in early 2004 as the industry's first gas mask approved for CBRN protection.

certifications for its line of MMR EXTREME Air Masks. Undergoing stringent, live-agent testing, MSA Air Masks were the first to be certified to the latest NFPA requirements *and* deemed suitable for use in situations involving CBRN agents. Today, one third of all SCBAs produced by MSA are NFPA and CBRN compliant, and this number continues to grow.

Utilizing this expertise, MSA quickly followed this achievement with development of the first gas mask to meet new CBRN test criteria for air-purifying respirators. In fact, MSA engineers and technical associates – working closely with the safety industry's leading trade association – offered expertise to help guide development of the standard itself. With a final standard in place, MSA submitted the Millennium facepiece and CBRN canister to NIOSH for testing on March 24 – the first day submittals were accepted. Only recently did MSA learn its gas mask was the first to pass muster. With this accomplishment, the company is now positioned as the first manufacturer capable of offering first responders this level of CBRN protection.

Thermal Imaging Leadership

In 2003, MSA also set performance benchmarks for thermal imaging camera technology. Thermal imaging cameras, also known as TICs, utilize infrared sensing technology to enable firefighters to see through smoke and darkness, locate trapped victims, pinpoint the source of a fire to better combat it, or help firefighters exit from a fire as needed. In short, MSA TICs are the latest development in advanced fire fighting equipment (see story on Titusville, Pa. Fire Department, page 6).

MSA pioneered development of the first hand-held TIC in the late 1990s. Since then, the company has established itself as the leader in TIC technology with a product brand recognized for exceptional durability and quality.

The Evolution 5000 is the company's newest generation thermal imaging camera. Weighing 50 percent less than its predecessor, and costing half as much, the Evolution 5000 TIC is the first small-format thermal imager to deliver a screen resolution equal to if not better than larger, heavier cameras. It features leading-edge sensing technology with advanced MSA features, including spot temperature measurement and a convenient vehicle-mounted charging unit.



The Evolution® 5000 Thermal Imaging Camera helped MSA distance itself from the competition in 2003. Compact, lightweight and extremely durable, this next generation camera delivers image clarity never before seen in a small-format TIC.

In head-to-head "live fire" evaluations with competitive products, the Evolution 5000 TIC was consistently the top performer in 2003. This performance resulted in MSA acquiring more orders and shipping more cameras in 2003 than in any other previous year.

The NFPA-compliant and CBRN-certified breathing apparatus, new air-purifying respirators, and thermal imaging cameras were all substantial contributors to MSA business growth over the past year. Among the major SCBA orders MSA secured in 2003 were contracts with some of the largest municipal fire departments in North America as well as the U.S. Department of Defense.

The MSA Culture...

A PASSION FOR SAFETY

The technological advancements in air-purifying respirators previously described also helped generate robust sales of gas masks and other respirators to the law enforcement market. Notable users of these products in 2003 included the New York City transit police, the state of Connecticut, and the City of New York. Overall, gas mask sales in 2003 grew 43 percent from the previous year.

In the air-purifying respirator arena, MSA also helped combat the frightening outbreak of SARS in Asia and in Canada. Just as MSA has responded in previous times of emergency, associates worked closely with government officials in these countries to provide respirators to the medical community.

MSA's timely development and introduction of these products are not just important for growth, but they are critically important to first responders throughout the world – firefighters, police officers and emergency medical technicians – who rely on MSA innovation, quality products and training to protect them in the event of a terrorist attack or other national emergency.

Keeping Tradition Alive

While products designed for first responders commanded much of MSA's attention in 2003, the company also worked to advance products required in everyday applications in the fire service and general industry. The new Cairns 880 Tradition Fire Helmet, developed and introduced in the third quarter, is a perfect example.

This historically popular, traditional-style helmet was discontinued more than a decade ago due to changes in NFPA requirements. However, by combining the latest in high performance thermal and impact resistant materials with advanced design techniques, MSA's 880 Tradition project team was able to develop a state-of-the-art helmet that bridges the gap between traditional designs and advanced protection. The result is a helmet that's 48 percent smaller and 20 percent less costly than competitive models. More simply, it's the lightest traditional fire service helmet available today.

While firefighters enjoyed the comfort features of the 880 Tradition Helmet, workers in industrial environments benefited from a "cool" new helmet that is a tribute to MSA global resources. As its name implies, the V-Gard Advance hardhat is the next generation of MSA's flagship product first introduced in the late 1960s. Based on a very successful design originating from MSA Australia, the Advance Helmet sports a vented top to promote cooling. However, to gain broad acceptance of this product in a price competitive market, manufacturing costs needed to be reduced. Contributions came from manufacturing engineers in the U.S., who enabled the product to be produced utilizing innovative press processes in MSA's Murrysville, Pa., plant.

The U.S.-produced V-Gard Advance Helmet achieved a 10 percent weight reduction and a 31 percent cost reduction, demonstrating MSA global strengths in design and manufacturing expertise.

A Soldier's Story

Perhaps no other head protection system made headlines in 2003 like MSA's Advanced Combat Helmet – a key product innovation that is helping protect American forces combating terrorism. Known as the ACH with Modular Integrated Communications system, it has been credited with saving soldiers' lives during combat operations in Iraq and Afghanistan, including that of First Sergeant Colin Rich of the 82nd Airborne Division, mentioned at the beginning of this report.

Sgt. Rich was on duty in Afghanistan in early 2003 when his unit was ambushed by terrorists posing as allies. On a mission to destroy two Taliban positions, Rich was struck in the back of the

MSA took a "back-to-the-future" approach in developing the Cairns 880 Tradition™ Fire Helmet, below. What resulted is a helmet that combines the best of both worlds: advanced lightweight protection with a "traditional" look preferred by many U.S. firefighters.

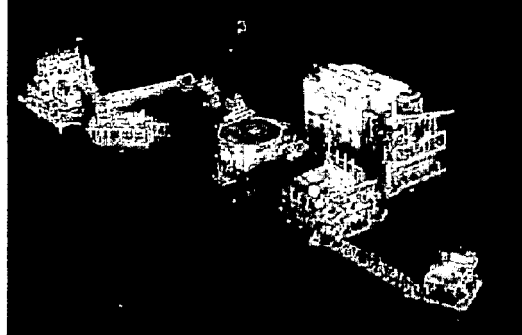


Keeping a cool head is what the new V-Gard® Advance® Hardhat, above, is all about. Featuring design input from MSA Australia, this U.S. produced product is quickly gaining market acceptance among workers exposed to hot, humid environments.



Sizeable orders for MSA Gallet firefighter helmets helped MSA Europe turn in a strong performance in 2003. At left, members of the Strathclyde Fire Brigade in Glasgow Scotland proudly display their new F1 Helmets. Shown, from left, are officer Ian Clark, procurement manager David Anderson and officer James Anderson.

A technology transfer agreement with Spectronix Ltd., negotiated in 2003, enhances MSA's ability to serve the oil production industry with advanced infrared detection systems for monitoring potentially hazardous environments.



head with a sniper's shot, but survived because of his ACH. Upon returning to the U.S., Rich made it a point to visit MSA's factory in Vermont to personally thank the employees for helping save his life. MSA associates there were equally pleased to thank him and his fellow soldiers for their great efforts and sacrifices.

Derived from MSA's acquisition of Gallet in 2002, the ACH was originally designed for U.S. Special Forces units but has since become the helmet of choice by U.S. Army personnel involved in Afghanistan and Iraq. The helmet's unique retention and suspension system gives maximum balance, stability and comfort, while providing the proper size, fit and ventilation.

It's become such a staple of the U.S. soldier's arsenal that the U.S. Army Material Command named it one of the greatest inventions of 2002 based on evaluations by six active Army Divisions and the U.S. Army Training and Doctrine Command. In accepting this honor, Ron Herring, Jr., vice president and general manager of MSA's Safety Products Division, said the recognition is a testimony to the quality, reliability and durability of the products MSA produces every day, and to the commitment and *Passion for Safety* demonstrated by all MSA associates.

Closer to the home front, new product development also helped MSA's fall protection group fulfill opportunities over the past year. Impressively, 28 percent of 2003 fall protection sales were from products developed just over the past three years, including the versatile Aptura™ SRL and TechnaCurv™ harnesses, both of which exceeded sales goals in their first year of availability.

Other new fall protection products that made an impact in 2003 included the FP5K Tieback Snaphook and Lanyard and PointGard™ Anchor.

A "Stellar" Performance in Instrumentation

In 2003, MSA's Instrument Division defined its *Passion for Safety* two ways: innovation and speed to market. Impressively, the Instrument Division improved on-time delivery performance to more than 97 percent – among the finest by any operating unit in MSA North America.

But above all, 2003 will be remembered as the year MSA's instrument professionals established a new benchmark for new product development (NPD). Their challenge? Develop a new low-cost multigas detector that outpaced the competition in terms of performance, durability and cost – and have it ready in less than a year to meet rapidly intensifying competition.

With a global, multi-functional team in place, the Instrument Division launched its most significant 2003 NPD project – the Solaris® Multigas Detector.

An affordable, durable and easy-to-use device, the Solaris Detector is one of the smallest and lightest four-gas monitors available today. Designed for first responders and workers in the chemical, construction, mining, oil and gas, and telecommunications industries, the Solaris unit detects the presence of O₂, H₂S, CO and combustible gas. But what truly differentiates it from the competition, aside from its affordability, is its unobtrusive, lightweight design that doesn't interfere with a user's range of motion, making the product comfortable enough to be worn all day long.

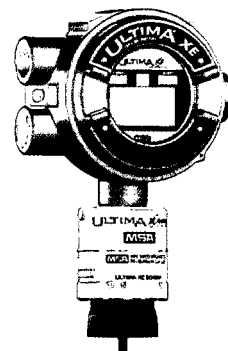
The list of accomplishments associated with the development of the Solaris Detector is substantial. For example:

- The Solaris Detector went from concept-to-customer in a record ten months.
- Its value proposition is unmatched (and easy to remember) – "half the size at about half the price."
- The global development team came to within two percent of its established cost target.
- The Solaris Detector is proving to be highly successful in the field – the most important measure of NPD success.

With these accomplishments, the Solaris Detector proved to be a significant contributor to MSA's top line in 2003, particularly in Canada where MSA established a special distribution agreement with Acklands-Grainger. Remarkably, Acklands-Grainger achieved its six-month Solaris sales goals in less than two.

In the permanent instruments market, gains were more challenging to come by, given the economic recession that has restricted capital expenditures and related large projects – a critical driver for permanent instrument sales.

Yet, the MSA Instrument Division made real progress into 2003 due in part to such products as the Ultima X line of sensors, which feature an innovative "disconnect under power" feature. This MSA exclusive allows users to change individual sensors in hazardous atmospheres without having to cut off power to the entire sensing system. In addition to convenience, the benefit of this technology is that it enables personnel to perform sensor maintenance without compromising protection in other areas monitored by the system. It's a remarkable feature and one that further distances MSA from the competition.



Ultima® XE Sensor

The MSA Culture...

A PASSION FOR SAFETY

International Performance

At MSA, having a *Passion for Safety* knows no borders. Indeed, this passion helped drive positive results among nearly all of MSA's global operations in 2003.

In particular, MSA Australia delivered remarkable performance in 2003, adding 24 percent sales growth driven largely by increased demand from the fire service market. In fact, fire brigades in Australia are among the most recent beneficiaries of new advancements in MSA firefighter head protection – the 660CAS Metro Helmet.

The 660CAS Metro helmet was designed specifically to meet requirements of the New South Wales Fire Brigade – one of the 10 largest fire departments in the world. MSA associates there demonstrated their *Passion for Safety* by detailing the design for the 660CAS Metro, executing in-house qualification tests, constructing a new mold and achieving certification to Australian standards – all in a remarkable five months. This coordinated effort resulted in an order for 7,000 helmets.

Performance in the Pacific Rim was also strengthened by MSA Japan, which achieved a 17 percent increase in revenue while establishing what promises to be a mutually rewarding relationship with one of Japan's largest safety distributors, Midori. In 2003, the company was also pleased to "plant a flag" in a new country, Malaysia, to serve that diverse and growing market.

In South America, the company saw robust performance by MSA Argentina, with strong recoveries by MSA Chile and MSA Peru, both of which managed successful transitions to new leadership. Solid results were also achieved by MSA Brazil.

In the Middle East, MSA revenues were bolstered by significant business gains generated through sales of head protection products derived from the acquisition of Gallet. Additionally, the company recently gained a large upgrade order for permanent instruments to Qatar Petroleum.

MSA Gallet's contributions in 2003 were particularly evident in Europe where helmet sales helped offset the impact of an ongoing sluggish economy, enabling MSA Europe to record an overall increase in sales. European fire brigades – particularly those in France – turned to MSA Gallet for the latest in firefighter head protection.

Through our associates in Europe, MSA was also able to negotiate in 2003 a promising technology transfer agreement with Spectronix Ltd. Under the agreement, the two companies will share technology and production expertise for detection systems that incorporate open-path infrared (OPIR) and IR³ technologies. Extremely versatile, these systems utilize infrared optics to detect potentially hazardous conditions across distances as far as 130 yards (approximately 120 meters), making them ideal for use in such places as storage vessels, refineries, pipelines and ventilation ducts.

These technologies were first used in the oil production industry, primarily in offshore drilling platforms to alert personnel of the presence of potentially hazardous situations. Today, the technology is finding broad application in refineries, chemical plants, petrochemical facilities, the transportation industry and pharmaceutical production.

With this alliance MSA and Spectronix strengthen their presence in the fire, gas and safety systems marketplace by adding cutting-edge OPIR and flame-detection technologies as new core competencies for personal and plant-wide protection.

Among the products MSA expects to market under the alliance are the SafeEye® 700 Xenon System and the FlameGard® IR³ XI Detector.

Over the past year, MSA Europe also significantly enhanced its position as a leader in thermal imaging cameras for the fire service market by gaining numerous, significant orders. The company was pleased to announce in December that delivery time for TICs, widely sought by European fire brigades, is being significantly reduced as a result of a new export license attained by MSA in the U.S.

The license covers export of the Evolution 5000 TIC to governmental fire brigades. In short, it allows MSA Europe greater access to TIC inventory in order to provide European fire service customers with the timely delivery they have been seeking for these life-saving TICs.

Fire brigades in Spain also turned to MSA in 2003 for leading edge personal protective equipment, including SCBA and firefighter helmets from MSA Gallet. In fact, sales of SCBA accounted for one fourth of MSA Spain's annual sales, helping generate overall revenue growth of 26 percent. An increased emphasis on distributor sales, along with a stronger presence in the Portuguese market, served to further enhance MSA Spain's performance. Ultimately, these initiatives led to greater sales activity in such key markets as chemicals, petrochemicals and the general industry sector.



The hard-to-overlook MSA Safety Works Learning Center, below, served as home base for MSA's consumer safety education outreach efforts in 2003. Through a series of fun, interactive demonstrations, kids and parents learned about the many home-related hazards that often get overlooked.

MSA at Home

Bringing a *Passion for Safety* home has been the driving focus of MSA Safety Works since the unit's inception in 1999. As the company's consumer products arm, the group achieved meaningful growth in 2003 while building greater brand awareness and enhancing consumer safety education.

Among the group's achievements were 19 new product introductions, adding a strong rental channel of distribution with 140 new outlets, and strengthening business with the addition of several new retail partners.

Following the adage that better service almost always leads to more sales, MSA Safety Works concentrated on improving its already strong record for outstanding customer service. In 2003, the consumer business group successfully trained and supplied pertinent product information to all industrial customer service associates, enabling them to respond to consumer questions quickly and with confidence. The result? Ninety-eight percent of all calls were answered within four rings, with the vast majority answered on the first ring.

The MSA Culture...

A PASSION FOR SAFETY



MSA chairman and CEO John T. Ryan III, left, accepts the Newcomen Award for outstanding business achievement from Leighton Wildrick, president and CEO of the Newcomen Society of the United States.

Enclosed with this report is a review of MSA's history given on the occasion of the Newcomen Award presentation. It provides a retrospective look at how MSA's Passion for Safety emerged from the very beginning and has continued over these many decades.

MSA Safety Works also continued its commitment of taking safety education "on the road" with its development of an eye-catching and interactive Home Safety Learning Center. An important new element of the Safety Works' consumer safety awareness program, the 25' by 37' by 18' inflatable structure visited seven cities in the eastern U.S., generating "inflated" awareness of safety issues within key MSA markets.

Supporting this education effort, MSA Safety Works' highly customized Volkswagen "Safety Bug" also took to road again in 2003. Touring 30-plus cities, the "Bug" resulted in an impressive store satisfaction score of 6.89 out of 7 based on retailer survey data.

A Year of Achievement

To be sure, MSA's market presence in 2003, be it in the home, at a fire, in a mine, on the battlefield or inside an industrial plant, has never been greater. The drivers of this growth have been consistent product demand from the fire service, homeland security and military sectors in the U.S., and from industrial customers outside of the U.S. and Europe.

Demand, however, is just part of the equation. MSA associates have a true *Passion for Safety*. Their commitment to improve MSA, to make the company more competitive, to develop and manufacture innovative and leading-edge products that meet customer needs, and to reach markets that have the greatest need and opportunity, is the true driver of success.

For all of MSA's accomplishments over its history, the company was recognized in 2003 by the Newcomen Society of the United States for outstanding business achievement. The award, which has been presented annually to select companies since the Society's founding in 1923, recognizes significant achievement by private institutions in the American free enterprise system.

In his presentation to MSA, Leighton Wildrick, president and CEO of the Newcomen Society, commented, "MSA's mission to protect the health and safety of people throughout the world began in 1914 when the company's founders convinced Thomas Edison to develop the first battery-powered miner's cap lamp that greatly reduced the risk of explosion in coal mines. Over these many decades, MSA has stayed true to that mission and today protects life in virtually every industry and anywhere people are at risk."

This recognition is a tribute to the many fine people, past and present, who have served MSA as associates and have consistently demonstrated a *Passion for Safety* and commitment to protecting life. It is a passion driven by the knowledge that what one does at MSA – on any given day – could make a lifetime of difference for another. The company's success over the past year is a tribute to these individuals and to MSA customers throughout the world who put their trust in MSA... every day.

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MANAGEMENT'S DISCUSSION AND ANALYSIS

Forward-looking Statements

The following discussion should be read in conjunction with the consolidated financial statements contained in this Annual Report to Shareholders. Certain statements contained in this discussion and elsewhere in this report may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially from expectations contained in such statements.

Factors that may materially affect financial condition and future results include: global economic conditions; the impact of unforeseen economic and political changes, including the threat of terrorism and its potential consequences; the timely and successful introduction of new products; the availability of funding in the fire service, military, and homeland security markets; fluctuations in the cost and availability of key materials and components; the company's ability to generate sufficient cash flow to support capital expenditures, debt repayment, and general operating activities; the company's ability to achieve sales and earnings forecasts; and interest and currency exchange rates.

The foregoing list of important factors is not exclusive. The company undertakes no obligation to publicly update or revise its forward-looking statements.

Critical Accounting Policies and Estimates

MSA prepares its consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires MSA to make estimates and judgements that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosures. MSA bases its estimates and judgements on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. MSA evaluates these estimates and judgements on an on-going basis. Actual results may differ from these estimates and judgements.

MSA believes the following critical accounting policies affect the more significant estimates and judgements used in the preparation of the financial statements. MSA recognizes revenue from the sale of products when title, ownership, and risk of loss pass to the customer. MSA records estimated reductions to sales for customer programs including volume-based incentives. If market conditions were to change the amounts due to customers under these programs could differ from the recorded estimates. MSA maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of MSA's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances could be required. MSA provides for the estimated cost of product warranties at the time that sales

are recognized. While MSA has extensive product quality programs and processes, the company's warranty obligation is affected by product failure rates, material usage, and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage, or service delivery costs differ from MSA's estimates, revisions to the estimated warranty liability would be required. MSA maintains reserves covering the uninsured portion of product liability claims. These reserves are based on management's evaluation of known claims and actuarial valuations. Should actual claims be greater than MSA's estimates, additional product liability charges could be required. MSA writes down its inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of the inventory and the estimated market value based on assumptions about future demand and market conditions. If demand and actual market conditions were less favorable than those projected by management, additional inventory write-downs could be required. MSA records an estimated income tax liability based on management's best judgement of the amounts likely to be paid in the various tax jurisdictions in which it operates. The tax liabilities ultimately paid are dependent on a number of factors, including the resolution of tax audits, and may differ from the amounts recorded. Tax liabilities are adjusted through income when it becomes probable that the actual liability differs from the amount recorded. Actuarial assumptions have a significant impact on the determination of net periodic pension costs and credits. If actual experience differs from these assumptions, future net periodic pension costs and credits could be adversely affected.

Significant accounting policies are described in note 1 to the consolidated financial statements.

Subsequent Event – 3-for-1 Common Stock Split

As more fully described in note 2, the company's common stock split 3-for-1 on January 28, 2004. All share and per share information in this Management Discussion and Analysis and throughout this annual report to shareholders has been adjusted to reflect the split.

Results of Operations

Overview – MSA is committed to being the premier world-wide provider of a full line of products that enhance the safety and health of workers. In recent years the company has concentrated on specific initiatives intended to help us meet this commitment and improve our competitive position and profitability by developing innovative new products, by acquiring companies and technologies that expand and complement our product lines, by entering emerging geographic markets where we believe there are opportunities to meet an unanswered demand for safety products, and by emphasizing operational excellence.

To sharpen our focus on our core safety products business, in November 2002 we announced our decision to explore the potential sale of Callery Chemical, our only non-safety products business unit. As discussed in the following section, this division was sold in September 2003.

In 2003, the company achieved record sales and net income from continuing operations for the third consecutive year. We believe that this performance and our improving financial performance in recent years are the result of initiatives that have allowed us to anticipate and respond quickly to market demand, particularly in the U.S. fire service, homeland security and military markets. Sales growth in the fire service market reflects our ability to quickly bring to market products that comply with changing industry standards and to create new market demand with innovative products like the Evolution 5000 hand-held thermal imaging camera, which is one of the smallest and lightest on the market. In addition, the company has successfully responded to increased homeland security and military market demand for products such as the Millennium and MCU 2/P gas masks and the Advanced Combat Helmet that has occurred since the September 11th attacks and during the ongoing war on terrorism. Demand in these markets has more than offset continuing sluggishness in North American industrial markets. The level of demand for our products in the U.S. fire service, homeland security and military markets is strongly influenced by the levels of government funding available to address the needs of first responders and to meet the requirements of military operations. A reduction in available government funding in the future could adversely affect the demand for our products in these markets.

Our results in Europe improved modestly in 2003, but continue to suffer from the effects of the poor economic climate in Western Europe. The acquisition of MSA Gallet in 2002 added the leading line of European firefighter head protection to our product line and has helped improve our overall performance in Europe. In other international markets, 2003 results were generally higher in most markets, but particularly Australia and Latin America. These improvements reflect focused efforts to effectively reach customers and, particularly in Latin America, improvements in general economic conditions.

Discontinued Operations – On September 12, 2003, the company sold its Callery Chemical Division to BASF Corporation. In accordance with accounting principles generally accepted in the United States of America, the operating results of the Callery Chemical Division and the gain on the sale to BASF Corporation have been reported as discontinued operations in the consolidated statements of income. The net assets of the division have been classified as assets held for sale in the consolidated balance sheets.

Discontinued operations, for which further information is included in note 17, reported sales of \$21.3 million, \$29.5 million, and \$33.1 million and net income of \$2.7 million, \$3.9 million, and \$5.8 million for the years ended December 31, 2003, 2002, and 2001, respectively. Discontinued operations for the year ended December 31, 2003, represent operating results of the Callery Chemical Division through the date of sale. The sale of the division to BASF Corporation resulted in an after-tax gain of \$13.7 million.

At December 31, 2003, approximately \$2.3 million of trade receivables related to the Callery operation were reported as assets held for sale. A substantial portion of this balance was collected in January and February 2004.

The after-tax proceeds of \$53.8 million received from the sale of the division and the subsequent liquidation of net assets retained by the company were distributed to shareholders on November 24, 2003 and charged to retained earnings as a capital distribution.

Continuing Operations – 2003 versus 2002 – Sales for 2003 were \$696.5 million, an increase of \$132.1 million, or 23%, from \$564.4 million in 2002.

Sales by North American operations were \$452.6 million in 2003, an increase of \$82.9 million, or 22%, from \$369.7 million in 2002. The sales improvement occurred in the United States and is largely related to higher shipments of self-contained breathing apparatus and thermal imaging cameras to the fire service market and of gas masks and ballistic helmets to military and homeland security markets. Sales of instruments and fall protection equipment were flat, reflecting continued sluggishness in industrial markets.

During 2003, the company changed its standard shipping terms to U.S. distributors. The effect of this change was to delay revenue recognition on the affected shipments, which reduced current year sales and gross margins by approximately \$4.7 million and \$2.7 million, respectively.

Sales by European operations were \$146.2 million in 2003, an increase of \$23.8 million, or 19%, from \$122.4 million in 2002. The sales increase in 2003 includes a full year of sales by MSA Gallet, which was acquired during the second quarter of 2002. When stated in U.S. dollars, approximately half of the sales increase in Europe was due to the favorable currency translation effects of the stronger Euro.

Sales by international operations were \$97.7 million in 2003 compared to \$72.2 million in 2002, an increase of \$25.5 million, or 35%. The sales improvement occurred primarily in Australia, on higher shipments of breathing apparatus to the Australian Navy, and in Latin America. Approximately one-third of the increase in International sales, when stated in U.S. dollars, was due to the favorable currency translation effects of a stronger Australian dollar and South African Rand.

Gross profit for 2003 was \$288.3 million, an increase of \$55.1 million, or 24%, from \$233.2 million in 2002. The ratio of gross profit to sales was steady at 41.4% in 2003 compared to 41.3% in 2002.

Selling, general and administrative expenses in 2003 were \$170.1 million, an increase of \$29.2 million, or 21%, from \$140.9 million in 2002. Approximately half of the increase was related to higher marketing and selling expenses required to support the significant sales growth in North America. The remainder of the increase occurred in Europe, and reflects the inclusion of a full year's expenses for MSA Gallet, which was acquired in the second quarter of 2002, and the currency exchange effect of a stronger Euro. Selling, general and administrative expenses were 24.4% of sales in 2003 compared to 25.0% of sales in 2002.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Research and development expenses were \$21.7 million in 2003, an increase of \$1.3 million, or 6%, from \$20.4 million in 2002. Research and development activities are performed primarily in the U.S. and Europe.

Depreciation and amortization expense was \$23.2 million in 2003, an increase of \$1.7 million, or 8%, from \$21.5 million in 2002. The increase was due to the inclusion of a full year of depreciation for MSA Gallet, which was acquired during the second quarter of 2002, and regular asset additions.

Cost of products sold and operating expenses in 2003 were favorably affected by a change in the vacation vesting policy for U.S. employees. Under the vacation vesting policy adopted in 2003, employees earn their vacation entitlement during the current year. Previously, vacation was vested on the last day of the prior year. The policy resulted in favorable adjustments to cost of products sold and operating expenses during 2003 of \$3.6 million and \$1.8 million, respectively. The vacation policy was changed to align the year the benefit is earned with the year it is received.

Cost of products sold and operating expenses include net periodic pension benefit costs and credits. As described in note 7, pension credits, combined with pension costs, resulted in net pension credits of \$8.8 million in 2003 and \$13.1 million in 2002. Net pension credits of \$10.8 million in 2003 include a \$2.0 million curtailment gain that was related to the sale of the Callery Chemical Division and is reflected in net income from discontinued operations. The current recognition of pension income is primarily the result of the exceptional investment performance of the U.S. pension fund over the past ten years. During that period, the investment performance of the MSA Noncontributory Pension Fund has ranked among the top 1% of all U.S. pension funds. Future net pension credits can be volatile depending on the future performance of plan assets, changes in actuarial assumptions regarding such factors as the selection of discount rates and rates of return on plan assets, changes in the amortization levels of actuarial gains and losses, plan amendments affecting benefit pay-out levels, and profile changes in the participant populations being valued. Changes in any of these factors could cause net pension credits to change. To the extent net pension credits decline in the future, income would be adversely affected.

Interest expense in 2003 was \$4.6 million compared to \$4.8 million in 2002. The decrease relates to reductions in long term debt and lower average short term borrowings.

Currency exchange gains of \$3.4 million were recorded in 2003 compared to gains of \$191,000 in 2002.

Currency exchange gains in 2003 were primarily related to Euro and Canadian dollar denominated assets held by the U.S. company, and reflect a significant strengthening of those currencies during the year.

Other income, for which further information is included in note 12, was \$1.7 million in 2003 compared to \$2.3 million in 2002.

The effective income tax rate, for which further information is included in note 5, was 33.7% in 2003 and 35.1% in 2002. The effective tax rate in 2003 was lower than the U.S. statutory income tax rate due in part to the favorable effect of research and development credits and the one-time effect of releasing \$1.2 million of previously-established valuation allowances on foreign tax credit carry forwards. These valuation allowances were released in 2003 as a result of tax planning strategies that were implemented during the year and an improved outlook for foreign source income. The company has maintained tax reserves established in prior years on research and development credits that were claimed in tax years that are currently being examined by the Internal Revenue Service. Management is cautiously optimistic that a favorable settlement of these examinations could be reached in late 2004.

Net income from continuing operations was \$48.9 million in 2003, an increase of \$17.7 million, or 57%, over 2002 net income from continuing operations of \$31.2 million. Continuing operations basic earnings per share of common stock improved to \$1.33 in 2003 compared to 85 cents in 2002.

Continuing Operations – 2002 versus 2001 – Sales for 2002 were \$564.4 million, an increase of \$54.7 million, or 11%, from \$509.7 million in 2001.

Sales by North American operations were \$369.7 million in 2002, an increase of \$26.1 million, or 8%, from \$343.6 million in 2001. The sales improvement occurred in the United States and is largely related to higher shipments of gas masks to the military and homeland security markets. Sales to the fire service market were relatively flat year-to-year with increased shipments of self-contained breathing apparatus being offset by lower shipments of thermal imaging cameras. Thermal imaging camera sales are dependent on the level of federal government funding provided to local fire departments. During 2002 much of this funding was diverted to meeting homeland security requirements. Sales of instruments and fall protection equipment were slightly lower in 2002.

Sales by European operations were \$122.4 million in 2002, an increase of \$28.2 million, or 30%, from \$94.2 million in 2001. A significant portion of the improvement was due to the acquisition of MSA Gallet during the second quarter. European sales also benefited from strong shipments of escape breathing devices for use in the merchant marine fleet.

Sales by international operations were \$72.2 million in 2002 compared to \$71.7 million in 2001, an increase of \$471,000, or 1%. Local currency sales growth of approximately 7% was largely offset by unfavorable currency translation effects when stated in U.S. dollars. Substantial local currency sales growth was achieved in Africa, Brazil, and Australia.

Gross profit for 2002 was \$233.2 million, an increase of \$16.4 million, or 8%, from \$216.8 million in 2001. The ratio of gross profit to sales was 41.3% in 2002 compared to 42.5% in 2001. The lower gross profit percentage is largely related to sales mix changes and somewhat lower gross margins in North American industrial markets.

Selling, general and administrative expenses increased \$10.8 million, or 8%, to \$140.9 million in 2002, but decreased as a percent of sales to 25.0% in 2002 compared to 25.5% in 2001. The increase in selling, general and administrative expenses occurred in North America and Europe and reflects costs associated with higher sales volumes, higher insurance costs, and the acquisition of MSA Gallet.

Research and development expenses in 2002 were \$20.4 million, an increase of \$3.7 million, or 22%, from \$16.7 million in 2001. These expenses relate to safety products equipment research and development activities conducted primarily in the U.S. and Europe. The increase reflects higher research and development costs in the U.S. and the acquisition of MSA Gallet in the second quarter of 2002.

Depreciation and amortization expense was \$21.5 million in 2002, a decrease of \$1.1 million, or 5%, from \$22.6 million in 2001. As required by FAS No. 142, goodwill amortization was discontinued at the beginning of 2002. Goodwill amortization expense was \$2.2 million in 2001. The decrease associated with the absence of goodwill amortization in 2002 was partially offset by the inclusion of MSA Gallet depreciation following its acquisition and regular asset additions.

Cost of products sold and operating expenses include net periodic pension benefit costs and credits. As described in note 7, pension credits, combined with pension costs, resulted in net pension credits of \$13.1 million in 2002 and \$15.0 million in 2001.

Interest expense in 2002 was \$4.8 million compared to \$5.3 million in 2001. The decrease relates to reductions in long term debt.

Currency exchange gains of \$191,000 were recorded in 2002 compared to a loss of \$1.2 million in 2001. The favorable swing was primarily due to the strengthening of the Euro during 2002. The most significant losses from currency valuation changes in 2001 related to the strengthening of the U.S. dollar against the Canadian dollar.

Other income, for which further information is included in note 12, was \$2.3 million in 2002 compared to \$2.8 million in 2001.

The effective income tax rate, for which further information is included in note 5, was 35.1% in 2002 and 40.7% in 2001. The effective tax rate in 2002 was substantially the same as the U.S. statutory income tax rate due to favorable tax effects associated with the charitable donation of property and adjustments to prior year tax provisions, net of valuation allowances taken on deferred tax assets. The 2001 rate was higher than the U.S. statutory income tax rate due to the recognition of a valuation allowance on deferred tax assets related to foreign tax credit carry-forwards in the U.S. and improved earnings in high tax rate countries.

Net income from continuing operations was \$31.2 million in 2002, an increase of \$5.4 million, or 21%, over 2001 net income from continuing operations of \$25.9 million. Continuing operations basic earnings per share of common stock improved to 85 cents in 2002 compared to 72 cents in 2001.

Liquidity and Financial Condition

The main sources of liquidity for the company are cash generated from operations and borrowing capacity. The company's principal liquidity requirements are for working capital, capital expenditures, and principal and interest payments on outstanding indebtedness.

Cash and cash equivalents increased \$36.8 million during 2003, compared to an increase of \$9.8 million in 2002.

Continuing operations provided cash of \$32.5 million in 2003 compared to providing \$43.0 million in 2002. Higher net income from continuing operations in 2003 was more than offset by increases in net operating assets. In 2003, increases in receivables used cash of \$27.0 million compared to using \$3.0 million in 2002. Increases in inventories during 2003 used \$3.2 million compared to inventory reductions in 2002 which provided \$5.5 million in cash. Trade receivables related to continuing operations were \$89.9 million at December 31, 2003. Trade receivables for continuing operations expressed in number of days sales outstanding were 47 days at December 31, 2003, compared to 38 days at December 31, 2002. The increase in trade receivables and days sales outstanding reflect increased government and international receivables. Other receivables were \$39.0 million at December 31, 2003 and \$35.5 million at December 31, 2002, representing a retained interest in securitized receivables. Inventories of continuing operations were \$90.1 million at December 31, 2003 and \$76.7 million at December 31, 2002. Inventory measured against sales turned 7.7 times in 2003 and 7.4 times in 2002. Cash flow from continuing operations in 2002 was \$22.9 million higher than in 2001. Improved cash flow from continuing operations in 2002 reflects higher operating income and relatively small changes in receivables and inventories.

Cash provided by discontinued operations in 2003 was \$1.6 million higher than in 2002. The increase is primarily related to the liquidation of trade receivables. Cash provided by discontinued operations in 2002 was \$1.2 million lower than in 2001, mainly due to lower income.

Investing activities provided cash of \$66.7 million in 2003 compared to using \$34.1 million in 2002. In 2003, the sale of the Callery Chemical Division and property in Germany provided cash of approximately \$63.0 million and \$22.9 million, respectively. In 2002, net cash of approximately \$14.5 million was used for the acquisition of Gallet. In 2001, cash was used for the acquisition of Surety Manufacturing and Testing, Ltd. Capital expenditures of \$19.6 million in 2003, \$20.1 million in 2002, and 20.0 million in 2001 were primarily related to purchases of new or replacement tooling and production equipment.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Financing activities used cash of \$76.3 million in 2003 compared to using \$7.1 million in 2002. The higher use of cash in 2003 includes a special distribution to common shareholders of \$53.8 million, representing the after-tax proceeds from the sale of the Callery Chemical Division and the subsequent liquidation of net assets retained by the company. Dividends paid on common stock during 2003 (the 86th consecutive year of dividend payment) were 26 cents per share. Dividends paid per share in 2002 and 2001 were 22 cents and 18 cents, respectively.

The average amount of short term debt outstanding during 2003 and 2002 was \$560,000 and \$3.1 million, respectively. Credit available at year-end with financial institutions was the U.S. dollar equivalent of \$20.4 million, of which \$19.6 million was unused.

Long-term debt, including the current portion, at December 31, 2003 was \$64.8 million, or 17.4% of total capital. For purposes of this calculation, total capital is defined as long-term debt plus the current portion of long-term debt and shareholders' equity.

Outstanding short and long-term indebtedness at December 31, 2003 and 2002 was as follows:

(In thousands)	2003	2002
Bank lines of credit	\$ 828	\$ 9,096
Industrial development debt	10,750	10,750
Senior notes	52,000	56,000
Other	2,003	2,564
	65,581	78,410
Current portion	(5,666)	(14,060)
	59,915	64,350

Accounts Receivable Securitization

As described in note 9, the company sells eligible trade accounts receivable to Mine Safety Funding Corporation (MSF), an unconsolidated wholly-owned subsidiary. MSF was established in November 1999 to provide the company with an inexpensive and reliable source of financing to replace borrowings under short term lines of credit. Under accounting principles generally accepted in the United States of America, MSF is not consolidated with MSA because legally it is a bankruptcy remote entity. In the event that MSA declared bankruptcy all cash collections on trade receivables owned by MSF would first be used to satisfy MSF's borrowings before any remaining proceeds could be returned to MSA. This arrangement permits MSF to borrow at advantageous interest rates using its portfolio of trade receivables as security. As a result of the securitization agreement, \$15.0 million of accounts receivable and short-term debt has been removed from the company's December 31, 2003 balance sheet. At December 31, 2002, \$29.0 million of accounts receivable and short-term debt were removed from the company's balance sheet under this arrangement.

Cumulative Translation Adjustments

The year-end position of the U.S. dollar relative to international currencies resulted in translation gains of \$14.7 million being credited to the cumulative translation adjustments shareholders' equity account in 2003, compared to gains of \$5.8 million in 2002 and losses of \$4.9 million in 2001. Translation gains in 2003 reflect the strengthening of most currencies against the U.S. dollar. The most significant gains related to MSA's operations in Europe and Australia. Translation gains in 2002 occurred primarily in Europe, partially offset by losses in South America. Translation losses in 2001 occurred primarily in South Africa, Brazil, Chile and most European countries.

Commitments and Contingencies

The company is obligated to make future payments under various contracts, including debt and lease agreements. Significant cash obligations of MSA as of December 31, 2003 were as follows:

(In thousands)	Total	2004	2005	2006	2007	2008	Thereafter
Long-term debt	\$ 64,753	\$ 4,838	\$ 4,561	\$ 8,231	\$ 105	\$ 8,105	\$38,913
Operating leases	27,613	5,262	4,259	3,621	2,739	2,657	9,075
Technology transfer agreement	2,250	1,500	750	-	-	-	-
Take or pay supply contract	7,000	1,500	1,500	1,500	1,500	1,000	-
Totals	101,616	13,100	11,070	13,352	4,344	11,762	47,988

The company expects to make net contributions of \$1.3 million to its pension plans in 2004.

The company has purchase commitments for materials, supplies, services, and property, plant and equipment as part of the ordinary conduct of business.

During the third quarter of 2003, the company sold its real property in Berlin, Germany for approximately \$25.7 million, resulting in a gain of approximately \$13.6 million. At the same time, the company entered into an

eight year agreement to lease back the portion of the property that it occupies. Under sale-leaseback accounting, \$12.1 million of gain was deferred and is being amortized over the term of the lease.

On September 12, 2003, the company entered into a lease agreement with BASF Corporation pertaining to that portion of the Callery Chemical site that is occupied by MSA's Evans City, PA manufacturing operations. The initial term of the lease is one year and the company has the option to renew for five successive one year periods.

Various lawsuits and claims arising in the normal course of business are pending against the company. These lawsuits are primarily product liability claims. Pending claims include several multi-party asbestosis or silicosis suits, generally as a result of the presence of safety equipment supplied by MSA and other manufacturers at locations named in the suits. While the amounts claimed may be substantial, the ultimate liability of the company is not determinable because of uncertainties, including the number of defendants in each suit and the jurisdiction.

The company maintains a reserve for uninsured product liability based on expected settlement charges for pending claims and an estimate of unreported claims derived from experience, sales volumes, and other relevant information. The company reevaluates its exposures on an ongoing basis and makes adjustments to reserves as appropriate. Based on information currently available, management believes that the disposition of matters that are pending will not have a materially adverse effect on the financial position of the company.

The company has retained responsibility for certain environmental costs at the Callery Chemical site in the event that corrective action is required by governmental agencies or regulations. Under the terms of the asset purchase agreement with BASE, MSA's maximum liability for these matters is capped at \$50.0 million. Based on environmental studies performed prior to the sale of the division, the company does not believe that its potential exposure under the terms of this agreement will materially affect the results of operations, cash flows, or financial condition.

Financial Instrument Market Risk

Market risk represents the risk of adverse changes in the value of a financial instrument caused by changes in currency exchange rates, interest rates, and equity prices. The company is exposed to market risks related to currency exchange rates and interest rates.

Currency Exchange Rate Sensitivity – By the very nature of our global operations, the company's cash flow and earnings are subject to fluctuations due to exchange rate changes. Because the company operates in a number of locations around the world, currency exchange risk is well diversified. When appropriate, the company may attempt to limit its exposure to changes in currency exchange rates through both operational and financial market actions. These actions may include contracts and other actions designed to reduce existing exposures by essentially creating offsetting currency exposures. At December 31, 2003, contracts for the purpose of hedging cash flows were not significant.

Interest Rate Sensitivity – The company is exposed to changes in interest rates primarily as a result of borrowing and investing activities used to maintain liquidity and fund business operations. Because of the relatively short maturities of temporary investments and the variable rate nature of industrial development debt, these financial instruments are reported at carrying values which approximate fair values.

As more fully described in note 11, the company has \$52.0 million of fixed rate debt which matures at various dates through 2012. The incremental increase in the fair value of fixed rate long term debt resulting from a hypothetical 10% decrease in interest rates would be approximately \$1.1 million. However, the company's sensitivity to interest rate declines and the corresponding increase in the fair value of its debt portfolio would unfavorably affect earnings and cash flows only to the extent that the company elected to repurchase or retire all or a portion of its fixed rate debt portfolio at prices above carrying values.

Related Party Transactions

The company does not have any related party transactions that materially affect the results of operations, cash flow, or financial condition.

Common Stock

At December 31, 2003, there were 36,927,984 shares of common stock outstanding and approximately 7,500 identifiable common stockholders. Common stock price and volume information is included on the American Stock Exchange under the symbol MSA. The quarterly high and low price quotations and cash dividend information for common shares follow. On November 24, 2003, the company made a special distribution of \$1.46 per common share, representing the after-tax proceeds received from the sale of the Callery Chemical Division and the subsequent liquidation of net assets retained by the company, to shareholders of record on November 14, 2003.

Quarter	2003		2002	
	High	Low	High	Low
First	\$12.44	\$10.05	\$14.40	\$11.78
Second	14.99	11.76	16.83	11.67
Third	22.63	14.21	13.58	10.63
Fourth	28.83	17.27	13.08	9.13

Quarter	2003		2002	
	Dividend Per Share	Record Date	Payment Date	
First	\$.06	Feb. 21, 2003	Mar. 10, 2003	
Second	.06	May 21, 2003	Jun. 10, 2003	
Third	.07	Aug. 15, 2003	Sep. 10, 2003	
Fourth	.07	Nov. 17, 2003	Dec. 10, 2003	
Total	.26			

Quarter	2003		2002	
	Dividend Per Share	Record Date	Payment Date	
First	\$.04	Feb. 22, 2002	Mar. 10, 2002	
Second	.06	May 17, 2002	Jun. 10, 2002	
Third	.06	Aug. 26, 2002	Sep. 10, 2002	
Fourth	.06	Nov. 22, 2002	Dec. 10, 2002	
Total	.22			

The company's stock transfer agent is Wells Fargo Bank, N.A., Shareowner Services, 161 North Concord Exchange, South St. Paul, MN 55075.

RESPONSIBILITY STATEMENTS

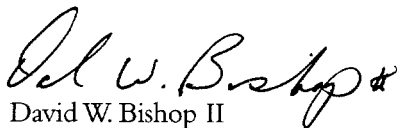
Responsibility for Financial Statements

The management of Mine Safety Appliances Company prepared the accompanying financial statements and is responsible for their integrity and objectivity. These statements were prepared in conformity with accounting principles generally accepted in the United States of America. The financial statements include amounts that are based on management's best estimates and judgments. The other information in this annual report is consistent with the financial statements.

The company maintains a system of internal controls, including a program of internal auditing. Management believes that the company's system of internal controls provides reasonable assurance that assets are safeguarded against losses and that the financial records are reliable for use in preparing financial statements. The concept of reasonable assurance recognizes that the cost of a control should not exceed the expected benefits. Management believes that its internal control system appropriately recognizes this cost/benefit relationship.

Management recognizes its responsibility for fostering a strong ethical climate so that the company's affairs are conducted according to the highest standards of personal and corporate conduct. This responsibility is characterized and reflected in a broad business ethics policy that addresses, among other things, conduct of business activities within the laws of the United States and other countries in which the company operates and potential conflicts of interest of its associates. Ethics policy violations are thoroughly investigated and may lead to disciplinary action, including termination of employment.

The Audit Committee of the Board of Directors performs an oversight role in the preparation of the financial statements. The Audit Committee is composed of four independent directors. The Audit Committee meets regularly to discuss audit and financial reporting matters with management, the internal auditors, and the independent auditors. The internal auditors and independent auditors have direct access to the Audit Committee to discuss the results of their audits or any other matters.



David W. Bishop II
Controller
Chief Accounting Officer



Dennis L. Zeitler
Vice President and Treasurer
Chief Financial Officer

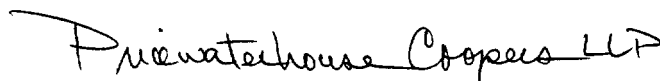


John T. Ryan III
Chairman of the Board
Chief Executive Officer

Report of Independent Auditors

To the Shareholders and Board of Directors of Mine Safety Appliances Company:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, changes in retained earnings and accumulated other comprehensive income, and of cash flows present fairly, in all material respects, the financial position of Mine Safety Appliances Company and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.



PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 20, 2004

CONSOLIDATED STATEMENT OF INCOME

(In thousands, except per share amounts)

Year Ended December 31

	2003	2002	2001
Net sales.....	\$696,473	\$564,426	\$509,736
Other income.....	1,724	2,271	2,776
	<u>698,197</u>	<u>566,697</u>	<u>512,512</u>
Costs and expenses			
Cost of products sold.....	408,219	331,215	292,940
Selling, general and administrative	170,081	140,924	130,092
Research and development	21,722	20,372	16,740
Depreciation and amortization.....	23,208	21,525	22,590
Interest.....	4,564	4,769	5,349
Currency exchange (gains) losses	(3,356)	(191)	1,197
	<u>624,438</u>	<u>518,614</u>	<u>468,908</u>
Income from continuing operations before income taxes.....	73,759	48,083	43,604
Provision for income taxes.....	24,835	16,870	17,753
Net income from continuing operations.....	48,924	31,213	25,851
Net income from discontinued operations.....	2,685	3,864	5,780
Gain on sale of discontinued operations – after tax.....	13,658		
Net income	<u>\$ 65,267</u>	<u>\$ 35,077</u>	<u>\$ 31,631</u>
Basic earnings per common share:			
Continuing operations.....	\$ 1.33	\$.85	\$.72
Discontinued operations.....	.45	.11	.16
Net income	<u>\$ 1.78</u>	<u>\$.96</u>	<u>\$.88</u>
Diluted earnings per common share:			
Continuing operations.....	\$ 1.31	\$.85	\$.71
Discontinued operations.....	.44	.10	.16
Net income	<u>\$ 1.75</u>	<u>\$.95</u>	<u>\$.87</u>

See notes to consolidated financial statements.

CONSOLIDATED BALANCE SHEET

(In thousands, except share amounts)

December 31

Assets

	2003	2002
Current Assets		
Cash and cash equivalents	\$ 73,244	\$ 36,477
Trade receivables, less allowance for doubtful accounts of \$6,418 and \$4,134	89,919	58,648
Other receivables	38,981	35,456
Inventories	90,103	76,748
Deferred tax assets	17,890	20,396
Prepaid expenses and other current assets	10,794	10,157
Assets held for sale	2,311	45,062
Total current assets	323,242	282,944
Property		
Land	4,642	5,615
Buildings	80,044	91,320
Machinery and equipment	269,739	250,797
Construction in progress	5,521	5,580
Total	359,946	353,312
Less accumulated depreciation	(239,386)	(222,905)
Net property	120,560	130,407
Other Assets		
Prepaid pension cost	121,290	107,338
Deferred tax assets	23,047	7,800
Goodwill	44,810	42,963
Other noncurrent assets	10,936	8,313
Total	\$643,885	\$579,765

Liabilities

Current Liabilities		
Notes payable and current portion of long-term debt	\$ 5,666	\$ 14,060
Accounts payable	40,029	30,979
Employees' compensation	15,486	16,216
Insurance and product liability	13,518	8,899
Taxes on income	4,976	3,748
Other current liabilities	35,040	25,798
Total current liabilities	114,715	99,700
Long-Term Debt	59,915	64,350
Other Liabilities		
Pensions and other employee benefits	74,808	61,198
Deferred tax liabilities	70,845	61,402
Other noncurrent liabilities	15,744	4,053
Total other liabilities	161,397	126,653

Shareholders' Equity

Preferred stock, 4½% cumulative, \$50 par value (callable at \$52.50)	3,569	3,569
Common stock, no par value (shares outstanding: 2003—36,927,984 2002—12,207,029)	31,187	28,626
Stock compensation trust	(19,385)	(21,697)
Treasury shares, at cost	(137,173)	(134,827)
Deferred stock compensation	(993)	(801)
Accumulated other comprehensive income	(6,037)	(20,501)
Earnings retained in the business	436,690	434,693
Total shareholders' equity	307,858	289,062
Total	\$643,885	\$579,765

See notes to consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

(In thousands)

Year Ended December 31

	2003	2002	2001
Operating Activities			
Net income	\$65,267	\$35,077	\$31,631
Net income from discontinued operations	(2,685)	(3,864)	(5,780)
Gain on the sale of discontinued operations	(13,658)		
Net income from continuing operations	48,924	31,213	25,851
Depreciation and amortization	23,208	21,525	22,590
Pensions	(8,845)	(13,125)	(14,962)
Net gain on sale of investments and assets	(2,332)	(35)	(1,764)
Deferred income taxes	4,922	4,765	9,259
Receivables and other receivables	(27,039)	(3,008)	(16,846)
Inventories	(3,162)	5,518	(10,716)
Accounts payable and accrued liabilities	1,253	(3,616)	(2,955)
Other assets and liabilities	(1,864)	(1,775)	4,132
Other—including currency exchange adjustments	(2,554)	1,582	5,561
Cash Flow From Continuing Operations	32,511	43,044	20,150
Cash Flow From Discontinued Operations	8,029	6,412	7,635
Cash Flow From Operating Activities	40,540	49,456	27,785
Investing Activities			
Property additions	(19,628)	(20,072)	(19,987)
Property disposals	23,521	649	6,685
Proceeds from sale of discontinued operations	63,042		
Acquisitions, net of cash acquired, and other investing	(279)	(14,667)	(6,765)
Cash Flow From Investing Activities	66,656	(34,090)	(20,067)
Financing Activities			
Additions to long-term debt	245	677	12
Reductions of long-term debt	(4,902)	(7,089)	(5,259)
Changes in notes payable and short-term debt	(9,146)	5,578	1,150
Cash dividends and special distributions	(63,270)	(7,961)	(6,480)
Company stock purchases	(2,309)	(846)	(3,227)
Company stock sales	3,036	2,508	7,477
Cash Flow From Financing Activities	(76,346)	(7,133)	(6,327)
Effect of exchange rate changes on cash	5,917	1,543	(1,231)
Increase in cash and cash equivalents	36,767	9,776	160
Beginning cash and cash equivalents	36,477	26,701	26,541
Ending cash and cash equivalents	\$73,244	\$36,477	\$26,701
Supplemental cash flow information:			
Interest payments	\$ 5,025	\$ 5,890	\$ 6,566
Income tax payments	35,743	18,546	9,765

See notes to consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN RETAINED EARNINGS AND ACCUMULATED OTHER COMPREHENSIVE INCOME

(In thousands)

	Retained Earnings	Accumulated Other Comprehensive Income	Comprehensive Income
Balances January 1, 2001	\$382,426	\$(20,869)	
Net income	31,631		\$31,631
Cumulative translation adjustments		(4,934)	(4,934)
Minimum pension liability adjustments (a)		(413)	(413)
Comprehensive income			<u>\$26,284</u>
Common dividends	(6,432)		
Preferred dividends	(48)		
Balances December 31, 2001	407,577	(26,216)	
Net income	35,077		\$35,077
Cumulative translation adjustments		5,772	5,772
Minimum pension liability adjustments (a)		(57)	(57)
Comprehensive income			<u>\$40,792</u>
Common dividends	(7,914)		
Preferred dividends	(47)		
Balances December 31, 2002	434,693	(20,501)	
Net income	65,267		\$65,267
Cumulative translation adjustments		14,699	14,699
Minimum pension liability adjustments (a)		(235)	(235)
Comprehensive income			<u>\$79,731</u>
Special distribution to common shareholders	(53,799)		
Common dividends	(9,425)		
Preferred dividends	(46)		
Balances December 31, 2003	<u>\$436,690</u>	<u>\$(6,037)</u>	

(a) – Charges to minimum pension liability adjustments in 2003, 2002 and 2001 are net of tax benefits of \$157,000, \$38,000 and \$275,000, respectively.

Components of accumulated other comprehensive income are as follows:

	(In thousands)		
	2003	2002	2001
Cumulative translation adjustments	\$(4,894)	\$(19,593)	\$(25,365)
Minimum pension liability adjustments	(1,143)	(908)	(851)
Accumulated other comprehensive income	<u>\$(6,037)</u>	<u>\$(20,501)</u>	<u>\$(26,216)</u>

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 – Significant Accounting Policies

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Principles of Consolidation – The consolidated financial statements include the accounts of the company and all subsidiaries except Mine Safety Funding Corporation. Intercompany accounts and transactions are eliminated. To facilitate timely reporting, several international subsidiaries have November 30th fiscal year ends. Certain prior year amounts have been reclassified to conform with the current year presentation.

Currency Translation – The functional currency of all significant foreign subsidiaries is the local currency. Assets and liabilities of these subsidiaries are translated at year-end exchange rates. Income statement accounts are translated at the average rates of exchange prevailing during the year. Translation adjustments for these companies are reported as a component of shareholders' equity and are not included in income. Foreign currency transaction gains and losses are included in net income for the period.

Cash Equivalents – Cash equivalents include temporary deposits with financial institutions and highly liquid investments with original maturities of 90 days or less.

Inventories – Inventories are stated at the lower of cost or market. Most U.S. inventories are valued on the last-in, first-out (LIFO) cost method. Other inventories are valued on the average cost method or at standard costs which approximate actual costs.

Property and Depreciation – Property is recorded at cost. Depreciation is computed using straight-line and accelerated methods over the estimated useful lives of the assets. Expenditures for significant renewals and improvements are capitalized. Ordinary repairs and maintenance are expensed as incurred. Gains or losses on property dispositions are included in income and the cost and related depreciation are removed from the accounts.

Goodwill and Other Intangible Assets – Effective January 1, 2002, the company adopted FAS No. 142, Goodwill and Other Intangible Assets. Under this standard, goodwill and intangible assets with indefinite lives are not amortized, but are subject to impairment write-down tests that must be performed at least annually. For years ending prior to 2002, goodwill was amortized on a straight-line basis over periods not exceeding 35 years. Other intangible assets are amortized on a straight-line basis over their useful lives.

Revenue Recognition – Revenue from the sale of products is recognized when title, ownership, and risk of loss pass to the customer.

Shipping and Handling – Shipping and handling expenses for products sold to customers are charged to cost of products sold as incurred. Amounts billed to customers for shipping and handling are included in net sales.

Research and Development – Research and development costs are expensed as incurred.

Income Taxes – Deferred income taxes are provided for temporary differences between financial and tax reporting. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. If it is more likely than not that some portion or all of a deferred tax asset will not be realized, a valuation allowance is recognized. No provision is made for possible U.S. taxes on the undistributed earnings of foreign subsidiaries that are considered to be reinvested indefinitely. Calculation of the unrecognized deferred tax liability for temporary differences related to these earnings is not practicable. Where it is contemplated that earnings will be remitted, credits for foreign taxes already paid are expected to generally offset applicable U.S. income taxes. In cases where they will not offset U.S. income taxes, appropriate provisions are recorded.

Stock-Based Compensation Plans – The company applies the intrinsic value-based method in accordance with Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees. Accordingly, no compensation cost is recognized for stock option grants. Compensation cost for restricted stock awards is measured at the market value of the shares when awarded. Unearned stock compensation is reported in shareholders' equity and is charged to income over the restriction period.

If the company had elected to recognize compensation cost based on the fair value of the options at the grant date as prescribed by FAS 148, Accounting for Stock-Based Compensation – Transition and Disclosure, net income and earnings per share would have been reduced to the pro forma amounts shown below:

	(In thousands)		
	2003	2002	2001
Net income as reported	\$65,267	\$35,077	\$31,631
Fair value of stock options granted, net of tax	(1,374)	(1,717)	(1,519)
Pro forma net income	63,893	33,360	30,112
Basic earnings per share:			
As reported	\$ 1.78	\$.96	\$.88
Pro forma	1.74	.91	.84
Diluted earnings per share:			
As reported	\$ 1.75	\$.95	\$.87
Pro forma	1.71	.90	.83

The fair value of the options granted was estimated at the grant dates using the Black-Scholes option pricing model and the following weighted average assumptions for options granted in 2003, 2002, and 2001, respectively; risk-free interest rate of 4.0%, 5.3%, and 5.2%; dividend yield of 2.1%, 2.0%, and 2.1%; expected option life of 9.9 years, 9.9 years, and 9.9 years; and expected volatility factor of 23%, 23%, and 23%.

Derivative Instruments – The company uses derivative instruments to dampen the effects of changes in currency exchange rates and to achieve a targeted mix of fixed and floating interest rates on outstanding debt. The company does not enter into derivative transactions for speculative purposes and does not hold derivative instruments for trading purposes. Derivative instruments, including interest rate swaps and forward exchange contracts, are not accounted for as hedges and are marked-to-market each period. The realized and unrealized gains or losses on these instruments are recognized in income in the current period. MSA estimates the fair value of all derivatives based on quoted market prices or pricing models, and records all derivatives on the balance sheet at fair value.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 2 – Subsequent Event

On January 28, 2004, the company paid a 3-for-1 stock split of the common stock to shareholders of record on January 16, 2004. Share and per share information in this report has been adjusted to reflect the split.

Note 3 – Capital Stock

- Common stock, no par value – 180,000,000 shares authorized
- Second cumulative preferred voting stock, \$10 par value – 1,000,000 shares authorized; none issued
- 4½% cumulative preferred nonvoting stock, \$50 par value – 100,000 shares authorized; 71,373 shares issued and 51,554 shares (\$1,690,000) held in treasury (1,241 shares, \$61,000, purchased for treasury in 2003; no activity in 2002; 600 shares, \$21,000, purchased for treasury in 2001)

Common stock activity is summarized as follows:

	Shares			Dollars (In thousands)		
	Shares Issued	Stock Compensation Trust	Shares in Treasury	Shares Issued	Stock Compensation Trust	Treasury Cost
Balances January 1, 2001	20,335,797	(1,639,320)	(6,868,854)	\$ 18,841	\$ (25,683)	\$(129,066)
Restricted stock awards		860		12	13	
Restricted stock awards forfeited			(3,900)			(80)
Stock options exercised	147,254	223,087		4,226	3,491	
Tax benefit related to stock plans				2,307		
Treasury shares purchased			(94,197)			(3,206)
Balances December 31, 2001	20,483,051	(1,415,373)	(6,966,951)	25,386	(22,179)	(132,352)
Restricted stock awards	23,198			915		
Stock options exercised	73,860	30,744		1,786	482	
Tax benefit related to stock plans				539		
Treasury shares purchased			(21,500)			(846)
Balances December 31, 2002	20,580,109	(1,384,629)	(6,988,451)	28,626	(21,697)	(133,198)
Restricted stock awards		27,235		517	427	
Restricted stock awards forfeited			(1,000)			(37)
Stock options exercised		120,317		1,151	1,885	
Tax benefit related to stock plans				893		
Treasury shares purchased			(44,253)			(2,248)
Balances December 31, 2003	20,580,109	(1,237,077)	(7,033,704)	31,187	(19,385)	(135,483)
3-for-1 stock split (January 2004)	41,160,218	(2,474,154)	(14,067,408)			
Adjusted balances December 31, 2003	61,740,327	(3,711,231)	(21,101,112)	31,187	(19,385)	(135,483)

The Mine Safety Appliances Company Stock Compensation Trust was established to fund certain benefit plans, including employee and non-employee directors stock options and awards. Shares held by the Stock Compensation Trust, and the corresponding cost of those shares, are reported as a reduction of common shares issued. Differences between the cost of the shares held by the Stock Compensation Trust and the market value of shares released for stock-related benefits are reflected in shares issued.

The company has a Shareholder Rights Plan under which each outstanding share of common stock is granted one-ninth of a preferred share purchase right. The rights are exercisable for a fraction of a share of preferred stock, only if a person or group acquires or commences a tender offer for 15% or more of the company's common stock. In the event a person or group acquires 15% or more of the outstanding common stock, each right not owned by that person or group will entitle the holder to purchase that number of shares of common stock having a value equal to twice the \$225 exercise price. The Board of Directors may redeem the rights for \$.01 per right at any time until ten days after the announcement that a 15% position has been acquired. The rights expire on February 21, 2007.

Note 4 – Segment Information

The company is organized into three geographic operating segments: North America, Europe, and International. The company is engaged in the manufacture and sale of safety equipment, including respiratory protective equipment, head protection, eye and face protection, hearing protectors, safety clothing, industrial emergency care products, mining safety equipment, thermal imaging cameras, and monitoring instruments.

Reportable segment information is presented in the following table:

(In thousands)	North America	Europe	International	Reconciling Items	Consolidated Totals
2003					
Sales to external customers	\$452,567	\$146,162	\$ 97,744	\$	\$696,473
Intercompany sales	24,215	49,499	3,061	(76,775)	
Net income from continuing operations	38,666	2,795	6,349	1,114	48,924
Net income from discontinued operations	2,685				2,685
Gain on sale of discontinued operations	13,658				13,658
Total assets continuing operations	419,472	190,179	68,611	(36,688)	641,574
Assets held for sale	2,311				2,311
Interest income	576	115	278	102	1,071
Interest expense	4,357	123	84		4,564
Noncash items:					
Depreciation and amortization	17,071	4,972	1,144	21	23,208
Pension income (expense)	14,999	(3,847)	(307)		10,845
Equity in earnings of affiliates			(5)		(5)
Income tax provision	18,632	2,069	2,985	1,149	24,835
Investments in affiliates	366		153		519
Property additions	13,221	3,976	2,423	8	19,628
Fixed assets	93,296	19,918	7,319	27	120,560
2002					
Sales to external customers	369,728	122,377	72,206	115	564,426
Intercompany sales	21,472	35,733	3,116	(60,321)	
Net income from continuing operations	25,933	2,519	2,372	389	31,213
Net income from discontinued operations	3,864				3,864
Total assets continuing operations	363,999	145,663	50,364	(25,323)	534,703
Assets held for sale	45,062				45,062
Interest income	424	142	281	106	953
Interest expense	4,501	67	201		4,769
Noncash items:					
Depreciation and amortization	16,012	4,446	1,047	20	21,525
Pension income (expense)	16,360	(3,123)	(112)		13,125
Equity in earnings of affiliates			23		23
Income tax provision	13,884	1,056	1,647	283	16,870
Investments in affiliates	1,374		158		1,532
Property additions	15,538	3,698	831	5	20,072
Fixed assets	100,213	25,329	4,824	41	130,407
2001					
Sales to external customers	343,646	94,187	71,735	168	509,736
Intercompany sales	20,074	21,668	2,124	(43,866)	
Net income from continuing operations	22,575	130	3,619	(473)	25,851
Net income from discontinued operations	5,780				5,780
Total assets	399,912	96,372	48,816	(24,402)	520,698
Interest income	513	146	408	116	1,183
Interest expense	4,844	156	349		5,349
Noncash items:					
Depreciation and amortization	17,714	3,680	1,170	26	22,590
Pension income (expense)	17,885	(2,783)	(140)		14,962
Equity in earnings of affiliates			40		40
Income tax provision	15,094	900	1,732	27	17,753
Investments in affiliates	1,374		135		1,509
Property additions	13,407	4,916	1,621	43	19,987
Fixed assets	132,213	18,118	6,033	49	156,413

Reconciling items consist primarily of intercompany eliminations and items reported at the corporate level.

Sales are attributed to segments and countries based on the location of the selling company. Sales to external customers in Germany were \$57,973,000 in 2003, \$50,925,000 in 2002, and \$46,865,000 in 2001.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 5 – Income Taxes

The U.S. and non-U.S. components of income before income taxes and provisions for income taxes are summarized as follows:

	(in thousands)		
	2003	2002	2001
Income From Continuing Operations Before Income Taxes			
U.S. income	\$64,289	\$47,850	\$34,190
Non-U.S. income	15,148	10,190	6,226
Currency translation gains (losses)	28	(317)	(776)
Eliminations	(5,706)	(9,640)	3,964
Income Before Income Taxes	73,759	48,083	43,604
Provision For Income Taxes			
Current			
Federal	9,608	8,115	5,370
State	2,526	610	404
Non-U.S.	7,779	3,380	2,720
Total current provision	19,913	12,105	8,494
Deferred			
Federal	5,251	4,101	8,377
State	937	936	1,732
Non-U.S.	(1,266)	(272)	(850)
Total deferred provision	4,922	4,765	9,259
Provision for Income Taxes	24,835	16,870	17,753

The following is a reconciliation of the U.S. Federal income tax rate to the effective tax rate for continuing operations:

	2003	2002	2001
Provision for income taxes at statutory rate	35.0%	35.0%	35.0%
State income taxes, net of federal benefit	3.0	2.9	3.4
Effects of foreign operations	.7		.2
Foreign tax credits	(.7)		(.5)
Valuation allowance	(1.6)	3.2	2.3
Research and development credit	(1.1)	(.2)	(1.0)
Adjustment of prior years income taxes	(1.1)	(4.4)	
Other—net	(.5)	(1.4)	1.3
Provision for income taxes	33.7%	35.1%	40.7%

The components of deferred taxes are as follows:

	(in thousands)	
	2003	2002
Deferred tax assets		
Postretirement benefits	\$ 5,598	\$ 5,628
Inventory reserves	5,691	4,836
Vacation allowances	1,184	2,560
Net operating losses	7,407	5,023
Foreign tax credit carryforwards (expiring between 2004 and 2008)	1,901	1,975
Liability insurance	3,134	1,363
Basis of capital assets	6,400	5,105
Intangibles	1,409	1,371
Warranties	3,528	1,016
Other	5,272	3,734
Total deferred tax assets	41,524	32,611
Valuation allowance	(587)	(1,975)
Net deferred tax assets	40,937	30,636
Deferred tax liabilities		
Depreciation	(20,033)	(26,213)
Pension	(44,752)	(37,296)
Other	(6,060)	(333)
Total deferred tax liabilities	(70,845)	(63,842)
Net deferred taxes	(29,908)	(33,206)

During 2003, the company released \$1.2 million of foreign tax credit carry forward valuation allowances based on the implementation of various tax planning strategies and an improved outlook for utilization of these credits in future years.

Net operating loss carryforwards of \$6,817,000 have no expiration date and \$66,000, \$471,000 and \$53,000 expire in 2006, 2008 and 2013, respectively.

Undistributed earnings of international companies for which U.S. income taxes have not been provided were \$90,927,000 at December 31, 2003.

Note 6 – Stock Plans

The 1998 Management Share Incentive Plan provides for grants of restricted stock awards and stock options to eligible key employees through March 2008. The 1990 Non-Employee Directors' Stock Option Plan, as amended April 1, 2001, provides for annual grants of stock options and restricted stock awards to eligible directors. As of December 31, 2003, there were 1,684,815 shares and 162,021 shares, respectively, reserved for future grants under these plans.

Restricted stock awards are granted without payment to the company in consideration of services to be performed in the ensuing three years (four years for employee awards prior to 2002). Restricted stock awards of 81,705 shares (fair value of \$944,000), 69,594 shares (fair value of \$915,000), and 2,580 shares (fair value of \$25,000) were granted in 2003, 2002, and 2001, respectively. Restricted stock awards expense charged to operations was \$716,000 in 2003, \$766,000 in 2002, and \$437,000 in 2001.

Stock options are generally granted at market value option prices and expire after ten years (limited instances of option prices in excess of market value and expiration after five years). Stock options granted in 2003 are exercisable beginning one year after the grant date. Options granted prior to 2003 were exercisable six months after the grant date.

During November 2003, the company made a special distribution of \$1.46 per common share to shareholders of record on November 14, 2003. For options outstanding as of November 12, 2003, the ex-distribution date, option shares and exercise prices were adjusted to reflect the change in intrinsic value that resulted from the special distribution. The adjustments were based on the ratio of the change in the market price of common stock that occurred as a result of the special distribution.

A summary of option activity under the two plans follows:

	Shares	Weighted-Average Exercise Price	Exercisable at Year-end
Outstanding January 1, 2001	1,634,382	\$ 6.69	
Granted	733,032	8.46	
Exercised	(1,111,023)	6.95	
Forfeited	(15,930)	6.26	
Outstanding December 31, 2001	1,240,461	7.52	1,240,461
Granted	552,165	13.17	
Exercised	(313,812)	7.23	
Outstanding December 31, 2002	1,478,814	9.69	1,478,814
Granted	744,630	11.58	
Exercised before adjustment	(259,752)	8.16	
Adjustment for special distribution	153,057	(.77)	
Exercised after adjustment	(101,199)	9.06	
Outstanding December 31, 2003	2,015,550	9.88	1,270,920

The following table summarizes information about options outstanding at December 31, 2003:

Shares	Range of Exercise Price per Share	Weighted-Average	
		Exercise Price	Remaining Life
677,046	\$5.88 - \$7.80	\$ 7.14	6.5
781,203	\$9.03 - \$10.65	10.60	9.1
557,301	\$11.72 - \$13.57	12.20	7.8
2,015,550	\$ 5.88 - \$13.57	9.88	7.9

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 7 – Pensions and Other Postretirement Benefits

The company maintains various defined benefit and defined contribution plans covering the majority of its employees. The principal U.S. plan is funded in compliance with the Employee Retirement Income Security Act (ERISA). It is the general policy to fund current costs for the international plans except in Germany and Mexico, where it is common practice and permissible under tax laws to accrue book reserves.

A minimum liability is recognized for unfunded defined benefit plans for which the accumulated benefit obligation exceeds accrued pension costs. The amount of the minimum liability in excess of unrecognized prior service cost, net of tax benefit, is recorded as a reduction in shareholders' equity. Non-contributory plan benefits are generally based on years of service and employees' compensation during the last years of employment. Benefits are paid from funds previously provided to trustees or are paid by the company and charged to the book reserves.

The company provides certain health care benefits and limited life insurance for retired employees and their eligible dependents.

Information pertaining to defined benefit pension plans and other postretirement benefits plans is provided in the following table.

	(In thousands)			
	Pension Benefits		Other Benefits	
	2003	2002	2003	2002
Change in Benefit Obligations				
Benefit obligations at January 1	\$218,010	\$193,603	\$20,677	\$21,835
Service cost	6,802	5,378	423	392
Interest cost	14,036	12,917	1,395	1,404
Employee contributions	159	214		
Plan amendments		454		(1,319)
Actuarial losses	10,844	11,666	2,509	487
Benefits paid	(13,178)	(12,242)	(2,131)	(2,122)
Curtailments	(2,143)			
Currency translation effects	9,810	6,020		
Benefit obligations at December 31	244,340	218,010	22,873	20,677
Change in Plan Assets				
Fair value of plan assets at January 1	269,836	314,122		
Actual return on plan assets	97,710	(32,599)		
Employer contributions	3,822	2,433	231	122
Employee contributions	223	263		
Benefits paid	(13,178)	(12,242)	(2,131)	(2,122)
Section 420 transfer to retiree medical plan	(1,900)	(2,000)	1,900	2,000
Reimbursement of German benefits	(2,478)	(719)		
Currency translation effects	2,442	578		
Fair value of plan assets at December 31	356,477	269,836		
Funded Status				
Funded status at December 31	112,137	51,826	(22,873)	(20,677)
Unrecognized transition gains	342	(137)		
Unrecognized prior service cost	1,323	1,647	(1,910)	(2,138)
Unrecognized net actuarial (gains)/losses	(46,909)	9,846	8,686	6,768
Prepaid (accrued) benefit cost	66,893	63,182	(16,097)	(16,047)
Amounts Recognized in the Balance Sheet				
Prepaid benefit cost	121,290	107,338		
Accrued benefit liability	(56,785)	(46,226)	(16,097)	(16,047)
Intangible asset	524	557		
Minimum pension liability adjustments	1,864	1,513		
Prepaid (accrued) benefit cost	66,893	63,182	(16,097)	(16,047)
Accumulated Benefit Obligation for all Defined Benefit Plans	202,856	177,424		

(In thousands)	Pension Benefits			Other Benefits		
	2003	2002	2001	2003	2002	2001
Components of Net Periodic Benefit Cost (Credit)						
Service cost	\$ 6,802	\$ 5,378	\$ 4,645	\$ 423	\$ 392	\$ 502
Interest cost	14,036	12,917	12,393	1,395	1,404	1,488
Expected return on plan assets	(27,785)	(27,332)	(27,202)			
Amortization of transition asset	(509)	(592)	(597)			
Amortization of prior service cost	310	298	300	(228)	(138)	(108)
Recognized net actuarial (gains) losses	(1,677)	(3,794)	(4,745)	590	552	377
Curtailment (gain) loss	(2,022)		244			
Net periodic benefit (credit) cost	(10,845)	(13,125)	(14,962)	2,180	2,210	2,259

	Pension Benefits		Other Benefits	
	2003	2002	2003	2002
Assumptions used to determine benefit obligations				
Discount rate.....	6.1%	6.4%	6.3%	6.5%
Rate of compensation increase.....	3.5%	3.5%		
Assumptions used to determine net periodic benefit cost				
Discount rate.....	6.3%	6.4%	6.5%	7.0%
Expected return on plan assets.....	8.5%	8.4%		
Rate of compensation increases.....	3.5%	3.5%		

The expected return on assets for the 2003 net periodic pension cost was determined by multiplying the expected returns of each asset class (based on historical returns) by the expected percentage of the total portfolio invested in that asset class. A total return was determined by summing the expected returns over all asset classes.

Asset Category	Plan Assets at December 31	
	2003	2002
Equity securities.....	79.2%	74.5%
Debt securities.....	15.3%	20.2%
Real estate.....	0.3%	0.3%
Cash/other.....	5.2%	5.0%
Total.....	100.0%	100.0%

Investment policies are determined by the Plan's Investment Committee and set forth in the Plan's Investment Policy. Asset managers are granted discretion for determining sector mix, selecting securities and timing transactions, subject to the guidelines of the Investment Policy. An aggressive, flexible management of the portfolio is permitted. No target asset allocations are set forth in the Investment Policy.

The company expects to make net contributions of \$1.3 million to its pension plans in 2004

For measurement purposes, a 7.5% increase in the costs of covered health care benefits was assumed for the year 2003, decreasing by .5% for each successive year to 4% in 2010 and thereafter. A one-percentage-point change in assumed health care cost trend rates would have increased or decreased the other postretirement benefit obligations and current year plan expense by approximately \$1.0 million and \$100,000, respectively.

Expense for defined contribution pension plans was \$3,360,000 in 2003, \$3,049,000 in 2002, and \$2,739,000 in 2001.

The U.S. defined benefit pension plan owned 2,533,500 shares (market value \$67.1 million) at December 31, 2003 and 3,049,500 shares (market value \$32.8 million) at December 31, 2002 of the company's common stock. The pension plan received dividends and distributions of \$4,506,865 and \$666,650, respectively, on these shares.

In December 2003, Congress enacted the Medicare Prescription Drug, Improvement and Modernization Act of 2003. The act incorporates a plan sponsor subsidy based on a percentage of the beneficiary's annual prescription drug benefits, within certain limits, and provides the retiree with the opportunity to obtain prescription drugs under Medicare. Specific authoritative guidance on the accounting for federal subsidy is pending and that guidance, when issued, could require plan sponsors to change previously reported information. Management is currently evaluating the effect of the act on the company, but does not expect the reductions in postretirement benefit costs to be significant. In accordance with FASB Staff Position FAS 106-1, the company has elected to defer accounting for the effect of the act. Accordingly, the benefit obligation and net periodic benefit cost do not reflect any potential effects of the act.

Note 8 – Earnings per Share

Basic earnings per share is computed on the weighted average number of common shares outstanding during the period. Diluted earnings per share includes the effect of the weighted average stock options outstanding during the period, using the treasury stock method. Antidilutive options are not considered in computing diluted earnings per share.

	(In thousands)		
	2003	2002	2001
Net income from continuing operations	\$48,924	\$31,213	\$25,851
Preferred stock dividends	(46)	(47)	(48)
Income available to common shareholders	48,878	31,166	25,803
Basic shares outstanding	36,730	36,512	35,729
Stock options	534	373	508
Diluted shares outstanding	37,264	36,885	36,237
Antidilutive stock options	0	552	0

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 9 – Accounts Receivable Securitization

The company has securitization agreements with Mine Safety Funding Corporation (MSF) under which the company sells MSF, on a continuous basis, an undivided interest in eligible trade accounts receivable generated by the company, while maintaining a subordinated interest in a portion of the receivables. MSF is an unconsolidated wholly-owned, bankruptcy-remote subsidiary of the company. Financial assets, net of retained interests, are removed from the balance sheet when the assets are sold and control is surrendered. The company services the sold receivables for MSF at market rates and, accordingly, no servicing asset or liability has been recorded. MSF and the company have also entered into securitization agreements with financial institutions under which MSF may sell up to \$30 million of accounts receivable to a multi-seller asset-backed commercial paper issuer.

At December 31, 2003, accounts receivable of \$55.2 million were owned by MSF. The company held a subordinated interest in these receivables of \$40.0 million, of which \$39.0 million is classified as other receivables. Net proceeds to the company from the securitization arrangement were \$15.0 million at December 31, 2003. The company incurred net costs associated with the securitization facility of \$1.8 million in 2003, representing the discount loss on the sale of the receivables, partially offset by related servicing income and dividends received from MSF. The net cost includes \$473,000 in bad debt expense borne by MSF during 2003.

At December 31, 2002, accounts receivable of \$66.2 million were owned by MSF. The company held a subordinated interest in these receivables of \$36.5 million, of which \$35.5 million is classified as other receivables. Net proceeds to the company from the securitization arrangement were \$29.0 million at December 31, 2002. The company incurred net costs associated with the securitization facility of \$2.1 million in 2002, representing the discount loss on the sale of the receivables, partially offset by related servicing income and dividends received from MSF. The net cost includes \$884,000 in bad debt expense borne by MSF during 2002.

The key economic assumptions used to measure the retained interest at December 31, 2003 were a discount rate of 3.3% and an estimated life of 2.2 months. At December 31, 2003, an adverse change in the discount rate or estimated life of 10% and 20% would reduce the fair value of the retained interest by \$32,000 and \$64,000, respectively. The effect of hypothetical changes in fair value based on variations in assumptions should be used with caution and generally cannot be extrapolated. Additionally, the effect on the fair value of the retained interest of changing a particular assumption has been calculated without changing other assumptions. In reality, a change in one factor may result in changes in others.

Note 10 – Inventories

	(In thousands)	
	2003	2002
Finished products	\$34,660	\$25,928
Work in process	17,476	14,936
Raw materials and supplies	37,967	35,884
Total inventories	90,103	76,748
Excess of FIFO costs over LIFO costs	39,083	39,431

Inventories stated on the LIFO basis represent 40%, 38%, and 52% of the total inventories at December 31, 2003, 2002, and 2001, respectively.

Reductions in certain inventory quantities during 2002 resulted in liquidations of LIFO inventories carried at lower costs prevailing in prior years. The effect of these liquidations reduced cost of sales by \$387,000 in 2002, and increased net income by \$235,000.

Note 11 – Long-Term Debt

	(In thousands)	
	2003	2002
U.S.		
Industrial development debt issues payable through 2022, 1.3%	\$10,750	\$10,750
Series B Senior Notes payable through 2006, 7.69%	12,000	16,000
Senior Notes payable through 2012, 8.39%	40,000	40,000
Other	150	200
International		
Various notes payable through 2010, 5.06% to 19.0%	1,853	2,364
Total	64,753	69,314
Amounts due within one year	4,838	4,964
Long-term debt	59,915	64,350

Approximate maturities of these obligations over the next five years are \$4,838,000 in 2004, \$4,561,000 in 2005, \$8,231,000 in 2006, \$105,000 in 2007, and \$8,105,000 in 2008. Some debt agreements require the company to maintain certain financial ratios and minimum net worth and contain restrictions on the total amount of debt.

Note 12 – Other Income

	(In thousands)		
	2003	2002	2001
Interest	\$1,071	\$ 953	\$1,183
Rent	532	710	739
Dividends	1,048	725	625
Dispositions of assets	(826)	(864)	(136)
Other, net	(101)	747	365
Total	1,724	2,271	2,776

Note 13 – Leases

The company leases office space, manufacturing and warehouse facilities, automobiles and other equipment under operating lease arrangements. Rent expense was \$9,120,000 in 2003, \$6,879,000 in 2002, and \$6,020,000 in 2001. Minimum rental commitments under noncancelable leases are \$5,262,000 in 2004, \$4,259,000 in 2005, \$3,621,000 in 2006, \$2,739,000 in 2007, \$2,657,000 in 2008, and \$9,075,000 after 2008.

Note 14 – Goodwill and Intangible Assets

During 2002, the company adopted FAS No. 142, Goodwill and Other Intangible Assets. Under this standard, goodwill and other intangible assets with indefinite lives are not amortized, but are subject to impairment tests that must be performed at least annually. Transitional impairment tests performed as of January 1, 2002 indicated that no goodwill impairment existed and as a result the company did not recognize a transitional impairment loss. Annual goodwill impairment tests performed during the fourth quarters of 2002 and 2003 also indicated that no goodwill impairment existed and as a result the company has not recognized an impairment loss.

The effects of adopting the non-amortization provisions of FAS 142 on net income from continuing operations and basic earnings per share were as follows:

	(In thousands, except per share amounts)		
	2003	2002	2001
Reported net income from continuing operations	\$48,924	\$31,213	\$25,851
Goodwill amortization, net of tax			1,365
Adjusted net income from continuing operations	48,924	31,213	27,216
Basic earnings per share:			
Reported net income from continuing operations	\$1.33	\$.85	\$.72
Goodwill amortization, net of tax			.04
Adjusted net income from continuing operations	1.33	.85	.76

Intangible assets include patents and license agreements that will be fully amortized in 2005 and 2008, respectively. These items are included in other noncurrent assets. At December 31, 2003, intangible assets totaled \$3,307,000, net of accumulated amortization of \$2.9 million. Intangible asset amortization expense is expected to be \$702,000 in 2004, \$655,000 in 2005, \$650,000 in 2006, \$650,000 in 2007 and \$650,000 in 2008.

Changes in goodwill and intangible assets, net of accumulated amortization during the year ended December 31, 2003 were as follows:

	(In thousands)	
	Goodwill	Intangibles
Net balances at January 1, 2003	\$42,963	\$ 171
Goodwill acquired	200	
Intangibles acquired		3,250
Amortization expense		(114)
Currency translation and other	1,647	
Net balances at December 31, 2003	44,810	3,307

At December 31, 2003, goodwill of \$34.3 million and \$10.5 million related to the North American and European operating segments, respectively.

Note 15 – Short-Term Debt

Short-term bank lines of credit amounted to \$20,403,000 of which \$19,575,000 was unused at December 31, 2003. Generally, these short-term lines of credit are renewable annually, and there are no significant commitment fees or compensating balance requirements. Short-term borrowings with banks, which exclude the current portion of long-term debt, were \$828,000 and \$9,096,000 at December 31, 2003 and 2002, respectively. The average month-end balance of total short-term borrowings during 2003 was \$560,000 while the maximum month-end balance of \$1,929,000 occurred at March 31, 2003. The average interest rate during 2003 was

approximately 9% based upon total short-term interest expense divided by the average month-end balance outstanding, and 3% at year-end.

Note 16 – Acquisitions

On April 30, 2002, the company acquired CGF Gallet of Lyon, France, the leading European manufacturer of protective helmets for the fire service, as well as head protection for the police and military. The acquisition of Gallet complements the company's strong existing line of fire service products and provides the opportunity to capitalize on opportunities in other areas where Gallet is strong – such as the law enforcement, military, and aviation markets. Gallet's results of operations have been included in the company's consolidated financial statements from the acquisition date.

The aggregate purchase price was \$16.6 million of cash and includes amounts paid to the previous owners and other direct external costs associated with the acquisition. The acquisition was recorded using the purchase method of accounting and, accordingly, the purchase price was allocated to assets acquired and liabilities assumed based on their estimated fair values at the acquisition date.

The following table summarizes the estimated fair values of the Gallet assets acquired and the liabilities assumed at the date of acquisition:

(In thousands)	April 30 2002
Current assets.....	\$17,427
Property	5,800
Goodwill	7,863
Total assets acquired	31,090
Current Liabilities	11,093
Long term debt	3,016
Other liabilities	349
Total liabilities assumed	14,458
Net assets acquired	16,632

Goodwill related to the Gallet acquisition, which is included in the European operating segment, is not expected to be deductible for tax purposes.

On February 1, 2001, the company acquired Surety Manufacturing and Testing, Ltd. (Surety), a leading provider of fall protection equipment and rescue systems. The acquisition was recorded using the purchase method of accounting. The purchase price of \$7.1 million was allocated to assets acquired and liabilities assumed based on estimated fair values and included \$5.6 million in goodwill, which is included in the North American operating segment.

The results of operations of Surety are included in the financial statements from the acquisition date.

The following unaudited pro forma summary presents the company's consolidated results as if the acquisitions had occurred at the beginning of 2001. The pro forma information does not necessarily reflect the actual results that would have occurred and is not necessarily indicative of future results of operations for the combined companies.

	(In thousands, except earnings per share)		
	2003	2002	2001
Net sales	\$696,473	\$578,252	\$535,317
Net income from continuing operations . . .	48,924	32,189	26,559
Basic earnings per share . .	1.33	.88	.74

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 17 – Discontinued Operations

On September 12, 2003, the company sold certain assets of the Callery Chemical Division to BASF Corporation for \$64.6 million. The operating results of the Callery Chemical Division and the gain on the sale of the division, as summarized below, have been classified as discontinued operations for all periods presented. Net income from discontinued operations for 2002 includes \$42,000 of expenses directly related to the sale of the division.

	(In thousands)		
	2003	2002	2001
Net sales	\$21,345	\$29,473	\$33,120
Income before income taxes	4,210	6,147	9,282
Provision for income taxes	1,525	2,283	3,502
Net income from discontinued operations	2,685	3,864	5,780
Gain on sale of discontinued operations	\$22,390		
Provision for income taxes	8,732		
Gain on sale of discontinued operations – after tax	13,658		

At December 31, 2003 and 2002, discontinued operations net assets classified as held for sale consisted of the following:

	(In thousands)	
	2003	2002
Accounts receivable and other current assets	\$2,311	\$ 7,983
Inventory		7,705
Property, net		29,374
Net assets held for sale	2,311	45,062

Note 18 – Contingencies

Various lawsuits and claims arising in the normal course of business are pending against the company. These lawsuits are primarily product liability claims. Pending claims include several multi-party asbestosis or silicosis suits, generally as a result of the presence of safety equipment supplied by MSA and other manufacturers at locations named in the suits. While the amounts claimed may be substantial, the ultimate liability of the company is not determinable because of uncertainties, including the number of defendants in each suit and the jurisdiction.

The company maintains a reserve for uninsured product liability based on expected settlement charges for pending claims and an estimate of unreported claims derived from experience, sales volumes, and other relevant information. The company reevaluates its exposures on an ongoing basis and makes adjustments to reserves as appropriate. Based on information currently available, management believes that the disposition of matters that are pending will not have a materially adverse effect on the financial position of the company.

The company has retained responsibility for certain environmental costs at the Callery Chemical site in the event that corrective action is required by governmental regulations. Under the terms of the asset purchase agreement with BASF, MSA's maximum liability for these matters is capped at \$50.0 million. Based on environmental studies performed prior to the sale of the division, the company does not believe that its potential exposure under the terms of this agreement will materially affect the results of operations, cash flows, or financial condition.

Note 19 – Quarterly Financial Information (Unaudited)

(In thousands, except earnings per share)	2003					2002				
	Quarters					Quarters				
	1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year
Net sales	\$160,391	\$175,939	\$171,927	\$188,216	\$696,473	\$128,058	\$141,862	\$143,398	\$151,108	\$564,426
Gross profit	66,538	72,652	69,918	79,146	288,254	55,638	57,090	57,910	62,573	233,211
Net income from continuing operations	10,499	12,192	10,984	15,249	48,924	7,724	7,897	5,323	10,269	31,213
Net income from discontinued operations	1,514	1,273	(102)		2,685	260	1,587	470	1,547	3,864
Gain on sale of discontinued operations – after tax			13,658		13,658					
Net income	12,013	13,465	24,540	15,249	65,267	7,984	9,484	5,793	11,816	35,077
Basic earnings per share:										
Continuing operations	.29	.33	.30	.41	1.33	.21	.21	.15	.28	.85
Discontinued operations	.04	.04	.37		.45	.01	.04	.01	.05	.11
Total	.33	.37	.67	.41	1.78	.22	.25	.16	.33	.96
Diluted earnings per share:										
Continuing operations	.29	.33	.29	.40	1.31	.21	.21	.15	.28	.85
Discontinued operations	.04	.04	.36		.44	.01	.03	.01	.05	.10
Total	.33	.37	.65	.40	1.75	.22	.24	.16	.33	.95

SUMMARY OF SELECTED FINANCIAL DATA

(In thousands, except as noted)

	2003	2002	2001	2000	1999
Summary of Operations					
Net sales	\$696,473	\$564,426	\$509,736	\$468,307	\$462,166
Other income	1,724	2,271	2,776	2,444	3,619
Cost of products sold	408,219	331,215	292,940	277,972	282,687
Selling, general and administrative	170,081	140,924	130,092	124,840	131,281
Research and development	21,722	20,372	16,740	15,988	15,235
Depreciation and amortization	23,208	21,525	22,590	20,936	20,550
Interest expense	4,564	4,769	5,349	4,040	3,916
Currency exchange (gains) losses	(3,356)	(191)	1,197	(444)	(694)
Provision for income taxes	24,835	16,870	17,753	8,531	3,098
Net income from continuing operations	48,924	31,213	25,851	18,888	9,712
Net income from discontinued operations	2,685	3,864	5,780	4,351	6,614
Gain on sale of discontinued operations - after tax	13,658				
Change in reporting period, net of tax					(1,192)
Net Income	65,267	35,077	31,631	23,239	15,134
Basic per common share continuing operations (in dollars)	1.33	.85	.72	.51	.22
Diluted per common share continuing operations (in dollars)	1.31	.85	.71	.51	.22
Dividends paid per common share (in dollars)	.26	.22	.18	.16	.15
Weighted average number of common shares outstanding—basic	36,730	36,512	35,729	36,904	38,917

Year-End Position

Working capital	\$206,216	\$138,182	\$135,186	\$114,175	\$123,085
Working capital ratio	2.8	2.4	2.6	2.3	2.5
Net property	120,560	130,407	156,413	159,586	163,509
Total assets	643,885	579,765	520,698	489,683	451,741
Long-term debt	59,915	64,350	67,381	71,806	36,550
Common shareholders' equity	306,867	288,009	252,451	225,382	241,374
Equity per common share (in dollars)	8.31	7.86	6.95	6.35	6.25
Market capitalization	978,715	393,677	485,844	297,169	274,624

Notes:

Cost of products sold and operating expenses include noncash pension income.

a. Noncash pension income, pre-tax \$ 8,845 \$ 13,125 \$14,962 \$14,900 \$10,175

b. In 1999, the fiscal year end for certain international affiliates was changed from November 30th to December 31st. The after-tax effect of the change in reporting period is included in the 1999 income statement as a change in accounting principle.

c. Working capital at December 31, 2003 and 2002 excludes assets held for sale.

Principal Operations

North America

Mine Safety Appliances Company,
Corporate Headquarters – Pittsburgh, PA
Manufacturing – Clifton, NJ; Cranberry Twp., PA;
Englewood, CO; Evans City, PA;
Jacksonville, NC; Murrysville, PA;
Newport, VT; Sparks, MD
Research – John T. Ryan Memorial Laboratory,
Cranberry Twp., PA
MSA Canada, Toronto; MSA Gallet, Quebec
MSA de Mexico, S.A. de C.V., Mexico City

Europe

MSA Europe (Headquarters), Berlin, Germany
Aritron Instrument A.G., Forch, Switzerland
MSA-Auer Almay, Almaty, Kazakhstan (Service Center/Office)
MSA Auer, Berlin, Germany
MSA-Auer GmbH, Czech o.z., Praha, Czech (Service Center)
MSA-Auer Polska Sp. z o.o., Warsaw, Poland
MSA-Auer Poznan, Poznan, Poland (Service Center)
MSA-Auer Hungaria Safety Technology, Budapest, Hungary
MSA-Auer Kiev, Kyiv, Ukraine (Representative Office)
MSA-Auer Miskolc, Tiszaujvaros, Hungary (Service Center)
MSA-Auer GmbH Romania, o.z., Bucuresti, Romania (Branch)
MSA-Auer Petrosani, Petrosani, Romania (Service Center)
MSA-Auer Moscow, Moscow, Russia (Representative Office)
MSA-Auer Sicherheitstechnik Vertriebs GmbH, Absdorf, Austria
MSA-Auer GmbH, Slovakia o.z., Pezinok, Slovakia (Service Center)
MSA-Auer Szczecin, Szczecin, Poland (Service Center)
MSA Belgium, N.V., Lier
MSA (Britain) Limited, Glasgow
MSA Española, S.A., Barcelona
MSA de France, Paris
MSA Gallet, Chatillon sur Chalaronne, France;
Mohammedia, Morocco
MSA Italiana S.p.A., Milan
MSA Nederland, B.V., Hoorn
MSA Nordic, Malmo, Sweden

International

MSA Africa (Pty.) Ltd., Johannesburg
MSA de Argentina S.A., Buenos Aires
MSA (Aust.) Pty. Limited, Sydney
MSA (Australia), Auckland, New Zealand (Branch Office)
MSA do Brasil Ltda., São Paulo
MSA de Chile Ltda., Santiago
MSA (India) Limited, Calcutta
MSA Japan Ltd., Tokyo
MSA Safety Malaysia Snd Bhd, Kuala Lumpur
MSA Middle East, Abu Dhabi, U.A.E.
MSA del Peru S.A.C., Lima
MSA S.E. Asia Pte. Ltd., Singapore
MSA Zimbabwe (Pvt.) Limited, Harare
Wuxi-MSA Safety Equipment Co., Ltd., Wuxi, China

Board of Directors

John T. Ryan III (1) (4)
Chairman of the Board and Chief Executive Officer
Calvin A. Campbell, Jr. (2) (3) (4)
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Chief Executive Officer, Goodman Equipment Corporation
(manufactured underground mining and tunneling
locomotives and parts and services for plastics injection
molding machinery)
James A. Cederna (2) (3)
Founder and owner, Cederna International, Inc.
Thomas B. Hotopp (1)
Retired, formerly President
Mine Safety Appliances Company
Diane M. Pearse (2)
Chief Financial Officer, Crate and Barrel
(home furnishings retailer)
L. Edward Shaw, Jr. (3) (4)
Attorney in private practice
John C. Unkovic (3) (4)
Partner and General Counsel – Reed Smith LLP
(full service law firm)
Thomas H. Witmer (1) (2) (3)
Chairman, Granite State Log Homes (log home construction)
(1) Member of Executive Committee
(2) Member of Audit Committee
(3) Member of Compensation Committee
(4) Member of Nominating and Governance Committee

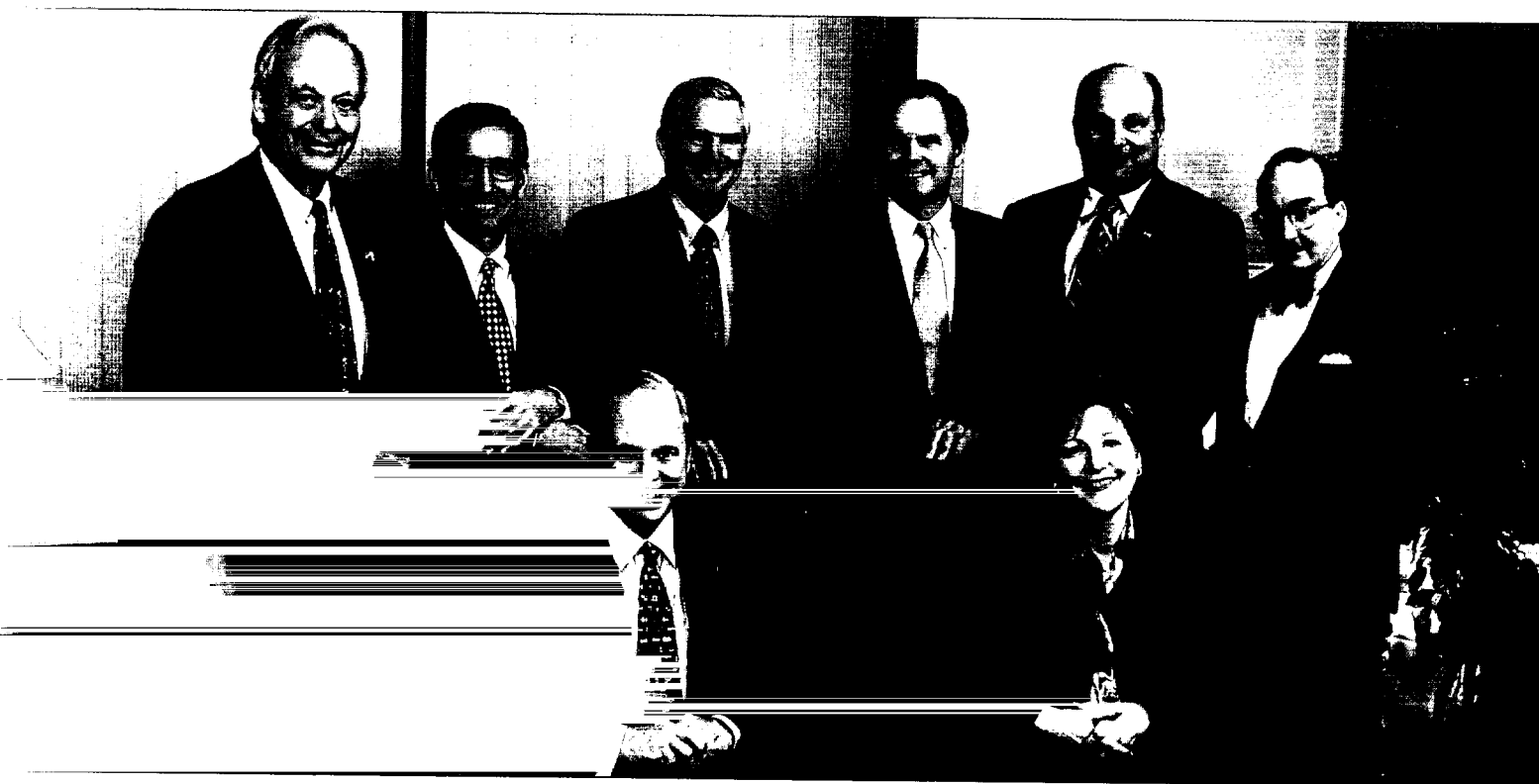
Director Emeritus

Eugene W. Merry

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Vice President
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Roberto Cañizares
Vice President; President, International
Benedict DeMaria
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Ronald N. Herring, Jr.
Vice President
William M. Lambert
Vice President; President, North America
Douglas K. McClaine
Secretary and General Counsel
Dennis L. Zeitler
Vice President, Chief Financial Officer and Treasurer

MSA BOARD OF DIRECTORS



(Front) John T. Ryan III, Diane M. Pearse, (back, from left) Calvin A. Campbell, Jr., Thomas H. Witmer, Thomas B. Hotopp, L. Edward Shaw, Jr., James A. Cederna and John C. Unkovic.

Shareholders' Inquiries

A copy of the company's 2003 Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, may be obtained by shareholders after April 1, 2004.

Printed and electronic versions are available. Requests should be directed to the Vice President-Finance, who can be reached at one of the following:

Phone: 412-967-3046

Fax: 412-967-3367

Internet: MSA.net.com

U.S. Mail: MSA

Vice President-Finance

P. O. Box 426

Pittsburgh, PA 15230

MSA
Mine Safety Appliances Company

For A World Of Safety At Work

JOHN T. RYAN, III



A Newcomen Address



The Newcomen Society of the United States is a tax-exempt, educational foundation founded in 1923 for the study and recognition of achievement in American business and the society it serves. The Society's headquarters are located in Exton, Pennsylvania, 30 miles west of Center City, Philadelphia. National membership is comprised of many of the nation's top leaders in business, industry, education, the professions, government and the military.

The purposes of The Newcomen Society are to:

- Preserve, protect and promote the American free enterprise system.
- Honor corporate entities and other organizations which contribute to or are examples of success attained under free enterprise, and to recognize contributions to that system.
- Publish and record the histories and achievements of such enterprises and organizations.
- Encourage and stimulate original research and writing in the field of business history through a program of academic awards, grants and fellowships.

The Society's name perpetuates the life and work of Thomas Newcomen (1663-1729), the British pioneer whose invention of the atmospheric steam engine in 1712 led to the first practical use of such a device to lift water out of mines. The resulting tremendous increase in mine productivity (the engine replaced the work of 50 mules and 20 men working around the clock) facilitated the birth of the industrial revolution. Indeed, Newcomen is frequently referred to as the "father of the industrial revolution" — its first entrepreneur. The Newcomen engines remained in use from 1712 to 1775, and helped pave the way for advancements 50 years later by the world-famous James Watt of Scotland, whose innovations led to widespread use of steam power in factories and in transportation.

Since its founding, The Newcomen Society has honored more than 2,500 organizations and institutions. The Society publishes the histories of the organizations it recognizes, usually following luncheons or dinners hosted by one of many volunteer committees organized throughout the U.S. These histories are distributed to Society members, as well as 3,300 public and private libraries for permanent archival storage in the support of the study of business history.

Newcomen Society Honorees are selected by the Board of Trustees from nominations received from the volunteer committees. Meetings are held each year in all parts of the country. Members and their guests, as well as guests of the Honorees, are invited to attend these historic events.

The Society maintains several awards in the field of business history: the Newcomen-Harvard Postdoctoral Fellowship, the Newcomen-Harvard Book Award and Article Awards in Business History, the Dissertation Fellowship in Business and American Culture, and the Newcomen Prize awarded by the Business History Conference.



“That men and women may work in safety and that they, their families and their communities may live in health throughout the world.”

— MSA Mission



This address, dealing with the history of Mine Safety Appliances Company, was delivered at a "2003 Pennsylvania Meeting" of The Newcomen Society of the United States held in Pittsburgh, Pennsylvania, when John T. Ryan, III was guest of honor and speaker on November 13th, 2003.



MSA
Mine Safety Appliances Company

For A World Of Safety At Work

JOHN T. RYAN, III

CHAIRMAN & CEO

THE NEWCOMEN SOCIETY OF THE UNITED STATES

EXTON

2003

Newcomen Publication Number 1587



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MINE SAFETY
APPLIANCES COMPANY



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ENSINGER PRINTING SERVICE IN THE UNITED STATES.



INTRODUCTION OF MR. JOHN T. RYAN, III BY
MR. CALVIN A. CAMPBELL, JR., NATIONAL TRUSTEE,
THE NEWCOMEN SOCIETY OF THE UNITED STATES.

LADIES AND GENTLEMEN, it is truly an honor – indeed my pleasure – to introduce tonight our speaker, John T. Ryan, III, Chairman and Chief Executive Officer of Mine Safety Appliances Company.

I first met John's father in connection with the mining industry, back in the early 1970's. "Jack" was an outstanding individual in all aspects of life: his family, MSA, and industries served. Most assuredly, his son, John has outstanding heritage!

I first met John in Lima, Peru in 1974! We started talking immediately and have ever since. John invited me in 1994 to become a director of MSA and I accepted with pleasure.



MR. CALVIN A. CAMPBELL, JR., NATIONAL TRUSTEE,
THE NEWCOMEN SOCIETY OF THE UNITED STATES

As we will hear tonight, MSA was founded in 1914 by John's grandfather and his partner. John was indeed born into "the MSA family."

But in recent years John and his associates have revitalized the company—truly turned it around—with "new" products and markets, ever growing and profitable, and worldwide with 28 international affiliates and sales in more than 140 countries.

MSA is the world's leading manufacturer of equipment and systems for worker and plant protection. The company showed a 2.3 times increase in earnings over the last three years plus another 61%, before one-time gains, so far in 2003.

Most impressive to many of us is John's and MSA's complete commitment to ethics and legality!

By way of background, John was born in 1943 in Pittsburgh. He graduated magna cum laude from Notre Dame in 1965 and earned a masters in business from Harvard Business School in 1969, after serving in the Army in Military Intelligence from 1965 to 1967.

John joined MSA in 1969. He's moved ahead rapidly. From 1974 to 1986, John served in MSA's International Division, covering operations in South America, Asia, and the Middle East. He was elected a Director in 1981, a Vice President in 1982, Executive Vice President with oversight of US Operations in 1986, President in 1990, and finally Chairman & CEO in 1991.

John's civic activities are numerous, including having a lifelong interest in world affairs and being an active member of the Council of Foreign Relations and the World Affairs Council of Pittsburgh. Further, he is a former Chairman of the Pittsburgh Branch of the Federal Reserve Bank of Cleveland.

He and his charming wife, Catharine, have three children, Mary Catharine, Maureen, and John IV, and four grandsons.

John has a sense of wanderlust, having, among other things, visited 62 countries and seeing the world through the lens of his Nikon camera, and learning Portuguese and some Spanish.

Most assuredly, he knows more about wine than anyone I've ever met. He loves chocolate cake and good stories. On a personal note, the two

of us often wager bets on football games between Notre Dame and Michigan, and I won't mention who's ahead!

The words of our speaker this evening will be published and sent by The Newcomen Society of the United States to over 3,300 libraries throughout America. Since 1923, when the Society was established in the United States, more than 2,500 outstanding American corporations and institutions have been honored for their particular contributions to our Free Enterprise System. The organization took its name from England's Thomas Newcomen, the inventor of the first steam engine in 1712. That's when the "free enterprise system" began, and he's so credited!

Since 1914 MSA certainly has enhanced the "free enterprise system." Indeed, I'm reminded of what Thomas Jefferson once wrote, "I like dreams of the future much better than histories of the past." That's what our speaker has so demonstrated. He is a dreamer of big dreams about how MSA can become even more beneficial to employees, customers, suppliers, shareholders, and society. Please join with me in welcoming our speaker, John T. Ryan, III!



MR. JOHN T. RYAN, III & MR. CALVIN A. CAMPBELL, JR.

I'D LIKE, before I start, to give proper attributions to some of my stories from an unpublished 50th anniversary history of the company that has been meticulously kept in the company archives.

The conception of the Mine Safety Appliances Company was gradual but if it had any precise moment, it was one day in March 1912 as John Ryan, Sr. entered the Jed mine on a rescue operation and emerged carrying a boy who was barely breathing; the sudden scream of children met him. As he exited, he saw the desolate faces of women who were standing in frozen stillness in the wreckage of the tibble at the entrance to the mine. He had just come from a high part of the mine where their men had taken refuge. They had survived the explosion but it was the carbon monoxide creeping in at the explosion's wake — the dreaded afterdamp -- that killed them. He knew he should tell the women, and he might have, if the boy he was carrying had not died just then. At that



JOHN RYAN, SR.

moment he determined that if he could do anything at all to relieve the pain on those faces, his life would be worth living.

George Deike, Sr. had experiences like this. Once in his days in mine rescue, he had to save his own rescue people because their breathing equipment had failed them and, for one of the fellows, he couldn't make it in time.

Ryan's family story was like so many in America. His father walked through the Golden Door at five years old, and not long thereafter started as a miner and ended up as mine superintendent.

John Ryan, Sr., began as a trapper boy in the mine at 14, saved money to educate himself and graduated from the Pennsylvania State College in 1908. George H. Deike was a veteran of the Spanish-American War and



GEORGE DEIKE, SR.

went to Penn State before Mr. Ryan and, among other things, was one of the founders of what is now known today as the Penn State Blue Band.

The two men were drawn to mining, and then to mine safety, and particularly to mine rescue. When the United States Bureau of Mines formed a Mine Rescue Division in 1910, they were among the first associates.

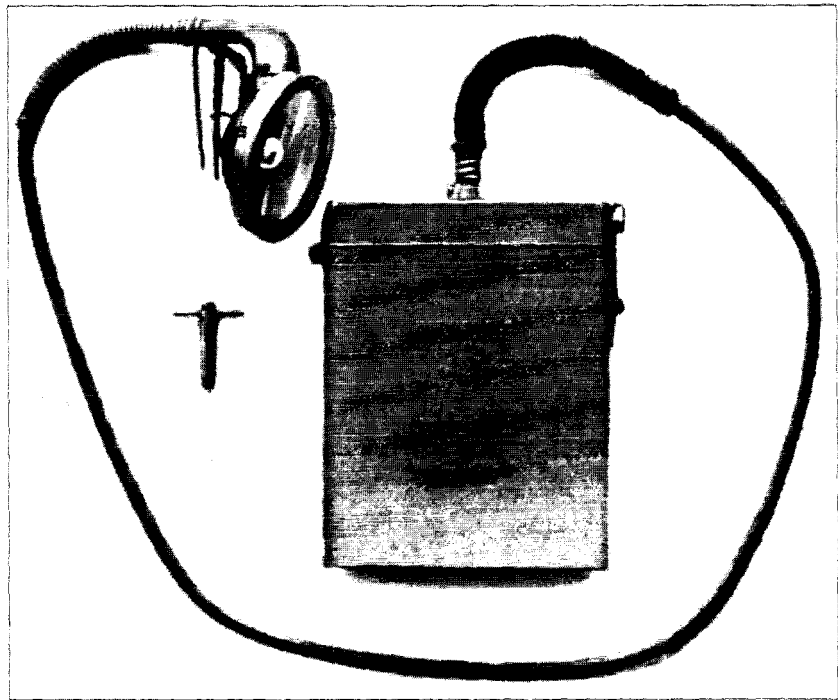
Out of the tragedy and frustration they experienced, Deike and Ryan wanted to bring safety equipment, safe practices and good rescue equipment to the mines where it was deeply needed. Thousands were killed in U.S. mines every year—1,000 in one year alone within just 100 miles of the city of Pittsburgh.

And there was personal tragedy—Ryan's wife died of infection a week after giving birth to their son, barely a year after they had been married. By coincidence or not, he was sent far away on a mission to Alaska to assess the coal fields as to whether they could fuel the new Two-Ocean U.S. Navy. The trip gave him time to mourn and time to think.

Upon his return, he and Deike quickly exchanged ideas and their mutual frustrations with the state of safety in the mines. They were frustrated by the fatalism of the people; they were frustrated by the lack



JOHN RYAN, SR., AT WORK IN THE 1910'S

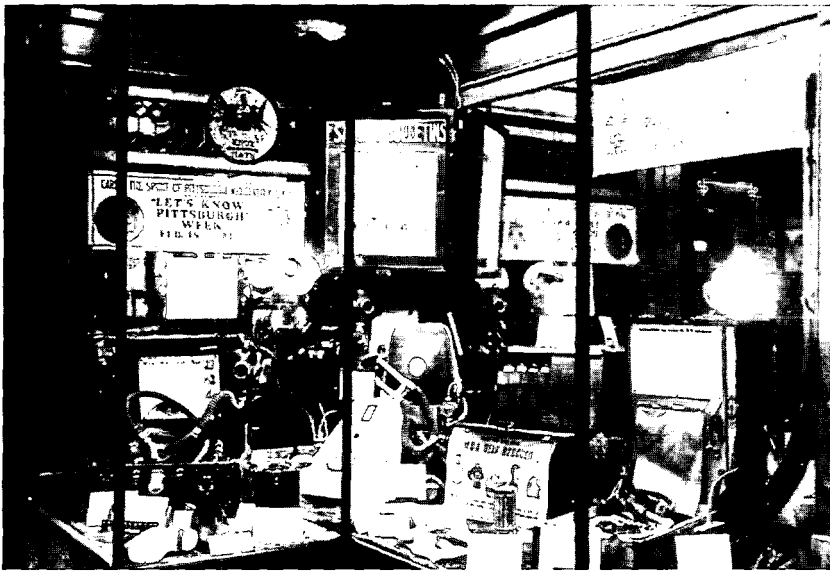


EDISON FLAMELESS ELECTRIC MINER'S CAP LAMP

of safety and rescue equipment and by the poor quality of what equipment existed, particularly breathing equipment, and, most of all, they were frustrated by the fundamentally unsafe basic conditions that led inevitably to mine explosions and massive loss of life.

Such explosions were not really accidents—they were the inevitable consequences of basic scientific principles. The process of mining coal brings forth methane gas and suspended coal dust, both of which are highly combustible. Oxygen must necessarily be present in the mine so that the miners can breathe. Combine the above with a source of ignition, specifically the open-flamed cap lamp that all miners used—you have the fundamental basis of combustion and, in this case, of explosions.

Both Deike and Ryan had thought that they had reached their limits as to what they could do in the Bureau of Mines and felt that the mission of safety could only be accomplished by a company that would make the necessary equipment and spread the Gospel of Safety. It turned out each of them had a list of what such a company could make and, with two



FIRST MSA STOREFRONT - DOWNTOWN PITTSBURGH

minor exceptions, the lists were identical. They shook hands, and on June 14, 1914, the same year of the completion of the Panama Canal and of the Guns of August in Europe, they set forth with the Mine Safety Appliances Company.

In some ways, though, they never left their mine rescue work and were unofficial and unpaid mine rescuers for the rest of their active lives. Though engineers, they turned themselves into salesmen at which they became extremely skillful.

Their company started with simple things: first aid with signs in five languages (because of the number of immigrants in the mines) and rudimentary breathing equipment and instrumentation. The Holy Grail that they sought was the flameless electric miners' cap lamp. This would put a stake in the heart of the villain, open flame lamps, the source of combustion. They had the concept but they needed a battery that was miniaturized and which could be reliable. They went to one of the most famous men in the world of their time, Thomas Edison—one of the most noteworthy inventors in human history.

One can imagine the scene at Edison's office in New Jersey—these two fairly unknown men making a passionate sales pitch to Edison, the

biggest sales call of their lives. They talked about how there were six deaths for every million tons of coal that were mined. They told their heartbreaking personal stories. Edison had always seen invention as a means to an end to make himself a highly successful businessman, and he had considerable skepticism about the economics of the proposal. But as the partners went on, he eventually got captured by their stories and probably realized that saying yes was the only way he was ever going to get those two out of his office and/or get their haunting witness of tragedy out of his mind.

Edison did say that while he never thought this venture would make any money, it had to at least break even. Later in his life Thomas Edison said that of all the things he ever invented, this product was the one that did the most for humanity.

Ryan and Deike were practical men, also, like Edison. They knew the industry and the limitations of the fallible human beings therein in that era. They emphasized that this light had to be sold, both on safety and on the superior illuminating power which would then enable considerably higher productivity of the miners.



THOMAS EDISON

In January 1915, George Deike was working his way back by train from the Panama-Pacific Exhibition in San Francisco, stopping at mines along the way to sell. Ryan was in New Jersey expediting the cap lamp, the U.S. Bureau of Mines approval for it, and the distribution agreement with the Edison Company. Deike had reached Welsh, West Virginia, when he received news that a mine disaster had struck in Clinton, West Virginia. The U.S. Bureau of Mines called for him to meet their train at a remote junction and then go to the mine. When he arrived, Ryan had telegraphed him that he had reached success in all of his objectives and that they had a product.

Deike arranged for samples, the Bureau of Mines liked them and then immediately required the use of such lamps at that mine. Immediately, MSA received its first big order for 500 lamps.

As this business started to develop, though, the partners found that the mines would say that they liked the product and its benefits but they lacked the money in their budget to buy it. The founders took some financial risk and decided to build the lamps on the company's account and then rent them to customers for one dollar per lamp per month which included all repair parts and service. The company would have been stillborn if the Edison lamp had not been rugged and reliable.

Step-by-step over the decades thereafter, the open flame lamp was rightfully pushed out of the mines. Twenty-five years later, death by explosion in coal mines had been reduced 75%. All of this started that great crusade of safety in the mines that has reached the point today where on an underground coal mining property in the United States, the most dangerous place to be is at the surface of the property as more people are killed there due to material handling and vehicle accidents than are killed underground, although just one person being lost in any way is emphatically one too many.

The U.S. entered World War I, and Requisition #7 of General Pershing's supply program was to get breathing apparatus for sappers who were veteran miners who would dig tunnels underneath the enemy lines, lay explosives and wire, go back to their lines and set the explosives off as a preliminary to an offensive. When they heard about this requirement, Deike and Ryan were in Washington the next morning. There was a serendipitous deal with Thomas Edison whereby Edison turned over his recording machine factory, closed due to war, and also

some critical materials for MSA who, with know-how and skilled people, could make the equipment for the sappers.

Next came the enemy gas attacks and an emergency program for an effective gas mask became the World War I technological equivalent to the Manhattan Project. In the shell of buildings which later became American University, the government and Mine Safety put together an emergency program to develop a facepiece and a gas mask canister using Whetlerite to filter out toxic gases and Hopcalite to turn carbon monoxide into tolerable carbon dioxide. These products are still used in gas masks today.



EDISON ELECTRIC CAP LAMP

At the end of the war, Ryan and Deike borrowed money to buy as many of the government patents as they could to be the foundation of the development of a respiratory protection program at the company.

The founders' vision of safety quickly expanded into general industry. After all, Pittsburgh was the center of the steel, glass and chemical industries, and each of these had particular toxic hazards. The policy at the company was, "Find the hazard; if we don't have a remedy, we'll develop it; and if no one will manufacture it, we'll do that, too."

Selling was missionary work then. There was, though, considerable cooperation by intelligent people in industry. The Carnegie Steel Company asked the partners to organize a safety program in their own mills and when this worked, rather than hoard the knowledge, the Carnegie Steel Company invited other steel companies in the area to share best practices and this was the foundation of the Western Pennsylvania Safety Council.

Mine Safety had started from the concept of safety, moved on to being a sales company, added by necessity manufacturing operations and



GAS MASK TEST CREW



MINE RESCUE TEAM

finally, became a research company. One of the first associates hired by the founders was a research chemist.

The founders continued to experience danger. In February 1926, John Ryan was involved in a mine rescue but wasn't coming out. George Deike went in with extra equipment and saw Ryan huddled over an injured miner, having taken off his own gas mask and putting it on the miner to save his life. Deike with his masks got them all out and the two agreed that thereafter they would never again go underground together.

The Liberty Tunnel is a functioning highway to this day in Pittsburgh. However, one day it was jammed up with cars, and the ventilation system wasn't working well. People were being overcome by carbon monoxide from vehicle exhaust in the tunnel. MSA people were called to rescue the motorists as if it were a mine disaster. A concept came forth of preventing accidents as well as protecting people. MSA had a product—Hopcalite—that converted CO into CO₂. This could be adapted to be the core of a CO detection instrument to run the ventilator and, if need be, to sound an alarm. This was the genesis of the MSA instrument business which is about one-quarter of MSA sales at the present time.

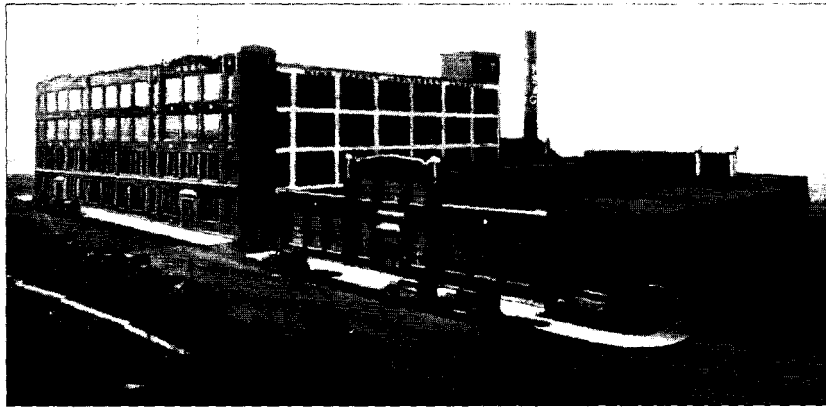
Most of you know of the legend and lore of the canary in the mines being the warning signal for the miners. The problem is that canaries were inconsistent. One of the partners once noted that the last thing he remembered before he passed out in a mining misadventure was, "that damn canary chirping away." MSA instruments put the canary out of business and probably our best ad of all time was the picture of a canary saying "Unemployed since 1920."

Throughout its history and for every product that this company has ever made, a life depends on its quality, as well as does the company's reputation. We do the tough, dangerous tasks; the harder it is, the better our commercial position. George Deike used to say to associates, "This very mask you're making — maybe one of our own people will be wearing it next week and will depend on it for his or her life. Maybe that person will be me." The message hit home, then and now. I have always said that some of the best sales people at MSA have a different day job — they work in our factories, but when you expose them to customers, they communicate our quality message very effectively.

On Black Thursday, 1929, Mine Safety had 248 employees. The company, long since incorporated, had borrowed money, primarily to build a factory complex at Braddock Avenue near Homewood in Pittsburgh



JOHN RYAN HOLDING CANARY



BRADDOCK AVENUE PLANT - MID-1930'S

where the business was located until the 1970's. However, fortuitously that debt was paid off by 1927. Managed prudently, the company's employment had almost tripled by 1938.

In this period our hard hat line, chemical oxygen breathing apparatus, better mechanical breathing apparatus and filter respirators were added. The core of the business, though, was and is the MSA sales force—doing missionary work, doing conventional sales work, training people in the use of our equipment and, in those days, acting as consultants.

Not all projects worked. An MSA division, the Carbon Monoxide Eliminator Company, was established in 1929 in Baltimore with the mission to filter auto exhausts. It was 40 years ahead of its time but this product was destroyed by leaded gasoline. Later, the same division invented the pacemaker battery.

At one point in the middle years, an epic event happened when Mine Safety sales to general industry became greater than its sales to mining.

Looking back some years later, an observer who knew the founders asked, "What sort of men are these?" This associate couldn't define it but said that the urge to emulate them was overwhelming. Perhaps this was the truest of answers. It was clearly not self-aggrandizement that drove them to risk their lives again and again, after all their achievements and recognition. Nor was it great wealth. There are much easier ways to increase money and those who sought wealth also anticipated leisure for the enjoyment of it. From the very beginning, these men's ambition had been to make their lives worthwhile.



HAT ASSEMBLY - MID-1930'S

By the end of the 1930's, John Ryan had given all he had in the Mission, taking action trying to prevent for new people and new generations the pain he had seen in his haunting memory on those desolate faces in the frozen stillness at the Jed mine. Negative attitudes as hard as granite had to be changed, laws passed, people educated and the company established and expanded and run against competition. John Ryan had saved others but at this point he, himself, could not be saved. First came the minor strokes, then a major stroke, which postponed his son's wedding. Finally in February of 1941 at age 57 another stroke took him from us.

As was quoted by Edward Markham in his memorial brochure, "As when a lordly cedar, green with bough, goes down with a great shout upon the hills and leaves a lonesome place against the sky."

George Deike carried on for many years thereafter and led his team well in the way Edison once called him, the Stabilizer.

At this point John Ryan, Jr., Penn State, 1934, had entered the company. As a teen-aged boy, he had spent an afternoon sitting in a lab watching Thomas Edison work. This was quite a change from his grandfather and his father, who at that age were working in the mines. On one December Sunday in the early 1940's, he was packing for a routine business trip to Washington but that Sunday was December 7, 1941. He arrived to a Washington in chaos. MSA went on to become a major military contractor. Deike had seen this all coming and held options to rent manufacturing space all over Allegheny County and MSA became the largest leasee in the area.

Employment during the war increased three to four times, and the company had 132 major military projects. The purpose of one of them was unknown to our people because it was part of the Manhattan Project, for work done at Oak Ridge, Tennessee, an MSA customer to the present day.



RUBBER MOLDING



US NAVY OXYGEN BREATHING APPARATUS

After the war, Mine Safety was deeply involved in that great period of growth for Industrial America. Its products and its sales force expanded substantially. The fire service, in particular, became of increasing importance, but two major decisions awaited the business. First, would we follow after our first name—Mine—or our middle name—Safety—and would we be an American company or a company for the world?

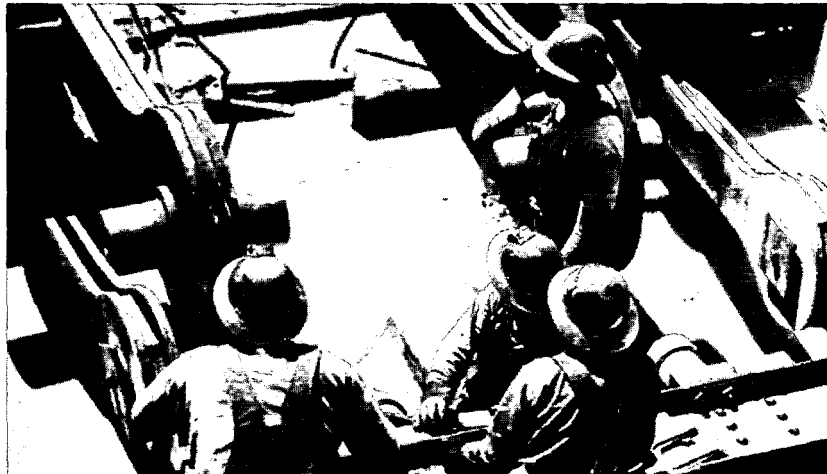
In the booming post-war era, there were many opportunities, each of which could work for the right organization. Should MSA go more deeply in the mining industry where it had excellent customer relations and a broad distribution network that could be leveraged into selling mining supplies and eventually go into mining machinery, or should MSA focus on being a safety equipment company, serving mining safety but putting its priority in expanding its lines and its customer base in the industrial safety area? This outlook kept in mind that the mining

equipment manufacturers were larger than we were; safety competition was generally smaller.

Gordon MacVean was the Manager, Mining Department, at the time and he espoused the former view. John Ryan, Jr., Executive Vice President, held the latter. Matters were complicated by two facts—Ryan, Sr., a long time widower, married later in life to a woman who was the sister of Mrs. MacVean, and he also died without a will. Mr. Ryan, Jr.'s view, with the support of George Deike, eventually carried the day and Gordon MacVean left along with a significant part of the mining sales force to form the National Mine Service Company that had many successful decades. Its acquisition of substantial market share in mining probably accelerated MSA movement into the alternative directions.

In the 1980's, from National Mine Service was spun off the Industrial Scientific Company—to this day a respected competitor in portable instruments.

Then the next decision for this company was to go on to the world. The founders had started the process in the 1930's by selling to Europe with the ironic observation that they now met in business competition the same European manufacturers, whose earlier generations of equipment they had used in their rescue work. By 1940, MSA considered establishing operations in Britain, South Africa and Australia. However, Hitler's war



IRONWORKERS WEARING SKULLGARD HELMETS

delayed the first, Pearl Harbor the third, and only the South African venture immediately took. We finally did get to Great Britain by 1947.

Ryan, Jr. (whom I will hereafter designate as "Ryan") had a vision for post-war Western Europe. He felt it was a continent with all the ingredients of prosperity that had only been suppressed by one war, a depression and another war. Under the right conditions, he believed that in the coming years it would move up substantially. He realized the company needed to get to Continental Europe, and he first made a visit to the Dräger company which was the foremost safety company in Germany and Continental Europe. On that visit, Dr. Heinrich Dräger showed him a building that was built in anticipation of major exports to the American market but that venture was stopped by the beginning of World War I, exactly the same time that Mine Safety was formed.

As the Drägers preferred to continue with their own business, as they have to this very day, MSA moved onward to buy the Auergesellschaft company, a small division of the large chemical company, Degussa. Auergesellschaft was older than MSA itself, true also of two new MSA divisions. It was formed by Karl Auer von Wellsbach, the Austrian inventor of the gas mantle for street lighting, still used in Berlin today. Dr. Auer then made improvements on our godfather Edison's electric light and, years later, the circles came together again.

In 1958, when the purchase was made, this was a very risky move as most of the assets of Auergesellschaft were located in West Berlin. Nikita Khrushchev was threatening West Berlin and, at any given time, there was the danger that the Soviet Army could just take it over. But Ryan and Deike went forward, and the foundation of Mine Safety's business in Western Europe was laid. A few years later, Ryan took his older children to Berlin who saw the city just two months before the Wall was built. 28 years thereafter, in March of 1990, his son took his children to stand up on top of that "Wall of Shame," just before it was about to be permanently destroyed.

MSA and Auergesellschaft have had a presence in Berlin for well over 40 years. General Lucius Clay, a hero in the city, was a summer neighbor of Ryan's at Cape Cod. Leo N. Short, Jr., MSA's executive in Europe, later to be CEO of the company, was present in the audience when John F. Kennedy made his famous "Ich bin ein Berliner" speech. Short welcomed Robert Kennedy a few months later to the Auergesellschaft



MSA - AUER, BERLIN

factory and he knew socially Willy Brandt, heroic mayor of West Berlin and eventually German Chancellor.

Later Short's successor in Europe was in the audience at two historic events: when Ronald Reagan stood up and said, "Mr. Gorbachev, tear down this wall!" and when the unified flag of Germany was raised in Berlin on October 3, 1990.

Ryan's vision extended to the world. No place was "foreign" to him or the company. MSA got into Japan at the earliest moment legally possible. Ryan particularly was intrigued by getting into Russia and China at a time when that seemed like a pipe dream. Perhaps his own experiences with Germany made him realize the transience of hostile leadership and ill international relations.

In 1968, in Bucharest, Romania, at an international mining show, a Chinese delegation asked if they could visit MSA's booth. This would seem like a waste of time for MSA as China was isolated in the midst of their Cultural Revolution and any business was impossible, but Ryan thought, gee, what do we have to lose? MSA welcomed them to see our display and to have lunch. The guests were so deeply impressed so that

at a later visit, Mine Safety was referred to as "old friends." Ryan took one of the earliest industrial visits to China during the late 1970's.

By 1984, MSA had contact in China and formed a joint venture which has been in operation since 1989. Additionally, we put together a presence in Russia and now do good business through a representative office in Moscow.

We finally did get to Australia and later to India, Singapore and Abu Dhabi. In Latin America, an MSA company in Mexico came in the 50's, Peru and Brazil in the 60's, Chile in the 70's, and Argentina in the 90's.

George Deike went out with his boots on. Still coming into the office every workday in his 80's, on one occasion he had chest pains, was taken into the hospital, not in great distress; but a week later he passed on. He had the great fortune of being able to see the fruits of his labors, to see his and his partner's ideas extend around the world and, most importantly, to see in the triumph of the Cause of Safety in mines and industry his life's ambition fulfilled exceptionally well.

Ryan became CEO of the company in the early 50's and had the benefit of his graduate school roommate and his best friend, Eugene W. Merry,



EUGENE W. MERRY & JOHN RYAN, JR - 1976

working with him in the company for their entire careers. Merry was a man ahead of his time in Progressive Business Management. His and Ryan's outlook combined diligence, effectiveness and a real feel for people on the factory lines and in the field. Merry once said, "I can ask tough things of people because they all know that 'we're in this together' and that 'I have their and the company's best interests at heart,'" which, I would add, he always did. The work of Ryan and Merry and their associates was enhanced by the passage of the Occupational Safety & Health Act in the early 1970's and the establishment of effective standards which enhanced quality in the marketplace. A major benefit of OSHA was that effective safety programs already done voluntarily by the most responsible companies were also legally extended to others.

When Ryan and Merry retired from their management positions in 1977-78, M. G. "Skip" Hulme, Jr. became CEO. His major objective was to enhance the profitability of the business by taking advantage of the opportunities presented by OSHA. In the midst of his time, the company received very large orders for government gas masks that had seemed about to be obsolete but would have another decade's worth of use. This led to the intriguing challenge of the company's fulfilling the requirements of the Securities and Exchange Commission for full disclosure of material additions to the company's business and the Defense Department's intense desire that the size of such orders be kept classified. We finally got the two to work out a compromise.

Unfortunately, Skip, who had always lived a healthy lifestyle, was brought down by cancer at age 59. Lee Short had come back from Berlin and with his international background became CEO of the company for half a decade. These were successful years for the business, even though both before and during his time as CEO the company had been hurt by the impact of economic change on Smokestack America. During his years, our sales to the fire service, the asbestos remediation market, nuclear power plants, hazardous material remediation and in Western Europe had all grown very nicely and in his last year the company had set a record for earnings.

The 1990's became the company's most challenging time. The reality of economic growth as being a "Process of Creative Destruction" was particularly evident. The activity in the asbestos market was greatly reduced and the use of respirators in nuclear power plants, then one of

MSA's two greatest markets, virtually disappeared. The company's practice, deeply ingrained, of selling directly to customers became uneconomic due to customer requirements and changes in the marketplace. The unification of Berlin meant the end of financial incentives to companies operating there which affected our business, as well as did the sharp decline in European mining and the sluggish economy there.

Many other changes occurred and Mine Safety had to install a new enterprise computer system before the year 2000 which was an extremely difficult passage.

So in 1999 there was a Moment of Truth—the company's financial performance was unsatisfactory and challenging goals were set to double profitability within three years in order to get the business results to a responsible level. Many efforts at transformation of the company had been made throughout the decade but their benefits had been offset by the effect of other changes in the company's markets. However, just at a time when it was most needed, the improvements had gathered such momentum that they began to overcome the negatives. The research and development process had been transformed on a global basis. Breathing



COMPUTERIZED MACHINING CENTER - MURRYSVILLE PLANT



MODERN SELF-CONTAINED BREATHING
APPARATUS AND THERMAL IMAGING CAMERA

Apparatus and Hard Hats did particularly well. Selling was transformed in the United States to going through distribution companies, and alliances with new distributor partners were particularly useful. MSA's business in Europe recovered and International improved. Our Murrysville factory, which had been challenged several years before, turned around so well that it was named a "Factory of the Year" by Industry Week magazine.

The era of "Business in the 90's" was a difficult time for many companies who believed in the principles that Mine Safety has stood for from the days of its founders, through the time of Ryan, Jr. and Merry to the present. For a while we just had to stand our ground, but the return to sobriety in the American business culture in the last few years has been a real vindication for all that Mine Safety has stood for:

- Focus on the Mission of Safety.
- Have Leading Products to protect people's life and health.

- Be honest and honorable to all and treat people sensitively, straightforwardly and well, and expect the same in return.
- We're all in this together—customers, shareholders, associates, management, directors, suppliers, communities. Run the company that way.
- Have a long-term outlook while doing your best for the present.
- Manage your finances prudently.

Today, MSA's largest customer area by far is the fire service; homeland security has been a large growth area recently after having been identified as an area of market need by MSA well before the tragedies of 9/11. We serve all of the major industrial, construction, utility and extractive industries throughout the world. Sixty percent of our business is in North America, 21% in Europe, and 18% in other international areas. Product sales are divided in four ways almost evenly between air supplied breathing apparatus, air purifying respirators, instrumentation—both portable and permanently installed to detect toxic or combustible gases and the lack of oxygen—and head protection. The latter includes the ubiquitous industrial V-Gard helmet with the "V" on top and the two largest selling fire helmets in the world. The newest product group is the thermal imaging camera which allows firefighters and emergency people to go into areas filled with darkness and smoke and find people in danger. It also locates sources of heat and fire to guide firefighters in suppressing them.

By the mid 90's John Ryan, Jr., had the same good fortune of his father's partner—to see the fruits of his labor fulfilled. He could see MSA in well over 20 countries around the world, making a difference anywhere people were in need of protection. It was said to him at his formal retirement as Chairman of the Board and in the eulogy at his funeral that his situation could be compared to that of the famous English architect, Christopher Wren. In Wren's master work, St. Paul's Cathedral in London, amid the many elaborate memorials to others, there was simply a little plaque that reads, "If you seek this man's monument, look about ye," Likewise, John Ryan, Jr.'s monument was this successful company spread about the World, following its principles and fulfilling its noble mission. Like the Scriptural Passage of the Parable of Talents read at his funeral, he was given many talents and made more of them.

Our story closes with the same spirit in which it started. One day the CEO of the company was at a mining convention in Peru; the President, Tom Hotopp, who had been instrumental in the company's revival in the

1990's, and several other executives were in Chicago, officiating at the inauguration of the use of MSA breathing apparatus at the Chicago Fire Department, an achievement attained after 15 years of effort. Judy Colfer, Acting Director, Logistics, was at a routine seminar on Mexican logistics in the North Tower of the World Trade Center when it was hit on September 11, 2001.

Despite the fact that six of the nine top executives of the company were not in Pittsburgh then, the entire team knew what they had to do and proceeded to follow the path of their predecessors in the epic struggles against the forces of death in the mines. Tom Jeramaz, MSA sales representative, finally got through police lines to the scene by two o'clock, but during the day, people in Pittsburgh had to quickly assess what equipment rescuers would need at the site, filled up three truckloads with the equipment and got a state police escort to accompany the vehicles when they left the Murrysville factory at 4:30 p.m. on September 11 to arrive at the site after midnight.

That salesman, who lost a number of his best business and personal friends in the tragedy, his manager and their associates worked straight through for several weeks at Ground Zero. At one point, one-quarter of the MSA sales force was there and at the Washington site, training people in the proper selection and use of MSA safety equipment.



MSA SALES ASSOCIATE, TOM JERAMAZ NEAR GROUND ZERO

It was just like Deike and Ryan used to do at mining disasters, the only difference being that there were no people to rescue, only workers to be protected. And for Judy Colfer—our prayers were answered; she got out of the North Tower not many minutes before it fell. The word got out rapidly around the MSA world by word of mouth and by mobile cell phones. She was put up by strangers for several days in New York before she could return home to her family.

Through this entire story, from mine rescues to industrial protection, from safety signs to thermal imaging cameras, from the Appalachian hills to a global presence, from World Wars to 9/11, one thing has been consistent—the efforts of everyone at the Mine Safety Appliances Company, MSA, to fulfill our long term mission: That men and women may work in safety and that they, their families and their communities may live in health throughout the world.



JOHN T. RYAN, III, CHAIRMAN & CEO
MINE SAFETY APPLIANCES COMPANY



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization—through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE
(1886-1958)
Senior Vice-President for North America
The Newcomen Society
for the study of the history of
Engineering and Technology
(1923-1957)
Chairman for North America
(1958)



This statement, crystallizing a broad purpose of the Society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of the British Government.

"Actorum Memores simul affectamus Agenda"
(Let deeds of our past serve as guides to our future)

"From mine rescues to industrial protection, from safety signs to thermal imaging cameras, from the Appalachian hills to a global presence, from World Wars to 9/11, one thing has been consistent—the efforts of everyone at the Mine Safety Appliances Company, MSA, to fulfill our long term mission: That men and women may work in safety and that they, their families and their communities may live in health throughout the world."

— John T. Ryan, III





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