

A BRIEF OVERVIEW
OF
THE MacNEAL-SCHWENDLER CORPORATION

by

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President and Chief Executive Officer

The MacNeal-Schwendler Corporation has undergone some significant changes in recent years. Because many of our clients do not have the opportunity to keep up with these changes, I would like to give you an update on our organization structure, and product thrusts. I intend to touch on these only very briefly because you will be getting more detailed information from Mike Gockel shortly - and from others over the next two days.

The attached organization chart shows that we are currently structured into eight (8) departments, as discussed below.

Mike Gockel, our Vice President of Technical Services, has the largest organization and is dedicated to the development, maintenance and support efforts for MSC/NASTRAN.

Lou Greco has been doing an outstanding job as our Chief Financial Officer - both in assuring effective internal controls and financial reporting, and in his dealings with the outside investment community.

Bud Adam is responsible for our physical plant, contracts administration, personnel and purchasing.

Perry Grant is in charge of our overall marketing activities and is

responsible for the MSC product sales in the United States and Canada.

Don McLean heads up our Advanced Projects Department which includes personal computer products and our interactive pre- and postprocessor efforts. Dave Herting heads up our Engineering Applications Department and is providing consulting support to clients in various parts of the United States. Jerry Joseph continues to run our Client Support Department and is also involved in such diverse activities as our video-cassette training programs and interfaces with the international operation for matters dealing with Latin America.

With the retirement of Mac McCormick effective January 31, 1986, the International Operation is now the responsibility of Dr. Dennis A. Nagy. Dennis has an excellent academic and industrial background which includes extensive service in the European marketplace - both at the University of Stuttgart under Professor John H. Argyris, and in conjunction with SDRC's marketing activities.

I encourage you to seek out these individuals, according to your interests, and find out more about them and their organizations. The only difficulty you might have is that Don McLean is currently on vacation in New Zealand. I am extremely pleased with this powerful management team that we have at MSC and I feel that as you get to know each of these individuals better you will share with me my conviction that they represent the best in the business.

The principal product for MSC has been, and continues to be, MSC/NASTRAN. We are committed to its long-term viability and we will not waver from our firm commitment to making it the most comprehensive, most reliable, most productive, most efficient, and most heavily used finite element-based computer program for large, complex problem-solving. Looking back on the history of MSC/NASTRAN, it is remarkable that a product designed in the mid-1960's could have survived so successfully in view of the incredible changes that have taken place in the computing hardware and related technologies; and

you will see that we have taken some firm steps to assure that it will continue to be useful for future generations of users.

One measure of our commitment to the future is the amount of resources we re-invest into our products. Approximately one-third of our revenues go right back into improving our products either in the form of maintenance or in research and development.

Our commitment to the future is perhaps best evidenced by the development of a New Executive system for MSC/NASTRAN. This project formally got underway three years ago but the idea for it really started two years earlier. The chief motivating factor for this New Executive was to be able to properly cope with changes in computer technology and the huge data volumes associated with large, complex problem-solving which has become routine with many of our major clients. For example, we have adapted MSC/NASTRAN to run on the world's fastest supercomputers and have done our best to exploit their vector processing facilities; and now we are trying to cope with the challenges presented by parallel processors. All this new technology offers us the opportunity to enter into highly advanced areas of nonlinear mechanics, design optimization and interactive pre- and postprocessing - but these areas require the ability to efficiently and effectively cope with modern data storage devices and systems. Flat file management that was available in the mid-1960's simply will not make it in a future environment of distributed, networked, relational data bases.

One of the primary results of our New Executive development will be our ability to effectively cope with the demands for an integrated design optimization capability. We are working cooperatively with some of the world's leading experts in this field and we are committed to having a highly superior design optimization capability unmatched by anyone in the business.

We are simultaneously developing what we believe will be the most

comprehensive pre- and postprocessing capability designed to take maximum advantage of all proven concepts and devices.

We will continue to improve our material and geometric nonlinearity capability and are very receptive to our clients' demands for providing further capabilities as their respective design environments become more demanding.

Composite materials are being employed more and more in various industries in order to take advantage of their excellent strength and weight characteristics. Once again, we are in contact with leading research facilities and will form strong partnerships with selected research institutes of international repute within the next several months.

We will continue to work with computer hardware manufacturers to make sure that you, the user, have the best possible operational efficiency and reliability on the various types of hardware on which we make MSC/NASTRAN operational.

We are committed to meeting your needs for very complex problem-solving and severe work overload situations through our Engineering Applications Department. Dave Herting and his operation have already proven themselves indispensable consultants in solving very complicated and difficult problems for clients whose problems at times require highly innovative approaches. The feedback that we have already received through this activity for making improvements to MSC/NASTRAN has, in itself, more than justified the existence of the organization.

Our personal computer products also represent a commitment to the future of MSC/NASTRAN. The MSC/pal series offers an opportunity for newcomers and smaller organizations to have the opportunity to solve modestly-sized problems on the personal computer that has become so prevalent in many engineering operations. Although MSC/pal is not a

derivative of MSC/NASTRAN, we have developed it so that it will successfully produce the input to MSC/NASTRAN as the users' problems grow in size and complexity. MSC/mate is intended to offer matrix solving abilities on the personal computer as well. MSC/CASE which was demonstrated at last year's User's Conference, offers a highly effective way to solve engineering equations commonly found in the more heavily used mechanical engineering handbooks.

We will continue to provide a wide variety of teaching and training courses and will continue to supplement this with other training aids such as PRENASTRAN and the video-cassette programs being narrated and produced by Professor Bill Anderson at the University of Michigan.

We intend to continue to strengthen our client support activities and to take advantage of modern technologies wherever possible. Our Product Support Center, which we established last year, will continue its commitment to providing excellent response to client requests for documentation and our PC-based products.

MSC is an organization totally dedicated to excellence. We are an engineering-managed and engineering-minded company. We believe that we have the best managers and professionals in engineering, computer sciences, and related fields. These people and their contributions enable us to meet the requirements that you, our clients, will continue to ask of us in the future and we will not deviate from this commitment to excellence.

